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Medicine on the Battlefield: the History of Army Medics in Modern Japan

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MEDICINE ON THE BATTLEFIELD

THE HISTORY OF ARMY MEDICS IN MODERN JAPAN

Reut Harari

A DISSERTATION

PRESENTED TO THE FACULTY

OF PRINCETON UNIVERSITY

IN CANDIDACY FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR

ACCEPTANCE BY THE

PROGRAM IN HISTORY OF SCIENCE

Advisors: Benjamin Elman, Sheldon Garon

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Abstract

Both war and medicine alter the human body, but in two different ways; war uses violence to harm and kill, while medicine strives to save and maintain the body. Despite this essential disparity, the two fields have been intimately connected and mutually contributive since early in history. This connection reached new heights during the "Modern era," as war expanded and became increasingly medicalized. The dissertation examines the corresponding processes of the ″medicalization of war" and the "militarization of medicine," through the role of military medics – layman soldiers, whom militaries enlisted and trained to serve as medical care providers. The dissertation argues that medics embodied these processes, spearheading the movement of medicine closer to the battlefield.

Why did militaries decide to entrust inexperienced soldiers with medical duties, and how did their role change over time? The dissertation explores these questions, while focusing on the case of the Japanese Army from roughly 1868 to 1945. Its first part examines the origins of the role and its early manifestations from an institutional and transnational viewpoint. It reveals how the Japanese Army created a variety of medic roles based on an altered view of the soldier's body, as an asset requiring maintenance and protection to ensure military victory. Medics consequently stood at the intersection between military and medical reforms.

The second part of the dissertation focuses on the voice of former Japanese medics, who served during the 1930s and 1940s - in units and hospitals, in the front and the rear, in Japan and overseas. It explores what it meant for these men to serve as at once soldiers and medical care providers. Their stories illustrate how the role changed, as the Japanese Army's position changed – from military expansion, through imperial occupation, to defeat – and reveals the ethical

dilemmas medics were forced to face as a result; in cases of war crimes, and when losing all ability to treat towards the end of the Pacific War. The role relied on a fragile balance between its two aspects – the "military" and "medical." When the balance was broken, the role was lost.

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When I came to Princeton six years ago, I felt honored and privileged to be among the few, granted the opportunity of enjoying the many gifts the History Department and the History of Science Program provide. At the same time, leaving my life in Tel-Aviv and embarking upon a journey to the unknown was far from easy. Throughout these rollercoaster years, I have been blessed with wonderful people, who made this transition easier and the journey - an unforgettable one. It was thanks to them that I managed to reach the finish line. Ideally, I would have liked to write a whole chapter on each name mentioned in these acknowledgements, but the limitation of space forces me to be more concise.

As already noted by others before me, though authored by one person, the PhD essentially is a collaborative effort. I had the advantage of benefitting from the knowledge and generosity of brilliant individuals, first and foremost – my advisors. When Benjamin Elman accepted me as an advisee, we both thought I would work on the history of Tokugawa medicine. After my first year I decided to change my topic and move to a very different thematic direction. Prof. Elman continued to support and believe in me irrespective. He gave me the confidence to follow my gut and assert myself, as well as the methodological and conceptual tools to deal with the unique issues in the history of science in East Asia and the delicate complexities of the history of war in the region. His door was always open to discuss anything I might have needed, while his comments hinted towards directions I might choose to take, so as to leave me with the freedom of exploration.

For Sheldon Garon I was a "surprise advisee." As I mentioned, when I came to Princeton I planned on working on the Early Modern era. One of the reasons I felt confident in my decision

to make a temporal and thematic change was the knowledge that Professor Garon was there. Prof. Garon kindly agreed to guide me through the vast – and for me, quite new – world of "Modern Japanese history." He also gave me the opportunity of serving as his TA, allowing me to learn how to engage a class and deepen my understanding of the historiography from a different perspective. In respect to my own project, Prof. Garon helped me make sense of the plethora of information I had before me. He encouraged me to zoom out and look at the big picture, beyond Japan and beyond my materials, to imagine large boundary-crossing structures and to think of ways of describing these vast ideas in as simple and succinct a way as possible. Finally, both Prof. Elman and Prof. Garon were wonderful advisors not only because of how they shaped my intellectual viewpoint, and encouraged me throughout the process. But, equally important, they also allowed me the space to sometimes disagree, which I believe is a unique characteristic of great teachers.

While I focus on Japan, I envision my dissertation through the eyes of the history of medicine. My committee members, Katja Guenther and Keith Wailoo, had a formative influence, not only on how I came to perceive my dissertation, but also on the questions that led me to it in the first place. They taught me to question the role medicine played in the world in general and in war in particular. Prof. Guenter's seminar during my first year had a lasting effect on me, exposing me to new analytical directions, inspiring me to think harder on the relationship between medicine and society, and giving me the confidence to speak in class. Prof. Guenther continued forming my way of thinking, as she made time to read dissertation chapters, providing me with invaluable, detailed and sharp comments, helping me focus my questions, and recommending important secondary sources. My first chapters in particular are greatly indebted to her. Keith Wailoo kindly agreed to be my general examination examiner in the field of history

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The oral history interviews I conducted in Japan have become the unexpected heart and soul of my project and an experience I will carry with me for the rest of my life. I do not think I

would have ventured on that path if it were not for Suzuki Akihito. Prof. Suzuki agreed to be my hosting advisor at Keio University, before he even met me in person. When I arrived in Japan during my fourth year, Prof. Suzuki encouraged me not to limit myself to the archives, and to search for those I wanted to write about while it was still possible. As Prof. Suzuki noted during our first encounter, the window of opportunity was closing. It was thanks to his faith in me and his encouragement that I decided to conquer my fears and begin running against the clock. Prof. Suzuki did not stop there, but also gave me invaluable comments, taught me so much about the history of Japanese medicine and helped me learn how to express myself in academic Japanese. Finally, he introduced me to the academic community in Japan, numerous scholars and colleagues, who became influential on my work, as well as dear friends. To name a precious few: Chris Harding, Keiko Daidōji, Fujimoto Hiro, Nakao Maika, Nakamura Eri, Sumida Tomohisa, Sarah Terrail Lormel, Takabayashi Akinobu, and the members of the "Suzuki zemi" – Kageki Tatsuya, Kaneko Shunsuke, Saeki Eiko and Takama Saori. I am very grateful to Prof. Suzuki for introducing us, and to my colleagues for welcoming me with such warm and open hands, for their patience, humor and dear friendship, and for enriching my research and knowledge of Japan's past and present. And finally, a very big thank you to Iwamoto Chiemi, who organized every little detail concerning my affiliation with Keio University and stay with such amazing efficiency, thoughtfulness and consideration.

Working with oral history interviews also posed unique methodological challenges. Erika Milam has helped me above and beyond in dealing with these issues - via email and skype while I was in Japan, and through countless conversations when I was back in Princeton. Even though I was not her direct student, Prof. Milam read my drafts when they were in the most inchoate state. She gave me detailed comments that changed how I constructed my chapters – from the bigger

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information and statistics the sources reveal, what information could be found and what has vanished. He taught me all I know about the history of conscription in Japan, provided me with long lists of sources for my perusal and has answered any question, either in person or via email. My research would have looked completely different if it were not for Watanabe.

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were my American family, and Leale – my second mother. This became truer than ever during the past six years. This whole PhD would have been worth it, if it were only for having the opportunity of spending time with you. You have been there for me, loving and supporting me to no end. It is imperative to also note that my interest in medics was sparked while watching the portrayal of medic Eugene Roe in "Band of Brothers." It was Suzie who urged me to watch the mini-series in the first place; and the choice of medics as the focus of my dissertation eventually materialized thanks to her friendship that is more than just friendship, but a part of me, body and soul.

Finally, I would like to dedicate this dissertation to the men and women, who had the courage to speak out and who agreed to entrust their precious stories with me for safekeeping. You and your families have constantly loomed before my eyes as I tried to give your stories the place they deserve in history.

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Introduction

In terms of my personality, I didn't like killing people. I hated bayonet drills the most. Nobody really likes killing that is. You don't have a choice. You do it for your country's sake. But, my personality was not suited for it... So, becoming a medic – it's not a role that involves killing...It was a job worth doing and it kept my conscience clean. I was really fortunate. (Satō Kazunori)[1]

The role of medic is a fundamentally strange one in the military landscape. As former-medic Satō noted, in wartime countries mobilize soldiers to fight and kill in their name. However, medics are soldiers who according to international conventions are forbidden to fight.[2] Their function is to protect lives instead of taking them. Stranger still, they are soldiers, who usually have no prior medical experience. In countries that enact general conscription, as Japan did between 1873 and 1945, armies choose to turn some of its conscripted layman soldiers into medical care providers, so they could treat other common soldiers like them. What was the historical process that made armies do such a thing? What did it signify for the men, who served as medics, to become soldiers whose weapon was medical care? How did medics maintain the balance between "the military" and "the medical" aspects of their role – two aspects that are in essence antithetical? How did their unique place in the army affect their relationship with other soldiers – their comrades and potential patients?

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[1] Author interview with Satō Kazunori, 17 December 2013. Satō served as a unit medic in Manchuria from 1942 to 1944, and in Leyte in the Philippines from 1944 to 1945.

[2] "Laws of War: Amelioration of the Condition of the Wounded on the Field of Battle (Red Cross Convention); August 22, 1864", articles 1, 6, *The Avalon Project: Documents in Law, History and Diplomacy* (New Haven, CT: Yale Law School, Lillian Goldman Law Library, http://avalon.law.yale.edu/19th_century/geneva04.asp. Last accessed: 6 July 2016); "Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field. Geneva, 6 July 1906," *International Committee of the Red Cross Website*, articles 6, 7, (https://ihl-databases.icrc.org/ihl/INTRO/180?OpenDocument. Last accessed: 6 July 2016. Text based on D. Schindler and J. Toman, *The Laws of Armed Conflicts* (Leiden: Martinus Nihjoff Publishers, 1988), pp.301-310); "Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Geneva, 12 August 1949," articles 19, 21, *International Committee of the Red Cross Website* (https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/vwTreaties1949.xsp. Last accessed: 6 July 2016. Text based on Final Record of the Diplomatic Conference of Geneva of 1949, Vol. I (Bern: Federal Political Department), pp. 205-224).

This dissertation explores these questions in the context of Japanese modern history from 1868 to 1945, a turbulent period, replete with far-reaching changes. Many of them were driven by military and imperial expansion, which by 1945 reached untenable magnitude. However, the dissertation also reveals that this history stood in the intersection between Japanese and global history; the Japanese Army created the role of medic through close conversation with international developments, in addition to learning from accumulated military experience at home. As such the dissertation is positioned in the intersection of a number of fields: Japanese history, global history, the history of medicine and military history.

Following Cooter and Sturdy, one central thread throughout the dissertation, is the historical importance of scale.[3] In 1873 Japan enacted general conscription, which it implemented gradually over the years, increasingly expanding the number of soldiers it recruited into its military lines. This expansion was part of a global trend that became predominant during the 19th century. The expansion of military scale caused a proliferation of bodies that required care. The dissertation argues that largely following France, the growing militaries began incorporating medicine into their lines for two main purposes; first, to maintain their fighting strength by keeping their soldiers healthy, and treating them upon wounding to enable them to return to battle. Additionally, as these militaries came to represent "nation states," the states came to assume responsibility for the bodies of the men it sent to fight in its name, as a form of reciprocity – the epitome of Foucault's concept of "pact of war," and Rousseau's earlier "social contract."[4] The expansion of the scale of warfare was thus also accompanied by a new perception of the importance of the body of its soldiers and the creation of new medical structures.

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[3] Roger Cooter & Roger Sturdy, "Of War, Medicine and Modernity: Introduction," in Roger Cooter, Mark Harrison & Roger Sturdy (eds.), *War, Medicine, and Modernity* (Stroud, GB: Sutton Publishing, 1998), p. 7.

[4] Jean-Jacques Rousseau, *The Social Contract* (1762), translated and introduced by Maurice Cranston (London, GB: Penguin Book, 1968); Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79*,

This was the case also in Japan. However, in Japan it took place concomitantly with wide-ranging medical reforms during the Meiji era (1868-1912) and with a process of medical professionalization. The creation of military medical structures coincided and to a certain extent, led these reforms, creating a cadre of physicians that were educated and trained in "Western medicine." Army physicians were thus an increasingly limited and precious asset that the Army wished to preserve. The dissertation argues that the creation of different medic roles was aimed at compensating for the limited number of physicians by creating a less professionalized form of middleman through a process of medical delegation. These conscripted laymen thus found themselves in classes, learning principles of Western anatomy and physiology, which were largely foreign to the common man during the late 19th century. The Army required medics to transition into Army life as well as change how they perceived the body and its maintenance.

In popular memory, medics have arguably come to be most closely associated with the image of a soldier, who rushes to the wounded on the battlefield, answering the calls for "medic!" to provide emergency care under fire. This, however, was not always the case. The dissertation argues that the development of the medic was part of a gradual movement of medicine closer and closer to the site of battle, which was again tied to issues of scale and part of an international process; as warfare grew in geographical scale, in addition to numerical scale, militaries traversed expanding territories, prolonging the time that passed between wounding and medical care. To shorten this time, while protecting the military physician, Japan – following France and Prussia – created systems of wounded evacuation, which involved a redefinition of the medic role, and his movement closer to battle.

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translated by Graham Burchell (Basingstoke, GB: Palgrave Macmillan, 2008), p. 216. See also Anna Skarpelis's interpretation in "Japan in War and Empire: Challenges for Historical and Comparative Welfare State Research from mid-20th century Japanese Welfare State Development," *Fondation France-Japon de l'EHESS Website* (http://ffj.ehess.fr/index/article/319/japan-in-war-and-empire-challenges-for-historical-and-comparative-welfare-state-research-from-mid-20th-century-japanese-welfare-state-development.html. Last accessed: 3 Oct 2015).

By the 1930s, the total scale of warfare grew to unprecedented scale. Yet, concomitantly the Japanese Army also broke down combat to smaller forces on special operations, whereby the medic remained the sole care provider. The smaller scale of combat pushed the medic directly onto the battlefield, while fighting was still in progress. The dissertation argues that the medic role developed from these changes of scale, from the rise of the importance of time and speed in the concepts of emergency care, and from the growing mobility of armies, which was extended to its medical care providers.

The dissertation thus contends that though doctors were the decision makers in the Japanese Army's medical framework, medics were the ones who physically spearheaded this international process whereby medicine gradually drew closer to the site of battle. Doctors were fewer and remained behind the fighting lines, where it was safer. Medics were more numerous and thus more "dispensable." As a result, they led the movement of medicine into battle, and emergency care increasingly became a defining element of their role. By the Pacific War, this distinction became more ambiguous as aerial bombings placed physicians, nurses and medics alike under fire. However, by then the concept of medic, as provider of care on the battlefield, was already established.

Though the battlefield came to be perceived as the quintessential sphere of medic activities, the history of Japanese Army medics reveals that the development of medics was also tied to the definition of hospitals as military medical spaces. Throughout its early history, the definition of the Japanese medic role fluctuated between the unit and hospital, until from largely 1899 the Army defined both as medic spheres of service. The dissertation argues that this change was a reflection of the growing importance that disease prevention and hygiene came to hold in the Army's view of medicine, following the experience of the Sino-Japanese War (1894-95), and

was reinforced by that of the Russo-Japanese War (1904-05). Until then, the system was dominated by concerns over wounding. Following both of the wars, Army networks of evacuation and care extended to the sick, and the importance of speed extended from the perception of wounds to that of infection as well. Besides treating sick soldiers, medics became the eyes and ears of the Army's medical system, spying after pathogens to prevent infection.

With every war, medics thus served in new capacities, sometimes by the very same person: in a growing variety of hospitals, on military bases, in ambulances, in Army schools and prisons, in units on the march, as providers of emergency care as well as guardians against disease. According to testimonies, by the 1930s and 1940s medics also became imperial agents, facilitating Japanese occupation overseas by treating and avoiding endemic diseases, maintaining the system of military prostitution, and providing care for local populations as a way to maintain the peace under occupation. Medics, by their sheer number, were the long arm of the Army's medical system among the troops, and the face of Japanese medicine among populations overseas.

As a result of Japanese military expansion, the movement of medics closer to the battlefield was thus accompanied by their spread beyond it to the rear, to the connecting routes between the front and rear, and to Japanese occupied territories. The dissertation examines how the varied spaces in which medics served – physical, geographical and military - contributed to forming the duties they filled, the content of the medicine they practiced and the ethical problems that medics were forced to face.

The role, or rather roles, that medics filled in the Japanese Army thus changed over time and with them the definition of the role, reflecting changes in the nature of warfare, its scale, and the relationship between war and medicine. As the dissertation demonstrates, the role of military

physician also underwent changes throughout the historical period, but his existence was arguably a given. Medics were a new role on the global stage and thus were more malleable, often redefined following military engagements and required to serve in new capacities while war was still taking place.

Terminology provides evidence for this argument, since there was no one consistent term for medics in Japanese during the examined period, but many. The term underwent numerous changes throughout the history, one replacing the other, thus demonstrating how the role was in a long process of definition. The dissertation analyzes these terminological changes together with the analysis of the changes the definition of the role underwent over time. To create an easier reading experience, the dissertation uses the term "medic" in English, which is problematic precisely because it creates the illusion of stability. Furthermore, in English the term "medic" refers to various roles as well, including physicians. In the American context it came to be associated with the "aid man" in particular - the role of medical soldier who provided care on the battlefield - largely from the 1940s, demonstrating how new this function was in the world at large.[5]

Japanese medics served in the Army as well as the Navy, which had an important role in Japanese expansion and militarization. However, to contain the scope of the dissertation, it focuses specifically on the Army. This is possible, since the Army and Navy medical systems, though they had much in common, developed quite separately and differently. They served disparate purposes, relied on different medical and military models, and followed a different set

[5] According to Berry and Greenwood, the US Army created the aid man/medic role as part of a general reform of field medicine following the First World War. See: F. Clifton Berry & John T. Greenwood, *Medics at War: Military Medicine from Colonial Times to the 21st Century* (Annapolis, MI: Naval Institute Press, 2005), pp. 86-90; Tracy Shilcutt, *Infantry Combat Medics in Europe, 1944-45* (New York, NY: Palgrave Macmillan, 2013), p. 3.

of criteria.[6] As a result the medic roles in each followed different paths as well. The terms used for each were not always the same either. There were occasions whereby their paths crossed, particularly during the Pacific War, which is noted in the final chapters of the dissertation. However, the focus is generally on land instead of the sea.

What was the position of the medic within the Army? The dissertation reveals a process of medical appropriation by the Army as it was conducted through the medic roles, the expansion of their duties and their numerical proliferation. The ways in which the role developed reflect the importance that the Army ascribed to medicine for its function. However, shifting the perspective from the institution to the men who served in the role reveals that at least by the 1940s the medics' place in the Army was an ambiguous one. As Japanese society became increasingly militaristic, the place of the medic within the Army became increasingly problematic as well, precisely because, as Satō noted at the beginning of the introduction, they were soldiers who did not fight. Some testimonies reveal that unlike Satō, who was relieved to serve in the role, others felt disappointed since they perceived it as not soldierly enough. Infantry was the epitome of the Army soldier. Diminishing nicknames for medics developed as well, as part of an image of a role that was safer and thus, less revered. Once they began their service, however, especially unit medics, they discovered the importance of the role as the soldiers' life keepers and the risks that the role involved. Testimonies note that as a result, during actual military service, medics were often cherished and respected by other soldiers.

As long as Japan was winning and on the offensive, the role of medics was challenging and the Army's medical system had its drawback. But it was largely a functioning system. By the 1940s, however, Japan expanded the scale of warfare and military mobilization more than ever

[6] Each also wrote its own official history of its medical system. See for instance: Kaigun gun'i-kai (ed.), *Kaigun eisei seidoshi* (Tokyo: Kaigun gun'i-kai, 1926); Rikugun gun'idan (ed.), *Rikugun eisei seidoshi* (Tokyo: Kodera Akira, 1913).

before, beyond its capability. Until 1942, the expansion of military scale promoted changes in the medic role and pushed for its professionalization. From 1942 as Japan's strategic position switched to the defensive, the condition of its troops worsened, particularly due to blockade of supplies, causing severe shortage of food, water and medicine. As a result, from 1942 the Army's medical system began to crumble and in some cases, collapse entirely. Expansion became unsustainable, pushing the medic role on a path of deterioration.

Following testimonies, the dissertation analyzes cases of medics who lost all ability to fulfill their role. They were often divested of medicine and medical tools, and became almost helpless as their patients weakened and died of hunger. Medics in such cases tried to improvise using all measures possible, including at times, traditional remedies and techniques. The dissertation examines how these men faced their position as care givers without the means to treat, while struggling to survive themselves. Among the examined cases are included a few of the most extreme nature. In these cases, close to the end of the war, medics were ordered by their superiors to kill patients who were immobile in moments of retreat. Not only did they lose their ability to treat, they were ordered to negate the essence of the role they assumed. As "the military" gained precedence over "the medical," the balance upon which the medic role was based ultimately broke.

Sources and Methodology

The dissertation largely employs two perspectives. The first is institutional history, based on archival materials: military regulations and documents, medic textbooks, official histories written by military physicians, and images created by artists affiliated with the military. Many of the Army documents are available online on the Japan Center for Asian Historical Records

Database (JACAR), and the National Diet Library resources.[7] Many documents, however, that are specific to medics are not online, nor are they in one archive, since, as shall be discussed below, the history of medics has received little scholarly attention. As a result, the materials are scattered among a number of facilities. I have visited 17 archives in Japan in search of the materials. Each provided me with an additional clue and steered me to a new direction, particularly thanks to the archivists who work in each of them. Among the archives, however, the *Shōkokan* 彰古館 archive of the Army's former medical school, and the *Shōkeikan*, しょうけい館 memorial museum for ill and wounded soldiers in Tokyo, have been particularly invaluable. Finally, I have managed to locate and purchase many of the sources – medic and stretcher-bearer textbooks in particular - through the *Nihon no furuhonya* 日本の古本屋 Database for antique books.[8]

An institutional perspective reveals the origins of the medic roles, the ways in which the Army envisioned it, its place in the hierarchy, and how this view and position changed following each war. They illustrate the process of military and medical professionalization the role underwent by providing information on the medicine medics learned and how it changed over time. As an institutional framework, it is dominated by the voice of the decision makers – mainly high-ranking Army physicians. However, equally important to this story is the voice of the medics themselves. What did it mean for them to serve in the role, and how did their view of it correspond or differ from the official definitions of the role?

Very few documents describe service through the eyes of medics before the 1930s. From the time of the War in China and the Pacific War, however, there are memoirs written by former-medics and oral history accounts. Juxtaposing Army policies and regulations with the

[7] http://www.jacar.go.jp/ and http://www.ndl.go.jp/ respectively (last accessed: 3 August 2016).
[8] https://www.kosho.or.jp/ (last accessed: 3 August 2016).

experiences of former-medics and their interpretation of their role sheds a different light on the nature of the role, what it signified to serve in it, how their place in the Army hierarchy manifested itself in daily interactions, as well as illustrate the gap between what Armies plan and the reality they encounter in the field.

As for memoirs, some are more readily available than others. I managed to purchase those who have been more widely circulated. However, like in cases elsewhere, many of the former-medics wrote their memoirs as personal publications for their families and friends. Some I have been given as a present from former-medics and those who are related to them. In addition, the Nara Prefectural Library and Information Center was extremely useful, thanks to its collection of wartime memoirs from all over Japan, the *Sensō taiken bunko* 戦争体験文庫. The collection includes also memoirs written by medics, doctors and nurses.

Most of the oral history accounts used in the dissertation have been conducted by the author during a period of fieldwork in Japan between 2013 and 2014. Finding former-medics at that point in history was a challenging task. I searched through a variety of means; every year on August 15th, the day of the emperor's speech and Japan's defeat in the Pacific War in 1945, newspapers publish short testimonies by people who went through the war. I searched in national and local newspaper databases for such testimonies of former-medics, contacted the newspapers and in a few cases, they located the author of the article who kindly introduced me to the former-medic. I was greatly assisted by the volunteer association "Japan Veterans Video Archive Project" (JVVAP), *Senjō taiken hōei hozon no kai* 戦場体験放映保存の会, to which I was introduced by an archivist in one of the archives I have visited. The volunteers of the association kindly shared with me their rich knowledge, experience and records and introduced me to a number of former-medics they have interviewed in the past. I contacted local municipalities and

Veterans associations as well. However in the latter case, it was already too late; at that point of time most of such associations were closed, because their members have either passed away or were too frail to attend meetings. In other cases I was introduced to interviewees by archivists and curators in memorial museums. I found others through friends, and finally, I also used Facebook as a platform to reach out to people, who might have known or have had relatives who served in the war. In total I conducted 20 interviews. Not all of them have been ultimately used in the dissertation, but I intend to give each a stage in the future.

In all of the interviews, I have either been introduced to the interviewees, or sent them a hand-written letter beforehand, to provide them with more freedom to decide and even refuse to be interviewed if they so wished. In some cases the person who introduced me to the interviewees accompanied me to the interview. One former-medic was too frail to meet at the time I wrote him, and thus instead of an interview he chose to send me written accounts by letters on his own initiative. All the other interviewees kindly agreed to the interview.

On the one hand, searching for former-medics at such a late stage made it difficult to find them, especially since I searched for men who served in a very particular role. If it were 20 years ago, there would be more former-medics still alive. On the other hand, most of the people I talked to did not share their experiences until 5-10 years ago. A few never did so before our encounter. The memory of the war is painful. A few of the testimonies even discussed war crimes as well. Talking about the past involves reliving it to a certain extent. As a result, many people chose not to speak for many years. One interviewee noted that he wished to put the painful past behind him untouched, so he could move on with his life. As with many things, however, responses were varied. There were some who did not mind sharing their experiences one way or another. There were others who were glad to relate tales of the days of yore, which

they had little opportunity of doing, and very few people who were willing to listen if at all. Many were surprised that anybody was interested specifically in the role of medic and the details of its history, instead of, for instance, in doctors who were higher in the military hierarchy; not to mention the fact that I am not Japanese and a woman. Quite a few expected to see a man as I entered the room.

But for quite a few, sharing their experiences became a mission to let current and future generations, who were born in an era of peace and prosperity, understand what war could lead to. This became an especially important mission to some in light of highly controversial contemporary political debates on reforming the Japanese constitution and the legislation of the State Secrecy Law in 2013.[9] As the Cooks wrote in the introduction to their path-breaking collection of Japanese wartime oral histories, the willingness to talk is tightly connected to the present in which the interview takes place. In their case, it was the death of the emperor Hirohito that facilitated a gradual process of "regular people" opening up and sharing their wartime stories.[10] In my case, it was the heightening fear of forgetfulness, because of politics and presumably due to the age of the interviewees; most of them were in their 90s at the time of the interview. Sadly a few already passed away since the interview. In one case a potential interviewee passed away before I even got the chance to meet him and hear his story.

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[9] Article 9 of the Japanese Constitution, promulgated in 1946: "Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes. In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized." Appears on the Website of the Prime Minister of Japan and his Cabinet: http://japan.kantei.go.jp/constitution_and_government_of_japan/constitution_e.html (last accessed: 23 May 2016). For contemporary debates see for example: Axel Berkofsky, *A Pacifist Constitution for an Armed Empire* (Milano: FrancoAngeli, 2012); Craig Martin, "Jus ad Bellum Implications of Japan's New National Security Laws," *Japan Focus*, Vol. 14, Issue 10, No. 2:15 May 2016 (http://apjjf.org/2016/10/Martin.html. Last accessed: 23 May 2016); Christian J. Winkler, *The Quest for Japan's New Constitution: an Analysis of Visions and Constitutional Reform Proposals* (London, GB: Routledge, 2010); Lawrence Repeta, "Japan's 2013 State Secrecy Act – the Abe Administration's Threat to News Reporting 2013," *The Asia-Pacific Journal Japan Focus*, Vol. 12, Issue 10, No. 1 (March 2014), pp. 1-11.

[10] In more ways than one this research follows in the footsteps of Cooks & Cook, see: Haruko Taya Cook & Theodore F. Cook, *Japan at War: an Oral History* (New York, NY: The New Press, 1992), p. 10.

Each interview was different in its dynamics and length. Some talked for many hours, others talked for much less. In all of them I prepared a list of questions. Some questions recurred in all interviews, and others I tailored to that particular interviewee according to what I knew of him – and in one case, her - in advance. I presented the questions to each interviewee at the beginning of the interview, to ensure transparency. I explained to each my background and the purposes of the research. At the beginning of each interview I also asked for the right to mention the interviewee's name, clarifying that it was not necessary if they did not wished it. Despite the questionnaire, I clarified to each that he/she could stray from the questions. Many of the most interesting findings revealed in the interviews were the result of topics that came up in between the questions.

I recorded each interview with the permission of the interviewees and transcribed it. To ensure the accuracy of the transcription I employed a double transcription method; I hired a second person to create an initial version, after signing a secrecy agreement. Then I listened to the interview recording again while going over the transcription, corrected and edited it. I sent the edited version with additional questions, as well as a CD recording of the interview to the interviewees. I also enclosed a form that allowed them to reconsider and choose what they wished to make public and how, based on their reading of the transcription – a process which I explained over the phone as well. Most interviewees replied, a few did not. As noted above, many of the interviewees were happy at the opportunity to share their stories. However, some had reservations following the transcriptions, which they made clear on the form. In other cases, they kindly took the time to add and correct details they believed needed more honing. Ultimately, these are personal histories of a delicate nature, and thus the transcriptions allowed the interviewees the choice if and how they wanted their stories to be heard. To all I provided my

contact information upon leaving Japan, and with those who are still well, I maintain periodic communication.

Conducted over 70 years after the fact, time takes its toll upon memory. It is most probable that some details of the interviews have been blurred over this long time span. Moreover, an interview, even a long one, provides only a glimpse into a person's constructed narrative. However, even if some of the details were lost over time and the way in which the accounts were told were naturally subjective, the essence of the stories remains, particularly since it is based on an intense experience that many have been carrying with them every day of their lives. Many of the interviewees made it a point to separate their interpretation in the present from that in the past, distinguishing between the "then" and the "now." When available, I have referenced other interviews conducted with my interviewees in the past – to supplement my interviews as I analyzed them.

Paraphrasing Portelli, each interviewee is an inexhaustible archive, providing new information in each conversation.[11] Every historical source is limited in the information it provides and that which it does not, the perspective it reveals and hides, and its credibility. This is salient to the military wartime documents as it is to the oral history testimonies given after the fact. In the latter, I as an interviewer also interrupted the historical process by eliciting the story and asking the questions. And yet, I argue, this does not diminish the value of these voices that will soon be lost.

Finally, there remains the question of representativeness. Each story is a unique self-contained world. What is its relation to the general story? First, the dissertation argues that precisely this variety of experiences reflects the diversity embodied within this seemingly one

[11] Alessandro Portelli, "The Peculiarities of Oral History," *History Workshop Journal*, Vol. 12, No. 1 (Autumn 1981), pp. 96-107.

role - according to geographic location, military space and time. Moreover, following the tenets of microhistory, though different they all share many common traits, since they belonged to a larger common historical context. Thus, their interpretations and experiences resulted and reflected the nature of Army service during the 1940s, and the complexities involved in serving as medical care providers within the Army framework.

Where are the Medics? Literature Survey

In 2013 the Japan Broadcasting Corporation, NHK, chose to dedicate its annual historical drama to the story of Niijima Yae. Nijima, among other things, served as head nurse in the Japanese Red Cross during the Sino-Japanese War of 1894-95.[12] In the scenes that show her heroically managing the Hiroshima Army Hospital during the war, the focus is almost entirely on the nurses in the hospital. Medics are limited to the background. The few dialogues between them portray a charged relationship between the nurses and the medics, as the women nurses try to assert their position in the masculine military medical framework.[13] Medics shortly appear in the drama for one purpose only: to highlight the character of the nurse. This image of medic as providing the background for the "real protagonists" is an accurate reflection of the state of the field, and surprisingly, not only in Japan.

The history of military medicine has largely been a history of nurses and physicians. Over the years the voice of wounded and sick soldiers has become prominent as well, particularly with the rise of the field of the history of disability.[14] One plausible reason for this is

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[12] Sawamura Shūji, *Nihon no naichinge-ru: jūgun kangofu no kindaishi* (Tokyo: Tosho shimbun, 2013), pp. 58-59.
[13] Katō Taku (director), "Itsu no hi mo hana wa saku," *Yae no sakura*, NHK, 2013, Television.
[14] See for instance Jeffrey S. Reznick, *Healing the Nation: Soldiers and the Culture of Caregiving in Britain during the Great War* (Manchester, GB: Manchester University Press, 2004). See also Beth Linker's review on the rise of the history of disability and its relationship with the history of medicine as a field, including military disability: "On

that the decision makers who formed military medicine – in structure and content – were physicians, while the field of nursing has been formed and occupied mostly by women nurses. Moreover, in many cases physicians and nurses wrote their own histories. History of nursing even grew into a sub-discipline of its own.[15] Medic memoirs also exist in different national contexts, but there is no parallel comprehensive history.[16] The only history written specifically on the topic is a book by Tracy Shilcutt on medics in a particular place and time – American infantry medics during the Second World War.[17] Thus, there is no history that traces the roots of the role and follows its development over time.

When mentioned in historical works, medics are often taken for granted, or conflated with nurses as their – usually "lesser" - male counterparts.[18] The dissertation argues that the roles of medics and nurses developed in a coeval and connected way. They often served together in hospitals in the rear. Moreover, the dissertation argues, one of the reasons for the creation of the medic role was separation of front and rear according to gendered lines – the battlefield was to be a solely masculine sphere, as the military by definition enlisted only men to its lines. Yet, the dissertation also detects a similar process that nurses and medics underwent – of movement closer and closer to the site of war; in the late 19th century nurses were limited to the rear, but gradually moved closer to the site of battle. By the 1930s nurses were mobilized in large numbers to warzones and by the 1940s, with the expansion of aerial bombings and Japanese

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the Borderland of Medical and Disability History: A Survey of the Fields," *Bulletin of the History of Medicine*, Vol. 87, No. 4 (Winter 2013), pp. 499-535.

[15] There are numerous works on the history of nursing in various national contexts. One useful survey is Celia Davies's "Rewriting Nursing History – Again?," *Nursing History Review*, Vol. 15 (2007), pp. 11-28. See also Janet James Wilson's earlier survey: "Writing and Rewriting Nursing History: a Review Essay," in *Bulletin of the History of Medicine*, Vol. 58, No. 4 (Winter 1984), pp. 568-84.

[16] A few examples from the British and American contexts: Dean W. Andersen, *Praise the Lord and Pass the Penicillin* (Jefferson, NC: McFarland, 2003); Richard L. Sanner, *Combat Medic Memoirs* (Clemson, SC: Rennas Productions, 1995); Stephen Snelling, *Commando Medic* (Stroud, GB: The History Press, 2012).

[17] Shilcutt, Op. Cit.

[18] For similar reasons, the history of male nurses has received little attention as well. See: Chad E. O'Lynn & Russell E. Tranbarger (eds.), *Men in Nursing* (New York, NY: Springer Publishing Company, 2006).

defeats, nurses were placed in the line of fire in a direct way. The conflation of the two roles thus stands to reason due to their proximity. And yet, this dissertation shows that these were disparate roles, each with their own related yet distinct histories, and each deserving their own scholarly focus.

In the Japanese context Kurosawa Yoshiyuki, who has researched different aspects of the history of Japanese military medicine, has written a few articles in Japanese on the history of "Army nursing" in the early Meiji era. Kurosawa mostly focused on questions such as, whether or not early military nursing in Japan was "modern".[19] Suzuki Noriko took his work a step further in her thorough and innovative body of work. Suzuki has investigated the early roots of medic roles in the Japanese Army, largely but not limited to the perspective of the history of nursing, in the 1870s and 1880s. Suzuki's rich research is not limited to questions of modernity, but follows the history on its own terms. It has been a fountain of information for this research. Yet, there is no comprehensive work that continues from the early period and after the 1880s, or that goes beyond the institutional perspective.

One likely reason for this lacuna has to do with the nature of the history of Japanese military medicine during the 1930s and 1940s. According to Taninaka Makoto, after the Japanese defeat in the Pacific War the topic became taboo and the very term for battlefield medicine, *gunjin igaku* 軍陣医学, has nearly disappeared from the language.[20] The reason for this taboo has to do with medical war crimes Japanese military physicians led and conducted during the War in China (roughly 1937-45) and the Pacific War (1941-45). Unit 731 is

[19] Kurosawa Yoshiyuki, "Rikugun kanbyōnin no kyōiku ni tsuite," *Nihon ishigaku zasshi*, Vol. 38, No. 2 (April 1992), pp. 118-19; Kurosawa Yoshiyuki, "Meiji-ki no rikugun kango shisutemu," *Nihon ishigaku zasshi*, Vol. 39, No. 4 (December 1993), pp. 523-42; Kurosawa Yoshiyuki, "Meiji-ki no rikugun kango gijutsu," *Nihon ishigaku zasshi* Vol. 40, No. 2 (June 1994), pp. 201-09.

[20] Taninaka Makoto, "Bōei hōmu shinbunsha hensan: Shōkokan – shirazaru gunjin igaku no kiseki," *Nihon ishigaku zasshi*, Vol. 56, No. 1 (2010), pp. 103-4.

particularly famous and has come to stand for Japanese military medicine in popular memory. The unit, led by Ishii Shirō, conducted a variety of experiments on POWs, which included vivisections, blood transfusions, the effects of frostbites, chemical and biological warfare, such as the plague and the list goes on. Similar to the Nazi Doctors, this case became an example of medicine gone terribly wrong, losing its moral compass, using war as "an opportunity" to cross ethical borders and try what was otherwise unimaginable. As a result, its medical care providers became administers of torture and death instead of life.

Numerous works have been written on the unit and related crimes in Japanese and in English.[21] As recently as the year 2000 a group of Japanese scholars established an association entitled "Research Society for 15 Years War and Japanese Medical Science and Service," *Jūgonen sensō to nihon no igaku iryō kenkyū-kai* 15年戦争と日本の医学医療研究会. The association's publications focus heavily on medical war crimes, such as those related to Unit 731.[22]

The Meiji era is a "safer" topic. While it was not free of war crimes they were not associated with medicine. Rather, Meiji military medicine has come to be associated with the Geneva Convention and the humane treatment of POWs. The dissertation will qualify this image somewhat, but in general it is possible to say that the earlier period was not as full of landmines as the later period. Research of the 1930s and 1940s was thus mainly preoccupied with the dark and brutal sides of Japanese military medicine.

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[21] See for example: Kanagawa Daigaku Hyōron Henshū Senmon Iinkai (ed.), *Igaku to sensō* (Tokyo: Ochanomizu Shobō, 1994); Nanasan'ichi kenkyūkai (ed.), *Saikinsen butai* (Tokyo: Banseisha, 1996); Daniel Barenblatt, *A Plague upon Humanity: the Hidden History of Japan's Biological Warfare Program* (New York, NY: HarperCollins: 2004); Sheldon H. Harris, *Factories of Death: Japanese Biological Warfare in 1932-45 and the American Cover-up* (London, GB: Routledge, 1994); Peter Williams and David Wallace, *Unit 731: Japan's Secret Biological Warfare in World War II* (New York, NY: Free Press, 1989).

[22] See the Association's website: http://war-medicine-ethics.com/ (last accessed: 29 July 2016).

Pennington raised another factor that affected particularly the dearth of scholarship on the history of Japanese wartime medicine in English – the heritage of Ruth Benedict. As Pennington noted, in her influential book *The Chrysanthemum and the Sword*, Benedict argued that the Japanese Army did not have a battlefield medical system during the Pacific War at all, since it considered the life of its soldiers expendable. This was a commonly held belief during the war, which carried through after it. Moreover, Pennington argued, Japanese scholarship, such as the work by Saubrō Ienaga emphasized the aforementioned cases whereby soldier-patients were either made to commit suicide or be executed, presenting the cases as a norm in the Japanese Army. Yet, these cases occurred only during the very end of the Pacific War, and as this dissertation also argues, should be understood in their specific context - not as an essential feature of Japanese Army medicine.[23]

These images of the Japanese Army created the impression that Japanese military medicine either did not exist, or only existed for the purpose of inhumane war crimes. This dissertation does analyze some cases of war crimes, conducted and witnessed by medics. Though it does not discuss Unit 731 directly, there were also medics who served in the unit and were involved in other related medical crimes. I would argue that this consistent preoccupation with the unit was and is justifiable. However, over 70 years after the end of the Pacific War, it is time to reveal other sides of this history as well. Alternatively put, war crimes are part of this dissertation, but are not the center or sole topic of preoccupation. The dissertation reveals a much broader history of the thousands of men, who were not involved in war crimes. Their story and the trajectory the role underwent in Japan placed within an international framework, contributes to the understanding of the development of modern medicine, military medicine and war, in a

[23] Lee K. Pennington, *Casualties of History: Wounded Japanese Servicemen and the Second World War* (Ithaca, NY: Cornell University Press, 2015), pp. 56-58.

way that could not be achieved by focusing only on war crimes. By so doing, the dissertation will contribute to a trend that has begun quite recently in the field.

Over the past 5-10 years the nature of research related to Japanese modern military medicine has begun to change. It has evolved into a budding field that explores this history from a variety of angles, positioning it within the intellectual framework of the history of medicine and disability. Bay wrote about the debates between the Japanese Army and Navy medical systems concerning the disease of Beriberi, and explored how these debates were tied to discussions on medical reform and westernization. Pennington contributed to the history of disability by analyzing the way the Japanese Army and society treated and perceived Japanese wounded soldiers - from the moment of wounding to their rehabilitation back into society. Fujiwara researched how military disability affected the wives and brides of the disabled during and following the Pacific War, and Nakamura revealed the field of Japanese wartime military psychiatry, and analyzed the treatment of soldiers with "invisible ailments."[24]

A related field that the dissertation also relies on and hopes to contribute to is the history of imperial and colonial medicine, particularly in respect to the functions Japanese medics filled in China from 1937. Most works on the topic have focused on the institutional frameworks that created medical structures to facilitate imperial expansion and colonial occupation from above. As such they examined the history of the doctors and scientists that led policy and related research, and the military, police and government command that ruled the different territories. As such, they are top-bottom approaches. Lo also examined the role of local mobilized doctors in

[24] Alexander R. Bay, *Beriberi in Modern Japan: the Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012); Fujiwara Testuya, "Sensō to shōgaisha no kazoku," in Yamashita Mai (ed.), *Rekishi no naka no shōgaisha* (Tokyo: Ippan zaidan hōjin hōsei daigaku shuppan-kyoku, 2014), pp. 277-317. In English see also Fujiwara Tetsuya, translated by Russelle Meade, "Disabled War Veterans during the Allied Occupation of Japan," *SOAS Occasional Translations in Japanese Studies*, Vol. 3 (2012), pp. 1-26; Nakamura Eri, ""Invisible" War Trauma in Japan: Medicine, Society and Military Psychiatric Casualties," *Historia Scientiarum*, Vol. 25, No. 2 (2016), pp. 140-60; Pennington, Op. Cit.

Taiwan and their multivalent relationship with Japanese rule, thus combining top-bottom and bottom-up approaches as well.[25] This dissertation explores the mundane aspects of occupation through medic activities. More than policy, it looks at the dynamics that Japanese medic presence deep in the Chinese countryside, as sole care providers, created between the Army and the local population. It reveals that in these cases medicine helped preserve the peace between moments of tension and conflict on the one hand, and filled a lacuna in remote places that had very little access to medical care on the other. The dissertation analyzes these moments of encounter – planned and spontaneous. Through them and the medics' interpretations of these encounters, it reassesses the place medicine held in the routine of occupation.

Chapter Overview

This dissertation is divided into two parts. The first part focuses on the question of origins from a largely institutional perspective. Chapter 1 discusses the rise of the importance of scale in the history of military medicine and historicizes the importance states and militaries ascribed to the body of the individual as potential soldier - two necessary preconditions for the creation of the medic. The chapter introduces the context of the Meiji era and its reforms, the establishment of the new Meiji Army and the enactment of general conscription. It also discusses the reforms medicine began undergoing and the tight connection between these reforms and the development of the new field of military medicine.

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[25] Michael Shiyung Liu, *Prescribing Colonization* (Ann Arbor, MI: Association for Asian Studies, 2009); Ming-cheng Miriam Lo, *Doctors Within Borders Profession, Ethnicity, and Modernity in Colonial Taiwan* (Berkeley, CA: University of California Press, 2002); Mizuno Norihito, "*Kampō* in Wartime Sino-Japanese Relations," in Philip C. Brown & David G. Wittner, *Science, Technology, and Medicine in the Modern Japanese Empire* (New York, NY: Routledge, 2016), pp. 175-92; Ruth Rogaski, *Hygienic Modernity* (Berkeley, CA: University of California Press, 2004); Iijima Wataru, *Malaria to teikoku: shokuminchi igaku to higashi ajia no kōiki chitsujo* (Tokyo: Tokyo Daigaku Shuppankai, 2005).

Chapter 2 explores the development of the earliest manifestation of the medic and the changes it underwent in the early Meiji era, following events that took place within Japan – the Boshin Civil War (1868-69) and the Satsuma Rebellion (1877). The chapter discusses how the intersection between the expansion of scale and the professionalization of medicine raised the need for a middleman to treat the growing number of soldiers. It explores how the Army negotiated the form this role was to take, whether civilian or military, in the hospital, Army unit or both, by a man or a woman.

Chapter 3 investigates the origins of the medic role tied to geographical as well as numerical expansion of warfare, and the rising importance of speed in military medical care. It places this development on an international trajectory in which medicine drew closer to the battlefield, focusing particularly on the Netherlands, Germany and France as sources of influence. Equally important, it investigates the role of experience in motivating change, specifically - the Sino-Japanese War (1894-95) and the Russo-Japanese War (1904-05).

The second part of the dissertation focuses on the viewpoint and experiences of the men, who served in different medic roles in the 1930s and 1940s. Chapter 4 serves as a transitional chapter between the institutional and personal perspectives of the dissertation through the question of criteria. Arguing that the criteria for a role reflects the way it is perceived by the organization that creates the criteria, the chapter explores why and how the Army selected certain men to serve as medics. It positions this question within the wider history of conscription and its connection with the history of the body, from the early Meiji to the Pacific War. It then juxtaposes the Army criteria and the changes they underwent, with popular culture and interpretations by former-medics, to gauge the image the role had within the Army and society.

Chapter 5 analyzes how the War in China (1937-45) affected and changed the roles medics played as a prolonged war of occupation. It follows the path medics tread from their enlistment, through their training and their following active service - in the hospital and the unit, the battlefield and the countryside. It examines the challenges medics faced, the skills with which their training armed them, and how these skills served them as they filled their duties. It discusses how violence affected the nature of medic service, through the functions medics filled, and war crimes that some participated in. It revisits questions of scale and gender and how they refashioned the role and the dynamics of service under new circumstances. And finally, it evaluates how the role developed into an imperial agent through the content of the medicine medics practiced and their interaction with local populations.

Chapter 6 focuses on the final years of the Pacific War, 1943-45, and evaluates how the deterioration of Japan's position in the war affected the definition, capability, ethics and experiences of medics. The first part of the chapter follows the lives of medics in different locations and functions, demonstrating the variety of experiences and conditions caused by location. However, it also detects the common traits among them – growing shortages of supplies, malnutrition and hunger. The chapter probes how medics coped with losing that which made them medics in the first place – their capability to treat. The second part of the chapter discusses the aforementioned cases of medics who were ordered to kill their patients as the apex of the disintegration of the medical system. By analyzing the specific context of different cases, the variety between them, the perspectives of medical providers, and the degree of agency they had, the chapter reassesses the place of survival and mobility in the history of the medic role.

Names and Transliteration

The dissertation generally follows the conventions of writing Japanese family names before first names. One exception concerns works written in English by authors of Japanaese descent, whereby the author of the work wrote his/her first name before his/her family name. In respect to location names, the dissertation uses local transliteration. For example, when referring to places in China the dissertation uses Chinese names instead of the Japanese terms for them.

Part I
Modern War, Medicine and the Medic

Chapter 1
Meiji Military Medicine: Intersection of Reforms and Contexts

The institutionalized medic role – or rather, roles – developed in a specific historical context of numerous intersecting changes. The Meiji era (1868-1912) was a period of rapid transformation. Politics, society, science, culture, technology, religion, philosophy, economics and even time changed almost unrecognizably in comparison to what they were in the preceding Tokugawa era (roughly 1600-1868). Trains and railways and foreign-styled brick buildings transformed the landscape; compulsory education changed daily life and the concept of childhood; Meiji reformers abolished former social classes, as well as the geo-political domains, which were the individual's focus of loyalty and attachment.

Historiography often discusses the degree of continuity versus change, especially in respect to people's daily lives. Namely, it examines to what extent these changes manifested themselves on a daily basis, and directly affected and altered what people experienced, thought and felt. Recently, scholars have been arguing that on many levels much remained as it was. Despite compulsory education, not all children actually went to school; not everyone boarded a train; though social classes formally ceased to exist, social and intellectual capital could not be abolished, at least not at first. Thus former samurai continued manning top positions. And finally, loyalty and attachment to one's hometown largely continued to shadow the newly invented concept of loyalty to the "nation."[1] In this respect, more than a quick "revolution" it

[1] Andrew Gordon, *A Modern History of Japan* (Oxford: Oxford University Press, 2003), pp. 61-136. For a telling comparison of continuity versus change, see for example, Stefan Tanaka, *New Times in Modern Japan* (Princeton, NJ: Princeton University Press, 2004) versus Mikiso Hane, *Peasants, Rebels, Women, and Outcasts: The Underside of Modern Japan*, (Lanham, MD: Rowman & Littlefield, 2003. Original from 1982). For an example of the combination of the "old" and the "new" see Gregory Clancey, *Earthquake Nation: the Cultural Politics of Japanese Seismicity, 1868-1930* (Berkeley, CA: University of California Press, 2006). On trains and their impact in the Meiji

was a period of gradual change that partially began in the late Tokugawa era. Yet, as mentioned above, in some areas changes were numerous, far-reaching, frequent and not always systematically planned, shaking the foundations of existence. One significant object of change, which was shared by all, was the physical body.

The chapter will focus on the altered politicized place the individual came to occupy in society, while his and her body became the object of increasing state preoccupation. As Frühstück and Burns demonstrated, this was salient to male as well as female bodies.[2] However, as shall be argued in subsequent chapters, it was the altered view of the importance of the male body in Meiji society, which became the foregrounding condition for the development of medic roles in the Japanese Army. This chapter will focus on three fields of change that created the context, which facilitated the enlistment of a layman to serve as a military medical caregiver. All three fields resulted from the rising importance of scale and collectivity: military reform, medical reform, and the establishment of military medicine as a specialty.

The Meiji leaders aspired to cement Japanese power and resilience in the world. Military prowess was one way of achieving that goal. To do so the new military wished to adopt Western ways of war, which included adapting to a form of warfare relatively new on the global stage – large-scale warfare based on conscripted militaries. The chapter will argue that conscription

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era see Steven J. Ericson, *The Sound of the Whistle: Railroads and the State in Meiji Japan* (Cambridge, MA: Council on East Asian Studies, 1996. For more on the history of Meiji education see: Motoyama Yukihiko, *Proliferating Talent Essays on Politics, Thought, and Education in the Meiji Era*, edited by J.S.A. Elisonas & Richard Rubinger (Honolulu, HI: University of Hawaii Press, 1997). For the development of new varied ideas in political ideology, such as the state, imperial rule and the body politic see Carol Gluck, *Japan's Modern Myths: Ideology in the Late Meiji Period* (Princeton, NJ: Princeton University Press, 1985).

[2] According to Frühstück, control over the individual body originally targeted soldiers and prostitutes, since the latter were perceived as a risk to public health. Gradually, especially by the 1930s, the perception of the female body as the reproductive body of the mother, became crucial to a pronatalist policy. See: Sabine Frühstück, *Colonizing Sex: Sexology and Social Control in Modern Japan* (Berkeley, CA: University of California Press, 2003). On the pathologization of the female prostitute body and its monitoring during the Tokugawa-Meiji transition, see also Susan Burns, "Bodies and Borders: Syphilis, Prostitution, and the Nation in Japan, 1860-1890," *US-Japan Women's Journal*, No. 15 (1998), pp. 3-30.

changed the identity of the soldier, expanding the formerly exclusive role of one social class to the general population.

For a soldier to fight, he was to be physically capable. The second field of change was thus medicine. The chapter will argue that conscription propelled medical change, because it attracted growing state attention to the body of each subject. This attention manifested itself through public health policies.[3] However, medicine also became an increasingly important field to maintain military strength, while requiring the cultivation of more personnel to ensure it. The chapter will argue that actual warfare and the threat of future warfare contributed to the development of new forms of medicine. Moreover, it will suggest that medical reformers used the new requirements of warfare, as an argument for medical reform and Westernization.

Conscription gradually brought military service to the doorsteps of a large portion of society blurring the lines between "military" and "civilian." It also cultivated an intertwined and almost inseparable relationship between civilian and military medicine, through a process of medical politicization and nationalization. The third field of change was thus the establishment of military medicine as a specialty, aimed at enabling the expansion of military scale on the one hand, and motivating the enlisted individual to serve by ensuring his physical welfare.

The chapter will end by positioning the Meiji context within the global context of contemporary military medicine, arguing that while the history of Meiji era Japan had unique characteristics, the development of the Meiji military was also part of a global trend of transnational learning. The chapter will thus provide a bird's eye view of the frameworks in

[3] For the implementation of public health policies and the cultivation of an association between the individual body to that of the state during the early Meiji era see Susan Burns, "Constructing the National Body: Public Health and the Nation in Nineteenth-Century Japan," in Timothy Brook & Andre Schmid (eds.), *Nation World: Asian Elites and National Identities* (Ann Arbor, MI: University of Michigan Press, 2000), pp. 17-49.

which medic roles came into being, while focusing on larger structures and on physicians, as the foundations on which the medic story will be built in the subsequent chapters.

1) Military Reform

Building a New Military

The Meiji era began with what often originates new eras in history – a war. The Boshin Civil War (1867-69) concluded with the toppling of the Tokugawa regime. The former rebels turned rulers (predominantly led by the Satsuma, Chōshū, Tosa and Hizen domains) took various steps to create a new Japan that could stand up to the "West"; the same "West" – America, followed by France, Britain, the Netherlands and Russia - which forced the previous regime to forfeit a substantial part of its sovereignty by signing a series of "unequal treaties" in the 1850s. The treaties provided the Western powers with such rights as the right of presence in Japan while maintaining extraterritoriality, as well as conducting trade on terms that were highly unbeneficial to Japan. The frailty of the Tokugawa regime in comparison to the "West," epitomized by the treaties, was the main reason for which the rebels took up arms and called for the reinstatement of emperor Meiji as ruler in the first place.

Following their victory, the rebels became the leaders, standing formally behind the emperor, but in practice, holding the reigns and enacting numerous reforms. Their aim was to extricate Japan from the unequal treaties and prevent it from ever being in the same inferior and disadvantaged position it was in 1853. The leaders concluded that to stand up to the West it had to learn the secrets of its power, adopt them, and eventually use them to open the doors for Japan to be treated as an equal. By so doing, they were in reality continuing many steps already initiated by the regime they fought against, but at a different magnitude. Instead of reforming

within the confines of an older regime, they aimed at reinventing Japan in the form of a centralized "nation state," which possessed a national Western-styled military.[4]

Necessity is the mother of invention. The Tokugawa era is often described as a period of almost 250 years of peace. Beginning with many internal wars, it was followed by a both centralized and dispersed polity in the form of the Tokugawa Bakufu government and the autonomic rule of the different *Han* domains.[5] Each domain possessed its own army, manned solely by members of the samurai class. The Bakufu held the right to enlist the different domainal armies if necessary under one roof. In other words, the Bakufu army was not a standing army. The relative scarcity of military activity even led members of the samurai warrior class to expand to other non-military fields.[6] Following the arrival of Commodore Matthew Perry and his notorious "black ships" in 1853, the Tokugawa reformed its international policy and signed the unequal treaties. It began implementing military reforms as well, as did particular domains independently, such as Chōshū. Different works on military strategy and formation translated from Dutch to Japanese proved particularly useful; Dutch, since the Dutch East India Company (the VOC) was the only Euro-American power with whom the Tokugawa government allowed to conduct trade and relations.[7] More importantly perhaps was the role that France and Britain came

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[4] For a fuller account of the different aspects of the reforms and the building of the new regime see Gordon, Op. Cit., pp. 61-137; Marius Jansen, *The Making of Modern Japan* (Cambridge, MA: Harvard University Press, 2002), pp. 333-413. For an example of how the state-building reforms affected different fields and society at large, see Morris Low's edited volume *Building a Modern Japan: Science, Technology, and Medicine in the Meiji Era and Beyond* (New York, NY: Palgrave Macmillan, 2005).

[5] For more, see John W. Hall, "The *Bakuhan* System," in *The Cambridge History of Japan, Vol. 4: Early Modern Japan* (Cambridge, GB; Cambridge University Press, 1991), pp. 128-182.

[6] On the armies of the Tokugawa era and the changes, which the Samurai position underwent during the period, see for example, Eiko Ikegami, *The Taming of the Samurai* (Cambridge, MA: Harvard University Press, 1995), particularly pp. 151-60. For earlier military organization and regional connection, see Thomas Conlan, *State of War: the Violent Order of Fourteenth-Century Japan* (Ann Arbor, MI: Center for Japanese Studies, University of Michigan, 2003).

[7] For more on Tokugawa era international relations see Grant K. Goodman, *Japan and the Dutch, 1600-1853* (Richmond, GB: RoutledgeCurzon, 2000); Ronald Toby, *State and Diplomacy in Early Modern Japan: Asia in the Development of the Tokugawa Bakufu* (Stanford, CA: Stanford University Press, 1991).

to play in the 1860s. French and British military instructors came to Japan to help reform and train its forces in European methods. The days of the former regime were numbered. Yet, its reforms left their mark and were pursued further by the Meiji leaders, as France became the main model for the structure of the Meiji Army, and Britain – for the Navy. The Meiji leaders were also particularly interested in the Prussian army, which gained precedence later in the 1880s.[8]

The drive for reform reached a peak in 1872, with the decision to establish a national military the following year, thus replacing both the former local armies and the *Shinpei* guard attached to the Meiji government. As such, the establishment of the new army also supported initiatives to abolish localized structures in favor of a more centralized one. The new military was an organization coming into being and as such, it went through many frequent reforms of different scale. For example, the military included an army and a navy under the same roof. This changed by 1872 when the government abolished the Ministry of Military Affairs and replaced it with an Army Ministry and a separate Navy Ministry. The reform was part of a number of reforms initiated by Yamagata Aritomo and implemented by Nishi Amane, two central figures in the early Meiji, who stood behind many of its reforms. Yamagata especially has come to be considered the founding father of the Meiji Military.[9] One of the most significant characteristics of the new army was its use of general conscription.[10]

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[8] See for example, Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853-1945* (Lawrence, KS: University Press of Kansas, 2009), particularly pp. 1-10; Ernst L. Presseisen, *Before Aggression: Europeans Prepare the Japanese Army* (Tucson, AZ: The University of Arizona Press, 1965), pp. 1-23. For an example of the significance of French influence, see Takehiko Hashimoto, "Introducing a French Technological System: The Origin and Early History of the Yokosuka Dockyard," *East Asian Science, Technology, and Medicine*, Vol. 16 (1999), pp. 53-72.

[9] Jansen, Op. Cit., pp. 395-96; Presseisen, Op. Cit., p. 30.

[10] As shall be further discussed in Ch. 4, this dissertation distinguishes between "conscription" and "enlistment" in the following way: conscription signified passing the conscription exam and being added to its lines, in some cases into active duty and in others – into reserves. Enlistment signified entering into active duty. Thus, the moment of conscription differed from that of enlistment. Some men were conscripted and never enlisted. Some were enlisted shortly after conscription, and others years after.

General Conscription – Social Class and Physicality

In order for Japan to become a worthy military player on the international stage it had to adapt its military capabilities to those of the West - technologically, strategically and also in terms of scale. As mentioned above, in the Tokugawa era military activity was limited to a particular social status – the Samurai – that was in turn defined by its monopoly over military activity. Throughout the 18th and 19th centuries especially, the scale of warfare in Europe and America grew increasingly. In addition to fighting technology, numbers were becoming a determining factor in war, more so than in the past. The Franco-Prussian war (1870-71) was an especially important landmark as it demonstrated the forceful potential of general conscription, enacted by both of the belligerents. Japan was aware of this, and according to scholarship, the Japanese conscription law was itself the product of both the French and German systems.[11] Both armies and the Franco-Prussian war in particular had a formative influence on the development of the medic role within the new Army, as shall be discussed in the third chapter.

The Meiji leaders sought to follow France and Prussia, by making use of the general population to enhance the military's strength. Military service gradually turned into a responsibility to be shouldered by all men irrespective of their social and geographic background. What determined a man's fitness for service was not his heritage, but his physical ability; "his" since from the start, the Meiji leaders defined the military as a solely masculine sphere.[12] In other words, the definition of "the soldier" changed from exclusive social capital to the physical characteristics of his body. This was a major point of departure from the past.

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[11] Presseisen, Op. Cit., pp. 31-33.

[12] See for example Algoso's discussion of the development of the category of hermaphrodite and the problems it caused in determining eligibility for military service: Teresa A. Algoso, "Conscription, Masculinity, and Hermaphroditism in Early Twentieth-Century Japan," in Sabine Frühstück & Anne Walthall (eds.), *Recreating Japanese Men* (Berkeley, CA: University of California Press, 2011), pp. 241-61, see particularly p. 246.

As in many other fields, however, the balance between change and continuity was delicate. Even though the Meiji government gradually abolished the status system by 1876, and though it enacted general conscription from 1873, high-ranking officer positions were typically filled by former members of the samurai and their descendants. Those who were in the lower echelons of society often manned lower positions, including medic roles.[13] Forms of cultural and social capital continued to largely determine one's path in life and in the military. Previous hierarchies then persisted in new forms.[14] Moreover, the Army continued conscripting soldiers according to their family registry into geographically bound garrisons – replaced by divisions from 1887. The connection between one's home and one's military service thus persisted. That said, extending military service to the general male population signified recognition of the individual's potential to contribute to the collective in the form of the new nation state - a radically new concept. Military service served as means for instilling a sense of solidarity and identification with the nation at large. Even though conscription was locally based, it was part of a collective national structure.[15]

Implementing conscription was a gradual process, and like most reforms, it was not implemented immediately in full. Though the government initiated general conscription in 1873, two prior attempts failed, and a system of exemptions, budgetary challenges, as well as popular resistance, resulted in conscription of only part of the theoretically eligible population. As Lone mentioned, young men adopted different measures to find loopholes in the system and avoid

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[13] Stewart Lone, *Japan's First Modern War: Army and Society in the Conflict with China, 1894-95* (London, GB: The Macmillan Press, 1994), pp. 17-21

[14] Following Pierre Bourdieu, "The Forms of Capital," translated by Richard Nice, in J.E. Richardson (ed.), *Handbook of Theory of Research for the Sociology of Education* (Greenwood Press, 1986), pp. 241-58.

[15] As mentioned above, during the Tokugawa era Japan was divided into domains, *Han* 藩. One of the major Meiji reforms included abolishing the domains and creating prefectures instead. The territory of the new prefectures was geographically similar to that of the previous domains, but the Meiji leaders divided them so that they were sufficiently different from the previous *han* to prevent continuity of loyalties. See Gordon, Op. Cit., pp. 63-64.

service, which took them away from their daily lives in an extreme and sudden way. There were even guidebooks for the purpose, which remained popular until the very beginning of the Sino-Japanese War in 1894.[16] Conscription reached a more mature and stable stage roughly by the 1890s.[17] As the next chapter will demonstrate, medics were not initially conscripted either. Only gradually did the role become part of the Army structure.

Another significant hindrance to conscription was the weak physical constitution of many of the potential conscripts. As the soldier's physical state became a central criterion for conscription, it also became an obstacle.[18] However, in addition to the physical ability of soldiers to fight, the success of conscription relied on their motivation to do so. Conscription required the individual to serve, potentially fight and risk death in the name of the state. To be willing to make such a sacrifice, states used education as means for instilling a sense of duty and spirit of service. According to Lincicome, in the early Meiji era there was a plethora of pedagogical theories and methods, some of which focused on the development of the individual. But, from 1891 the ministry of education expanded its authority over the by then, largely universal education, to regulate, and to a large extent, use it to instill a sense of "nation," and a spirit of loyalty and duty towards it.[19]

In addition, both the ability and motivation to serve came to increasingly rely on the state assuming responsibility for managing and maintaining the soldier's body. Japan was part of an international process in which more and more states began requiring individuals to serve, fight, and die in their name, and in return were gradually held accountable for the soldiers' welfare.

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[16] Lone, Op. Cit., pp. 17-18.

[17] Drea, Op. Cit., pp. 23-24, 28-31, 69; Gordon, Op. Cit., pp. 66-7. For a global history of conscription see Peter Karsten (ed.), *Recruiting, Drafting, and Enlisting: Two Sides of the Raising of Military Forces* (New York, NY: Garland, 1998).

[18] See Chapter 4 for more details on the physical criteria for conscription.

[19] See Mark E. Lincicome, *Principle, Praxis, and the Politics of Educational Reform in Meiji Japan* (Honolulu, HI: University of Hawaii Press, 1995).

The expansion of conscription consequently contributed to a redefinition of the relationship between the state and the individual. In his 1762 work, Rousseau interpreted conscription as one manifestation of the "social contract" formed between the polity and its subjects; the subject surrendered his liberties to the polity, but the polity was then to reward this sacrifice. Conscription was to be based on an idea of reciprocity. Foucault interpreted this reciprocity as centered on the body; the state was to ensure the physical wellbeing and health of the serving body in return for the latter's willingness to serve and risk his own life in an implicit agreement Foucault termed "pact of war."[20] Even though this pact was often not executed perfectly as shall be discussed in subsequent chapters, the development of this concept itself is telling. It did not exist in the same way in the smaller armies of the past. Changes of scale, in the concept of the soldier and the authority of the state as a mobilizing force, created a new relationship between the state and its civilian body, through military mediation. Each country underwent this process in a different way, but while being aware of similar processes elsewhere. As shall be discussed below, Japan was part of this wider process.

Medicine was to play an important role in maintaining the health of the soldier, creating structures to cater to Army needs, such as medic roles. But what kind of medicine was it to be? In the Japanese case especially, medicine underwent significant changes, precisely when the Meiji leaders were establishing the new military and its medical system. The reforms of one were part of the reforms and policies concerning the others. Before we delve into the establishment of

[20] Jean-Jacques Rousseau, *The Social Contract* (1762), translated and introduced by Maurice Cranston (London, GB: Penguin Book, 1968); Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79*, translated by Graham Burchell (Basingstoke, GB: Palgrave Macmillan, 2008), p. 216. See Anna Skarpelis's interpretation in "Japan in War and Empire: Challenges for Historical and Comparative Welfare State Research from mid-20th century Japanese Welfare State Development," *Fondation France-Japon de l'EHESS Website*: http://ffj.ehess.fr/index/article/319/japan-in-war-and-empire-challenges-for-historical-and-comparative-welfare-state-research-from-mid-20th-century-japanese-welfare-state-development.html (last accessed: 3 Oct 2015).

military medicine into a field, let us then first examine the medical context of the time in question.

2) Medical Reform

Past and Future

Mori Rintarō – more widely known by his penname Mori Ōgai - was one of Meiji Japan's most notable authors, as well as the eighth Surgeon-General to serve in its army. His acclaimed novel *The Wild Geese*, set in the year 1880, focused on the protagonist Okada, a medical student at Tokyo University, about to set out to Germany to continue his studies. The novel revealed that Okada's journey was enabled by the recommendation of a Professor Baelz, under whose tutelage he studied in Tokyo. By going to Germany he was leaving Japan's former traditions and culture behind him. Symbolizing the break embedded in his departure for the West was the true main character of the novel – Otama - a poor girl, unwittingly forced by circumstances to become the mistress of a married usurer. Following a chance meeting, the two fell in love, a love that remained unfulfilled as Okada departed, taking with him Otama's last hope for redemption. Towards the end of the novel, the narrator paralleled Otama with a wild goose, which Okada – the medical student – reluctantly shot and killed, right before his departure.[21]

Similar to many of his contemporaries, Mori presented in his work, published serially between 1911 and 1913, the essential dilemma of the Meiji era – how to reconcile "Westernization" with "Tradition." The concentrated effort to adopt Western knowledge and culture in the first decades of the Meiji era, resulted in a backlash mostly as of the 1890s,

[21] Ōgai Mori, *The Wild Geese*, translated by Kingo Ochiai & Sanford Goldstein (Rutland, VT: Charles E. Tuttle, 1959).

centering on one question: how to adopt the foreign without losing "Japanese identity," the latter being itself in a process of definition as a result of its encounter with the West. Past analysis of the novel focused on its significance in expressing the complexity of this dilemma.[22] I argue that the novel holds special significance also for the specific process, which the field of medicine underwent during the Meiji era.

Pre-Meiji medicine was a combination of various schools and practices, predominantly based on what came to be known as *Kanpō* 漢方, often translated as East-Asian medicine or Traditional Chinese Medicine. Though lumped under one category, theories and practices differed, changed and developed over hundreds of years, as a result of activities within Japan and its interaction with China and Korea.[23] As of the 17th century, but most significantly from the late 18th century, works on so-called Western medicine arrived in Japan through trade with the Dutch East India Company. According to conventional historiography, this interest in foreign works on medicine stimulated interest in other fields of European knowledge. This new field of learning came to be known as *Rangaku* 蘭学, or Dutch Learning, led by doctors and Nagasaki interpreters.[24] Trade with the Qing Empire and Choson kingdom also brought translated missionary works to Japan, which included works related to medicine. This richness of material led to the development of schools of medicine, combining a variety of medical practices and

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[22] For more on the issues of "East/West", "tradition/modernity" as they were portrayed in the novel, see Keiko I. Mcdonald, "The Wild Geese Revisited: Mori Ōgai's Mix of Old and New," in Hiroshi Nara (ed.), *Inexorable Modernity* (Lanham MD: Lexington Books, 2007), pp. 201-15.

[23] For the history of *Kanpō* in Japan see Yasuo Otsuka, "Chinese Traditional Medicine in Japan," in Charles Leslie, (ed.), *Asian Medical Systems: A Comparative Study* (Berkeley, CA: University of California Press, 1976), pp. 322-340.

For more on movement of medical knowledge within East Asia and the changes medicine underwent in Japan as a result see: Daniel Trambaiolo, "Native and Foreign in Tokugawa Medicine," *The Journal of Japanese Studies*, Vol. 39, No. 2 (summer 2013), pp. 299-324; Mathias Vigouroux, "The Reception of the Circulation Theory in Japan (1500-1800)," in Benjamin Elman (ed.), *Antiquarianism, Language, and Medical Philology* (Leiden: Brill, 2015), pp. 105-132.

[24] James R. Bartholomew, *The Formation of Science in Japan* (New Haven, Ct: Yale University Press, 1989), particularly pp. 4-5, 13-14, 51-52.

theories, including Western and local practices. In respect to the latter, many doctors flocked to centers, such as Nagasaki and Edo to learn "Western-styled medicine" or "Dutch medicine" as it came to be termed. Though not limited to it, the focus of these schools was on anatomy and surgery.[25]

Following the Meiji restoration, medicine became one of the fields targeted by the Meiji leaders for reform as both a venue for asserting Japan's international stature and part of the process of increasing intervention in the health of Japanese subjects. Bartholomew even argued that medicine was the leading field in the Meiji reforms as part of the legacy of the Tokugawa era, since interest in Dutch medicine instigated foreign study in general.[26] Dutch works also continued to hold currency in the early Meiji, providing a mediating bridge for learning new policies and acquiring new foreign language skills. Moreover, the leading reformers were often trained themselves in Dutch medicine during the late days of the Tokugawa era. In this sense, one might argue that the preoccupation with the human body stood in many ways in the center of Tokugawa learning, and by extension, of the Meiji reforms.

Yet, during the Tokugawa era foreign works were often combined with *Kanpō* theories, while during the Meiji era *Kanpō* was gradually delegitimized.[27] It was no coincidence that Mori portrayed Okada in *The Wild Geese* as a medical student, who went to Germany to continue his studies, but that his journey was facilitated by his ability to translate classical Chinese medical texts. In the novel Prof. Baelz recommended him as a translator to another German professor in

[25] See for example: Benjamin Elman, "Sinophiles and Sinophobes in Tokugawa Japan: Politics, Classicism, and Medicine during the Eighteenth Century," *East Asian STS*, Vol. 2 (2008), pp. 93-121; Ellen Gardner Nakamura, *Practical Pursuits: Takano Chōei, Takahashi Keisaku, and Western Medicine in Nineteenth-Century Japan* (Cambridge: Cambridge University Press, 2005); Ranzaburo Otori, "The Acceptance of Western Medicine in Japan," *Monumenta Nipponica*, Vol. 19, No. 3/4 (1964), pp. 254-74. See also an example of how the different schools of medical thought and practice came together in the case of Hanaoka Seishū: Matsuki Akitomo, *Hanaoka Seishū to mafutsusan: mafutsusan wo meguru nazo* (Tokyo: Shinkō bōeki isho shuppanbu: 2006).

[26] Bartholomew, Op. Cit., particularly pp. 4-5, 13-14, 51-52

[27] Otsuka, Op. Cit., pp. 334-36; Sugiyama Shigeo, "Traditional Kampo Medicine: Unauthenticated in the Meiji Era The Similarity between Two Medicines," *Historia Scientiarum* 13 (March 2004), pp. 209-23.

Leipzig based on that particular ability. Ironically, it was the German professor who was interested in the texts, while for Okada they were a tool, enabling him to learn German medicine instead. Thus, even though Okada translated the texts and owed them his journey, he was intellectually leaving them behind as he was physically leaving Japan.[28]

Okada's background and story could be interpreted as an illustration of the transition between what came to be known as "traditional medicine" and the new Westernized medicine, which largely followed German models. Like Professor Baelz in the novel, between 1871 and 1914 the Tokyo medical school employed German physicians to teach and formulate a new system of medical education. Like Okada and Mori himself, many Japanese students went to study medicine in Germany. German influence on the field became so pronounced that, as Kim revealed, in 1907 the dean of the faculty of medicine of Tokyo Imperial University bemoaned that when it came to medicine, Japan essentially became a German colony.[29]

Accompanying this process was a parallel effort to limit and, in reality, ban local practices through legislation. The government did not officially forbid so-called traditional medicine, and a growing body of literature demonstrated how practices and belief systems persisted throughout, despite the reforms, including in the military all the way to the 1890s.[30] Subsequent chapters will demonstrate that even during the Pacific War in certain circumstances

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[28] Mori, Op. Cit., pp. 147-48.

[29] Hoi-eun Kim, *Doctors of Empire: Medical and Cultural Encounters between Imperial Germany and Meiji Japan* (Toronto: University of Toronto Press, 2014), p. 3.

[30] See for example Susan Burns' account of the use of new marketing techniques for rebranding *Kanpō* formulas in "Marketing Health and Beauty: Advertising, Medicine, and the Modern Body in Meiji-Taisho Japan," Hans Thomsen and Jennifer Purtle (eds.), *East Asian Visual Culture from the Treaty Ports to World War II* (Chicago: Paragon Books, 2009), pp. 179-202. Also see the history of physician Asada Shōhaku in Federico Marcon, "Honzōgaku after Seibutsuyaku: Traditional Pharmacology as Antiquarianism after the Institutionalization of Modern Biology in Early Meiji Japan," in Elman, 2015, pp. 148-62. Concerning the revival of *Kanpō* as a field from 1910, see Margaret Lock, *East Asian Medicine in Urban Japan* (Berkeley, CA: University of California Press). On early Meiji medical pluralism see Alexander R. Bay, *Beriberi in Modern Japan: the Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012), particularly Ch. 1, pp. 11-29, and Ch. 2, pp. 52-86 on medical pluralism in the military.

military physicians and medics used more traditional practices as well. However, they were arguably measures to fall back on when there was no alternative. Generally speaking, the motions from above gradually and increasingly limited the professional scope of the traditional practitioners, culminating in the legislation of a group of laws in 1874 – the *Isei* 医制, or "medical policy," as Burns translated it. The *Isei* created a set of criteria that in practice paved the way for enabling only practitioners of "Western medicine" to practice.[31] So much so, that foundational works on traditional medicine lost their appeal and demand, pushing them into antique book markets and in some cases, to China – outside of Japan altogether.[32] The wild goose was shot, and the medical student went abroad in search of new horizons.

War as Justification for Medical Reform

Medicine was a target for reform as part of a wider process of Westernization, aimed at presenting Japan to the world as a modern state. Yet, the instigators of these reforms justified them by emphasizing the close connection between medicine and war, specifically war that employed Western warfare. Ishiguro Tadanori was the fifth Surgeon-General between 1890 and 1897, and the president of the Japanese Red Cross Society between 1917 and 1920. He was one

[31] Bridie Andrews, *The Making of Modern Chinese Medicine, 1850-1960* (Vancouver: UBC Press, 2014), pp. 76-77; Susan L. Burns, "Contemplating Places: the Hospital as Modern Experience in Meiji Japan," in Helen Hardacre & Adam L. Kern (eds.), *New Directions in the Study of Meiji Japan* (1997), pp. 704-5. For more on the effects of the reforms, the *Isei* in particular, on local doctors and their reaction to them see: Sugiyama Op. Cit., pp. 209-23. It is noteworthy that a parallel process and similar debates took place in China at the time as well, influenced significantly by the regulations and reforms that took place in Japan. See: Bridie Andrews, "Tailoring Tradition: The Impact of Modern Medicine on Traditional Chinese Medicine, 1887-1937," Viviane Alleton and Alexei Vokov (eds.), *Notions et Perceptions du Changement en Chine* (Paris: Collège de France, l'institut des Hautes Études Chinoises, 1994), pp. 149-160; Xi Gao, "Foreign Models of Medicine in Twentieth-Century China," translated by Sabine Wilms, Xi Gao, Bridie Andrews, in Bridie Andrews & Mary Brown (eds.), *Medical Transitions in Twentieth-century China* (Bloomington, IN: Indiana University Press, 2014), p. 181; Xiaoqun Xu, "'National Essence' Vs 'Science': Chinese Native Physicians' Fight for Legitimacy, 1912-37," *Modern Asian Studies*, Vol. 31, No. 4 (1997), pp. 847-877.

[32] See Mayanagi Makoto's account of Yang Shoujing's purchase of a collection of Chinese medical works, preserved in Japan in the hands of the Kojima family in "Yang Shoujing and the Kojima Family: Collection and Publication of Medical Classics," in Elman (ed.), 2015, pp. 186-213.

of the most prominent proponents of medical reform, the adoption of so-called Western medicine and the delegitimization of *Kanpō* during the early Meiji.[33] Concurrently, and in an interrelated capacity, he played a major role in forming the Military medical system and is considered one of its most important founding fathers.[34] In his memoir Ishiguro described his experiences during the early days of the Meiji era and weaved into them the story of medical reform and the institutional establishment of military medicine.

For Ishiguro, the experience of the Boshin War clarified the importance of Western medicine, illustrating the close relationship between civilian and military medicine. A month following the outbreak of the war in 1868, the government army enlisted domain physicians to establish hospitals for treating the wounded, resulting in the creation of numerous care facilities.[35] According to Ishiguro, many of the incurred injuries were gunshot wounds, which required specific medical skills to treat. However, the active use of firearms was relatively new in Japan at the time, while local medicine largely focused on non-invasive methods of care. Consequently, Ishiguro argued for the adoption of Western medicine due to its vaster experience in the field of surgery, to compensate for the comparative lack of such experience in Japan.

Firearms had a long history in Japan. They appeared for the first time during the 13th century, arriving from Korea together with other merchandise, books and information. However, they were little used. According to Conlan, the dominant weapons and sources of injury during the 14th century were arrows and swords.[36] During the 16th century, a few hundred years later, European visitors brought with them European firearms as they arrived on Japanese soil.

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[33] Andrews, 2014, pp. 77-79.
[34] Aya Takahashi, *The Development of the Japanese Nursing Profession: Adopting and Adapting Western Influences* (London, GB: RoutledgeCurzon, 2004), p. 43; Rikujō jieitai eisei-gakkō shūshinkai (ed.), *Rikugun eisei seido-shi (Shōwa-hen)* (Tokyo: Hara-shobō, 1990), p. 11.
[35] Nishioka Kaori, "Nihon rikugun ni okeru gun'i seido no setsuritsu," *Gunjishigaku*, Vol. 101 (June 1990), p. 25.
[36] Conlan, Op. Cit., pp. 58-67.

According to Perrin, five years later – in 1548 – warriors continued using swords and arrows, but many began also using this new type of weapon. Japanese artisans also produced local firearms based on the European, while improving their function and range. Production and use of firearms expanded and grew.[37] Circumstances changed by the time of the Tokugawa era starting roughly in 1600. The new Tokugawa government confiscated weapons as it monopolized the practice of war. During its 250 years of relative peace, minimal use of them was made. But, in Europe and America firearms continued changing, as did the wounds they inflicted.[38] Therefore, as discussed above, the Tokugawa government agreed to American demands in 1854, recognizing it did not have the means to resist.

When it came to medicine, there were earlier forms of "wound medicine" in Japan, as well as invasive methods of care. According to Goble, the expansion of warfare during the 14th century and the consequent proliferation of wounded soldiers, encouraged development of forms of wound medicine, which grew into a medical specialty for the first time. Goble argued they were based on local practices combined with those introduced from Song-China, and included both invasive and non-invasive techniques.[39] By the early 19th century, local schools of medicine developed forms of surgery, including under general anesthesia, as a combination of Western and local sources of knowledge and practice. Yet, these skills were limited to particular schools. By and large, it was more prevalent to treat by noninvasive methods, such as herbal formulas. Even the surgical schools did not have experience in dealing with invasive battle wounds – due to the scarcity of warfare. They focused on extraction of tumors, treating accidents resulting in

[37] Noel Perrin, *Giving Up the Gun: Japan's Reversion to the Sword, 1543-1879* (Boston, MA: David R. Godine, 1979), pp. 16-17.
[38] Kenneth Chase, *Firearms: a Global History to 1700* (Cambridge, GB: Cambridge University Press, 2003), pp. 172-196.
[39] See Andrew Goble, "War and Injury: the Emergence of Wound Medicine in Medieval Japan," *Monumenta Nipponica*, Vol. 60, No. 3 (Autumn 2005), pp. 297-338.

trauma, or dealing with difficult births.[40] Thus, Ishiguro argued, it was not possible to adequately cope with the physical price of war, without using Western medical methods.

Matsumoto Ryōjun, the first Surgeon-General of the Meiji Army, who served as military physician with the Tokugawa government army, made a similar argument. Matsumoto studied in Nagaski with a Dutch military physician by the name of Pompe van Meerdervoort. In 1856 he even opened a school for Western medicine in Nagasaki with Meedervoort, at the behest of the Tokugawa government.[41] Based on what he witnessed during the war, he argued that the ability of *Kanpō* doctors to deal with war wounds, gunshot wounds in particular, was limited to cleaning and bandaging the wound. As a result of their lack of experience, they were unable to save most of their patients.[42] The majority of doctors active during the war were *Kanpō* doctors. Training them in wound treatment required time - an unavailable asset amidst the expanding civil war. Hence, Ishiguro argued, the Tokugawa government decided not only to employ those among the Japanese who learned Western medicine like Matsumoto, but also to directly employ a Western physician who had the practical experience, needed so extensively during wartime.[43] According to Ishiguro, the British Envoy in Japan, Sir Harry Smith Parks, was aware that the Tokugawa Bakufu government was searching for Western physicians, and recommended his friend Dr. William Willis.[44] Together with another British physician, Joseph Bower Siddall, Willis opened a hospital in Yokohama and as the Boshin War moved, so did he, treating the numerous wounded in improvised locations. He conducted surgery, performed amputations, and instructed

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[40] See for example, Kure Shūzō, *Hanaoka Seishū sensei oyobi sono geka* (Tokyo: Ōzorasha, 1994); Shinmura Taku, *Nihon iryō-shi* (Tokyo: Yoshikawa Kōbunkan, 2006), pp. 144-218; Yuki Terazawa, "Gender, Knowledge and Power: Reproductive Medicine in Japan, 1690-1930," (Doctoral Dissertation. University of California, 2001).
[41] Bartholomew, Op. Cit., pp. 31-32, 40.
[42] Matsumoto Ryōjun, *Matsumoto Jun Jiden, Nagayo Sensai Jiden,* annotated by Ogawa Teizō & Sakai Shizu (Tokyo: Heibonsha, 1980. Original from roughly 1902), second chapter, particularly pp. 66-67.
[43] Ishiguro Tadanori, *Kaikyū kyūjū-nen* (Tokyo: Ōzorasha, 1994. Original from 1936), p. 133.
[44] Ishiguro, Op. Cit., pp. 133-34.

the government army medical officers in techniques, such as removing bullets, and applying splints. According to his report, he eventually treated 600 wounded men and oversaw the treatment of a 1000, including both members of the government army and those of the opposition.[45] According to statistics of the Boshin war, the war resulted in 8240 men dead and 5354 injured.[46] Willis then played a major role in wartime medical support.

The government and military preoccupation with the need to provide sufficient care during battle, establishing facilities for the purpose and considering the best practices and practitioners to provide care demonstrated an underlying assumption that the soldier required proper care. This growing concern for the soldier's body was unprecedented at the time. As discussed above, there were forms of wound medicine, but no institutional framework dedicated to treating the soldier on the field. The justification for adopting Western medicine by emphasizing the importance of its particular skills in wartime thus elucidates how the soldier's body stood in the center of the institutionalization of both war and medicine; medicine was to be completely reformed so that during war, the soldier could receive better care. The importance of Western medicine was thus presumably proven during the very war that opened the Meiji era.

Was it so? Medicine and Surgery

It is possible to argue that both Ishiguro and Matsumoto inflated the importance of the treatment of gunshot wounds, in order to further their goal of promoting Western medicine to serve a different purpose. Both Matsumoto and Ishiguro were proponents of medical Westernization, writing their memoirs years after the fact to justify and even glorify the reforms they supported and led – Matsumoto roughly in 1902 and Ishiguro, later still in 1936. However,

[45] Hugh Cortazzi, *Dr Willis in Japan, 1862-1877: British Medical Pioneer* (London, GB: The Athlone Press, 1985), pp. 1-2, 150-51.
[46] Owada Tetsuo, *Sensō no nihonshi* (Tokyo: Yoshikawa Kōbunkan, 2007), p. 288.

despite the use of firearms, swords continued being a frequent cause of wounds. For instance, during the Shinpūren Rebellion of 1876, waged by former Samurai against the Meiji government, swords were the cause of many of the injuries. Ishiguro acknowledged this, but argued that the Shinpūren Rebellion would be "the final sword war" in Japan. The future was in firearms and required, he argued, medical adaptation to its repercussions.[47]

Deriding *Kanpō* and emphasizing the superiority of Western medicine was another way of reinforcing the glorification of medical Westernization. However, in Matsumoto's abovementioned criticism of the inability of local doctors to deal with wounds, he purposefully ignored the ability of many to suture. He argued that only those trained in Western medicine knew how to do so. Granted, practices such as suturing and bandaging developed largely as a result of the encounter with Western missionaries already in the 16th century, eventually leading to their categorization as *geka* 外科, external treatments (a term used in Japanese today to signify surgery). Furthermore, as mentioned above, practitioners of *geka* often practiced in their own specific schools creating a distinction between them and other practitioners. However, as of the 17th century, a growing number of country doctors traveled to large urban areas, such as Kyoto, Edo and Nagasaki, to study with different schools of medicine. The practice was so prevalent that it was even defined by a particular term – *yūgaku* 遊学, literally signifying recreational study, but actually denoting travel outside of one's hometown for the purpose of study. During their travels, the students would usually study *hondō* 本道, "the main path," a term used at the time to refer to different schools of Sino-Japanese theories of medicine, which were largely non-

[47] See a similar debunking of technological determinism in respect to war and firearms in China: Nicola Di Cosmo, "Did Guns Matter? Firearms and the Qing Formation," in Lynn A. Struve (ed.), *The Qing Formation in World-Historical Time* (Cambridge, MA: Harvard East Asian Monographs, 2004), pp. 121-66. For more on the Shinpūren Rebellion, see John M. Rogers, "Divine Destruction: the Shinpūren Rebellion of 1876," in Helen Hardacre & Adam L. Kern, *New Directions in the Study of Meiji Japan* (Leiden: Brill, 1997), pp. 408-39.

invasive. The same students would often study with the abovementioned external medicine schools as well. Thus even doctors who did not define themselves as *gekai* 外科医, doctors of external medicine, or practitioners of Dutch or Western medicine, were often still trained to a certain extent in such skills.[48]

The very emphasis of both Ishiguro and Matsumoto on the importance of surgery is also noteworthy. First of all, it could be debated what advantage Western medicine possessed over *Kanpō* in the late 1860s in respect to survival rates. As described above, Willis taught Japanese doctors how to apply splints, remove bullets, and perform amputations - specific skills tied to injury incurred in battle. However, the Boshin war took place before Listerian methods of antiseptics took hold in European surgery. The Prussian army was hailed for its avant-garde use of antiseptic technique in the Franco-Prussian war about three years later. Other countries, such as Britain did not implement the method as extensively at that time. Moreover, when it came to battle, disease was more often the cause of military casualties. In Europe there was a distinction between medicine and surgery for hundreds of years within civilian and military contexts.[49] In light of this, it is interesting to note that Matsumoto and Ishiguro presented surgery as a metonymy for Western medicine in general, encompassing the treatment of disease as well as wounds. The term adopted for military physicians - *gun'i* 軍医 - was to be used for all.[50] The identification of Western medicine specifically with wounds, and not disease for example, became another formative factor in the development of the medic role, due to an emphasis on the importance of speed in medical evacuation, as shall be discussed in the third chapter.

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[48] Terrence Jackson, *Socialized Intellect: the Cultural Network of Rangaku in Late Tokugawa Japan* (Doctoral Dissertation, Indiana University, 2004), p. 148; Nakamura, Op. Cit., pp. 100-101; Otori, Op. Cit., pp. 25-27. For a fascinating case-study see Nakamura, Op. Cit.

[49] Toby Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the 18th Century* (Westport, CT: Greenwood Press, 1980), pp. 43-44; Martin R. Howard, *Napoleon's Doctors: the Medical Services of the Grande Armée* (Stroud, GB: Spellmount, 2006), p. 14.

[50] Matsumoto, Op. Cit., p. 66.

Ishiguro and Matsumoto's memoirs illustrate that the question of Westernization was not self-evident – at least not to the general public, or the community of practicing physicians. It required justification. War experience and its relationship with medicine provided one such justification. Another possible source of motivation was a political one. For the Meiji reformers medicine was not an impartial practice. It was a representation of national power. Thus again, the body of the individual was tied to the body politic. A reflection of this line of thought could be seen in the varied considerations raised for choosing which national medical system Japan was to follow.

National Models and Politics

As the Meiji reformers began fashioning Japan into a nation state, they also began considering medicine as a national endeavor. As in Japan, medicine in Europe and America was diverse and underwent significant changes at the time. The Meiji reformers used the general term "Western medicine." Yet, when they discussed the actual reforms, they divided the general term into national models, creating different factions in support of each. The Meiji reformers focused on the state as a unit, instead of specific medical schools of thought and practice according to their utility. By so doing, they identified medicine with the political unit in which it developed. This equation could be termed 'nationalization of medicine' – a process that was taking place at the time in Europe as well.[51]

[51] Erwin Heinz Ackerknecht, *Medicine at the Paris Hospital, 1798-1848* (Baltimore: Johns Hopkins Press, 1967), particularly chapter 10, pp. 121-27; N.D. Jewson, "The Disappearance of the Sick-man from Medical Cosmology, 1770-1870," *International Journal of Epidemiology*, Vol. 38 (2009), pp. 622-33. See also George Weisz's analysis of the process of medical specialization according to distinct national lines – French, German, British and American: *Divide and Conquer: a Comparative History of Medical Specialization* (Oxford, GB: Oxford University Press, 2006); See also Ann La Berge's work on the development of "French medicine" or "French public health" in juxtaposition to the British. For example: *Mission and Method: the Early Nineteenth-Century French Public Health Movement* (Cambridge, GB: Cambridge University Press, 1992), and her edited volume: Ann LaBerge & Mordechai

Why then did the protagonist of *The Wild Geese* raise his eyes to Germany and not to Britain or the United States? Willis who assisted during the Boshin War was British, and the first country to force Japan into concessions was America. The aforementioned Ishiguro Tadanori argued that the vast influence Germany came to hold over the development of civilian and military medicine was the result of a deliberate decision made by the Meiji leaders, based on a combination of factors: convenience, the world status of German medicine, and politics.

"Convenience," since the abovementioned Dutch medicine learned in Japan – which he studied himself in Nagasaki - was based to a large extent on Dutch translations of German works. Indeed, the work which historiography came to crown as the "dawn of Dutch learning" in Japan was a German work on anatomy. The VOC Dutch merchants brought the Dutch translation of the work – *Anatomische Tabellen* by Johann Adam Kulmus – to Japan. Japanese physicians then translated it from Dutch to Japanese, and came to be known as a result as *Rangakusha* 蘭学者, scholars of Dutch learning.[52] So were numerous other Dutch works that were translated into Japanese, including works on battlefield medicine. Obviating Dutch mediation and adopting German models directly would thus have created a degree of continuity, a familiar bridge to new systems.[53]

Ishiguro ascribed the second factor - "World status" - to Guido Verbeck, a Dutch reformed church missionary based in Nagasaki. Ishiguro argued that according to Verbeck,

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Feingold (eds.), *French Medical Culture in the Nineteenth Century* (Amsterdam: Clio Medica, Wellcome Institute Series in the History of Medicine, 1994).

[52] Sugita Genpaku, *Rangaku kotohajime*, annotated by Ogata Tomio (Tokyo: Iwanami shoten, 1959. Original from 1815). Researchers have since qualified the glorification of the work and questioned its status as the starting point of Dutch studies in Japan. See for example Shigehisa Kuriyama's interpretation of the change the work made or rather reflected in "Between Mind and Eye: Japanese Anatomy in the Eighteenth Century," in Charles Leslie & Allan Young (eds.), *Paths to Asian Medical Knowledge* (Berkeley, CA: University of California Press, 1992), pp. 21-43; see also Annick Horiuchi's assessment of earlier endeavors and the deliberate erasure thereof by *Rangakusha*, or Dutch learning scholars in "When Science Develops Outside State Patronage: Dutch Studies in Japan at the Turn of the Nineteenth Century," *Early Science and Medicine*, Vol. 8, No. 2 (2003), pp. 148-72.

[53] Ishiguro, Op. Cit., p. 134.

German and particularly Prussian medicine was considered the most advanced among the Western nations. Verbeck, who immigrated to America before arriving in Japan in 1859, taught English in Nagasaki and Saga, as well as other topics of "Western learning," such as economics and politics. He sent many of his students to further study in the United States during the 1860s, particularly at Rutgers College. Among his former pupils were some of the most influential Meiji leaders, such as Okuma Shigenobu and Iwakura Tomomi.[54] His word carried substantial weight as a result. According to Ishiguro, when Verbeck was summoned to Tokyo to conduct different investigations on behalf of the new government, medical reformers came to ask him, which country was the most advanced in the field of medicine.[55] His reply mirrored to some extent developments, which took place in Europe at the time – largely between the late 18th and early 19th centuries. According to Jewson and Ackerknecht's categorization, laboratory and hospital medicine began to gradually replace bedside medicine. Though France was an important harbinger of this trend, according to Ackerknecht, during the 19th century, roughly from the 1840s, Germany gradually outshined France on the European stage, leading medicine outside of the home. It became a center attracting medical students from Europe, including Britain and France, and as of the 1870s – Japan as well. Thus, it came to replace France who held this position roughly from 1815.[56]

As for the final factor - "politics" - Ishiguro believed that as a democracy, America would not have been a good model for the new Meiji regime. The German system of constitutional monarchy appealed to him more. Connecting medicine with politics, he argued that similar to its

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[54] Hamish Ion, *American Missionaries, Christian Oyatoi, and Japan, 1859-73* (Vancouver: University of British Columbia Press, 2009), p. 23. See also, Benjamin Duke, *The History of Modern Japanese Education: Constructing the National School System, 1872-1890* (New Jersey: Rutgers University Press, 2009), pp. 40-46.
[55] Cortazzi, Op. Cit., p. 170; Ishiguro, Op. Cit., pp. 135-36.
[56] Ackerknecht, Op. Cit., particularly chapter 10, pp. 121-27. See also: Jewson, Op. Cit., pp. 622-33.

political structure, German medicine was more suitable for Japan than America.[57] It is interesting to note how Ishiguro tied medicine with political rule, illustrating the great importance ascribed to medicine as having agency beyond its immediate field. Yet, this was perhaps the least convincing argument among the three, since by singling out the American political system, he purposefully ignored British constitutional monarchy and political theory, which greatly influenced Meiji political structure and thought.[58] It seemed like Ishiguro was searching for ways to legitimize his already determined German inclination, or again, to justify the historical choice from the vangate point of the 1930s.

This qualification aside, Ishiguro's association of medicine with politics indicated its place in the larger endeavor of state building. This association was particularly evident in the establishment of a system of military medicine. Even before the establishment of the national Meiji Army, Meiji leaders ascribed importance to medicine as facilitator of military strength and by extension – national potency. In 1870 the aforementioned Yamagata Aritomo – the father of the Meiji military - entrusted Matsumoto Ryōjun - whose memoir was discussed above - with founding a Medical Corps. Matsumoto did so the following year. According to Matsumoto, when Yamagata offered him this mission, he emphasized that a medical corps was the most important ingredient, which the military lacked.[59] This was not self-evident at the time. A dominant thread in the history of British military medicine, for instance, all through the Second World War, describes medical officers' struggle for recognition and respect.[60] According to Herrick,

[57] Ishiguro, Op. Cit., pp. 134-36.
[58] Jansen, Op. Cit., pp. 389-95.
[59]"ようやく兵部省あるも、最も必要とする衛生部なし" from Matsumoto, Op. Cit., p. 82; Suzuki Noriko, "Rikugun no eisei yōin hojū seido no seiritsu katei," *Gunji shigaku*, Vol. 46, No. 2 (2010b), p. 111.
[60] This theme recurs throughout Mark Harrison's two books on British Military Medicine in the two World Wars. It is introduced and analyzed in the introductory chapters: *Medicine and Victory: British Military Medicine in the Second World War* (Oxford, GB: Oxford University Press, 2004); *The Medical War: British Military Medicine in the First World War* (Oxford, GB: Oxford University Press, 2010). For an earlier account of such tensions, see

following the Russo-Japanese War (1904-05) social movements in both Britain and the United States used Japan as a model for reform, among others lauding the high status physicians held within the Japanese military. Granted, Herrick argued that the reformers had cause to exaggerate Japanese achievements to promote their goal.[61] Subsequent chapters will also analyze similar problems in the Japanese military medical systems as they manifested themselves over time. However as we see in the above statement by Yamagata, and as we shall continue observing through the level of attention the Army gave to the military medical system throughout the Meiji era, we can infer that medicine was deemed an important asset for military activity, even if not as successful as it was portrayed. Medicine – and medics - were then important not just for maintaining military strength, but also for raising Japan's political position in the world.

3) The Establishment of Military Medicine

Military and Civilian Medicine

Similar to his protagonist Okada in *The Wild Geese*, author and top medical officer Mori Rintarō was born at the end of the Tokugawa era and lived through the transition into Meiji. Coming from a family of doctors, he studied medicine under his father, the physician of the Daimyo (the ruler of the domain), which included the Chinese classics as well as Chinese medical texts. In addition, he studied Dutch to become familiar with Dutch medicine. However, in 1872 following the rise of the Meiji regime, he began studying German instead. In 1874 he

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Catherine Kelly's analysis of medicine in the British Army between 1793 and 1830, when the medical officer developed into a new role, distinct from its civilian counterparts: *War and the Militarization of British Army Medicine, 1793-1830* (London, GB: Pickering & Chatto, 2011).

[61] Claire Herrick, "'The Conquest of the Silent Foe': British and American Military Medical Reform Rhetoric and the Russo-Japanese War,'" in Roger Cooter, Mark Harrison & Steve Sturdy (eds.), *Medicine and Modern Warfare* (Amsterdam: Editions Rodopi B.V., 1999), pp. 99-129, especially pp. 101-2, 108-109.
See also, a report on the recommended reforms following observed experiences of the Russo-Japanese War: "Army Reform", *The Lancet* (4 March 1905), p. 597, and a similar editorial, calling for peacetime training of the American Army medical department following the Japanese case: "Military Efficiency and the Medical Service of Armies," *Journal of the American Medical Association*, Vol. XLVIII, No. 11 (1907), p. 951.

entered the Tokyo medical school, the future faculty of medicine in Tokyo Imperial University (present day University of Tokyo). In 1881 he joined the Army as a medical officer, bringing to it the knowledge he accrued in the civilian institution.[62]

In many ways, other medical officers in the early Meiji shared Mori's life path. Like Mori, many of the Army's military physicians studied medicine in the Tokyo medical school. In order for a medical corps to function, it required personnel who could provide treatment. Matsumoto and Meiji leaders identified the suitable personnel as physicians trained in Western medicine. The antecedents of the Meiji Army began providing medical education in its confines already in 1870, a practice that the new national military took over. The Army combined subjects specializing in military medicine within the medical officers' training, such as battlefield hygiene, military surgery, and wound dressing, in addition to general medical education. By 1877 the Ministry of Education completed the organization of a civilian program for medical education. Thus, the Army closed its own school and began outsourcing medical education for its military physicians to the Tokyo medical school. The education provided by the medical school, however, naturally focused on civilian medicine. Outsourcing resulted in forfeiting special training in unique skills required within the military. Recognizing this deficiency, the Army Medical Department – the managing headquarters of the medical corps - reestablished its medical school in 1886. The school provided specialized military medical training in subjects, such as field hygiene, field surgery, wound bandaging, and training in medical duties at the military hospital and camp.[63]

This system of outsourcing combined with specialized in-house training created proximity between the Army's medical apparatus and the Tokyo medical school. By so doing, it

[62] Sanford Goldstein & Kingo Ochiai, "Introduction," in Mori, Op. Cit., pp. 6-7, 9.
[63] Nishioka, Op. Cit., pp. 31-33, 36-37; Rikujō jieitai eiseigakkō shūshinkai (ed.), *Rkugun eisei seidoshi (Shōwa-hen)* (Tokyo: Genshobō, 1990), pp. 21-2.

tied the Army's medical framework to that of the civilian medical world, particularly since the Tokyo medical school held such a central place in the implementation of medical reform; it was the center of medical education and training for the new generation of medical practitioners, leaning especially on German medicine. Between 1871 and 1914 the university employed German physicians to teach and design medical education. Many of the German doctors were military physicians themselves (e.g., the first two doctors, sent by the German government were Leopold Müller, a former medical officer in the Army, and Theodor Hoffman, a former officer in the Navy). Kim argued that Germany specifically selected military doctors for this purpose, because it deemed them agents for spreading German influence to strengthen Germany's position in Asia – not only culturally and intellectually, but militarily as well. Thus again, the development of military and civilian medicine became intertwined.

One of the most influential professors, hailed as the father of modern medicine in Japan, was Erwin Baelz.[64] It was no coincidence that the name Mori chose for Okada's fictional professor in Tokyo University in his novel was Baelz as well. Mori, as his fellow medical officers and surgeon-generals, studied at the medical school and carried with them the theories and paradigms instilled in them by Baelz and his fellow German professors. Like his protagonist Okada, in 1884, after he became a medical officer in the Army, the Army sent Mori to study military hygiene in Germany.

From a very early stage, the Army sent medical officers to study abroad on the government's expense, almost exclusively to Germany. According to the Army Medical Department official history, published in 1913, the Army sent roughly one medical officer per year to study abroad between 1872 and 1895. All of the 25 students went to Germany. One of

[64] Kim, Op. Cit., pp. 23-25, 31-53, 142.

them studied in Austria. Others chose to go abroad and study of their own accord and at their own expense, thus also indicating that they came from a very particular socio-economic background to enable them to do so. Among the 50 students who departed between 1886 and 1907, three students went to the United States, one - to England, and the rest - to Germany, three of whom went to Austria.[65] This too corresponded to a trend in civilian medicine, since according to Kim, between 1868 and 1914 a total of 1150 Japanese students went to German speaking countries to study medicine.[66]

The boundaries between civilian and military medicine, therefore, were ambiguous and porous; the leaders of the medical reforms were often the top medical officers, who decided upon the structure and content of military medicine. Medical officers studied in the Tokyo Imperial University and in Germany, as did non-military physicians. After completing their service, medical officers returned to practice as civilians. Moreover, as shall be discussed in the following chapter, during the early years, the difference between military and civilian hospitals was not clear either, especially since the early battles Japan participated in took place in Japan itself. The point of departure between the two could be seen in structure, more than in content; medicine had a particular structure and served specific functions within the military medical framework, which civilian contexts did not. Consequently, as mentioned above, medical officers underwent specific military training in addition to their medical education. Subsequent chapters will reveal how imperial expansion added idiosyncratic content to military medicine, which contributed to further differentiation between the two. Medics, on the other hand, were trained solely within the confines of the Army, as shall be described in the subsequent chapter.

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[65] Rikugun gun'idan (ed.), *Rikugun eisei seidoshi* (Tokyo: Kodera Akira, 1913), pp. 493-513, specifically pp. 493, 497-8, 503-6.

[66] Kim, Op. Cit., p. 61. For more details see also pp.16-18, 23-5, 42, 54-5.

Global Military Medicine vs. Meiji Exceptionalism

The development of military medicine in Meiji Japan as a new institutionalized field was thus the result of the combination between the expansion of the scale of military service through conscription, the accompanying rise of ascribed importance to the individual body, corresponding reforms in medicine in general, and the nationalization and politicization of medicine as a field. In many ways this was a story unique to Meiji Japan. The development of Meiji military medicine resulted from the specific circumstances created by the nature of the Tokugawa-Meiji transition and the Meiji reforms. However, when it came to military medicine and military technology in general, the developments in Meiji Japan were arguably also part of a wider process shared by various countries.

Following the Japanese victory in the Sino-Japanese War (1894-95) a narrative portraying the "rise" of Japan and the "fall" of Qing China developed in international discourse and imagery. This discourse created a perception of Meiji exceptionalism, which carried through to historiography. According to Elman, the key to this rise and fall narrative was the notion of adaptbilitiy. Japan presented itself as a nation that managed to successfully adopt European and American techniques and knowledge, and contrasted itself with Qing China's supposed failure to do so. This image took root abroad, although the Qing Navy was actually one of the strongest most modern navies of its time.[67] The later "Modernization School" in the research of Japan during the 1960s further portrayed the Meiji reforms as a success story facilitating modernization.

[67] Benjamin Elman, "Optical and Cognitive Illusions: the MIT Visualizing Cultures Controversy in Spring 2006," *Positions Asia Critique*, Vol. 23, No. 1 (February 2015), pp. 15-39. On Meiji Japan becoming a model for modernization in China after the Sino-Japanese War, see also Benjamin Elman, *A Cultural History of Modern Science in China* (Cambridge, MA: Harvard University Press, 2006), pp. 216-23.

Though much has changed since, the image of the Meiji reforms as an exception still persist to some extent.[68]

Despite the special context of Meiji era international learning, adoption and adaptation of Euro-American structures and techniques, in the fields of military studies, and military medicine in particular, Japan shared many characteristics with its contemporaries. As the scale of warfare grew from the late 18th century, countries looked at each other and the devices each developed to improve their individual abilities to maintain their overall fighting strength and adapt to the changing nature of war. This mutual gazing took place through various means. International exhibitions were one example. The 1867 Paris exhibition for instance – preceding the Meiji Restoration - was a site where international discussions took place over wounded evacuation methods. Thomas Longmore, a Deputy Inspector-General in the British Army, mentioned the exhibition in a report he wrote about wartime evacuation in 1869.[69] In his report, Longmore also wrote a detailed review of the state of wounded evacuation in various armies, including France, Austria, Prussia, Spain, Russia, Britain, and the United States.[70] His report was hence a source of contemporary knowledge of the international state of military medicine and its evaluation.

Actual warfare was another occasion whereby armies could witness in practice which methods their adversaries used and whether or not they were successful and worthy of adoption. The same Longmore argued that because Britain fought France so frequently and extensively following the French Revolution, it witnessed firsthand how French methods of evacuation worked in real time. Therefore, he argued, the French methods raised more attention among

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[68] For more on the "Modernization School" see Sheldon Garon, "Rethinking Modernization and Modernity in Japanese History: a Focus on State-Society Relations," *The Journal of Asian Studies*, Vol. 53, No. 2 (May, 1994), pp. 346-66.

[69] Thomas Longmore, *A Treatise on the Transport of the Sick and Wounded Troops* (London, GB: Printed under the Superintendence of H.M.S.O, 1869), pp. 4-5, 501.

[70] Longmore, Op. Cit., pp. 43-59.

English surgeons than anywhere else and affected British perceptions of wounded and sick evacuation.[71] Similarly, following the Belgian Wars of independence in 1830-3, in which France participated, the Belgian Army purchased 36 ambulances (*ambulances volantes*) from the French Army.[72] Another example was the American Civil War (1861-65). Historiography emphasized the important influence that the French Army had over the development of the medical evacuation lines organized by the Union Army during the war. Yet, a few years later, Union Army veterans participated as medical reinforcement in ambulance units on both sides during the Franco-Prussian War, carrying with them the knowledge and experience they accrued during the American Civil War. The Prussian Army adopted the Union Army's line of evacuation and became a model itself for disease prevention following the war, particularly through the use of antiseptics during the Franco-Prussian War.[73]

Battlefields became centers that attracted physicians, surgeons in particular, both to assist the wounded and to learn new practices. Largely following the establishment of the Red Cross and different volunteer associations, medical men would go to sites of battle in foreign countries, to assist the wounded and the sick of the belligerent armies. Many went not only to help, but also to take advantage of the opportunities war provided for learning new techniques. War produced numerous wounded and sick bodies and made them available for observation. The battlefield became a location for experimentation and practical medical training. William McCormac, for example, a British surgeon, volunteered in the Anglo-American Ambulance force during the

[71] Longmore, Op. Cit., p. 26.

[72] Pierre Vayre, *Les Larrey: Dominique, Hippolyte et les autres* (Paris: Éditions Glyphe, 2004), pp. 88-89.

[73] See for example: Richard A. Gabriel, *Between Flesh and Steel: a History of Military Medicine from the Middle Ages to the War in Afghanistan* (Washington D.C.: Potomac Books, 2013), pp. 139-47, 168-76; Jack E. McCallum, *Military Medicine: from Ancient Times to the 21st Century* (Santa Barbara, CA: ABC-CLIO, 2008), pp. 124-7, 152-4, 254-5.

Franco-Prussian War (1870-71). He explained his motivation to volunteer as his wish to help in a desperate situation. However, he also stated the following:

Being anxious to see what military surgery was like, I started from home, for Paris, almost immediately after the declaration of war.[74]

And indeed, a report he wrote concerning his experiences in the war included many detailed descriptions and graphic illustrations of various surgical techniques and procedures, which he could learn, practice and examine firsthand during the war.[75]

Finally, the growing medical attraction of the battlefield both supported and was supported by the expansion of "War Reporting." Since the mid 19th-century, journals and newspapers dispatched correspondents to war sites to report and describe what they saw, and also published reports by doctors who were on the scene.[76] *The British Medical Journal*, for example, published a series entitled "Notes of the War" from the Franco-Prussian war, including summaries of the aforementioned MacCormac's report on what he witnessed during his work in the Anglo-American ambulance.[77] In 1873 The *Lancet* analyzed in detail the structure of the German medical corps during the war, arguably to learn from its success.[78] As mentioned above, the British Army looked closely at the Japanese Army following the Russo-Japanese War and considered what it could learn from its latest performance. Other countries such as the United States did the same, as foreign observers - journalists, Red Cross volunteers, and others –

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[74] William McCormac, *Notes and Recollections of an Ambulance Surgeon* (London, GB: J&A Churchill, 1871), p. 1.

[75] McCormac, Op. Cit., p. 1. See example on pp. 97, 124-25.

[76] On War Reporting and its history, see for example Michael Higgins & Angela Smith, "Introduction: Reporting War – History, Professionalism and Technology," *Journal of War & Culture Studies*, Vol. 5, No. 2 (Oct 2012), pp. 131-36.

[77] "Notes of the War," *The British Medical Journal*, Vol. 2, No. 503 (20 Aug 1870), p. 199; Vol. 2, No. 505 (3 Sep 1870), pp. 252-55; Vol. 2, No. 507 (17 Sep 1870), pp. 317-21; Vol. 2, No. 508 (24 Sep 1870), pp. 341-42; Vol. 2, No. 509 (1 Oct 1870), pp. 370-71; Vol. 2, No. 515 (12 Nov 1870), pp. 538-39; Vol. 2, No. 520 (17 Dec 1870), pp. 664-65.

[78] "The Medical Service of the Prussian Army," *The Lancet* (25 January 1873), p. 137.

published numerous reports on the Japanese Army's performance during the war. The Russo-Japanese War in particular was a site where the different Euro-American powers could witness the performance of technologies and strategies that have yet to see action beforehand, thus attracting particular attention from all.[79] The belligerents themselves – both Japan and Russia – used these foreign reports, as sources for information on their own performance as well as that of their adversary.[80]

There are many other such examples, since international mutual gazing was the common rule when frameworks were ever changing, being formed and reformed according to national lines. Japan was thus participating in global processes and adapting to global dynamics, which were encouraged by its domestic circumstances. Consequently, though the chapter emphasized Germany, Britain and France in particular, Japanese military physicians did not limit their observations and study to the three countries, but discussed and studied medical experience, research and formations in numerous armies. In 1876 Ishiguro Tadanori - the same Ishiguro who supported Germany as the model for military medicine - attended the International Exhibition in Philadelphia to learn about global trends in military medicine. He noted that during his visit he learned that international military medicine could be ranked in the following hierarchy according

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[79] See the analysis by David Jones of the European observers during the Russo-Japanese war in "Military Observers, Eurocentrism, and World War Zero," in Bruce W. Menning, David Schimmelpenninck van der Oye, John W. Steinberg, David Wolff & Shinji Yokote (eds.), *The Russo-Japanese War in Global Perspective: World War Zero,* Vol. 2 (Leiden: Brill, 2007), pp. 135-78. The most famous report on Japanese military medicine was above all Louis Livingston Seaman, *The Real Triumph of Japan: the Conquest of the Silent Foe* (New York, NY: D. Appleton and Company, 1908). His triumphant report is and was often cited at the time, including by aforementioned reformers. For example: "The Possibilities of the Medical Departments of an Army," *The Journal of the American Medical Association*, Vol. XLIII, No. 17 (22 October 1904), p. 1236. Another important, though less famous example, is an account written by Teresa Eden Richardson, a Red Cross nurse who volunteered during the war, entitled *In Japanese Hospitals during War-Time: Fifteen Months with the Red Cross Society of Japan* (Edinburgh: William Blackwood and Sons, 1905).

[80] Yokote Shinji, "Between Two Japano-Russian Wars: Strategic Learning Re-appraised," in Menning, Schimmelpenninck van der Oye, Steinberg, Wolff & Yokote (eds.), Op. Cit., pp. 107-113.

to order of importance: United States > Germany > England > France > Australia.[81] Ishiguro continued perceiving medicine according to national lines. But, he was aware of different trends and opinions, and was still eager to learn about innovations, not limited to the so-called German methods. In other words, despite nation-based learning during the early Meiji, the chosen models did not limit Japanese probing and flexibility in its international learning, which continued in subsequent decades. Knowledge, particularly scientific and military knowledge, was constantly changing on the global stage. Japanese leaders were both aware of that and took part in the process, learning for others' examples and equally important, from its own experience. The medic role developed out of this international conversation and Japan's accrued experience of warfare.

Conclusion

Medics were common soldiers who came from various social classes, often from modest backgrounds, whom the military required to learn basic concepts of Western medical theories and treatment. Why were men enlisted into the Japanese army irrespective of social class? Why was medicine part of military service and why was that medicine largely based on Western knowledge and practices? Though medics were nearly absent from this chapter, it answered precisely these questions. Japan in the early Meiji period underwent a series of reforms – big and small, some gradual and others radical. At the root of them all was a perceived need for Japan to survive as a sovereign state in a world principally ruled by Western powers. The reforms were aimed at ensuring its independence, abolishing the unequal treaties foisted upon it, and eventually becoming an equal. One important tool for achieving this goal was to build a strong

[81] Ishiguro, Op. Cit., pp. 176-78.

military, based on the relatively new concept of general conscription, which also helped in the gradual abolishment of social classes. War was no longer to be the monopoly of a particular group. Instead, the capability to serve was determined by the individual's body. To enable the creation of a large-scale military, the new government thus strove to ensure physical health. One way of doing so was to create a new national medical system and build an additional one specifically to serve the military.

From the start the relationship between war and medicine was a close one; war served as a justification for medical reform, specifically Westernization, while medicine was to enable adaptation to new forms of warfare, particularly the use of firearms. The close and porous relationship between civilian and military medicine reflected the practice of military conscription; military physicians continued serving in civilian contexts, while every man was a potential soldier and as a result – a potential patient. Moreover, because of the fluid nature of military technology and medicine at the time, military medicine came to hold political capital. Both in Japan and elsewhere, medicine underwent a process of nationalization and the forms, in which medicine was employed in wartime, bore on the militaries and nations that sent it to the battlefield. Countries were constantly gazing at each other to discover new techniques and to learn about the success of existing ones in action. Japan was no different. Its own moment in the sun was the Russo-Japanese war, which will be further discussed, since it put the Japanese military medical system – and by extension, Japanese international influence – on the global map.

Chapter 2
Medical Delegation and the Evolution of Medic Roles



Figure 1: "Army Uniforms"[1]

The above drawing was taken from the *Fūzoku gahō* 風俗画報 (Illustrated Manners and Customs), Japan's first pictorial magazine issued between 1889 and 1916. Circulation of printed knowledge in Japan – textual and visual – has a long history, reaching a peak in the so-called Tokugawa print revolution. However, as Huffman argued, print reached a different scale and form in the Meiji era, since one of its aims was to create a "national public." Recreating Japan as a "nation state" necessitated the creation of a public that could be mobilized for its causes. Information and education were necessary for mobilization. Consequently, one of the first steps taken by the Meiji government was to assess levels of literacy, reform education and create a

[1] "Dai-roku zu," *Fuzoku gahō: Nihon teikoku rikugun tokubetsu dai-enshū kiji oyobi fukusei zukai*, Vol. 54 (1 June 1893).

public press. Visual representation was a useful method for providing information, while overcoming the literacy gap, which required time to bridge.[2] The *Fūzoku gahō* could be seen as such an example.

In 1893 the magazine published a special issue depicting army uniforms, including the colorful image above. In practice, the various illustrations introduced different army roles to the magazine's audience. Though we do not know the extent of its circulation, we do know that following the enactment of general conscription, its audience necessarily consisted of potential conscripts and their relatives. Furthermore, in 1900 the British journal - *The Imperial and Asiatic Quarterly Review* - published an article about the *Fuzoku gahō*, implying that as a visually based journal, it attracted a degree of foreign attention as well.[3] Thus, the illustrations in the journal could arguably be considered as representations of an image of Japan – and in this case, of its army - which the Meiji leaders wished to disseminate. Keeping that in mind, it is interesting to note how the figures in the above drawing were depicted.

The drawing is spread over two pages, which are both thematically divided and related. The figures on the left include members of the cavalry, infantry and artillery branches of the Army. As we move to the right we encounter members of the Medical Department. Considering

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[2] On the creation of a national press see: Albert A. Altman, "The Press and Social Cohesion during a Period of Change: the Case of Early Meiji Japan," *Modern Asian Studies*, Vol. 15, No. 4 (1981), pp. 865-76; James L. Huffman, *Creating a Public: People and Press in Meiji Japan* (Honolulu, HI: University of Hawaii Press, 1997). On the history of print and text in Early Modern Japan, see Peter Kornicki, *The Book in Japan: a Cultural History from the Beginnings to the Nineteenth Century* (Honolulu, HI: University of Hawaii Press, 2001). Note Kornicki's definition of literacy in the plural as differing in kind, as opposed to a monolithic view of reading and writing in pages 30-38. For more on literacy see: Richard Rubinger, *Popular Literacy in Early Modern Japan* (Honolulu, HI: University of Hawaii Press, 2007), particularly pp. 162-95 on the Meiji era. On the reform of Meiji education see: Mark E. Lincicome, *Principle, Praxis, and the Politics of Educational Reform in Meiji Japan* (Honolulu, HI: University of Hawaii Press, 1995).

[3] C.M. Salwey, "Japanese Illustrated Literature and Art," *The Imperial and Asiatic Quarterly Review and Oriental and Colonial Record*, Vol. IX, Nos. 17-18 (The Oriental University Institute, January-April 1900), pp. 390-91. Salwey was a member of the Japan Society of London, and a researcher of East-Asian art. As described by the society's transaction, she was the "daughter of an eminent orientalist, archaeologist and ethnographer, the late Dr. Samuel Birch, of the British Museum, possesses an inherited gift for Oriental research." In "The Sixth Ordinary Meeting," *Transactions of Proceedings of the Japan Society, London*, Vol. 2 (London, GB: Kegan Paul, Trench, Trübner and Co., 1895), p. 28.

both sides together, we can infer that the drawing depicted the Medical Department in the context of an army unit. The figure which draws the eye most immediately is the mounted figure in the front of the drawing - the Surgeon Major General, *gun'ikan* 軍医監 – followed by a second private military veterinarian behind him, *Nitō jūi* 二等獣医. The fact that the Surgeon General was placed in the middle of the drawing and that both he and the military veterinarian were depicted mounted, symbolically demonstrated their superior position within the hierarchy of the military medical system. The Surgeon General in particular is the largest and most central figure in the drawing, creating the impression that he was the most important figure in the drawing, even more perhaps than the mounted combatant officers on the left – lieutenant ranked cavalry staff officer and colonel ranked infantry staff officer.

If we lower and shift our gaze to the other figures carrying the Red Cross insignia, we find on the far-right another military physician, yet of a lower rank – first class military physician, *Ittō gun'i* 一等軍医. Though not on horseback, he was still depicted standing tall, looking down authoritatively upon a figure. That figure, nearest to the wounded soldier in the drawing, kneeling above him on the ground, is the *kangoshu* 看護手 – the unit medic. It is possible to say that this simple drawing echoes how military and medical hierarchies were constructed in the Army documents. The movement of our gaze from the top – Surgeon-General → to the middle – medical officer → to the bottom – *kangoshu* – visually sketches the hierarchy of medical care within the unit; the high-ranking military officers made the top decisions regarding medical care in the Army at large. The lower-ranking unit-attached military physicians were in charge of the medical care of soldiers in their unit. The *kangoshu* medics were to follow the orders of their superiors - the military physicians and the non-commissioned medic officers -

and care for the soldiers accordingly.[4] It could be argued that for that reason, the figure in the drawing was depicted looking up to his medical officer. Concomitantly, he is also closest to the soldier on the ground, and is the only one who is directly touching him. He is also the front-most figure in the drawing, the closest to the observer's eye. *Kangoshu* were the closest in rank to the combatants who were in their care. They even underwent basic training with the soldiers of their unit. As such, there was a great deal of proximity between the *kangoshu* and the unit soldier, at times more so than between him and the higher-ranking medical personnel.

As the Army began shaping its budding system of military medicine, it defined its personnel, their duties and terms of service, and the relationship between them. Among the personnel a new role appeared – the medical soldier, a common soldier whom the Army shaped into a care provider. Yet, if one searches for the terminology that the Army used to refer to this role, one finds many different roles carrying different names. The Japanese military regulations tied these myriad roles together in a genealogy, where one role replaced the other. Terminological change was accompanied by changes in the meaning, purposes and nature of the role, implying that it was in constant flux, resulting not in "a role" but in various "roles." Moreover, as the below chart demonstrates, its development was not linear either. The army initiated reforms and then annulled them following experience and/or internal constraints, later to be revived following changes in circumstances.

[4] *Rikugun kangogaku shūgyō-hei kyōkasho: Rikutatsu dai-kyūjūni-gō*, authorized by Army Minister Ōyama Iwao (Tokyo: Kobayashi Matashichi, 1890), pp. 6-9.

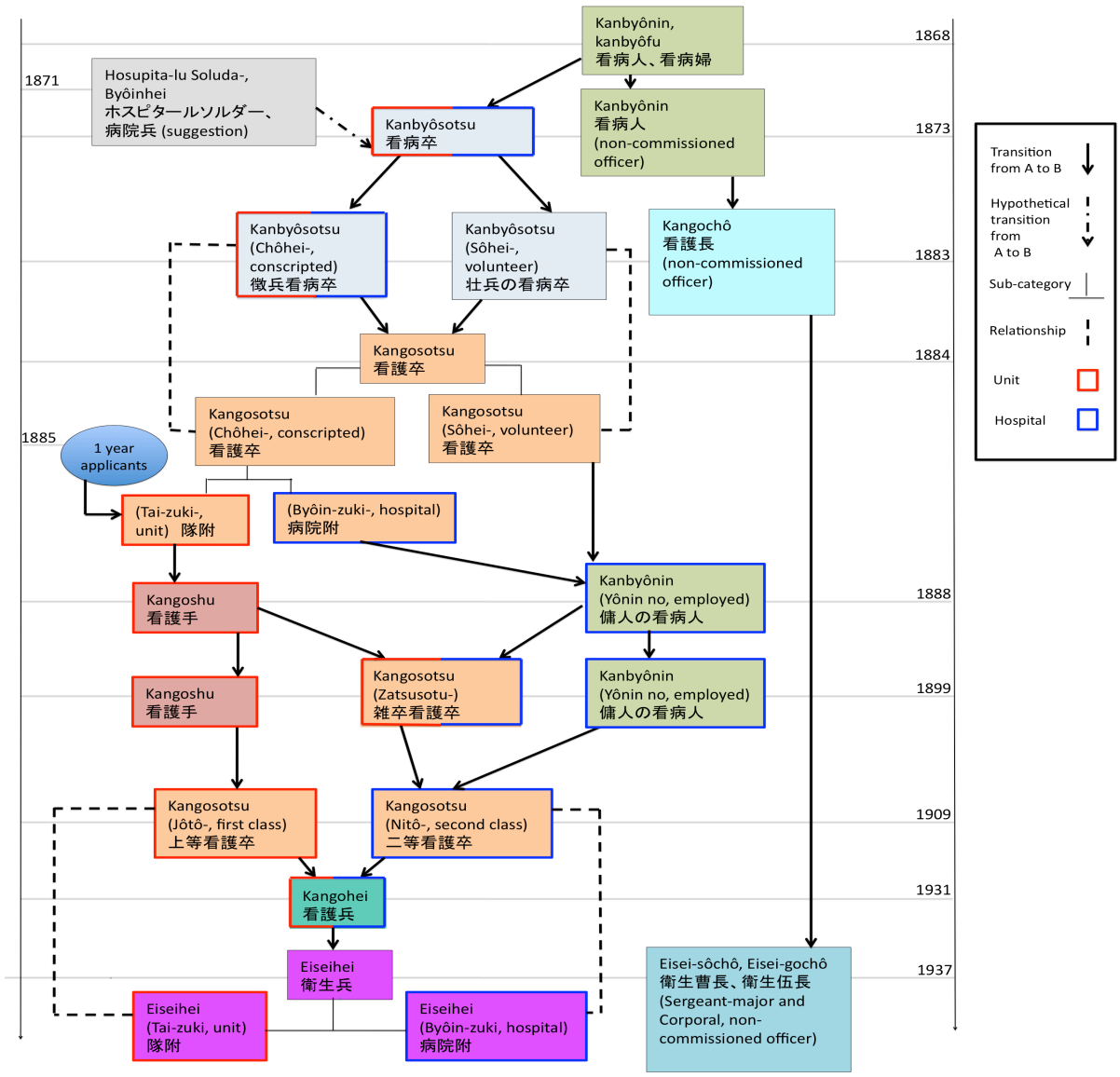


Figure 2: Terminology Chart According to Year[5]

[5] Main Regulations: Rikugunshō, "Kanbyōsotsu wo kangosotsu to kaishō, ōkura he tsūchō," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (November 1884), JACAR reference number: C04031242300; Imukyokuchō, "Kangosotsu wo kangoshu to kaishō no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (31 October 1889), JACAR reference number: C06080900600; Katsura Tarō, "Kakushidan kangosotsu chōshū no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (2 August 1899), JACAR reference number: C10062245900; Naikaku (government document, signed by Prime Minister Katsura Tarō and Army Minister Terauchi Masatake), "Chokurei dai-hyakuichi-gō, rikugun hojū jōrei-chū kaisei," Goshomei-genpon Collection, Kokuritsu-bunshokan Archive (15 April 1909), JACAR reference number: A03020796900; Naikaku (government document signed by Prime Minister Wakatsuki Reijirō and Army Minister Minami Jirō), "Chokurei

This argument is particularly strengthened by the relative stability of the term used to denote medical officers – *gun'i* 軍医. The role of medical officer underwent many significant changes and developments from the Meiji era all through the Pacific War, but its existence and significance were arguably clear from the establishment of the role in the early Meiji. Medics underwent a long process of essential definition and redefinition, as their terminological instability illustrates. So much so, that even the official history of the Japanese Army's medical system, describes the history of medic names as "dizzyingly" intricate.[6] In this sense, the story of the original development of medic roles is a quintessential Meiji era story, where so much new was being created, tried, and reformed until reaching a level of stability.

The chapter will unfold the circumstances behind this intricacy and explain why medic roles developed in the first place. Why did the new Meiji Army decide to use common soldiers, usually with no prior medical experience, to serve in roles whose main responsibility was to provide medical care? What functions were medics to serve? What place did they hold within the military hierarchy, and how did the roles change over time? What made them change so frequently? The chapter will start at a relatively later juncture in the medic history – 1888 - where the Army clearly defined the purposes of the role for the first time. It will then move back in search of origins and the processes that led to the later definition. To do so, the chapter will look to political and social, as well as actual military experience in the early years of the Meiji

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dai-nihyakunanajūichi-gō, rikugunhei tōkyūhyō-ni kansuru ken," Goshomei-genpon Collection, Kokuritsu-bunshokan Archive (07 November 1931), JACAR reference number: A03021825000; Naikaku (government document signed by Prime Minister Hayashi Senjūrō, Navy Minister Yonai Mitsumasa, Home Minister Kawarada Kakichi, and Army Minister Sugiyama Hajime), "Chokurei dai-nijūyon-gō, heiekihō shikōrei-chū kaisei," Goshomei-genpon Collection, Kokuritsu-bunshokan Archive (18 February 1937), JACAR reference number: A03022081600. Also based on Rikugun gun'idan (ed.), *Rikugun eisei seido-shi* (Tokyo: Kodera Akira, 1913), pp. 324-49; Rikujō jieitai eisei-gakkō shūshinkai (ed.), *Rikugun eisei seido-shi (Shōwa-hen)* (Tokyo: Hara-shobō, 1990), pp. 251-59. The dissertation will not elaborate on the volunteer category. For more on it see Suzuki Noriko, "Rikugun eisei yōin no ikusei to ichinen shiganhei seido no sōsetsu," *Kokushikan shigaku,* Vol. 15 (March 2012), pp. 32-53.

[6] Rikujō jieitai eisei-gakkō shūshinkai (ed.), Op. Cit., p. 252.

era from an institutional perspective. As such, it will largely focus on domestic factors, while the subsequent chapter will move to the international.

By examining military records written mostly by the high-ranking decision makers – military physicians - the chapter will argue that the role originated in a combination of related factors, but in the center of them all was the need to delegate medical authority. The chapter will suggest that the development of medic roles could be seen as a solution to the problem of calibration; how does a system deal with an expansion of scale, while each of its components is important and requires preservation. As discussed in the previous chapter, the exigencies of war led to a gradual increase of the scale of warfare and the size of armies. This expansion was accompanied by the Meiji leaders ascribing increasing importance to each soldier's body for maintaining the military's overall strength, especially in wartime when the number of wounded and sick soldiers rose. Yet, meeting the requirements, which the combination of the two bred, necessitated a larger number of medical officers. As medicine underwent Westernization and military medicine became increasingly specialized, becoming a medical officer required more time and effort. Consequently, medical officers became a precious and limited human resource. The chapter will argue that one way of dealing with this challenge was categorization and division of labor; the Army delegated medical responsibility by creating additional less specialized roles from within the ranks – that of medics. The form these roles took however, developed in a process of professionalization and militarization, through trial and error, leading to terminological changes, redefinition of the roles, and constructing divisions between different military medical spaces.

1) Medical Delegation: 1886-88 Reforms

The Problem of Numbers

The duties of a medic (*kangosotsu*) who serves in the hospital differ from those of the unit. In the unit, the medical officer is at times temporarily absent, for example, when (the unit is) on the march. (In such cases the medic) is required to possess skills to provide emergency treatment. In the hospital (medic duties) are limited to tending the (patient-)soldiers on a daily basis, removing (their) excrements, cleaning the rooms, providing food etc. Hence, there would be no disturbance if employed orderlies (*kanbyōnin*) would be used (for this purpose). On the contrary, having soldiers serve at hospitals and the like (i.e., army facilities) is extremely unfavorable financially.[7]

Between the 1870s and the 1930s, the Japanese Army caused medics to assume different shapes in different spheres. Entering army service, a medic could find himself in an atypical military setting – a hospital – or be entrusted with the responsibility of creating a medical space within an army unit. As shall be further discussed, the alternation between hospital and unit became a recurring and formative motif in the history of Japanese medics. In the above paragraph, Surgeon-General Hashimoto Tsunatsune suggested that from 1888 medic service would be limited solely to the army unit. The Army would employ civilian orderlies to serve in hospitals instead of medical soldiers, and cut costs in the process. By so doing, he transformed medic service, making it inseparable from the Army's most basic component – the unit.

Though there were earlier medic roles, the *kangoshu* and Hashimoto's suggestion for its reform are a good place to start the quest for understanding the origins of this role, since it is the first clear statement explicating the unique purposes it was to fill and the limitations of the system in which he was to serve. Hashimoto indicated that the most important purpose of the unit medic was to compensate for the absence of the military physician in times of emergency, which required specialized skills; militarily, to enable the medic to accompany his unit to action

[7] Hashimoto Tsunatsune, "Eiseibu gen'eki kangoshu hojū jōrei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (12 October 1888), JACAR reference number: C06080636600, pp. 2397-8. Also cited by Suzuki Noriko in "Eiseitai hensei ni muketa rikugun kango seido no dainiji kaikaku," *Kokudoshigaku*, No. 14 (March 2010a), pp. 93-94.

or during drills. Medically - so he could perform his role independently of the military physician. These skills, Hashimoto argued, differed from those of the hospital in their level of specialization; the unit required the ability to provide emergency care, and the hospital required skills, which in his opinion did not necessitate the same level of training.

Hashimoto implied that the reason for the disparity between the two spaces – unit and hospital - was embodied in the presence of the physician, or rather, of his potential absence; while in the unit the number of physicians was particularly limited, resulting in the need to compensate for their occasional absence, in the hospital there was, theoretically, a relatively larger staff. Consequently, when the unit was in action a medical officer could not always be reached, leaving the medic to fend for himself. In the hospital – a limited and defined physical space – it was easier to call for one if another was absent, obviating the need for the orderly to replace him entirely. The orderly was to provide support in the hospital instead of acting independently.

Much then came down to the problem of numbers. The Army expanded the number of medical officers since the establishment of its medical system in the early Meiji. However, this expansion did not sufficiently keep up with the growth of the number of conscripted soldiers, and the ratio of doctors per unit remained low. Let us compare between the situations in 1873, the foundational year of the new Meiji national army,[8] and 1887, a year before the establishment of the unit medic role. According to estimations, in 1873 there were approximately 35,560 soldiers and 113 military physicians.[9] By 1887 there were 207,991 soldiers in service and roughly 340

[8] The Meiji government passed the conscription law in December 1872 and it was published in January 1873. Ernst L. Presseisen, *Before Aggression* (Tucson, AZ: University of Arizona Press, 1965), p. 32.
[9] Nishioka Kaori, "Nihon rikugun ni okeru gun'i-seido no setsuritsu," *Gunjishigaku*, Vol. 101 (June 1990), pp. 33-34; Presseisen, Op. Cit., p. 33.

military physicians.[10] Based on these figures one deduces a 34.6% growth rate in the number of soldiers versus a 14.3% in the number of army physicians. Moreover, the Army divided the total number of physicians between hospitals and units, and while the ratio of doctors per basic unit did grow over these years, it was still limited:

	Infantry Regiment and Battalion	Cavalry Regiment	Artillery Regiment	Engineering Battalion	Logistics Battalion
1873	2 (1 per regiment, 1 per battalion)	1	1	1	1
1887	3 (0 per regiment, 3 per battalion)	2	2	1 (2 from 1888)	2

Figure 3: Number of Doctors per Unit[11]

The expansion of conscription in 1887 also coincided with an army-wide reform of its structure from garrisons to divisions, leading to a proliferation of the number of units and by extension – the need for more medical officers for each.[12] A gap thus developed between the general growth of the Army and the limited size of the forces dedicated to treating its soldiers.

The process of specialization of the military physician role plausibly hindered further expansion of the number of military physicians as a solution to this problem. According to Nishioka, one of the first steps the founders of the military medical system took in 1872 was to set standards for its future officers' medical education, and require existing physicians to undergo qualifying exams. Not everybody passed. The curriculum became more elaborate and longer over time, making it increasingly demanding.[13] Moreover, by 1886 after a hiatus of nine years, the Army created a specialized course for training medical officers specifically in military

[10] Rikugunshō, "Dai-nana: Eisei," *Rikugunshō dai-ikkai tōkei nenpō* (Tokyo: Rikugunshō, January-December 1887) p. 1, JACAR reference number: A07062060100; Rikugunshō, "Dai-ni Jin'in," *Rikugunshō dai-ikkai tōkei nenpō* (Tokyo: Rikugunshō, January-December 1887), pp. 12, JACAR reference number: A07062050900.
[11] Rikugun gun'idan (ed.), Op. Cit., pp. 251-56.
[12] Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853-1945* (Lawrence, KS: University Press of Kansas, 2009), pp. 56-57.
[13] Nishioka, Op. Cit., pp. 29-32.

medicine. The course supplemented the general medical education they obtained outside of the military.[14] It then took even longer and more effort to eventually become a medical officer. There were thus largely two processes taking place simultaneously in opposite directions; on the one hand, military medical specialization required more time, resources and effort, making it more difficult to meet the requirements of the role of medical officer. On the other hand, the Army was expanding extensively, requiring more physicians to treat more soldiers.

A way to compensate for this disparity was to use a middleman – a less specialized position that was, however, specialized enough to provide immediate first tier medical care to stabilize the wounded until the medical officer could be found. If we turn once again to numbers, we find that in 1887 there were 787 *kangosotsu* 看護卒 medic soldiers, who served in hospitals and units, and 333 non-commissioned medic officers. There were also 118 volunteer soldiers serving in army facilities, such as schools and prisons, amounting to a total of 1238 medical soldiers.[15] As a reminder, there were only 340 medical officers serving in both hospitals and units that same year. In other words, the total number of medics was over three times that of physicians, facilitating a wider reach of military medical care.

If we return to Surgeon-General Hashimoto's suggestion at the opening of this section, however, we find that to Hashimoto, the 1238 soldiers were not sufficient. Numbers had to be accompanied by specialization and militarization. To make better use of army resources, Hashimoto argued, medic service was to be limited to the unit, since unit service required special skills. According to Hashimoto, to enable the medic to temporarily replace a physician in times of emergency, the medic role was to be more specialized than it had been - both medically and

[14] As mentioned in the previous chapter, until the Tokyo Medical School began teaching in 1877, the Army provided medical education, which included topics in both general and military medicine. After 1877, the Army outsourced medical education to the Tokyo Medical School and thus specific training in military medicine stopped. Nishioka, Op. Cit., pp. 31-32, 36-37; Rikujō jieitai eiseigakkō shūshinkai (ed.), Op. Cit., pp. 21-2.
[15] Rikugunshō, "Dai-nana: Eisei," Op. Cit., JACAR reference number: A07062060100, pp. 1-2.

militarily. Before the reform, medics would first undergo basic infantry training, irrespective of the unit they were in, followed by medical training, for a period of six months in total.[16] According to the 1888 reform, medics were to undergo one year of training – double the time. Moreover, their military training was to be specialized according to the unit they were attached to. If they were in cavalry for example, they were to know how to ride horse like any other soldier in their unit.[17]

Hashimoto thus privileged the unit, defined it as a specialized military medical space, requiring specialized personnel termed *kangoshu*. By concentrating on the unit, Hashimoto privileged the battlefield over the rear as the center of military action and by extension – of military medical action. The subsequent chapter will focus on an additional reform Hashimoto implemented that same year, concentrating once again on the battlefield. According to the reform, the Army was to create a new role of stretcher-bearer to be in charge of evacuation of the wounded from the battlefield. By so doing, the stretcher-bearers were to enable medics to focus on providing care to the wounded. The reforms of 1886-88 thus clarified the structure of the Japanese Army's medical system and clearly defined the place medics were to hold in it, as well as the purposes they were to fill. Medics officially became a distinct part of the Army.

The clear definition of the medic role relied on creating professional boundaries. Hashimoto's reforms defined what medic service was to be and simultaneously – what it was not to be, or was no longer. This differentiation translated into the distinction between two army spaces – units and hospitals, while redefining the unit as a military medical space. To understand

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[16] Ōyama Iwao, "Kangosotsu kyōiku kisoku," Rikugunshō dainikki Collection, Bōei kenkyūjo Archive (28 December 1887), JACAR reference number: C09050160000.

[17] Naikaku (government document, signed by Prime Minister Kuroda Kiyotaka and Army Minister Ōyama Iwao), "Chokurei dai-kyūjū-ni-gō, rikugun eiseibu gen'eki kangoshu hojū jōrei," Goshomei-genpon Collection, Kokuritsu-bunshokan Archive (24 December 1888), JACAR reference number: A03020028200. On the need for special military skills see Hashimoto Tsunatsune, Op. Cit., JACAR reference number C06080636600, p. 2397. Also see Suzuki Noriko, 2010a, p. 93.

the significance of this division in shaping a distinct medic role, one needs to understand why earlier medic roles were also attached to hospitals in the first place. What role did army hospitals play in the early development of medic roles? Where did the army hospitals come from and why were there medical soldiers serving in them? What eventually caused Hashimoto to redefine medic service while limiting it to the unit?

2) The Boshin War: Gender and the Hospital

"The Tender Hand of a Woman"

The creation of new roles of medical care providers resulted from specific circumstances that necessitated more and more caring hands - an event that produced more patients in need of care. The Boshin civil war (1868-69) was the first major war Japan experienced in hundreds of years, resulting in thousands of casualties and wounded bodies to be tended.[18] The war led to the creation of care facilities and the enlistment of doctors to serve in them. As described in the previous chapter, it raised the specific need for treating injuries, such as gunshot wounds, with which many of the practitioners had no prior experience. However, there was no leeway for selectivity. Any doctor was welcome - whether "Western" or "traditional" - and still there were not enough care providers to treat the numerous casualties. One way to compensate for this shortage of caregivers was to delegate tasks.[19]

While the doctors were men, supporting assistance came from women. William Willis, the British doctor employed by the Tokugawa Bakufu government, as mentioned in the previous chapter, employed women in his hospital in Yokohama. He continued this practice following the

[18] As mentioned in the previous chapter, the estimations are of 8240 men dead and 5354 wounded. Owada Tetsuo, *Sensō no nihonshi* (Tokyo: Yoshikawa Kōbunkan, 2007), p. 288.
[19] Nishioka, Op. Cit., pp. 25-26.

war when he moved to Tokyo and opened an alternative hospital there. The women who served in the hospitals did not undergo any previous training and so, their responsibilities were limited to tasks that did not require specialized skills; mostly cleaning, cooking, removing patient excrements, and airing the patients' rooms. Tending the sick was a small part of their chores, which included bandaging and providing post-surgical care following the doctors' instructions.[20]

Seven years later, in 1875, the Meiji Army issued a collection of regulations describing the duties of the newly minted army medics and their supervisors. According to the document, *kanbyōsotsu* medics were to serve in army hospitals, under the supervision of higher-ranking medics, who in turn were under the command of military physicians and/or accounting officers.[21] Their duties included providing medicine at certain hours of the day according to the doctors' orders, and assisting them in surgery. They were also to clean the sick rooms, the medical equipment and the dishes, to air the hospital rooms, and regularly dispose of patient excrements.[22] When comparing this early description of medic duties with that of the women who served in Willis's hospitals, one finds an uncanny resemblance.

Terminology also indicates a connection between the two roles – the early medics and the women orderlies. Similar to medic roles in the Army, the women serving in the Boshin War were referred to by various terms. They were not nurses, because nursing was defined as a

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[20] Aya Takahashi, *The Development of the Japanese Nursing Profession: Adopting and Adapting Western Influences* (London, GB: RoutledgeCurzon, 2004), pp. 20-21.

[21] Rikugun gun'idan (ed.), Op. Cit., p. 326; Suzuki Noriko, "Rikugun ni okeru kangosotsu kyōiku no hajimari," *Nihon kango rekishi gakkai-shi*, No. 23 (March 2010c), p. 97.
Japanese Army medical personnel originally belonged to the Army Accounting Department until 1880, presumably following the French Army's example. In the French Army, the medical corps, *Service de Santé*, was under the jurisdiction and control of the *Commissaires des Guerres*, from1811. The *Commissaires de Guerres* were originally in charge of accounts and military records. However, as of the Revolutionary Wars and the expansion of warfare, their jurisdiction grew to a logistic administrative managing power due to their control over funds. See: Martin R. Howard, *Napoleon's Doctors: the Medical Services of the Grande Armée* (Stroud, GB: Spellmount, 2006), p. 11, and Alan Forrest, "The Logistics of Revolutionary War in France," in Roger Chickering & Stig Förster (eds.), *War in an Age of Revolution, 1775-1815* (Cambridge, GB: Cambridge University Press, 2010), pp. 177-96.

[22] Yamagata Aritomo, "Kanbyōnin kanbyōsotsu fukumu gaisoku," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (10 November 1875), JACAR reference number: C08070047300, especially pp. 0515-520

professional category only later; historiography of nursing usually detects the starting point of nursing as a professional field with Florence Nightingale in 1860 and her reform movement, predominantly following her experiences during the Crimean War (1853-56).[23] However, according to Suzuki, it was only in 1907 at the Eighth International Conference of Red Cross Societies in London that nursing received international recognition as a profession, and in Japan – in 1915.[24] The plethora of terms during the Boshin War, as in the medic case later, suggested a lack of a steady and clearly defined position. The terms also included *kanbyōnin* 看病人 and *kangonin* 看護人.[25] Both terms could be roughly translated as "person tending the sick" (*Kan* signifies to look, but also to treat. *Byō* signifies sickness. *Go* signifies to protect. The term for nursing in contemporary Japanese is *kango*). *Kanbyō* was the earlier of the two. According to Takahashi, the word *kanbyō* dated back many years to at least the eighth century, in reference to monks and nuns, who tended the sick physically and spiritually. Since then it continued being used as a term signifying treatment of those in need of care, and came to be associated with those who provided it - particularly women in a domestic environment; in pre-Modern Japan, as in many other countries, when people were sick they were most often treated by family members, friends and sometimes by domestic maids in their home. These caregivers were usually women and so the term *kanbyō* came to be associated specifically with women.[26]

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[23] It should be noted that nursing had a much longer history before Nightingale, including in military settings, which is often ignored or trivialized. See: Eric Gruber von Arni, "Who Cared? Military Nursing during the English Civil Wars and Interregnum, 1642-60," in Geoffrey L. Hudson (ed.), *British Military and Navy Medicine, 1600-1830* (Amsterdam: Rodopi, 2007), pp. 121-48.

[24] According to Suzuki, in 1915, eight years after the international decision, the Japanese Home Ministry issued a regulation, similar to the international one, which systematized nursing qualifications and recognized it as a distinct profession. See: Suzuki Noriko, 2010c, pp. 92-93; Suzuki Noriko, 2013a, p. 72.

[25] Rikugun gun'idan (ed.), Op. Cit., p. 327; Suzuki Noriko, "Shokugyō kangofu no hajimari ni kansuru ikkōsatsu," *Hōsei shigaku*, No. 80 (September 2013a), p. 72.

[26] Takahashi, Op. Cit., particularly pp. 20-22, 24-6. For more on the place of the home in the care of the sick in Early-Modern Japan, see William Evan Young, "Family Matters: Managing Illness in Late Tokugawa Japan, 1750-1868," (Doctoral Dissertation. Princeton University, 2015).

Returning to the terminology chart in figure no. 2, one notices that the earliest terms the Army chose for medics used the same roots as the above women - *kanbyōsotsu* 看病卒 in 1873 and *kangosotsu* 看護卒 from 1884. The fact that they shared the same roots – *kanbyō* and *kango* – could have simply been the result of the roots' meaning – to tend the sick and injured. It also, however, suggests a similarity between their functions and possibly implies a degree of continuity between the roles. According to the Japanese Army's official history of its military medical system, during the transitional years between the end of the Boshin War (1868-69) and the establishment of the new national army in 1873, the guard force of the new Meiji government continued employing women, and referred to them by a similar term - *kanbyōfu* 看病婦. The history also stated that the employment of these women stopped, following the establishment of the medical soldier's role – the *kanbyōsotsu*.[27]

The difference between the two could be found linguistically and symbolically in their respective suffixes. For medics, the suffix was *sotu* 卒, replaced by *hei* 兵 in 1931.[28] *Sotsu* and *hei* were military suffixes used to denote a common soldier. For nurses, on the other hand, the suffix was *nin* 人, people, or *fu* 婦, women. Once the Army created the role of medical soldier, it militarized and thus masculinized it by default, since only men served in the Army. Thus, even though soldiers and women orderlies shared the common preoccupation with tending the sick and injured, the suffixes mirrored the gendered distinction that accompanied the military institutionalization of medicine and the different form it took.

[27] Rikugun gun'idan (ed.), *Rikugun eisei seido-shi*, Op. Cit., p. 326

[28] This change was part of an Army-wide reorganization. See: Naikaku (government document signed by Prime Minister Wakatsuki Reijirō and Army Minister Minami Jirō), "Chokurei dai-nihyakunanajūichi-gō, rikugunhei tōkyūhyō-ni kansuru ken", Op. Cit., JACAR reference number: A03021825000.

The designation of the medic role as masculine resulted from the definition of soldier as distinctly male. However, it was also the product of careful deliberation on nursing, medical care and the role of gender in the military. Consider the following paragraph from Ishiguro Tadanori's memoir concerning that very point. As a reminder, the previous chapter discussed Ishiguro's central role in creating the Army's medical system, as well as the Japanese Red Cross:

> The tender hand of a woman is imperative for preparing a pleasant (environment) to nurse sick and wounded soldiers in serious condition. Nonetheless, the military authorities are unable to train and utilize female nurses (*kangofu* 看護婦). The main goal of the Japanese Red Cross has been to provide medical assistance to the military during wartime and to conduct training for that purpose. As time progressed it became possible to use the services of these nurses in treating the seriously wounded, also in times of peace. That has been my plan for some years now.[29]

After Japan joined the Geneva Convention in 1886, a tight cooperation between the military and the Red Cross ensued, especially from the time of the Sino-Japanese War (1894-95). Four years later the Japanese Red Cross began training women nurses, and so their relationship with the military began a process of institutionalization as well.[30] Army leaders thus had no compunction with a woman tending a male body. On the contrary, Ishiguro argued that he viewed care giving as essentially feminine. Nonetheless, the advantages of employing women in nursing roles clashed with the nature of the military framework, which he perceived as exclusively masculine. Moreover, in the early days of the Japanese military, it did not allow women into warzones, limiting the service of nurses to hospitals in the rear.[31] The battlefield thus became a masculine

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[29] Suzuki Noriko, 2010a, p. 104; Ishiguro Tadanori, *Kaikyū kyūjū-nen* (Tokyo: Ōzorasha, 1994. Original from 1935), p. 233.

[30] Suzuki Noriko, 2010a, p. 104; Kita Yoshito, ""Bunmei sensō" to shite no nisshin sensō," Kawai Toshinobu & Kurosawa Fumitaka (eds.), *Nihon sekijūjisha to jindō enjo* (Tokyo: Tokyo daigaku shuppankai, 2009), p. 68; Kawaguchi Keiko and Kurokawa Ayako, *Jūgun kangofu to nihon sekijūjisha* (Kyoto: Bunrikaku, 2008), pp. 14-16.

[31] According to Padilla, limiting female presence to the rear might have been the result of German influence, since the German military at the time did not employ many nurses and by the late 19th century forbade the activities of aid societies on the frontline in general: Roberto Ramon Padilla II, "Science, Nurses, Physicians and Disease: the Role of Medicine in the Construction of a Modern Japanese Identity, 1868-1912" (Doctoral Dissertation. Ohio State University, 2009), p. 36.

space.[32] This changed gradually over the years and with each war, as subsequent chapters will discuss. However, at this point of time, the Army assumed it could not use women as medical caregivers on the battlefield, and so created its own system of supporting male medical soldiers. It should also be noted that during that early time, and because nursing was not yet professionalized or accepted as a woman's potential job, there were not that many women the Army could build its system upon in the 1870s, even if it decided to do so. The concept of a woman nurse and her unique contribution, as Ishiguro noted, was established only later.[33] The creation of medic roles was thus partly the result of the perceived need to create distinct gendered medical spaces as well as the urgent demand for an organized supply of medical care.

"Hospital Soldiers " and Medics: War and Peace

While many similarities existed between the early medics and early women orderlies, the most initial vision the Army had for the role ascribed unique traits to medics that were completely different from the role filled by the women orderlies. This difference suggests that the development of medic roles could not be limited to a linear progression from one early role to another. Rather, the development of early medics intersected with that of nursing, as the Meiji regime reformed medical care in general. This intersection and coeval development affected the form medic roles took. However, another factor must have been at play to produce such disparity from the very start. That factor derived from the Army's distinction between peacetime and wartime medical care.

[32] Kawaguchi & Kurokawa, Op. Cit., pp. 17-18.
[33] See for example, Sawamura Shūji, *Nihon no naichinge-ru: jūgun kangofu no kindaishi* (Tokyo: Tosho shimbun, 2013), pp. 41, 47.

In 1871, right between the Boshin War and the enactment of general conscription to the new Meiji Army in 1873, decision makers in the *gun'iryō* 軍医寮 - the military medical headquarters at the time - suggested creating the role of 'hospital attached soldier,' *byōin-fuzoku-hei* 病院附属兵. According to the official history of the Army's medical system, approximately ten out of a hundred soldiers were to serve in the role of hospital soldier, carrying the Red Cross insignia. It was the first time such a role had been discussed. The definition of the duties of the hospital soldier distinguished between peacetime and wartime service.

During peacetime the soldiers were to be attached to military hospitals, where they would tend the sick and act as sentries at the hospital, as well as perform various other required chores.[34] This description, as well as the term suggested for the role, tied the development of army medics to that of hospitals as a new form of medical institution. As discussed in the first chapter, following the Boshin War, the Meiji leaders began perceiving the soldier's body as a building block for the new military and nation at large. Consequently, it decided to found army hospitals – *rikugun byōin* 陸軍病院 – in each domain.[35] Concurrently, the leadership began expanding its concern from the soldier to the state body at large; the soldier's strength and resilience in wartime was determined by the condition of his body upon conscription. Culminating in a series of public health policies in 1874, the Meiji government expanded its involvement in public health, including the establishment of public care centers termed hospitals. According to Burns, though Japan had a longer history of care centers, the early "hospital" was a Meiji invention, and its roots could be found in the facilities created to deal with the emergency casualties of the Boshin War. Following the war numerous centers grew sporadically all over

[34] Rikugun gun'idan (ed.), Op. Cit., p. 326.
[35] Hugh Cortazzi, *Dr Willis in Japan, 1862-1877: British Medical Pioneer* (London, GB: The Athlone Press, 1985), pp. 1-2; Nishioka, Op. Cit., pp. 23-24.

Japan in a variety of structures. Largely from 1874 as the government wished to harness medicine for state building, it began initiating the systematized establishment of public care facilities. Establishment of private hospitals was not late to follow. Yet, as Burns argued, the civilian public and private hospitals alike came to assume a commercial air, catering mostly to the relatively prosperous. Thus, even though the proliferation of various hospitals presented a significant change in how medical care was perceived, for a large part of the population, care remained within the home.[36] When men enlisted to military service, on the other hand, they were taken out of the domestic sphere and if needed, were treated in military facilities. Army hospitals were to treat all army soldiers in need, irrespective of wealth, and they required personnel.

In peacetime the hospital was thus the center of medical care. However, wartime added special medical needs. According to the 1871 suggestion, in wartime the hospital soldier was to be attached to a different kind of medical structure - the ambulance, *anbiransu* アンビランス.[37] The hospital turned ambulance soldier was to treat the conveyed sick and wounded soldiers, or transport the wounded from the front.[38] In 1876 the Army issued an addendum to the 1875 regulations with a list of subjects the medics were to learn, that corresponded to the 1871 suggestion. They included duties, such as recognizing the terms for different surgical and pharmaceutical instruments, tending patients suffering from internal ailments, and caring for surgical patients. Most importantly, they also included preparing and using bandages, mastering the technique for using triangular bandages, learning methods for carrying patients, and how to

[36] See Susan L. Burns's analysis of what she described as heterogeneous development of hospitals and care facilities in the early Meiji, and of the heterogeneous experience they created among patients in "Contemplating Places: the Hospital as Modern Experience in Meiji Japan," in Helen Hardacre & Adam L. Kern (eds.), *New Directions in the Study of Meiji Japan* (1997), pp. 703-709. See also a chart listing the 14 care facilities that were established and used during the Boshin war, including the battles they catered to. Two of the 14 were William Willis's hospitals and one was Matsumoto Ryōjun's: Iijima Shigeru, *Nihon senpei-shi* (Tokyo: Ueno Akira, 1943), pp. 362-365.

[37] Ch. 3 will focus specifically on the role of the history of the ambulance in the development of medic roles from a global perspective.

[38] Rikugun gun'idan (ed.), Op. Cit., p. 326.

tend patients on the battlefield. Finally, they were also required to learn how to recognize the different military symbols and ranks.[39]

These military-specific skills indicated that the medic role was not to be limited to a static hospital. Rather, the military context necessitated special military and medical knowledge and skills, which were significantly different from the hospital setting and from the role women filled during the Boshin War. These special skills were particularly evident during wartime, when the battlefield became a potential medical space. As the subsequent chapter will argue, these special skills largely derived from foreign experience – particularly French and German – which contributed to a reevaluation of the battlefield as a medical space in Japan and elsewhere. Specialization and professionalization were then intertwined with a new form of militarization, while militarization was inseparable from "masculinization."

Based on the above it is possible to argue that the major contribution of the Boshin War was to illustrate the need for a medical framework for tending the wounded and sick soldiers, and the importance of assistants in supporting the medical apparatus. The assistants lightened the burden of the relatively scarce physicians and additionally, facilitated the transition from domestic to institutional medical care. Following the war, the Meiji leaders persisted in using medical delegation as a tool to facilitate the establishment of a framework of military medicine in its new military, by both creating a role of semi-specialized medical soldier and supporting early forms of nursing. The interconnectedness of the development of military and civilian facilities translated to similar responsibilities for their initial staff. Medic roles and the category of nurse thus grew out of similar circumstances and aimed to fill similar purposes. What

[39] Rikugunshō, "Kanbyōnin kanbyōsotsu fukumu gaisoku daigo-shō zōka," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (16 December 1876), JACAR reference number: C08070815700.

eventually differentiated between them were the exigencies of the battlefield and the gendered categories that accompanied the new ways in which the Meiji leaders defined war.

The origins of the medic roles were tied to two new definitions of military medical spaces based on experience and foreign influence: the hospital and the battlefield. Why then did Surgeon-General Hashimoto Tsunatsune limit the definition of medic service in 1888 only to the unit, and by extension to the battlefield, while divorcing it from the hospital? If the early manifestations of medic roles were tied so strongly to hospitals, whose development itself was tied closely to war experience, why did Hashimoto consider the unit as the central military medical space? To answer these questions, one has to examine the first experience the Meiji Army had with actual warfare and its consequences.

3) The Satsuma Rebellion: Conscription and the Battlefield

The Problem of Numbers Revisited

The first time the newly established Meiji Army put its new structures, strategies and capabilities to the test was during the Satsuma Rebellion of 1877. As discussed in the previous chapter, many of the Meiji reforms shook the foundations upon which people's lives were based for centuries, creating antagonism and eliciting uprisings. The Satsuma Rebellion was the largest uprising of them all, meriting the term civil war. In Japanese it was termed the "the Southwestern War," *Seinan sensō* 西南戦争. Jansen argued that its importance was so great that rather than the Boshin War, the Satsuma Rebellion could be defined as the war, which truly opened the Meiji era.[40] The Satsuma rebels mobilized 30,000 men, and lost nearly all of them but a few hundreds. The Meiji Army mobilized more than 60,000 soldiers, and resulted in 16,000 casualties – almost

[40] Marius Jansen, *The Making of Modern Japan* (Cambridge, MA: Harvard University Press, 2002), p. 369.

30% of the troops. The disastrous results of the war left an indelible mark – on the Army and society at large. When it came to the Meiji Army, though it managed to subdue the rebellion, it did so at a very high cost, which exposed its weakness and demonstrated a need for further reform.[41]

Only four years had passed since the establishment of the Meiji Army, moving it away from Samurai to Western-styled warfare. The war demonstrated, however, that the samurai-led Satsuma rebels were actually better trained and more motivated than the "conscripted farmers"; farmers since at that point of time, even though top positions in the Army were typically manned by former samurai, common soldiers – the majority - consisted of those who did not have the means to buy an exemption from service. Most of the weight was carried by those who had no way of escaping it, causing great frustration among the population, revolts, and low motivation among the new troops. It was only in 1889 that the government revised its conscription law, cancelling the former unequal method of exemptions following the suggestion of Jakob Meckel, a Prussian General who served as foreign advisor to the Meiji government.[42]

The weakness exposed by the war also led to various structural reforms of the military. The Army leaders focused particularly on how the Army was managed from the top, creating a general staff to facilitate coordination between the different troops, improve its chain of supplies and create a sturdier reserves force. According to Presseisen, these points of weakness, so strongly manifested in the war, were to no little extent the result of the French model the Meiji Army followed. Thus, even though French advisors assisted in the subsequent reforms, the rebellion began a process of gradual detachment from France and further movement towards

[41] James H. Buck, "The Satsuma Rebellion of 1877," *Monumenta Nipponica,* Vol. 28, No. 4 (Winter, 1973), pp. 427-28.
[42] Buck, Op. Cit., pp. 427-28; Presseisen, Op. Cit., pp. 123-24.

Germany.[43] Among the different steps the Army took to improve the level of its troops, were reforms within its medical system.

While the Boshin War demonstrated the need for establishing a military medical system with its center in the hospital, the Satsuma Rebellion added the battlefield as a major factor to take into consideration. The war exposed shortcomings in wounded evacuation procedures and as the following chapter will argue, these shortcomings and their reforms were a significant factor in crystallizing the definition of the medic role. The war also revealed a grave shortage of medical personnel. The number of casualties was significant, derived of wounds and equally grave – diseases. Cholera was one example. The returning troops were believed to be the source for subsequent outbreaks of the epidemic among the general population in bouts between 1879 and 1886.[44] Another example was the Beriberi disease. In 1921 it was established as a nutritional disease caused by thiamin deficiency. However, until then, according to Bay, its etiology and corresponding treatment came to be a serious bone of contention between medical officers in the Army and the Navy.[45] Oberländer argued that the Satsuma rebellion was the first event, which brought Beriberi into the attention of the Army and nation at large. Many of the troops suffered from the disease during the war. According to Oberländer, the estimated number of soldiers suffering from the disease climbed from 11% in 1876 to 38% in 1878.[46] It was not enough to protect the health of the population to create a strong army. Controlling disease within the Army

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[43] Presseisen, Op. Cit., pp. 55-59.

[44] On the spread of cholera during and following the Satsuma Rebellion and the central role played by military hospitals in treating and implementing new treatment of the epidemic (the hypodermic injection) see: Tsukisawa Miyoko, "Meiji shoki Nihon ni okeru iryō jōhō no dentasu: seinan sensō, korera to hikachūshahō no fukyū," *Nihon ishigaku zasshi*, Vol. 58, No. 4 (2012), pp. 457-70.

[45] See Alexander R. Bay, *Beriberi in Modern Japan: the Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012).

[46] Christian Oberländer, "The Rise of Western "Scientific Medicine" in Japan: Bacteriology and Beriberi," in Morris Low (ed.), *Building a Modern Japan: Science, Technology, and Medicine in the Meiji Era and Beyond* (New York: Palgrave Macmillan, 2005), p. 15.

proved to be equally imperative for protecting the health and strength of its soldiers and by extension, the general population.

To better deal with these challenges in the future and cope with the aftermath of the war – the numerous sick and wounded did not cease to need care once the battles ended - the Army's medical leadership enacted both top and bottom oriented reforms. First, it established a new Medical Department to manage, oversee and coordinate all military medical issues in the Army, much like the new General Staff the Army established that same year.[47] Until 1878, the Army's head hospital in Tokyo, the *Rikugun-honbyōin* 陸軍本病院, functioned as medical headquarters in addition to its general duties as central hospital. As of 1879, the newly established Medical Department – the Military Medical Headquarters, *Rikugun-gun'ihonbu* 陸軍軍医本部 - took over the managerial duties, enabling the hospital to focus its resources on its own activities.[48]

Personnel reforms were particularly important, since the war demonstrated the gap between the number of casualties and that of the staff available to treat them; the shortage of personnel became manifest both in the echelons of medical officers and the medic soldiers serving under their command. According to Nishioka, the military managed to enlist around 250 physicians of different ranks and level of experience to treat thousands of patients in both units and hospitals.[49]

As discussed in the first section of the chapter, the gap between the number of medical officers and soldiers in need of care was to be bridged by the medic soldiers. However, medics were also of an insufficient number. Documents do not provide a total number of medics during the war, but specific examples provide a sense of the shortage of human resources experienced

[47] Presseissen, Op. Cit., pp. 61-63.
[48] For more on the history of the military medical headquarters in its numerous manifestations see Rikujō jieitai eisei-gakkō shūshinkai (ed.), Op. Cit., especially pp. 2-10
[49] Nishioka, Op. Cit., pp. 34-35.

during it. When it came to units, the Kumamoto garrison, for instance, had roughly 1 military physician and 1-2 *kanbyōsotsu* medic soldiers per battalion. Each battalion included more than 400 men, creating a very wide gap between the number of medical soldiers and their potential patients.[50] There are also quite a few documents from 1877, written by high-ranking medical officers, deploring the shortage of physicians, medic soldiers and non-commissioned medic officers, calling directly for reinforcement.[51]

Hospitals also suffered from a shortage of staff. Suzuki located records of a temporary military hospital established in Osaka, where the scarcity of personnel was so great that the hospital was willing to recruit any available pair of hands. The hospital records indicate that between March and July there were 4,168 hospitalized patients and only 51 medics of different non-commissioned officer ranks to treat them. The hospital employed more than 200 daily-waged attendants to compensate for the shortage of hands, by posting signs and newspaper advertisements and promising certificates to those who performed well to attract as many as possible.[52] In other words, the military medical system could not function independently without civilian support, nor did it work precisely according to plan, when faced with the demands of battle. Volunteers were also difficult to find and required convincing through the prospect of a reward.

Medics at this point were army soldiers, but similar to the civilian employees, they were volunteer soldiers. The government implemented conscription gradually and while the Army

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[50] Rikugunshō, "Kumamoto chindai shotai jinmei-hyō," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1877), JACAR reference number: C09080691800.

[51] Hayashi (Kenkai), "Ikan kanbyōnin-sotsu fusoku kanbyōsotsu wa mada tatasenuka," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1877), JACAR reference number: C09081778900; Ōtsuki Yoshiyuki, "Kaikeikan-fuzoku, yobi-jū owatashi, kanbyōsotsu zōka-nado no irai," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (April 1877), JACAR reference number: C09081841500.

[52] Suzuki Noriko, "Rikugun no eisei yōin hojū seido no seiritsu katei," *Gunji shigaku*, Vol. 46, No. 2 (2010b), pp. 113-14.

created the medic role as in-house militarized medical support, by enlisting volunteers it relied on their volition to serve in the role. It is possible to imagine how the prospect of working at a wartime hospital, full of numerous wounded and sick patients, based on very little training, was not so appealing. The people serving in the hospital and improvised centers of care faced the danger of contracting disease. They had to witness difficult sights, take in noxious smells and touch intimidating lesions. By the 1870s surgery established itself among doctors following the process of medical Westernization, described in the previous chapter. Consequently, more doctors grew accustomed to seeing the body in different forms, inside and out. However, this did not encompass all doctors, did not reach the extreme conditions of war, and especially, did not include laymen outside of the medical communities. The sight and contact with so much blood and death was probably shocking for the unaccustomed. It might also have been even more meaningful in a society where principles of purity and impurity defined, to a certain extent, ways of thinking, and caused recoil from what was perceived as impure. Blood, disease and death were considered some of the causes of impurity.[53]

Ensuring the number of medics thus depended not only on army quotas and planning, but also on the willingness of potential medics to serve. Eliminating the element of choice by expanding conscription to include medic roles was then one solution to the problem. Conscription also ensured that medics were subject to military discipline, and placed under its authority in a way that volunteers were not. To facilitate its implementation, however, the Army was to initiate a wide structural reform, which required resources. Consider the following

[53] See Miyata Noboru's analysis of the concept of *kegare* 穢 in respect to blood and the social connotations, as well as the discrimination it bred in *Kegare no minzokushi: sabetsu no bunkateki yōin* (Tokyo: Chikuma Shobō, 2010). William Johnston wrote a more specific analysis of the concept and its implications on perceptions of tuberculosis and its symptoms in society in *The Modern Epidemic: a History of Tuberculosis in Japan* (Cambridge, MA: Harvard University Press, 1995), pp.117-120. See also Edward R. Drott's discussion of defilement in early Japan in "Care Must be Taken: Defilement, Disgust and the Aged Body in Early Japan," in *Journal of Religion in Japan*, Vol. 4 (2015), pp. 1-31.

example. In 1883, when the Army began implementing conscription, Surgeon-General Matsumoto Ryōjun wrote Army Minister Ōyama to notify him of a problem raised following the completion of training of the first generation of conscripted *kanbyōsotsu* medics in the Tokyo garrison. In his correspondence, he notified Ōyama that certain facilities in the Tokyo area, such as the Military Police Officers School and the Tokyo Army Prison, found it difficult to receive the new conscripts and preferred to continue following the method of using volunteer soldiers.[54] To absorb the new conscripts, each institution had to prepare housing facilities and at certain occasions change the very outlines of their grounds. The new conscripts presumably required the Army to produce uniforms for them, supply them with food, prepare training as well as housing facilities, systematize and expand training, pay the soldiers - though limited - Army wages and create the mechanisms to supply and document all these services. Such preparations required funds, human resources, and also time.

Because of the said difficulties, the Medical Department could only implement change gradually. For the first years following the Satsuma War the Army continued enlisting volunteers to serve as medic soldiers, but began expanding their numbers. Moreover, according to a regulation from 1878, for what seemed to be the first time, the Army set a clear ratio for medics per unit. The regulations until then only specified numbers of medics per garrison hospital. By defining a number of medics per unit, the Army gained more control over unit medic service. As argued above, the experience of the war reemphasized the unit as the center of military activity and as a result, a medical space in need of emergency support in wartime. Following that line, it

[54] Matsumoto Ryōjun, "Chōhei kanbyōsotsu haitō no gi ni tsuki ukagai," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (December 1883), JACAR reference number: C04031032900.

is notable that the Army gave precedence to infantry battalions, as the main combatant units requiring the most immediate and extensive care.[55]

	Infantry Battalion	Artillery Battalion	Cavalry Battalion	Engineering Battalion
Medic Soldier	2 per battalion	-	-	1
Non-commissioned medic soldier	1 per battalion	1	1	1

Figure 4: 1878: Medic Quotas per Unit[56]

As for medic service in hospitals, though the earlier regulations from 1875 specified a number of medics per hospital, it was relative and unstable; the number of medics was determined according to the number of patients (1 kanbyōsotsu medic per 6-10 patients) - not per hospital. Since the number of patients differed at every given time, we could assume that there was no continuous total number.[57] It seems this did not change much in 1878, a year after the Satsuma war, since the Army ministry issued a chart to the various garrison hospitals elaborating the salary they were to pay medic soldiers as well as non-military orderlies. The chart was to guide them as they dealt with a large number of patients – presumably the convalescing sick and wounded from the war from the year before.[58] Hospitals could thus presumably hire and discharge medics according to need, but on the other hand, had less control over the availability of personnel.[59]

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[55] Rikugunshō, "Kakutaizuki-ikan kanbyōnin kanbyōsotsu zōin," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (August 1878), JACAR reference number: C08070870900.

[56] Rikugunshō, "Kakutaizuki-ikan kanbyōnin kanbyōsotsu zōin," Op. Cit., JACAR reference number: C08070870900.

[57] The regulations were limited to the auspices of the garrison hospitals and stipulated that there should be 1 first ranked *kanbyōnin* officer in each garrison hospital, 1 second ranked kanbyōnin officer per 20-21 kanbyōsotsu medics, 1 third ranked kanbyōnin per 8 kanbyōsotsu medics, and 1 kanbyōsotsu medic per 6-10 patients. See: Yamagata Aritomo, "Kanbyōnin kanbyōsotsu fukumu gaisoku," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (November 1875), JACAR reference number: C08070047300, pp. 1, 3, 6, 8-9.

[58] Rikugunshō, "Yatoi kanbyōfu nikkyū," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (October 1878), JACAR reference number: C08070876300.

[59] This changed it seems only in one hospital – the Army's central hospital in Tokyo – that set a number of medics in 1878. According to the following regulation it was to have 100 medic soldiers on its premises: Rikugunshō,

This gradual expansion and definition of set numbers enabled the Army to partly deal with the shortage of medics, while working within a limited budget and allowing a certain degree of flexibility. However, it was only a temporary peacetime solution. It did not address the challenges of recruitment and as a result, could not fully guarantee sufficient personnel in the event of a future war. Conscription could do that by providing the Army with the power of enforcement and by creating additional reserve forces as backup.

Conscription and the Elimination of Choice

In 1880, three years following the war, an assembly of high-ranking medical officers gathered in Tokyo to discuss the feasibility of conscripting medic soldiers. It became a reality three years late, as the Army began conscripting soldiers to serve as medics in hospitals and units for the first time. Volunteer soldiers continued serving in army facilities, such as army schools and prisons, plausibly because in many respects they were peacetime institutions.[60] This was a form of compromise. Building upon the Satsuma wartime experience, it was more imperative to ensure the number of personnel in potential wartime units and hospitals, than other army facilities located mostly in the rear. Conscription then began with a division of medical spaces.

Conscription took out the element of choice and so ensured a regular supply of medic soldiers. Another main advantage of enacting conscription was the creation of a pool of reserves available in wartime. Volunteers or employees did not have a reserve force to be called up to duty in times of emergency; and, as noted, any volunteer reinforcement had the potential to

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"Honbyōin kanbyōsotsu teiin hyaku-mei ni sadamu," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (June 1878), JACAR reference number: C08070866100.

[60] Rikugunshō, "Chōhei kanbyōsotsu toriatsukai tetsuzuki un'nun," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February1883), JACAR reference number: C09050054600; Rikugun gun'idan (ed.), Op. Cit., pp. 328, 333-46; Suzuki, 2010b, p. 114.

refuse to serve. By enacting conscription, the Army created a standing force of medics and a backup supply of reinforcement that was significant in number.

The Army divided its reserves into different categories according to experience and age, which the Army could pull from according to the severity of the situation. The first category, "Replacement Reserves," *hojūeki* 補充役, referred to conscripted soldiers who were not enlisted into active service, *gen'eki* 現役. Soldiers in the replacement category underwent limited training and did not experience actual service as the other two categories. The final chapters of the dissertation will describe the stories of quite a few medics, who fit this category during the 1940s. The two additional categories were first and second reserves, which aimed at maintaining experienced human resources; the Army wished to use soldiers who already had service experience, but completed their compulsory period of service. The "First Reserves," *yobieki* 予備役, consisted of soldiers, who completed three years of active service. Between 1873 and 1879 such soldiers were enlisted into the reserves force for four years, following the French Army system. From 1879 the Japanese Army prolonged the reserves period by creating an additional "Second Reserves," *kōbieki* 後備役; enlistment into the First Reserves would last three years and into the Second Reserves for an additional four years. Together they created a pool of available experienced soldiers for a total of seven years following army discharge. In 1883 the Army prolonged this period again – to four and five years respectively, indicating once more, the growing need for personnel as the Army accrued more active experience and began to prepare for the next war.[61]

Conscription thus enabled more control over numbers and a certain degree of expansion, though according to Suzuki, not to the extent that the Medical Department planned due to

[61] Drea, Op. Cit., pp. 29, 51, 55.

budgetary constraints.[62] As subsequent chapters will argue, throughout its history the Japanese Army negotiated the balance between a perceived need for expansion, and the limitation of resources required to both facilitate it, and equally important, maintain it after the fact. Assessing the exact numbers is problematic, since different documents provide different numbers. The disparity illustrates the difficulties of implementing conscription, how numbers changed over the span of even short periods of time while implementing reform, and the gap between projection and implementation.[63] If we focus solely on army conscription charts, as opposed to how many medics served per given year, we could detect a general trend of growth in the number of conscripts per year, even if not linearly consistent or to the degree originally hoped for by the Medical Department. The charts particularly demonstrate the importance of reserves in reinforcing the total number of medics that could be mobilized if necessary.

[62] Suzuki, 2010b, pp. 116-18.

[63] Consider the following examples. The regulations determining how medics were to be conscripted stated that each infantry battalion was to have 3 medics and that each cavalry, artillery, engineering and logistics battalion/company/platoon should have 1 medic: Rikugunshō, "Chōhei kanbyōsotsu toriatsukai tetsuzuki un'nun," Rikugunshō dainikki Collection, Op. Cit., JACAR reference number: C09050054600. In July that year the Army issued a report with exact numbers of medics following the new regulations, per Army district, divided according to unit. In most cases the basic unit included 1 medic, but unlike the earlier regulations, that applied to infantry battalions as well. The documented noted a total of 306 medics, 166 in hospitals, 138 in units, 1 in an officer's school and 2 in a prison, even though the latter two were not supposed to be conscripted: Ōyama Iwao, "Chōshū chōhei kanbyōsotsu haitō jin'in un'nun," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (July 1883), JACAR reference number: C09050063900. In May that same year, a document provided the number of hospital medics per district, a total of 568 medics – a much larger figure than the total number of conscripted medics. This figure probably referred to non-conscripted medics from the earlier system, since the new conscripts would not have finished training by May 1883: Ōyama Iwao, "Rikugun gun'ibu shokkan teiinhyō-chū kaisei," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (May1883), JACAR reference number: C09050061800). The following year, 1884, the Army issued the exact same document, but the numbers changed. At the end of the document it noted that there was a shortage of medics in the previous year among the units, which was compensated for by hospital medics. There was no mention of medics serving in Army facilities anymore. The total number of medics was 394, 251 in hospitals, and 143 in units: Rikugunshō, "Chōshū chōhei kangosotsu haitō jin'in," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (July 1884), JACAR reference number: C08071097900.

	1884	1885	1886	1887
Active Service	264	226	276	601
Replacement Reserves (*hojū*)	172	597	488	459
Total Number of Medics	436	823	764	1060
Total Number of Conscripted Soldiers	42288	167366	174659	188486

Figure 5: Conscription per Year[64]

By enacting conscription, creating reserves forces and gradually ensuring that a larger number of soldiers possessed service experience, the Army fastened its control over unit and hospital medical care. It is also possible that these reforms were aimed at solving another problem raised during the Satsuma Rebellion – the low morale of the soldiers. The French Army under Napoleon, for example, which had such a formative influence on the Japanese Army, considered the presence of medical personnel in battle significant for reassuring the soldiers that in case of harm, they would receive succor. Napoleon himself, supposedly, considered the very visibility of medical personnel to be conducive in times of battle, to encourage the soldiers to move ahead and fight.[65] Expanding military medical personnel and making its facilities more efficient might then have also been a measure for improving the fighting spirit of its demoralized troops.

Enacting conscription reflected the Army's recognition of the importance of maintaining medical soldiers as available personnel in wartime, especially as the total number of soldiers increased with every year. The way it enacted conscription also indicated a growing measure of

[64] Katsura Tarō, "Sōmukyoku: nenpō," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (December 1884), JACAR reference number: C09060055700 (tables no. 1&2, pp. 15-16 of digital file); Katsura Tarō, "Sōmukyoku: nenpō," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1885), JACAR reference number: C09060061900 (table no. 1, pp. 12-14 of digital file); Rikugunshō Sōmukyoku, "Sōmukyoku: nenpō," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1886), JACAR reference number: C09060068500 (table no. 1, pp. 43-45 of PDF); Rikugunshō Sōmukyoku, *Rikugunshō dai-ikkai tōkei nenpō* (1887), NDL reference number: 000000482425, Microfilm reference number: YDM51728 (table no. 1&2, pp. 4-14 of original, pp. 75-80 of digital file).

[65] Howard, Op. Cit., pp. 83, 87, 92.

professionalization of medic roles; the Army implemented conscription of medic soldiers by distinguishing between three spaces of service - hospital, unit and army facilities. This division and the fact that the Army conscripted medics only to hospitals and units, revealed a perception of each as a disparate medical space, requiring its own specific staff and by extension – specialized skills.

Conscription, Militarization and Professionalization

Like any other conscript the medic was to learn how to become a soldier, how to follow army discipline and codes, and how to march and salute. In addition, however, he was to learn how to become a medical care provider. The first medic soldiers conscripted in 1883 entered the Army with no medical knowledge or background. Moreover, they were probably not familiar with basic Western medical concepts on which the Army built its medical framework. The first conscription regulations from 1883 established a new program to enable conscripts to adjust and embody the combination between the military and medicine.

Training was to last for six months and to consist of ten different subjects. The new program was similar to its aforementioned 1875 predecessor and its revision from 1876. It included subjects, such as tending the sick, preparing bandages, learning to use triangular bandages, carrying and moving patients, and providing emergency treatment, just as before. In 1883, however, there were two significant additions that indicated the militarization and medical specialization of the role, following conscription. First of all, the new training program included an additional section of army specific training that conscripts were to undergo usually with infantry units. Since the conscripted medics were to serve as soldiers in active duty they were to

learn about the system they were in, and be physically fit. Training thus included army calisthenics and marching.

Medically, the most significant addition to the former training program was basic anatomy.[66] The 1875 curriculum created the impression that training was aimed to teach volunteers what to do in different situations. In other words, the emphasis was on action. The addition of anatomy in 1883 suggested an added level of understanding. The conscripted medics were to know how to bandage a wound and treat a sick soldier, but also to understand how his body was built and how it worked according to Western constructs and terms. Anatomy was the quintessential epitome of Western medicine in Japan. The earliest encounter and interest in Western medicine during the Tokugawa era began, as mentioned in the previous chapter, with anatomy. The "traditional" Sino-Japanese interpretation of the body and the Western anatomical understanding of the body were worlds apart, requiring a conceptual leap from these new laymen conscripts.[67] Incorporating visual means was a powerful way of conveying new concepts, as well as a useful tool for memorization. The 1883 regulation specified a textbook title and a list of training equipment.[68] By so doing, medic training became increasingly unified and systematized. The earliest textbook available today for conscripted medics is from 1886 and it includes various instructive illustrations.[69] Towards the end of the book there is a folded paper that opens up to a

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[66] Rikugunshō, "Chōhei kanbyōsotsu toriatsukai tetsuzuki un'nun," Rikugunshō dainikki Collection, Op. Cit., JACAR reference number: C09050054600; Suzuki, 2010b, pp. 114-15. See also the description of the duties the conscripted medics were to fill: Yamagata Aritomo, "Kanbyōnin kanbyōsotsu fukumu gaisoku," Op. Cit., JACAR reference number: C08070047300, especially pp. 0515-0520 concerning hospital duty, pp. 0520-0521, concerning unit duty.

[67] See Shigehisa Kuriyama's work on the different ways of experiencing and understanding the body in *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine* (New York: Zone Books, 2002).

[68] Rikugunshō, "Chōhei kanbyōsotsu toriatsukai tetsuzuki un'nun," Op. Cit., JACAR reference number: C09050054600; Suzuki Noriko, 2010b, pp. 114-15.

[69] Suzuki Noriko researched the list of medic textbooks elaborated in the official history of the Army's medical department and investigated their current availability. See: Suzuki Noriko, "Rikugun kangogaku kyōkasho," *Nihon kango rekishi gakkai-shi*, Vol. 26 (May 2013b), p. 81.

size four times as large as the textbook, to reveal an illustration of the human skeleton and the blood circulation system, following European conventions.

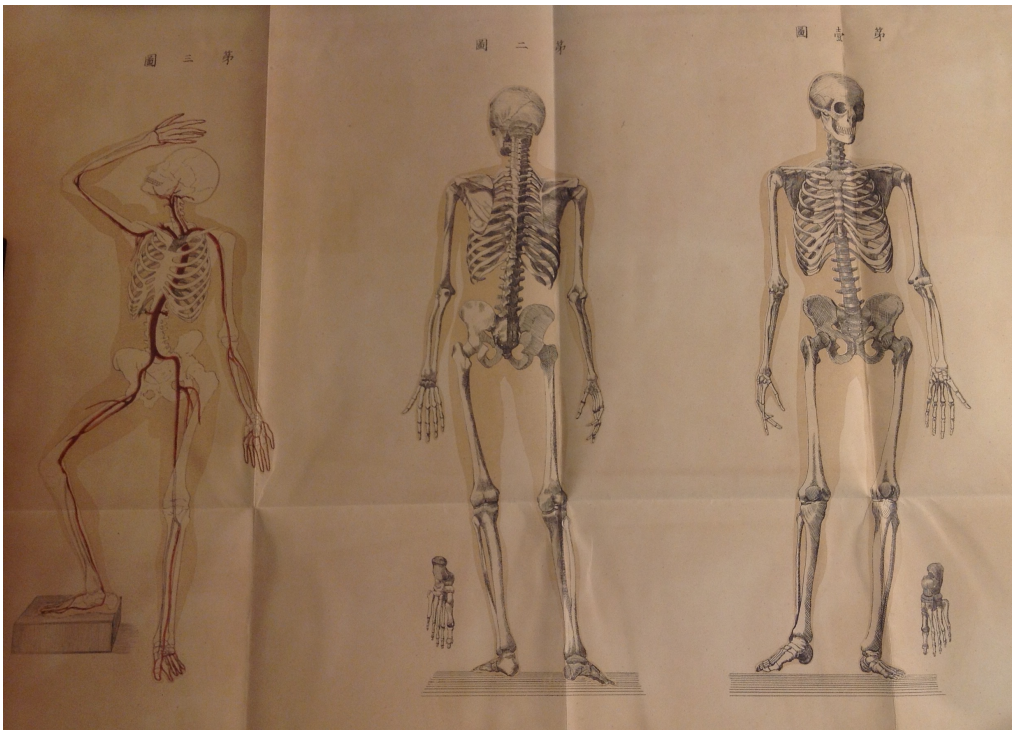


Figure 6: Illustration from Medic Textbook, 1886[70]

Medic conscripts were to learn how to look at the male body in a different way, internally and externally.

By initiating the conscription of medics, the Army not only strove to gain control over the number of personnel, but also over their level of training and performance. By accompanying conscription with a reform of medic training, the Army Medical Department wished to transform the former volunteers into a special kind of soldiers - soldiers who practiced medicine.

[70] (Rikugunshō imukyoku), *Rikugun kangosotsu kyōkasho dai-nihan* (publication details unavailable. According to the official history of the Army medical system, this specific textbook was published in 1886. According to the official history a third edition was issued the following year. Despite that, I believe the version I hold of the second edition, which I use for the dissertation, was actually published in 1887, before the third edition came out in May, because it includes an illustration describing a reform from January 1887 – the creation of the stretcher-bearer role. It also includes a page with corrections, implying that it was a slightly later version of the original from 1886: See Rikugun gun'idan, Op. Cit., p. 483; Suzuki Norko, 2013b, p. 81; Prince Arisugawa Taruhito, "Tankajutsu kyōiku kisoku nami-ni eiseitai hensei hyō no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1887), JACAR reference number: C06080203600).

4) The *Kangoshu* – Unit as Medical Focal Point

The Japanese Red Cross and the Prospect of War

Five years following the initiation of conscription, we finally reach the *kangoshu* reform, which opened the chapter; in 1888 the Army once again outsourced medical care in army hospitals, limiting medic conscription to units. However, as discussed above, one of the main failings of the Satsuma War was a shortage of human resources in hospitals, leading to the hasty recruitment of civilian orderlies - often than not, with no prior training. This was one of the main impetuses for implementing conscription in the first place – to consolidate the Army's control over medical care in wartime and ensure the level of training of its providers. Instead, the leader of the reform, Surgeon General Hashimoto Tsunastune, fashioned the unit as the crux of military medical care. By distinguishing between the hospital and the unit he redefined the medic role – the *kangoshu* was a unit medic soldier, as opposed to the *kanbyōnin* employed hospital orderly. Why did Surgeon-General Hashimoto lead such a reform considering the experience of the Satsuma Rebellion and the reforms, which followed it only a few years prior?

There were three main factors that might have contributed to Hashimoto's decision to separate the medical spaces. The first was growing military activity in Korea. From the early 1880s Japan increasingly expanded its involvement in the internal affairs of Korea, leading to mounting anti-Japanese animosity. The first revolt against Japanese intervention took place in 1882 and resulted in further escalation reaching its peak in the Sino-Japanese War of 1894-95.[71] Suzuki and others argued that the 1882 revolt provided the additional justification the Army required for expansion in preparation for future international warfare, leading even to a partial mobilization of the Army's reserves force in 1882 and 1885. Yamagata Aritomo drafted a

[71] Jansen, Op. Cit., pp. 424-29.

proposal for such an expansion as the chief of staff in 1882, but there were not enough resources to carry it through. Thus, the Army implemented the expansion in stages between 1883 and 1885 and finally changed its structure in 1888 - moving from a formation of six garrisons to eight divisions. This move expanded the army significantly and, as formerly discussed, pushed the Army into a more German-oriented structure in the process.[72]

It is feasible that Hashimoto's decision to outsource medic hospital service and focus the Army's resources on the unit was a reflection of his growing preoccupation with the battlefield over the rear. This shift arguably intensified, as the future potential war grew geographically distant from Japan, requiring the Army to carry its units far from the centers of medical care. *Kangoshu* medics treated unit soldiers in clinics on their base not unlike hospital medics or orderlies. However, they also trained specifically in caring for the unit soldiers as they were moving – whether on the march or on the battlefield, a set of skills that differentiated their duties from hospital service.[73] Moreover, on the battlefield the distance between military physician and wounded soldiers grew substantially, more so than in the defined hospital space, making medics and stretcher-bearers particularly invaluable.

Budgetary concerns were another factor to accompany expansion and preparation for war, arguably affecting Hashimoto's decision and requiring him to prioritize certain expenses over others. As discussed above, by enlisting soldiers the Army had to bear the costs for their keep and livelihood over time, and create and maintain facilities to house them. Hospitals, on the other hand, could hire employees according to need. Dividing the hospital and the unit would have allowed the funds and human resources allocated to hospitals to be invested in the unit instead, reinforcing the latter at the expense of the former. In deciding to employ volunteers, however,

[72] Drea, Op. Cit., P. 279n22; Suzuki Noriko, 2010b, pp. 115-16, 119-20; Suzuki Noriko, 2010a, p. 89.

[73] *Rikugun kangogaku shūgyō-hei kyōkasho: Rikutatsu dai-kyūjūni-gō*, authorized by Army Minister Ōyama Iwao (Tokyo: Kobayashi Matashichi, 1890), pp. 9-12.

the Army relinquished the possibility of recruiting a reserves force when needed. The Army's capability of enforcing service and ensuring its quality diminished as well. Why did Hashimoto repeat the same potential mistake of the Satsuma war? It is plausible that he felt secure in this step due to the availability of a new source of medical support and reinforcement – the Japanese Red Cross.

The close cooperation between the Army and the *Hakuaisha* 博愛社 – the main predecessor of the Japanese Red Cross - also began during the Satsuma Rebellion. Prince Arisugawa Taruhito, the head of the *Genrō* council, serving as the Meiji *de facto* government, defined the *Hakuaisha* as a supporting organization subordinate to the military medical command. As Japan entered the Geneva Convention in 1887, a decade later and a year before the *kangoshu* reform, the name changed to *Nisseki jūjisha*日赤十字社, the Japanese Red Cross. Though over time it came to be associated particularly with women nurses, the Red Cross personnel also included physicians and pharmacists, as well as male orderlies. Kawaguchi and Kawamura even argued that during the Satsuma Rebellion there were only male orderlies assisting in treating the wounded. The term for them was *kangonin* 看護人.[74] The Army changed the term for medic in 1884 from *kanbyōsotsu* to *kangosotsu*. Thus, the Red Cross *kangonin* could be seen – terminologically at least - as a male civilian version of the military term for its own military medics.

The Red Cross *kangonin*, however, were limited to a particular medical space as were its female orderlies. The Army defined its official relationship with the Japanese Red Cross in the mobilization law, created before the beginning of the Sino-Japanese War (1894-95). The law stipulated that the Red Cross, like the *Hakuaisha* before it, would be subordinate to the Army's

[74] Kawaguchi & Kurokawa, Op. Cit., pp. 14-16; Kita, Op. Cit., pp. 67-68.

medical command. More importantly, it defined in which areas the Red Cross personnel would be active; the Red Cross staff served in army hospitals, whose safety the Army was to secure in advance. This definition included hospitals behind the line of fire. Women nurses were limited to hospitals on Japanese soil, where wounded and sick soldiers were sent to receive further care following treatment received in the warzone. Male *kangonin*, on the other hand, could also be sent to actual warzones, but again – only to particular areas; as non-military personnel, *kangonin* were to keep to hospitals behind the line of fire within the warzone, such as hospitals on transportation lines, *heitan byōin* 兵站病院 or hospital ships. In other words, they did not serve in bandaging stations near the line, nor were they attached to units, as unit medics were.[75]

The same Surgeon General Hashimoto became the first director of the Japanese Red Cross Hospital in 1887, a year after he became Surgeon-General and a year before he initiated the *kangoshu* reform. It is highly likely that in his decision to reinforce the Army's medical strength and cutting costs by focusing on the unit, Hashimoto relied on the support of the Japanese Red Cross. The unit and the battlefield, on the other hand, remained solely the responsibility of the Army, and thus required special reinforcement and attention. It might be said that the Red Cross facilitated further militarization of the medic role. It also necessitated binding the *kangoshu* more tightly to his unit.

Medics as Unit Soldiers: Rank and Trust

Besides outsourcing hospital medical care, the *kangoshu* reform aimed at refashioning the medic into a soldier, who was an integral part of unit life and action. One of the major changes the *kangoshu* reform elicited was a delay of the moment in which a soldier was appointed to the

[75] Kita, Op. Cit., pp. 69-71. See following chapter for more on the military medical structures during the Sino-Japanese War.

role. Before the reform, the Army drafted soldiers directly to serve as medics.[76] As a result, when they entered the Army, they knew at least nominally what role the Army intended them for; nominally, since it was an altogether new role and so, most people did not necessarily know what it signified or what to expect. Following the *kangoshu* reform, medics no longer appeared in conscription tables. Its aim was to create the *kangoshu* as a role that grew from within his unit. Neither he nor his commanders knew who would serve in the role at the moment of conscription.

As discussed in the first section, the fresh conscripts would undergo six months of general training with the other soldiers of their unit. Only following basic military training did the unit officers choose those among the trainees, the few who would proceed to undergo medical training, based on their ability to learn and their personality: "those who were sincere, serious and benevolent, who could read, calculate and write (篤実温厚読書算筆)."[77] Defined as such, officers could choose the potential medics only upon better acquaintance. When they were chosen, even though they trained with all the other soldiers equally, they became distinct.[78]

Cultivating the medic soldier from among his peers presented potential advantages and disadvantages. On the one hand, it produced medics, who were more militarized than before. In Hashimoto's rationalization of the reform he stated:

When (soldiers) were conscripted (directly) as medics (*kangosotsu*), their mind envisioned only medic nursing (*kango* 看護). Consequently, this created a bad habit, whereby additional military education resulted in an insufficient level of (military) skill.[79]

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[76] Ōyama Iwao, "Chōhei kanbyōsotsu toriatsukai tetsuzuki un'nun," Op. Cit., JACAR reference number: C09050054600.

[77] Naikaku (government document, signed by Prime Minister Kuroda Kiyotaka and Army Minister Ōyama Iwao), "Chokurei dai-kyūjū-ni-gō, rikugun eiseibu gen'eki kangoshu hojū jōrei," Op. Cit., JACAR reference number: A03020028200.

[78] See the fourth chapter for further analysis on the criteria for selecting soldiers to serve as medics and how these criteria reflected on the way the Army perceived the role in different periods.

[79] Hashimoto Tsunatsune, "Eiseibu gen'eki kangoshu hojū jōrei no ken," Op. Cit., JACAR reference number: C06080636600, pp. 2397-8; Suzuki, 2010a, p. 93.

The medical came at the expense of the military. Choosing medics following Army training avoided that situation. It also created more closeness between the medic and his comrades. Both were common soldiers, subordinate to their superior commanding officers. However, this proximity could also pose problems in asserting authority and respect – an important factor in the relationship between patient and caregiver. Without it the patient would not be inclined to follow the caregiver's instructions. Why should a soldier obey the instructions of another soldier, with whom he underwent basic training on the same standing? Since conscription was geographically based, perhaps they even knew each other or of each other from their hometown. What gave one superiority over the other? This was imperative in the unit setting, since the purpose of the role, as discussed in the opening of the chapter, was to potentially replace the medical officer – a heavy responsibility.

Let us return to the drawing, which opened the chapter in figure 1. The *kangoshu* was depicted kneeling above the wounded soldier - the lowest figure in the drawing. He is touching the wounded and treating him, while turning his eyes up to the medical officer, as if searching for validation. The medical officer is not looking at either, but at his notes. The wounded soldier's eyes are turned up, either towards the standing military officer, or, it seems more likely, directly to the figure treating him - the *kangoshu*.



Figure 7: Medic, Medical Officer and Soldier-Patient[80]

What was to happen when the standing figure was not there? The wounded soldier had to learn to trust the *kangoshu,* even though he was a common soldier like him. The Army recognized the importance of trust and respect in the relationship between medical caregiver and patient. Thus, to foster the said trust, the Army placed the *kangoshu* one rank above the common soldier – private first class, *Jōtōhei* 上等兵.[81] The *kangoshu*'s rank was close to that of the unit soldier, yet distinct enough to potentially enable the cultivation of both intimacy and respect.

Carrying ranks was itself part of a historical process of - once again - militarization of the medic role. Initiation of conscription in 1883 was one important stage in the process. A year later, as the Army replaced the role of *kanbyōsotsu* with *kangosotsu* it also determined ranks for the soldiers serving in the role for the first time. If the prospective *kangosotsu* passed his training successfully he became a private 2nd class. Until then, only non-commissioned medic officers held ranks. According to the official history of the Army's medical system, the purpose of the step was to prevent medics from being in a lower position than their patients – their fellow

[80] Detail of "Dai-roku zu," Op. Cit.. Cut by author.
[81] Imukyokuchō, "Kangosotsu wo kangoshu to kaishō no ken," Op. Cit., JACAR reference number: C06080900600.

soldiers - who did hold ranks. Providing the medics with ranks raised them to the same level. [82] In creating the role of *kangoshu* unit medics, the Army took the medic position and his relationship with the other soldiers to a higher level.

In his suggestion for the establishment of the role, Surgeon-General Hashimoto stipulated that it was not enough for medics to be on the same level as their peers. They had to stand on higher footing:

In respect to (the *kangoshu*'s duty to) provide medical treatment, placing (the *kangoshu*) in a higher rank than that of the common soldier, would hold not a small influence over the trust, which the patient would foster towards the *kangoshu*. Hence, from this point on (*kangoshu*) will be placed at the same rank as private first class.[83]

In his statement Hashimoto emphasized the importance of trust in the medical relationship, illustrating the special and problematic position in which the Army placed the medic as it transformed it into a unit soldier.

The first new edition of textbooks to be published following the *kangoshu* reform suggested another source of unique difficulty medics faced as non-combatant members of a combatant unit - a problem that continued throughout the historical period and shall be revisited in the second section of the dissertation. In the introduction to the earliest new textbook the Army published after the reform in 1890, one finds a justification for the medic role:

Generally speaking, the army *kangonin* (referring to non-commissioned medic officers, pharmacists and *kangoshu* medics) must possess plenty of courage and an obedient spirit. As military men especially, *kangonin* have to be courageous, as they must escape from harm (which they are placed in) while tending (the sick and wounded), and facing various unpleasant (situations). Moreover, they must brave danger, while not reflecting upon their own life (and the danger it is in), treating infectious diseases and providing emergency care to the wounded in the midst of artillery smoke and a rain of bullets. Furthermore, they must bountifully possess an obedient spirit, to serve while following the orders of the superior officers, as even a small

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[82] Rikugunshō, "Chōhei kangosotsu toriatsukai tetsuzuki-chū kaisei," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (April 1885), JACAR reference number: C08071106600; Rikujō jieitai eisei-gakkō shūshinkai, Op. Cit., p. 336.

[83] Hashimoto Tsunatsune suggestion for the creation of *kangoshu* role of 1888, cited in Rikugun gun'idan (ed.), Op. Cit., p. 340.

transgression will not be excused… Upon passing their training the non-commissioned medical officer, the pharmacist and *kangoshu* medic posses specialized skills and (begin) military service equal (to soldiers in other roles). Accordingly, the honor one obtains from taking up a weapon and directly targeting the enemy is one and the same (as military medical care).[84]

The fact that the textbook stressed how the honor the medic role conveyed to the men who served in it did not fall from that which active fighting brought to combatants, suggests that it was not taken for granted. It implies that the opposite perception existed – that medics were less exposed to danger and that the fact that they did not fight made them lesser soldiers. The recurrence of this justification in textbooks all the way to 1941 suggests that this inherent paradox between medicine and combat persisted in affecting how the medic role was perceived within the Army.[85] Concurrently, it also demonstrates that the Army, as an institution, recognized the importance of the implications of rank and prestige on the ability of medics to provide medical care within the unique circumstances created by the Amy framework. The fact that it did not appear earlier demonstrates the new level of militarization the ripe medic role reached from 1888. Moreover, even after the Army recreated versions of the role of hospital medic in 1899 and 1909, the hospital medics had to go through a longer process until they reached the same high rank unit medics received right after they completed their medical training.[86]

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[84] Underlined by author. See *Rikugun kangogaku shūgyō-hei kyōkasho: Rikutatsu dai-kyūjūni-gō*, Op. Cit., pp. 1-2; Rikugun imukyoku, *Rikugun kangogaku shūgyōhei kyōkasho* (Tokyo: Kobayashi Matashichi, 1903. Original from 1883), pp. 1-2.

[85] Rikugun imukyoku, *Kango kyōtei* (Tokyo: Kobayashi Matashichi, 1915) pp. 1-2; (Rikugunshō), *Kangosotsu kyōtei sōan* (Kyoto: Wada Buyōsha, 1924) pp. 1-2; Rikugun imukyoku, *Kangohei kyōtei*, (Publication unknown, 1931. Original from 1928), pp. 1-3; Rikugun imukyoku, *Eiseihei kyōtei* (Tokyo: Buyōdō-shoten, 1932. Original from 1928), pp. 1-3; Rikugun imukyoku, *Hojo kangohei kyōtei* (Tokyo: Buyōdō-shoten, 1934), pp. 1-3; "Dai-yon-hen: Eiseihei kagaku gijutsu," *Eiseihei suchi* (Tokyo: Buyōdō-shoten, 1938. Original from 1933), pp. 1-3; Rikugun imukyoku, *Hojo kangohei kyōtei* (Tokyo: Shōheikan, 1939), pp. 1-3; Rikugunshō imukyoku, *Eiseihei kyōtei* (Tokyo: Buyōsha-shoten, 1940. Original from 1928) pp. 1-2; *Eiseihei suchi-zen*, issued by Fujitani Yoshisaburō (Tokyo: heisho shuppansha, 1941), pp. 388-90.

[86] Katsura Tarō, "Rikugun heisotsu tōkyū," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1900), JACAR reference number: C08070554900; Naikaku (government document, signed by Prime

In creating the *kangoshu* role the Army continued, on the one hand, earlier developments in respect to delegation and specialization of military medical care. On the other hand, it is possible to see a degree of departure from the previous roles, in its focus on the field, leading to a redefinition of the role and its relationship to the Army as a medical care provider in military garb. The role would continue undergoing many reforms, as the terminology chart in figure 2 illustrates. But, by 1888 the medic was already a distinct, well-defined Army role.

Conclusion

Over the span of twenty years, the Japanese Army created a military medical system by looking abroad and learning from experience, while making do with available resources. The medic roles, as they developed during this period, were the result of both Meiji era circumstances and global changes in the nature of medicine, war and military medicine. This chapter focused on the element of experience in creating and defining the new medic role in the Japanese Army. It suggested that due to the numerous reforms, instead of one specific role that changed over time, there were numerous roles that converged and separated, were defined and redefined over a number of decades.

Focusing on the question of origins, the chapter argued that the medic roles grew and were shaped by the fundamental challenge of reconciling growth of scale with medical professionalization. The form the roles took was the result of attempts to define boundaries within the Army and its medical system. One such boundary was a gendered one, which defined the military and its personnel as solely male, creating a distinct division between what grew to be the medic role and what developed into that of the nurse. Another boundary was between

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Minister Katsura Tarō and Army Minister Terauchi Masatake), "Chokurei dai-hyakuichi-gō, rikugun hojūr jōrei-chū kaisei," Op. Cit., JACAR reference number: A03020796900, pp. 14-15 in digital file.

military medical spaces – the hospital, unit and army facilities. The third boundary was between conscripted soldiers and volunteers – the military and the non-military. All three overlapped and created a more specialized definition of medic roles and the skills required of them.

Subsequent chapters will show that these boundaries shifted with changing circumstances, changing the medic roles with them. However, they will also demonstrate that questions and themes introduced in this chapter persisted throughout the Pacific War. The effects of global warfare and the growing experience Japan accrued in proliferating conflicts had and would influence the direction which medical delegation took and the way the Army defined medic roles. Budgetary considerations and, more importantly, limitations had a direct effect on the number of medics in service, where they served, what the Army expected of them, the level of training they received, and their ability to put into action what the Army trained them for. The importance of medical space – unit versus hospital – continued being a central thread, as the medic role oscillated between the two, and as the definition of military hospitals became multivalent. The position the Army placed the medic, as the intersection of military and medicine within a combatant framework became increasingly complicated with growing militarization and imperial expansion as well. And finally, the importance of gender and the intertwined development of nursing and medic roles ensued, affecting the way medics were generally perceived, and the nature of their service. To examine these many threads let us continue by analyzing how the *kangoshu* structure weathered military action in practice in Japan's first two modern international wars, while bringing into focus the importance of transnational military and medical developments.

Chapter 3
Moving Forward: Distance, Speed and the Medic



Figure 8: Second Army Attacking and Occupying Port Arthur [1]

The above woodcut tells a visual story of a battle scene. It is rich with detail; Japanese soldiers are depicted arriving by boats, some are preparing to fight in the rear while others are in the midst of battle, fighting Qing soldiers, or shooting canons towards the hills. It is a depiction of the attack of the Japanese Second Army on Luxunkou, Port Arthur, during the Sino-Japanese War of 1894-95. It was Japan's "first modern war," as Lone termed it; not only was it the first international war Japan fought in hundreds of years, taking its soldiers away from Japan to Korea, Manchuria and Taiwan. It was also the first major war in which Japan utilized its military as a national force, built upon the general population, and while using modern armaments and

[1] Artist unknown, "Illustration of the Second Army Attacking and Occupying Port Arthur" (1894-1895), Jean S. and Frederic A. Sharf Collection at the Museum of Fine Arts, Boston. Taken from "Throwing off Asia II: Woodblock Prints of the Sino-Japanese War (1894-95)," image 2000.369, within *MIT visualizing Cultures* Website (http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_01/gallery/pages/2000_369.htm. Last accessed: 19 July 2016).

military strategy. As a comparison, during the Satsuma War the Army mobilized 60,000 men to fight against the 30,000 Satsuma forces. During the Sino-Japanese War, the Army mobilized 240,000 men.[2] The government worked in different ways to mobilize public support for this great undertaking, including the use of print and the media.[3]

The image of Port Arthur currently appears in a collection available online on the *MIT Visualizing Cultures* website.[4] It stands out among the various images in the collection for a number of reasons. It is in black and white and makes rare use of xylography within a collection of mostly woodblock prints in vibrant colors.[5] This choice of techniques and colors contributes to the production of a much tamer image than the others. Most of the images describe the war from the Japanese military's perspective as, according to Elman, a propaganda tool aimed at a Japanese audience. Though colorful and vibrant, the content of most of the images is anything but, vividly depicting glorified Japanese soldiers in modern uniforms, killing Qing soldiers depicted in traditional garb. They show violent stabbing and trampling of soldiers, and the beheading of Qing POWs as retaliation for attacking Japanese guards.[6]

The images were aimed at creating, what Elman termed an "optical illusion;" a narrative whereby Japan presented itself as a modern powerful nation rising out of a backward failing Asia, symbolized by the Qing defeat - even though, as both Elman and Lone noted, the victory was far from obvious or easy. It was a constructed narrative and hence an illusion. And yet, this

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[2] Stewart Lone, *Japan's First Modern War: Army and Society in the Conflict with China, 1894-95* (London, GB: St. Martin's Press, 1994), p. 52.

[3] Lone, Op. Cit., pp. 2-3, 16-17, 98-101.

[4] The Website was founded by John Dower and Miyagawa Shigeru. See specifically the section entitled "Throwing off Asia II" (http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_02/index.html. Last accessed: 18 July 2016).

[5] See John Dower, "Throwing off Asia," *MIT Visualizing Cultures* Website (http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_02/visnav_ii_b.html. Last accessed: 18 July 2016).

[6] Judith Fröhlich noted the Japanese military reaction against international criticism, brought against it due to the image. The military argued it was merciful and just and gave the Japanese Red Cross treatment of Qing POWs as a counter example. See "Pictures of the Sino-Japanese War of 1894-95," *War in History*, Vol. 21, No. 2 (April 2014), pp. 244-45.

narrative gained traction in Japan, Europe, and even eventually in China. The war was caused by the rivalry between Japan and Qing China over Korea, but the way Japan and the foreign media depicted it enabled Japan to use the war to assert its international standing, at the expense of its larger neighbor.[7] In the above image, although a depiction of fallen Qing soldiers could be detected among its details, it is only a small fraction of a much larger scene. It is particular ironic, because following that very attack on Port Arthur was a bloody massacre of thousands of Qing soldiers and civilians.[8] However, unlike the other images, this woodcut is not particularly violent. Rather, it could be read as a descriptive bird's eye depiction of how the attack was spatially constructed.

The most important reason why this image stands out for the purposes of this chapter is that within this spatial construction of battle is a symbol of a Red Cross. There is only one other image from the Sino-Japanese War, which depicts a Red Cross, but outside the context of battle – by a tent encamped at night.[9] The other medical scenes in the collection are from the subsequent Russo-Japanese War (1904-05).[10] According to Fröhlich, one can find medical related images from the Sino-Japanese War also in other collections. But, they are of the Japanese Red Cross Association and they do not show medicine in the context of actual battle

[7] When the website was launched in 2006, it resulted in a pushback by Overseas Chinese students, who found the images and message they conveyed offensive today as they were in the past. On the significance of the images and the MIT controversy see: Benjamin Elman, "Optical and Cognitive Illusions: the MIT Visualizing Cultures Controversy in Spring 2006," *Positions Asia Critique*, Vol. 23, No. 1 (February 2015), pp. 15-39.

[8] Lone, Op. Cit., pp. 142-63.

[9] Kobayashi Kiyochika, "Eiguchi no genkan wo okashite wagagun roei wo haru no zu," image 2000.419, Museum of Fine Arts, Boston, within the *MIT visualizing Cultures* Website: http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_01/gallery/pages/2000_419.htm (last accessed: 18 July 2016). Appears also in the Japanese Diet Library Collection of Images from the Sino-Japanese War: http://dl.ndl.go.jp/info:ndljp/pid/1312137?tocOpened=1 (last accessed: 1 August 2016).

[10] See for example Utagawa Kokunimasa, "Russo-Japanese War: Great Japan Red Cross Field Hospital Treating the Injured" (March, 1904), Jean S. and Frederic A. Sharf Collection at the Museum of Fine Arts, Boston. Taken from "Throwing off Asia III: Wooblock Prints of the Russo-Japanese War (1904-05)," image 2000.367 within the *MIT visualizing Cultures* Website: http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_01/gallery/pages/2000_367.htm (last accessed: 18 July 2016).

either.[11] For one thing, as described in the previous chapter, the Japanese Red Cross was to be positioned at a distance from the front, and hence – not in battle. Symbolically, this distinction also stands to reason, since what the Red Cross symbol represented was very different from the violent nature of battle. Japan signed the Geneva Convention in 1886, which determined the neutrality of medical personnel and facilities in battle through the presence of the symbol of the Red Cross.[12] By signifying humane medical treatment to the sick and wounded without distinction of nationality, it contrasted the brutal killings in war, particularly as depicted in the other images in the MIT collection.[13] As Fröhlich suggested, wishing to present itself a civilized humanitarian nation, Japanese images intended for international consumption, focused on humanitarian work, often detached from the context of battle.[14]

And yet, the Red Cross is part of the scene depicted in the above image, even though t is almost hidden on the right hand corner above a tent. The figures standing by the tent are the top commanding officers of the Second Army, including Marshall Ōyama Iwao and general Yamaji Motoharu. They are overlooking the fighting at a noticeable distance from the eye of battle. This concomitant separation and belonging of the Red Cross illustrates its special position in battle – both symbolically and geographically. It was no accident that the tent was depicted where it was.

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[11] Fröhlich, Op. Cit., pp. 245-46.

[12] "Laws of War: Amelioration of the Condition of the Wounded on the Field of Battle (Red Cross Convention); August 22, 1864", articles 1, 6, *The Avalon Project: Documents in Law, History and Diplomacy* (New Haven, CT: Yale Law School, Lillian Goldman Law Library: http://avalon.law.yale.edu/19th_century/geneva04.asp. Last accessed: 6 July 2016).

[13] See for instance an excerpt from *Heroic Japan*, a history of the war, written in English two years after the war under the supervision and direction of the Japanese military: "…in treating the enemy's injured, both here and elsewhere, the strictest impartiality was observed. Chinese officers were, in accordance with their rank, given the same treatment as that accorded to Japanese officers of like rank. The broad humanitarian rules laid down by the famous Geneva Convention were followed throughout by the Japanese… The Chinese, on the other hand, exhibited the crassest ignorance of civilized warfare, and were supremely ungrateful for the kindness shown them. Knowing little or nothing of the real intentions of their conquerors, the frequently refused to be medical treated…" in F. Warrington Eastlake & Yamada Yoshiaki, *Heroic Japan: a History of the War between China & Japan* (London, GB: Sampson Low, Marston & Company, 1897), pp. 422-23.

[14] Fröhlich, Op. Cit., pp. 242-48.

It was part of a larger strategy of medical mobilization, which divided the battlefield into stages, according to distance, speed, and available supplies and personnel. For that reason, the woodcut could also be read as a depiction of distance, by contrasting movement and immobility.

The detailed battle scenes in the woodcut describe movement of soldiers – arriving by boats, marching forward, engaged in fighting. There is even a waterfall in the background whose waters seem to continue flowing as Japanese soldiers march forward in its direction. On the background of these numerous dynamic scenes, on the other hand, static components of the illustration, including the tent with the Red Cross insignia, convey a strong feeling of alert anticipation. The tent does not move during this scene. It waits for the wounded to be brought to it. It is most probably a small temporary dressing station, where the unseen medical personnel – a few doctors and more numerous medics – were to treat the battle casualties, as they arrived or were carried to their tent.



Figure 9: Second Army Attacking and Occupying Port Arthur - Detail[15]

The previous chapter focused on the expansion of numerical scale in forming medic roles as a process of delegation of medical care. This chapter will explore how the expansion of geographical scale and the rising importance of speed originated and formed the medic role, as part of a larger process whereby medicine moved closer to the site of battle. It will examine the spatial dimensions of the medic roles within the context of battlefield medicine, and how intertwined they were with physical movement and speed. It will contend that this movement was part of an international process in which the nature of war and the role of medicine in it changed and as a result, militaries created new structures and reshaped them with each military engagement. Japan was one of them. The chapter will argue that this development was in many ways spearheaded by definitions of new medic roles and an additional role that grew from them as another case of medical delegation – the stretcher-bearer role. Finally, it will suggest that in Japan, these developments resulted from the Army's emphasis on wounds as the epitome of military medicine, but that with growing battlefield experience, disease became an equal contender, reshaping the medic role once more.

The chapter will begin by investigating the effect of these international developments on Japan in the 1870s and 1880s in ways that complemented the various processes described in the previous chapter. It will weave into the analysis of these developments, historical processes that took place earlier in France and Prussia, from largely the 17th century to the Franco-Prussian War of 1870-71. Finally, it will end by describing the implementation of the structures, constructed through this longue durée transnational process, in the Sino-Japanese and Russo-Japanese Wars,

[15] Artist unknown, "Illustration of the Second Army Attacking and Occupying Port Arthur," Op. Cit., http://ocw.mit.edu/ans7870/21f/21f.027/throwing_off_asia_01/gallery/pages/2000_369_det04.htm (last accessed: 19 July 2016).

and how the experience of the war changed perceptions of military medicine and the medic's role within it.

1) The Medic Role as a Transnational Development

"Hospital Soldier" and the Early Medic

In 1871 the Japanese military medical headquarters, the *gun'iryō* 軍医寮, suggested the earliest version of the medic role two years before the enactment of general conscription. The suggestion appeared in the official history of the Army's medical system and described a "hospital attached soldier." The soldier was to serve in Army hospitals during peacetime, and in ambulances treating and conveying the wounded during wartime. In the text, next to the Japanese term for this new role - *byōin-fuzoku-hei* 病院附属兵 – was what seemed like a phonetic transliteration of the term in smaller letters. However, it did not provide the phonetic reading of the Japanese, as was common practice. Instead, it presented a completely different foreign reading of the term – *hosupita-lu soluda-* ホスピタールソルダー.[16] The most plausible sources for this reading, based on similarity in pronunciation and in light of the historical context, were the Dutch *Hospitaalsoldaat* and the German *Hospitalsoldat*. As discussed in the first chapter, Dutch and German medicine and military technology shaped the development of Japanese military medicine in many ways. Moreover, as Ishiguro Tadanori argued, the Dutch presence in Japan provided a bridge to German teachings of medicine, and in this case, particularly military medicine.[17] The "hospital soldier" exemplifies Ishiguro's argument.

[16] Rikugun gun'idan (ed.), *Rikugun eisei seido-shi* (Tokyo: Kodera Akira, 1913), p. 326.
[17] Ishiguro Tadanori, *Kaikyū kyūjū-nen* (Tokyo: Ōzorasha, 1994. Original from 1935), p. 134.

In 1873, the Army's head hospital in Tokyo – the predecessor of the Army's Medical Department – published a textbook entitled *Yaei iten* 野営医典, "A Dictionary of Field Medicine." It followed the teachings of the Dutch physician Tjarko Wiebenga Beukema, who worked and taught in military hospitals in Japan until 1880. The Meiji government, through the initiative of the first Surgeon-General Matsumoto Ryōjun and the Army minister Yamagata Aritomo, summoned Beukema to Japan in 1871 to assist in establishing the new military medical system – the same year when the idea of the "hospital soldier" came up, according to the official history.[18]

In its descriptions of medical action on the battlefield, Beukema's book referred to the role of hospital soldier and its place in the general medical framework. According to the book, an Army regiment was to allocate half of a battalion to train as "hospital soldiers," *byōinheisotsu* 病院兵卒. The hospital soldiers were to rescue the wounded, place them on a stretcher and carry them back to the dressing station or a field hospital. Dressing stations were to be locations – in tents or in structures available in adjacent villages etc. – where the wounded were to receive first tier care, immediately after they were evacuated from the battlefield. For that reason, the book stated, they were to be established "a thousand steps" behind the position of the fighting forces. In the stations were military physicians as well as other hospital soldiers. There too the hospital soldiers were to provide first tier care. According to the book, the care at the dressing station was to be divided into three stages – examination of wounds, surgery, and transportation of the wounded in need of more care to a hospital further back. The doctors at the dressing stations were to conduct surgery and provide the main treatments. However, the hospital soldiers were the ones to take the wounded in once they arrived, assess their wounds, provide them with first

[18] Rikugun gun'idan (ed.), Op. Cit., pp. 509-12.

aid and send them to the next stages according to need.[19] In other words, the hospital soldiers were to physically connect the battlefield with care facilities further back, be their gateway to first aid at the dressing station, as well as serve as medical caregivers afterwards.

According to Kurosawa Yoshiyuki, Army regulations from 1873 concerning the military hospital duties stated that medical treatment on the front should follow the content of this work, though its actual implementation is not clear.[20] However, the description of the hospital soldiers in the book are in fact very similar to the 1871 suggestion for the Japanese new role of hospital soldier and the subsequent form that medics gradually assumed over the following two decades. To place the history of the Japanese medic within the larger historical development of this battlefield structure, it is thus important to decipher the genealogy of the concepts on which the role was based.

The introduction to Beukema's book stated that it was largely founded upon another work from 1860, written by a Prussian Army Chief Physician. Beukema purportedly discovered the book before his arrival in Japan, while he was participating in the Franco-Prussian war as a Red Cross surgeon. Beukema taught his Japanese students the contents of the Prussian book, which were later written down in Japanese in the above textbook based on his teachings.[21] The Prussian Army had a relatively long history of using non-professional soldiers in medical roles; from surgeons' assistants between 1832 and 1848, to hospital assistants from 1852 and military sick attendants, who were to serve among the troops as of 1852 as well.[22] The expansion of the

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[19] Rikugun honbyōin, Beukema kōju, *Yaei iten* (Tokyo: Rikugun honbyōin-kanpan, 1873), pp. 1-2 of introduction, pp. 1-4 of content, NDL ID: 000000473637.

[20] Kurosawa Yoshiyuki, "Nisshin sensō ni okeru yasen byōin ni tsuite." *Nihon ishigaku zasshi*, Vol. 32, No. 1 (1986), p. 44.

[21] Rikugun honbyōin, Beukema kōju, *Yaei iten* (Tokyo: Rikugun honbyōin-kanpan, 1873), pp. 1-2 of introduction, pp. 4-6 of content, NDL ID: 000000473637.

[22] *Chirurgengehilfe*, *Lazarethgehilfe* and *Militärkrankenwärter*, according to Frank Howard, *Handbook of the Medical Services of Foreign Armies: Part II – Germany* (London, GB: Harrison and Sons, 1907), pp. 23-24, 40, 50;

Prussian Army, like the Japanese case, was accompanied by a rethinking of the importance of medicine within the military structure and its negotiation through various reforms enacting medical delegation. The result as it was described in Beukema's book thus had a foundational influence on the development of the role of Japanese medic, particularly what came to be distinguished as the unit medic from 1888.

If we return to the 1871 Japanese Army suggestion for its own role of hospital soldier, we find another term that requires explanation and contextualization. The suggestion stated that in wartime the hospital soldier was to be attached to an *anbiransu* アンビランス. The term appeared in large letters - not as an accompaniment to a Japanese term, thus leaving no doubt of its foreign nature. It did not require special explanation either. It was already a well-established expression in military circles, unlike the medic role that was still in the process of development in various militaries. This time, however, the origin was French and not Prussian. As we shall see, the genealogy of the medic roles included both France and Germany, which had their own history of intertwined development.

"Ambulance" and Military Medical Movement

A dictionary of military terms from 1869 reveals that the parallel to the Dutch *Hospitaalsoldaat* and the German *Hospitalsoldat* was the French *soldat d'ambulance*, more commonly known by the term *infirmier*.[23] The role of *infirmier* developed out of a process in which warfare and medical movement became increasingly intertwined, due to the expansion of warfare – of the size of armies and the territories across which they fought. French history

Ferdinand Schöningh, *Medizin und Krieg: Deutschland 1914-24* (Paderborn: Ferdinand Schöningh, 2014), pp. 100-101, 112.

[23] HMF Landolt, *Dictionnaire Polyglotte de Termes Techniques Militaires et de Marine: Anglais-Français-Neerlandais-Allemand* (Leiden: E.J Brill, 1868)," p. 131.

arguably played a central role in this process, starting with Louis XIII and reaching its peak with Napoleon.

Changes in the mobility of military medical care and the role of the *infirmier* in this process were tied to changes in the notion of the hospital as a military care facility. According to Limelette, the establishment of the first hospitals used solely for military purposes could be ascribed to the Cardinal Richelieu under Louis XIII as of 1629. The hospitals were fixed to one place and relied largely on volunteers to provide care – religious orders and local towns and communities that were often forced to "volunteer" for the task.[24] Their main legacy was the idea behind them. According to Parrot, Louis XIII and his ministers ascribed great importance to the use of hospitals during military campaigns to maintain the strength of the forces. Cardinal Richelieu even argued that sick or wounded soldiers, who returned to the troops following convalescence, were more valuable than three times as many new recruits, lacking prior experience. Consequently, Louis XIII's Army accompanied military campaign plans with projects to establish hospitals.[25]

Louis XIII's successor, the famous Louis XIV, adopted this train of thought and added to it as he centralized military organization and rebuilt his Army to be the largest of his time – more than 250,000 men by 1689. He also expanded the use of hospitals numerically and qualitatively; his Army divided hospital care into three according to their distance from the battlefield; there were mobile *hōpitaux ambulants* that moved with the troops and were the closest to the site of battle. According to Ramsey, they could be translated as dressing stations or field hospitals,

[24] David Parrott, *Richelieu's Army: War, Government and Society in France, 1624-1642* (Cambridge, GB: Cambridge University Press, 2004), pp. 536-37.
[25] Parrott, Op. Cit., p. 534.

depending on their size.[26] There were temporary hospitals that were slightly further away from the battlefield to which the wounded could be evacuated to receive further care. And finally, there were permanent fixed hospitals, furthest in the back, as in the time of Louis XIII.[27] This structure was the outline on which various components were later added. The most significant component in this context was an additional organized system of evacuation directly from the battlefield itself.

According to Howard, during the Revolutionary Wars (1792-1802) figures in the French Army, especially military surgeons came to consider the lack of systematic methods of evacuation as a significant hindrance to the care of the wounded. During the wars many wounded French soldiers would remain on the battlefield for over 24 hours after the fighting stopped, often perishing in the interlude. Evacuation of the wounded was an improvised practice, which took place after the battle ended, to shelter the medical personnel from harm.[28] There were three plausible reasons that the Revolutionary Wars stood apart and brought further attention specifically to wounded evacuation; the Revolutionary Army was the first to enact general conscription, eventually reaching the size of 1.5 million men.[29] Additionally, the wars spread over a vast geographical territory - across Europe and beyond to the Middle East. Consequently, there were more wounded bodies in need of care spread over a vaster territory. Finally, the two most famous figures to originate systematic methods for wounded evacuation during the wars -

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[26] Martin R. Howard, *Napoleon's Doctors: the Medical Services of the Grande Armée* (Stroud, GB: Spellmount, 2006), p. 103.

[27] Howard, Op. Cit., p. 89; Renaud Limelette, "Le Service de Santé Militaire dans les Intendances de Flandre et de Hainaut: de la Liberté Provinciale et l'Uniformisation Nationale," *La Construction des Professions, du National à l'Européen* (Villeneuve d'Ascq, FR: HAL Archives-Ouvertes, Nov 2008)), p. 4.

[28] Howard, Op. Cit., pp. 9-10, pp. 78-79.

[29] On the development and expansion of the Revolutionary Army as a conscripted Army see Jean Paul Bertaud, *The Army of the French Revolution: from Citizen Soldiers to Instrument of Power* (Princeton, NJ: Princeton University Press, 1988).

Dominique Jean Larrey and Pierre-François Percy - were military surgeons.[30] According to Howard and Ackerknecht, one of the main developments of surgery from 1795, also due to Larrey's influence, was the relatively wider use of amputations in cases of severe limb fractions, which raised the chances of survival. Such cases were particularly numerous during battle and required great speed. Faster evacuation was thus particularly valuable for surgical cases. Moreover, both also argued that such developments, particularly techniques of amputation, contributed to elevating surgery to a respectable learned profession – in civilian as well as military contexts – in the early 19th century. Thus surgeons arguably developed stronger influence over military medical priorities, unlike their lower standing in the past.[31]

Both Larrey and Percy developed plans for a different kind of ambulance system, to enable a systematized and quick method of evacuation. Both devised their plans during the Revolutionary wars, but promoted and partly implemented them during the Napoleonic campaigns, when the Army's medical personnel faced a much larger scale of activity than in the past; the size of the Napoleonic Army – the *Grande Armée* – reached an unprecedented size of over 2 million men; the geographic distance the Army traversed expanded even further, exposing its soldiers to new forms of terrain, climate and numerous diseases; the campaigns were also particularly bloody, resulting in numerous casualties. Howard argued that Napoleon co-opted medicine as a strategic tool aimed at supporting his growing empire, and initiated unprecedented

[30] Thomas Longmore, *A Treatise on the Transport of the Sick and Wounded Troops* (London, GB: Printed under the Superintendence of H.M.S.O, 1869), p. 25.

[31] Ackerknecht, Op. Cit., p. 141-42; Howard, Op. Cit., pp. 177-79, 185-88. See also Gelfand's account on the long process of the professionalization of surgery in Toby Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the 18th Century* (Westport, CT: Greenwood Press, 1980), particularly the first section of the book, pp. 21-79.

militarization of the medical forces, enacting various reforms. These included also the field of wounded evacuation.[32]

Percy and Larrey built their plans around two main components - a special vehicle and specialized personnel. In Percy's case the vehicle was the *wurtz* – a long "sausage-like" wagon, which carried medical equipment and personnel – surgeons and *infirmiers* - closer to the location of battle. According to Limlette, from at least the time of Louis XIV men termed *infirmiers* worked in permanent fixed hospitals in the rear, mostly assisting doctors and surgeons. Bottet and Brice argued that during the Revolutionary Wars (1792-1802) they became militarized, as the French Army created a distinct corps of *infirmiers* in 1793, defining specific conditions of service.[33] In other words, until Napoleon's time only doctors and surgeons worked near the battlefield. Percy suggested creating a supporting force of *infirmiers* trained especially in caring for the sick and wounded in these mobile hospitals.[34]

Percy also suggested creating an extension of the *infirmier* role on the battlefield, a mobile *infirmier* – a stretcher-bearer. According to his suggestion, a subsidiary force of sufficiently fit *infirmiers*, termed *despotats* or *brancardiers*, were to specialize particularly in wounded evacuation. Until then, this function was carried out by other soldiers on the battlefield, if at all. In both cases, the result was harm to the Army's fighting capability. Moreover, since soldiers were not trained in proper methods of wounded evacuation, which required specific skills and training, they inflicted additional suffering on the wounded. According to Percy's plan,

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[32] Howard, Op. Cit., pp. 10, 75, 97. Concerning the rise of the number and type of casualties see specifically "Ch. 8: Surgey: the Cutting Edgy" and "Ch. 9: Disease: the Greatest Enemy," pp. 177-198 and 199-224 respectively. For more on the expansion of Napoleon's Army and how it changed the scale of war and social mobilization, see David Bell, *The First Total War: Napoleon's Europe and the Birth of Modern Warfare as We Know it* (Boston: Houghton Mifflin Harcourt, 2007).

[33] Marice B. Bottet & Marie Raoul Brice, *Le Corps de Santé Militaire en France: son Évolution – ses Campagnes, 1708-1882* (Paris: Berger-Levrault & Cle, Éditeurs, 1907), pp. 97-98; Limelette, Op. Cit., p. 10.

[34] Longmore, Op. Cit., pp. 31-33; Pierre Vayre, *Les Larrey: Dominique, Hippolyte et les autres*" (Paris: Éditions Glyphe, 2004), p. 111.

the *wurtz* was to follow the division it belonged to. When fighting began, the *brancardiers* would run to the field equipped with a first-aid kit, search for the wounded, provide rudimentary care and carry them back to the *wurtz*, while fighting was still underway. Creating the role of *brancardier* from among the *infirmiers* thus aimed at bringing medicine right into the heart of battle. After completing the evacuation, the *brancardiers* were to serve as *infirmiers* – helping the doctors and surgeons to treat the wounded in hospitals.[35] The *brancardiers* were to turn the battlefield itself into a medical space by their very presence. No physical structure was needed, but their moving self and the first-aid kit they carried.

Even though Percy's plan was respected and lauded by his colleagues, it was not widely implemented in the French Army.[36] Larrey's plan was more widely known and implemented, but also to a limited extent. It could be framed as a compromise between Percy's two plans – the *wurtz* and stretcher-bearer corps - though his plan presumably preceded Percy's. In the heart of Larrey's plan was the "flying ambulance," *ambulance volante.* It was to consist of small vehicles – mainly light horse-drawn carriages – that would closely follow the troops. Each was to convey a small number of medical personnel, mainly surgeons and *infirmiers*, and medical equipment. Their small size enabled them to move more easily and swiftly. Moreover, if one of them were hit or disabled on the way, the loss would not have been as great as that of the *wurtz* thanks to their decentralized structure; if the *wurtz* were incapacitated the entire medical staff and their equipment would be disabled by extension, creating many potential logistic problems.[37]

Their relatively small dimensions enabled the *ambulances volantes* also to go directly onto the field, shortening the distance between the wounded and their medical providers.

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[35] Howard, Op. Cit., pp. 82-83, 125; Léon Le Fort, "le Service de Santé des Armées dans les Nouvelles Armées Europénnes" (Paris: Bureau de la Revue des Deux Mondes, 1871), p. 118; Longmore, Op. Cit., p. 30; Vayre, Op. Cit., p. 111.

[36] Howard, Op. Cit., pp. 103, 122-25; Longmore, Op. Cit., pp. 32-33.

[37] Longmore, Op. Cit., pp. 26, 31.

Potentially, the wounded could be cared for by a surgeon before evacuation, making the latter more mobile than ever. Unlike Percy's plan, there was no provision for a special role of stretcher-bearer. Rather, the *infirmiers* in the ambulance were to both evacuate the wounded and assist in their care. For that purpose they also carried a first aid kit in the form of a backpack, which mainly contained bandages. The destination of evacuation was the mobile hospital – *l'hōpital ambulant*, which was the closest to the field. Consequently, and unlike the focus on the vehicle in the English language, the term "ambulance" came to hold a compound of meanings in French; literally signifying movement and mobility, ambulance referred to the evacuation system and its staff, the vehicles in which evacuation was conducted, and the mobile hospitals which were the vehicles' destination.[38]

According to Taithe, the strategy practiced by the French military for years, including during the Napoleonic Wars, was based on the principle of swift mobility; the army was to fight and move quickly from one location to another. Larrey's concept of the *ambulance volante* suited this strategy by focusing on velocity of motion.[39] However, its implementation was also relatively limited in effect, mostly because Napoleon forbade the medical personnel to go on the battlefield until fighting stopped. As a result the wounded still remained waiting for help on the field for many hours as they did before. There were not enough vehicles or personnel to man them either. Finally, following the invasion of Russia until 1812 the Army suffered from a dire

[38] Matthew Berkeley-Hill, *Treatment of the Sick and Wounded: Illustrated by Observations Made at the Seat of War* (London, GB: James Walton, 1870), p. 16; Howard, Op. Cit., pp. 88-89; Longmore, Op. Cit., pp. 8, 29.
[39] Bertrand Taithe, *Defeated Flesh: Welfare, Warfare and the Making of Modern France* (Manchester, GB: Manchester University Press, 1999), p. 90.

shortage of supplies – food, water and medicine. Napoleon overstretched his vast and dwindling Army without prioritizing its sustenance.[40]

Despite their limited implementation, both plans created a new kind of *infirmier,* more mobile and specialized, pushed onto the battlefield to provide care and evacuate the wounded. Both Percy and Larrey's *infirmiers* developed through a long historical process in which medical mobility attempted to keep up with the expansion of battle, and thus shorten the time that passed between the moment of injury and medical care. In this process medical facilities and personnel moved closer to battle until they eventually moved outside of the facility and onto the field. By so doing, they created an alternative medical space in battle, as they divided the warzone into stages of evacuation. It was arguably no coincidence that the origins of the triage system were also ascribed to Larrey – the system of patient categorization according to severity of injury, to shorten the time patients spent waiting for treatment.[41] The intensity of battle reinforced time as both a military and medical factor for consideration.

At the end of the day, plans were not sufficient. As discussed in the previous chapter, military medical personnel could implement new medical structures or expand existing ones only through negotiation with the wider military authorities over the allocation of resources and general military priorities. Moreover, when met with the reality of warfare, unexpected circumstances challenged the ability to follow the original plans. Nonetheless, the two plans and the historical process from which they grew had a lasting effect on military medicine, crossing borders, including into Japan.

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[40] Concerning Napoleon's inconsistent interest in the medical corps. See: Howard, Op. Cit., pp. 66-73, 148-150. On the limitations of the medical services during the later part of the Napoleonic wars, see Howard, Op. Cit., pp. 129-152.

[41] Gerald R. Winslow, *Triage and Justice* (Berkeley, CA: University of California Press, 1982), pp. 1-6.

"Tankasotsu" – the Stretcher Bearer and the Medic

Let us now return to Japan and examine how the processes described above carried through to the Japanese system and influenced the forms that the medic roles came to assume in the Japanese Army. As argued in the previous chapter, the earliest descriptions of the duties of Army medics – *kanbyōsotsu* - were from 1875 and they focused almost exclusively on the hospital setting. A year later, in 1876, the Army added a training curriculum that included also skills to be used on the battlefield, such as patient evacuation and providing care on the battlefront. This was much like the suggested hospital soldier from 1871, discussed above.[42] The Satsuma Civil War, the first major war the new Army participated in, broke out in 1877, a year later. According to Nishioka, medical officers established dressing stations and field hospitals during the war, in addition to the static garrison hospitals. Official histories noted that there were medics serving in different dressing stations and hospitals. However, there was a grave shortage of personnel, particularly when it came to wounded evacuation. On more than one occasion the Army used Army porters, *gunpu* 軍夫, instead of trained medical personnel, to carry the wounded and the bodies of the dead.[43] There was also an insufficient number of stretchers. Following the war, the Army medical command planned a variety of reforms, also discussed in the previous chapter. One of the reforms, however, dealt specifically with wounded evacuation and tied it to the purpose of the medic role and his mobility.

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[42] Yamagata Aritomo, "Kanbyōnin kanbyōsotsu fukumu gaisoku," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (10 November 1875), JACAR reference number: C08070047300; Rikugunshō, "Kanbyōnin kanbyōsotsu fukumu gaisoku daigo-shō zōka," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (16 December 1876), JACAR reference number: C08070815700.

[43] Nishioka Kaori, "Nihon rikugun ni okeru gun'i-seido no setsuritsu," *Gunjishigaku*, Vol. 101 (June 1990), pp. 35-36; Sanbō honbu, "Seisei senki-kō 17," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (October 1877 - May 1887), JACAR reference number: C13080009800, p. 1456; Rikugunshō, "Gundan byōin nikki-shō," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (October 1877 - May 1887), JACAR reference number: C13080018300, for instance pp. 1321-22, 1324.

In 1886 Surgeon General Hashimoto Tsunatsune wrote a suggestion for creating a specialized role of stretcher-bearer as part of a wider reform of wounded evacuation strategy. He based the justifications for the reform on lessons learned from domestic and international experience:

> Wartime relief work has occupied the lion's share of the work of Army Medical Departments. Among the Medical Departments of various countries, France has researched (the topic) the most. (The same France) has been making every effort to reform (its system) since the War of 1870-1871 (the Franco-Prussian War), perhaps engaging in self-reflection while comparing (its system) to that of the German Army's wartime medical services. Our country too has been planning such undertakings year after year, but has put them into practice on a small scale only during the Satsuma War (1877). But even in that war there were no men to fully execute these undertakings...[44]

For Hashimoto, the Satsuma war came in this context to serve as a small experimentation ground; it enabled the new Army and its leadership to see how the structures it built worked in practice, before using them on a larger scale. What he noted was that when it came to wounded evacuation, even though structures existed, there were no sufficient personnel to carry them out. Focusing specifically on the relationship between wounding and combat performance, Hashimoto argued later in the document that a wounded soldier hurt the overall fighting capacity of a combat unit, not just by being incapacitated himself, but also by taking out of the line at least three more soldiers - the minimal number of men who would carry the wounded back to the dressing station. Hence, when a soldier was wounded, the unit power decreased by at least four in total.

Medical care was given further in the back, while fighting took place on the frontline, and, Hashimoto argued, there were no sufficient personnel to connect the two, costing the line its combatants. Medically, this condition, he argued, further harmed the wounded, since common soldiers were not trained in wounded evacuation. In other words, there were special medical

[44] Hashimoto Tsunatsune, "Senji eisei jimu kaisei no gi ni tsuki shinshin," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1886), JACAR reference number: C06080041000, pp. 1487-89.

skills required to conveying a wounded man according to his injury. His final suggestion to remedy the situation was to create the role of supporting stretcher-bearer *tankasotsu* 担架卒 and special patient evacuation units, *eiseitai* 衛生隊. He suggested doing so by following the German system.[45] The previous section, however, described how Percy originated the stretcher-bearer role and units, as an extension of the *infimier* medic role. Why then did Hashimoto ascribe it to the German Army?

By the time of the Franco-Prussian war that Hashimoto alluded to, the French system of wounded evacuation was based on ambulances – various stationed ambulance hospitals and mobile "flying ambulances." *Infirmiers* served in both: some went on to the battlefield to collect the wounded and carry them to the ambulance. Others remained at the station to help the doctors care for the wounded.[46] There was no separate role of stretcher-bearer as Percy advocated. Rather, the evacuation of the wounded from the field was part of the *infirmier*'s duties. In 1871 a French surgeon who participated in the Franco-Prussian War wrote the following:

> Percy proposed the establishment of a special corps of *brancardiers* (stretcher-bearers), formed by the ambulance *infirmiers* (medics). M. Larrey (Dominique Jean) believed that the wounded were to be lifted by squads, assembled in advance by men, who were the most suitable for this service, chosen from among the bravest soldiers of the troops in the corps. The ideas of Percy and M. Larry could be usefully combined. Unfortunately, they were not adopted. It is in the Austrian and Prussian armies, that we see how these projects were put into practice over a long period of time, and to the advantage of all.[47]

Following the Franco-Prussian war, various accounts compared the medical systems of the two belligerents and argued that the Prussian system was better for a variety of reasons. Taithe argued that the Prussian system was, actually, far from perfect. Yet, as the victor, its

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[45] Hashimoto, "Senji eisei jimu kaisei no gi ni tsuki shinshin," Op. Cit., JACAR reference number: C06080041000, pp. 1487-89.
[46] Jean-Auguste Huguenard, *Guide Théoretique et Pratique de l'Infirmier, du Brancardier et de l'Ambulancier sur le Champ de Bataille* (Paris: Librairie Militaire de J. Dumaine, 1881), pp. 68-69.
[47] Le Fort, Op. Cit., p. 118.

system came to be considered superior.[48] The pinpointing of the stretcher-bearer role as a point of divergence was a recurring theme in many accounts.[49] Some like Le Fort – including the French Army itself - explained this point of superiority as the German ability to implement French concepts that the French themselves failed to adopt; following the war, the trauma of defeat was so strong that France looked to Prussia, just as Hashimoto wrote, to reform its medical services. However, it presented this as a way of reviving a French concept, rather than learning from Prussia, plausibly softening the blow.[50]

For Surgeon-General Hashimoto, creating the specialized stretcher-bearer role signified moving from France to Germany as a main reference point. By so doing he corresponded to a general move the Japanese Army took following the Satsuma Rebellion, towards Germany, in which the aforementioned German advisor Jacob Meckel played an important role. Ishiguro Tadanori, who was the head of the battlefield medical apparatus during the war, argued that the same Meckel originally introduced the category and term for the stretcher-bearer units – the *eiseitai* – to the Japanese Army.[51] Thus, even though the idea was originally French, the Japanese Army implemented it through interaction with the German Army.

Unlike the various French accounts, Hashimoto did not note a special connection between the stretcher-bearer role and the medic. Yet, at the end of his suggestion for the establishment of the role, he appointed a committee to investigate the feasibility of his plan and the ways to implement it. The committee wrote an official report a year later, supporting

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[48] Taithe, Op. Cit., pp. 30-32.

[49] See for example, Jean-Charles Chenu, *Rapport au Conseil de la Société Française de Secours aux Blessés des Armées de Terre et de Mer sur le Service Médico-Chirurgical des Ambulances et des Hopitaux pendant la Guerre de 1870-1871* (Paris: Librairie Militaire de J. Dumaine, Éditeur, 1874), p. 189; William McCormac, *Notes and Recollections of an Ambulance Surgeon* (London, GB: J&A Churchill, 1871), p. 116.

[50] Hippolyte Larrey cited by Pierre Vayre, *Les Larrey: Dominique, Hippolyte et les autres* (Paris: Éditions Glyphe, 2004), p. 204.

[51] Kurosawa Yoshiyuki, Op. Cit., p. 44. See Chapter 1 for more on Jacob Meckel.

Hashimoto's suggestion and noting specifically the connection between the two roles, based on their findings:

> Until now, carrying the wounded in battle was (a task) performed by medics (*kangosotsu*) or logistic soldiers etc. Such was the rule. However, the main duty of a medic is not to carry. Furthermore, logistics soldiers are not trained during peacetime (in methods of patient evacuation), leading to much discomfort (on the side of the wounded). Hence, the previous system should be reformed.[52]

Having researched the situation as it stood, the committee came to learn that the men, who would usually undertake the task of wounded evacuation, were medics and logistic soldiers, like the Army porters mentioned above. In other words, for the committee, besides reinforcing the power of the line, creating the stretcher-bearer role and respective units was to allow medics to focus on their main duty in wartime – treating patients in the dressing stations, while replacing the military physician if needed. And indeed, this reform took place a year before Hashimoto Tsunatsune enacted the *kangoshu* medic reform, that redefined medic service as exclusively tied to Army units, which was the focus of the previous chapter.

The committee also emphasized the importance of the specific skills required to evacuate the wounded. Patient evacuation was a medical movement. In other words, just like Percy's original suggestion, the stretcher-bearer was to take over the aspect of the medic role, which required the most movement – between the battlefield and the dressing station. He was an amalgamation of medics and logistic soldiers, since he required specific medical skills as well as physical strength.

Shortly after the decision to reform the evacuation system by training stretcher-bearers and creating stretcher-bearer units, the following image appeared in medic textbooks:

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[52] Arisugawa Taruhito, "Tankajutsu kyōiku kisoku namini eiseitai hensei hyō no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (28 January 1887), JACAR reference number: C06080203600.



Figure 10: Image of Wounded Transportation on the Battlefield[53]

This image is very similar to that which opened the chapter depicting the attack on Port Arthur during the Sino-Japanese war: it is also a detailed bird's eye view of the battlefield in black and white. It also has a tent with a Red Cross insignia on it. The tent is also positioned at the edge of the image, while fighting is portrayed at a distance in other areas of the image - in the back and on the right. However, while the tent in this image is static, it is not waiting. It is full of action due to the men around it, and the carts that are moving towards it. According to the explanation written upon the image, the tent is the *eiseitai* dressing station. The carts behind it and which are moving towards it belong to the unit. They are vehicles to carry the wounded to and from the tent.

[53] (Rikugunshō imukyoku), *Rikugun kangosotsu kyōkasho dai-nihan* (publication details unavailable. As mentioned in the previous chapter, according to the official history of the Army medical system, this specific textbook was published in 1886. However, since it depicts stretcher-bearers, whose role was only suggested in 1887, it stands to reason that this particular version of the textbook was published between January and May 1887; the suggestion was made in January and in May a new third edition of the textbook was published: See Rikugun gun'idan, Op. Cit., p. 483; Suzuki, 2013b, p. 81; Arisugawa Taruhito, "Tankajutsu kyōiku kisoku namini eiseitai hensei hyō no ken," Op. Cit., JACAR reference number: C06080203600).

According to the reform, the *eiseitai* stretcher-bearer units were to be mobilized only during wartime and to cater to the entire division. As such, they were comparatively large; they included a headquarters and two stretcher-bearer companies, each including over a 100 stretcher-bearers. Medics served in the headquarters with physicians, pharmacists and assistant pharmacists, and non-commissioned medic officers. They established the dressing station and tended the sick and wounded there. They also served as the professional supervisors of the stretcher-bearers.[54]

	Military Physicians	**Non-Commissioned Medic Officers**	**Unit-Medics**	**Stretcher-Bearers**	**Commanding Stretcher-Bearers**
Headquarters	4	5	13	-	
Stretcher-Bearer Company	-	-	-	133	12
Stretcher-Bearer Company	-	-	-	133	12

Figure 11: Example of Part of *Eiseitai* Medical Personnel during the Sino-Japanese War[55]

On the right hand side of the image are five formations. In front of each, one sees very small images that stand apart in a slightly separate group. They are the unit supporting stretcher-bearers. In addition to the *eiseitai*, infantry - and until 1892 and from 1896 artillery units as well -[56] had their own in-house stretcher-bearers that established their own dressing station. These soldiers – four per company – would train in peacetime and serve as any member of their unit. In wartime they would be mobilized as special unit stretcher-bearers. Their supervising commanders were the unit-attached medical personnel, including the unit medics.[57] The Army

[54] *Tankajutsu kyōkasho: Rikutatsu dai gojūgo-gō*, authorized by Ōyama Iwao (Tokyo: Kōseidō, 1893), pp. 2-3; Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," *Meiji nijūshichi-hachi nen'eki rikugun eisei jiseki* (Tokyo: Rikugunshō imukyoku, 1907), pp. 14-16; Rikugun gun'idan (ed.), *Rikugun eisei seido-shi* (Tokyo: Kodera Masaharu Publishing, 1913), p. 489.

[55] Rikugunshō, "Eiseitai rinju hensei-hyō," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (July 1895), JACAR reference number: C12121270500.

[56] Rikugun gun'idan (ed.), *Rikugun eisei seido-shi*, pp. 488-89.

[57] Authorized by Ōyama Iwao,1893, pp. 2-3; Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., pp. 13-14; Rikugun gun'idan (ed.), Op. Cit. p. 489.

considered infantry and artillery as particularly vulnerable to injury, and as a result, their soldiers had also a better chance of being found and evacuated from the battlefield.

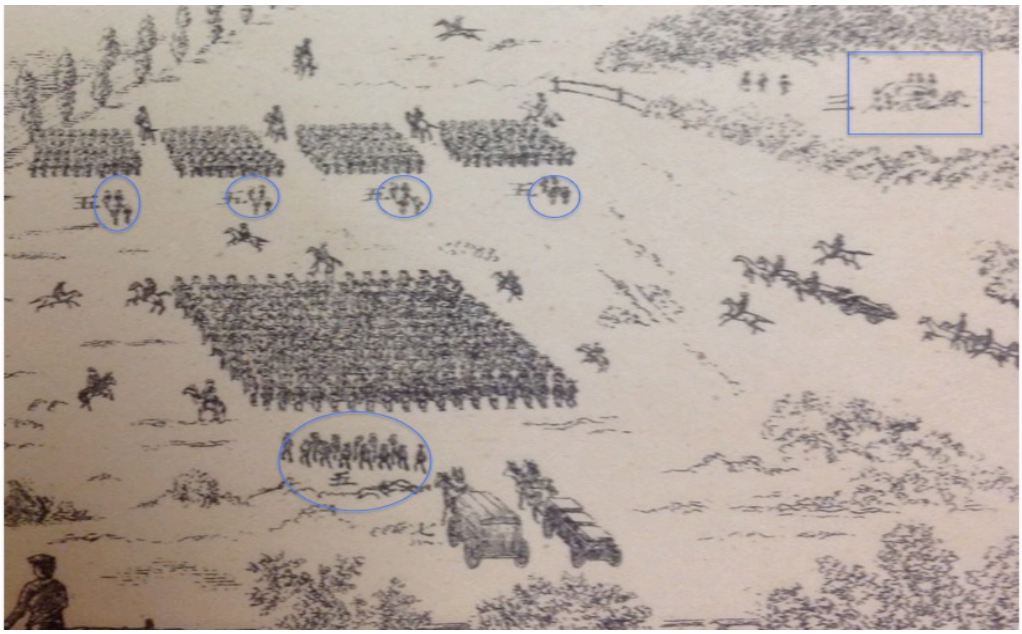


Figure 12: Image of Wounded Transportation on the Battlefield – Detail (unit stretcher bearers in circles, unit dressing station in square, added by author)

Despite this reform, unit medics were to continue going on the field, but only half of them. The rest were supposed to remain at the dressing station and in structures further back that were also redefined that year.[58] According to Kurosawa Yoshiyuki, in 1887, as part of the general reform following the Satsuma War, to make each Army division self-sufficient, the Army defined its wartime hospital as division attached units by the name of "field hospital," *yasen byōin* 野戦病院, with their own personnel and equipment. They were the next stage of evacuation following the dressing station and as such, were to be mobile and move with the troops.[59]

By the time the Sino-Japanese War broke out in 1894, medics worked within a large framework of wounded care and evacuation, dividing the stages of care according to distance

[58] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., pp. 11-14.
[59] Kursosawa, Op. Cit., p. 44.

and the condition of the soldier-patient. Since medics by then only served in units, the further one moved from the line, the fewer medics there were; medics and mostly stretcher-bearers would evacuate the wounded from the field back to the dressing station. From the dressing station stretcher-bearers would carry the wounded further back to a field hospital. From the field hospital a designated unit – patient evacuation unit, *kanja yusōbu* 患者輸送部, carried the soldier-patients over communication routes, stopping at communication hospitals, *heitan byōin* 兵站病院. Those who made a full recovery would return to the line. Those who needed further care would then travel by train or ship to military hospitals back in Japan.[60] Delegation according to medical role and distance was complete. Let us now return to the event that opened the chapter – the Sino-Japanese War – and see how the structure weathered actual warfare.

2) The Trial of Fire: Medics and Stretcher-Bearers in War

A Kangoshu at War – Planning and Implementation

Kondō Kintarō was aged 27 by the time the war began. He was in the Second Reserves by then and hence he did not expect to be enlisted. But, to his surprise he received a call of enlistment a few days after the war broke out in August 1894. He joined the Third Division from Nagoya as a unit medic. He served together with 6 military physicians of different ranks, 14 non-commissioned medic officers of different ranks, and 39 other *kangoshu* medics. In September 1894 Kondō began his journey to the front, first by train from Nagoya to Hiroshima, exposing him to locations and landscapes he had never seen before. From Hiroshima, he set sale to Korea. He suffered from severe and recurring stomach pains throughout the journey, and thus, two days after he arrived with his unit in Korea, he was hospitalized for 17 days. A few days after he

[60] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., pp. 17-25.

recovered, his unit moved to Pyongyang, where the Japanese Army won one of the major battles of the war.[61]

Shortly after arriving at Pyongyang, Kondō's unit established a hospital in local houses. He was in charge of one of the sick rooms, tending eight soldiers: six soldiers gravely ill with amoebic dysentery, one soldier sick with "intermittent fever," *kanketsunetsu* 間歇熱, and one patient suffering from rheumatism. According to Kondō's memoir, written three years after the war, the majority of the patients in the hospital were suffering from amoebic dysentery – 580 men - and a few suffered from typhus. With such a number of patients suffering from intestinal diseases and severe diarrhea, it was very difficult to maintain the cleanliness of the makeshift hospital. The Sino-Japanese war was a post-Listerian war and the importance of disinfection and hygiene was more widely known and especially emphasized in medic training.[62] One of the reasons that the Prussian military medical system was lauded in the world and emulated by other militaries, such as the British, was its implementation of systems of disinfection and sterilization.[63] According to Yamada, a German military textbook explaining such methods was translated to Japanese as well.[64] However, these methods did not keep up with the reality encountered during the war. Kondō described how the medical personnel scattered coal in the sick rooms to absorb the toxins and somehow improve the hygienic conditions, but these efforts did not prevent flies

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[61] Kondō Kintarō, abridged and annotated by Katō Kiyofumi, "Aru "kokumin" heishi no tanjō: rikugun kangoshu kondō kintarō no jūgun nikki ga katarumono," in Hiyama Yukio (ed.), *Kindai nihon no keisei to nisshin sensō* (Tokyo: Yūzankaku shuppan, 2001), pp. 394-99; Lone, Op. Cit., pp. 35-37.

[62] M. Anne Crowther & Marguerite W. Dupree, *Medical Lives in the Age of Surgical Revolution* (Cambridge, GB: Cambridge University Press, 2007), pp. 96-121; Roy Porter, "Hospitals and Surgery," in Roy Porter (ed.), *The Cambridge Illustrated History of Medicine* (Cambridge, GB: Cambridge University Press, 2006) pp. 229-30; *Rikugun kangogaku shūgyō-hei kyōkasho: Rikutatsu dai-kyūjūni-gō,* authorized by Ōyama Iwao (Tokyo: Kobayashi Matashichi, 1890), pp. 112-14, 121-28.

[63] Richard A. Gabriel, *Between Flesh and Steel: a History of Military Medicine from the Middle Ages to the War in Afghanistan* (Washington D.C.: Potomac Books, 2013), p. 182.

[64] Yamada Ichirō, "Nisshin Sensō ni okeru iryō, eisei," in Kuwada Etsu & Okumura Fusao (eds.), *Kindai nihon sensō-shi*, Vol. 1 (Tokyo: Dōtai Keizai Konwakai, 1995), p. 243.

from crowding in swarms over the feces. On the third day he moved to another sick room where he treated wounded soldiers, who arrived from the front in growing numbers. Presumably since Pyongyang itself was a frontline not long before, there were no supporting Red Cross personnel at the hospital. Once the support arrived, Kondō's unit moved on.[65]

Kondō described how the unit moved from place to place, and how he treated wounded soldiers, and mostly sick soldiers in the different locations – tents and hospitals alike. It was only in January 1895 that he finally arrived in Qing territory - Dagushan in Manchuria. Kondō served at a hospital one stage behind the field hospital in the line of evacuation, a "battlefront hospital," *senchi teiritsu byōin* 戦地定立病院. From there the soldier-patients were to eventually continue to a transportation hospital further back. This time most of the patients he treated suffered from frostbite in their extremities, and a growing number of them contracted tetanus. During the three months he was there, Kondō was exposed to many infectious diseases and indeed, 20 *kangoshu* medics of the total of 40 in his unit fell ill and returned to Japan to convalesce. One passed away.[66]

Kondō treated wounded soldiers, but the chief part of his time was spent treating those who suffered from various diseases. His story was thus very different from what the reforms, described in the current and previous chapters, emphasized – the moment of actual battle. According to the official history of the war, written by the General Staff Headquarters, the vast majority of soldiers died of disease. From approximately 240,000 mobilized soldiers a total of 13,164 soldiers were estimated to have died during the war, but only 1,401 died of wounds.

[65] Kondō & Katō, Op. Cit., pp. 400-01.
[66] Kondō & Katō, Op. Cit., pp. 402-06.

11,587 died of disease and 176 died of other causes.[67] A much larger number fell ill during the war and required treatment.[68] Similar to Kondō's descriptions, according to the official history, most of the soldiers suffered from amoebic dysentery, malaria and cholera.[69]

Even though he was a *kangoshu* - the medic role that was to be exclusively attached to units – Kondō served in a variety of makeshift hospitals. They were in the warzone, but further in the rear. According to a report written following the war on the performance of the Army medical services, there was a grave shortage of personnel in field hospitals already in 1894 when the war began. Consequently, instead of 6 field hospitals as planned, each division established only 2-3 field hospitals, and even there the personnel were insufficient in number.[70] The Army employed additional doctors and orderlies, *kanbyōnin*, but it was still not enough. As another solution, the Army used reserves *kangoshu* unit medics, like Kondō, to serve in field hospitals and in an intermediate category of hospital between field and transportation hospital - the battlefront hospital. However, the overall limited number of facilities and personnel continued burdening the evacuation process and left the sick and wounded in dressing stations for longer periods of time.[71] The system was overwhelmed and congested.

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[67] Sanbō honbu (ed.), *Meiji nijū-shichi-hachi-nen nisshin senshi*, Vol. 8, appendix no. 120, p. 90 of digital file, NDL ID: 000000432059, p. 90.

[68] According to military medical statistics, more than 250,000 soldiers were sick over a period of 574 days. The total number of soldiers mobilized to fight in the war was around 240,000 men. Thus, this figure is most probably the accumulative number of patients every day, over 574 days, recounting the same sick soldiers who were hospitalized for a number of days. This figure thus demonstrates the cumulative burden on the personnel, more than the total percentage of the military to be sick. See: Rikugunshō imukyoku, "Dai-isshō senshisha oyobi kanja tōsū," Rikugun ippan shiryō Collection, Bōei kenkyūjo Archive (1907), JACAR reference number: C13110332400, p. 6. Yamada Ichirō argued there was an accumulative total number of 204,424 patients throughout the war: Yamada Ichirō, Op. Cit., p. 234.

[69] According to Yamada Ichirō, even more than infectious diseases, Beriberi – discussed in the previous chapters – continued being the most serious cause of disease: Yamada Ichirō, Op. Cit., p. 234. According to Bay, while over 30,000 Army soldiers suffered from Beriberi due to its insistence on maintaining a white rice diet, the Navy did not suffer from the disease at all, due to an active reform of nutrition. See Alexander R. Bay, *Beriberi in Modern Japan: the Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012), pp. 53-54.

[70] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., p. 17.

[71] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., 22, 404.

As Kondō described, the diseases did not skip over the medical personnel either, incapacitating half of the medics in his unit. According to the report written after the war, this created significant drainage upon the personnel across the board. The medical department's statistics calculated that out of a total number of 2308 *kangoshu* medics, 102 died during the war and only 3 from injury. Out of the 3915 *kanbyōnin* employed orderlies, 224 died, and none of injury. In both cases, cholera took the largest toll – 34 and 85 respectively.[72] A much larger number fell ill and became incapacitated. The medical report written following the war specifically noted that because so many unit medics fell ill in 1895 the Army decided to make an emergency change to the *kangoshu* training regulations, to enable the enlistment of new personnel quickly; the Army shortened medical training from six months to two. The Army even stipulated that according to need, it was possible to take soldiers from the various units who were already serving, including infantry, artillery and cavalry, and train them to be medics in two months[73] The total number of sick soldiers was so great that without *kangoshu* the situation was unsustainable, to the extent that the Army allowed taking combatants off the frontline to reinforce the medical lines.

The prevalence of disease also signified that the stretcher-bearer units and patient evacuation units transported more ill soldiers than wounded ones. This was the case during the American Civil War that had a foundational effect on structures of wartime patient evacuation.

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[72] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (shimo)," Op. Cit., p. 501. Wartime statistics are highly problematic. Documents give contrasting figures. For instance, according to a different document, there was a total of 1669 *kangoshu* medics serving during the war – 1283 of whom were sent abroad and 66 died from infectious diseases. See: Katō, Op. Cit., pp. 406, 415n3; Rikugunshō, "Dai-kyū-hen jin'in," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive, JACAR reference number: C14020393400, p. 16.

[73] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (shimo)," Op. Cit., pp. 404-05. See also requests from different units for expedited medic training to compensate for shortages: Nozaki Sadasumi, "Rusu dai-ichi shidan yori gen'eki kangoshu hojū sokusei kyōiku no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1895), JACAR reference number: C06022050300; Manabe Akira (head of the Army Personnel Department), "Yamauchi Rikugunshō fukukan-ate kangoshu no hojū oyobi tassei kyōiku no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1895), JACAR reference number: C10060654100.

According to Gabriel, while 110,071 Union soldiers and officers died from wounds, 224,586 died of disease.[74] According to Taithe, for that reason both armies moved quickly in open fields and tried to flee disease in equal urgency to that of fleeing the enemy's weapons. To do so, the Union Army employed trains and ships and created hospital tents, which were easy to assemble and dismantle.[75] "The Letterman plan" that divided the evacuation process into a chain of stages was thus motivated not just by the need for evacuating the wounded, but the diseased. In fact, the Prussian Army implemented these measures, learned from the American Letterman Plan for the systematic evacuation of patient-soldiers, in addition to the creation of the French stretcher-bearer role.[76]

The Japanese Army, by extension, adopted it as well through the Prussian Army. However, it defined the Japanese stretcher-bearer as a transporter of the wounded, and field hospitals – as hospitals to treat the wounded. Following the Russo-Japanese War a decade later, a report suggested expanding the duties of stretcher-bearers and field hospitals to include the sick, as well as the wounded by definition. The suggestion signified that the wounded-exclusive definition continued during the two wars, but did not keep up with the conditions on the ground, where the accumulation of sick soldiers caused congestion in the system. The report specifically noted that while the main purpose of stretcher-bearer units was to convey the wounded, in wartime, particularly during consecutive battles, infectious disease spread, requiring the personnel to adapt.[77] Kondō, for instance, noted that when tetanus began spreading among his

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[74] Gabriel, Op. Cit., p. 163

[75] Taithe, Op. Cit., pp. 90, 94; pp. 33; Margaret Humphreys, *Marrow of Tragedy: the Health Crisis of the American Civil War* (Baltimore, MD: Johns Hopkins University Press, 2013), pp. 36-43.

[76] Gabriel, Op. Cit., pp. 182-83. For more on the Letterman Plan see pp. 168-70. For the implementation of the German *Etappen* system (evacuation in stages) during the Franco-Prussian war see: "Notes of the War," *The British Medical Journal*, Vol. 2, No. 255 (3 Sep. 1870), pp. 253-55.

[77] *Senji eisei kinmu-rei kaisei iken* (Ōgai bunkō Collection. Tokyo University Libraries, written post-1905), articles 66, 69, pp. 16-17, article 102, p. 28. Author and publication details unknown. Was part of Mori Rintarō's collection

patients, the medical personnel believed it was a result of infection between them and consequently, the hospital separated the tetanus patients from the rest.[78] In other words, medical personnel reacted to disease through more divisions of space. Taking into account the large number of sick soldiers during the Sino-Japanese War, accumulating in the various stages of military medical evacuation, one might infer that the suggestion to incorporate disease into wounded evacuation was a description of an existing reality that was yet to be supported by official regulations.

Under such overcapacity and without sufficient personnel and resources, the system could not function properly. Moreover, the stretcher-bearers were not immune themselves. According to the official history of the war, stretcher-bearers serving in Manchuria suffered particularly from frostbite, as they were obligated to evacuate the wounded also during the wintertime, when temperatures dropped below freezing point.[79] During the invasion of the Pescardores islands of Taiwan in March 1895, the final major campaign of the war, the Army mobilized the troops from the second reserves, and shipped them out without an *eiseitai* or a field hospital at all. While the troops suffered few casualties in battle, 1700 of the 4000 soldiers fell sick with cholera, leading to the emergency employment of 120 laborers as care-givers, based solely on basic and quick emergency training.[80]

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of military medical documents. Since it mentions the Russo-Japanese War in several places, it could be inferred that the document was written following the Russo-Japanese war.

[78] Kondō & Katō, Op. Cit., p. 403.

[79] Sanbō honbu (ed.), *Meiji nijū-shichi-hachi-nen nisshin senshi*, Vol. 8, Op. Cit., p. 107.

[80] Fujiwara Akira, *Tennōsei to guntai* (Tokyo: Aoki Shoten, 1978), pp. 64-65; Lone, Op. Cit., p. 170. The term Fujiwara used for these laborers was *ninbu* 人夫, and Lone - "coolies." Neither noted where these laborers/coolies came from. According to Lone, the Japanese Army used 154,000 Japanese coolies during the war, but also relied on Korean and Chinese coolies as the war continued. It stands to reason that in the above case, the reference was to Japanese laborers/coolies, since Army documents concerning laborers in Taiwan often discuss their dispatch to Taiwan – hence, from Japan. Lone also noted Army suspicion towards Korean coolies. It is plausible that non-Japanese laborers would thus be entrusted with carrying equipment, but not with treating the wounded and ill. On the use of coolies during the war see Lone, Op. Cit., pp. 75-77, 147-48. On the "dispatch" of laborers, see for example Komatsu Akihito, "Daihon'ei yori taiwan ni haken-shi aru ninbu no tame eiseiin haken no ken,"

A final note should be made on the supply routes. The medical services relied on chains of supplies, which provided food, water and medicine to the troops and the various hospitals on the evacuation chain. Historiography of the war often pinpointed the dysfunction of the logistic supply systems as the soft underbelly of the Japanese Army in general and the medical system in particular; its lack of sufficient planning and knowledge of the foreign terrain to which the Army sent its troops caused soldiers to lose their way and to require more time to arrive at their destination, particularly since in most cases they did not speak the local languages; shortage of marine vessels to carry the supplies and troops abroad, improper means to traverse the foreign terrain and an insufficient number of personnel to carry the necessary supplies led to the employment of 153,000 Japanese civilian laborers during the war for the purpose. As a result, soldiers were often left without enough food, blankets and proper clothing, and medical personnel - without enough medical supplies to treat the sick and wounded.[81] This became a recurring motif in later wars, reaching its peak towards the end of the Pacific War as shall be discussed in the final chapter of the dissertation.

To conclude, according to the reports written during and following the Sino-Japanese war, the system of medical evacuation functioned largely according to the structures described in the previous section; the unit medical personnel and *eiseitai* units moved with the troops from place to place and battle to battle. They set up dressing stations as close as possible to the line but at a safe distance, and took them apart following each battle. Unit medics provided first aid to the wounded together with military physicians and non-commissioned medic officers in the dressing stations, or searched for the wounded together with the stretcher-bearers on the field. The

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Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (7 July 1895), JACAR reference number: C06022455900.

[81] Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853-1945* (Lawrence, KS: University Press of Kansas, 2009), pp. 83-85; Lone, Op. Cit., pp. 72-77, 166; Yamada Ichirō, Op. Cit., pp. 241, 244-45, 247.

stretcher-bearer units, engaged in evacuating the wounded from the line to the dressing station, and transported them back following treatment at the dressing stations. Beforehand, the *eiseitai* physicians would attach a tag to each patient to indicate the severity of his condition and so prioritized care further down the line.[82] According to Yamada, Japanese unit medics were even among the earliest in the world to use antiseptic bandages, which proved successful.[83]

However, the Army built these structures while focusing on wounds, only to be flooded with disease, despite various efforts to prevent infection.[84] As a result, the separation of unit and hospital medic service gradually crumbled. Moreover, the number of personnel and facilities, which was smaller than planned already at the beginning of the war, became even scarcer in comparison to the increased number of patients, and as Yamada noted, the transportation lines grew longer with military expansion.[85] Each area posed its own unique challenges as well, such as the extreme cold encountered in Manchuria and cholera in Taiwan. The problems encountered by logistic units in carrying supplies exacerbated the situation even further. The orderly employees and the support of the Japanese Red Cross in the rear were not sufficient.

Despite its victory, due to the above the Army and its Medical Department rethought its medical strategy following the war, including the medic role; in 1899 the Army created a new role of medic termed *kangosotsu* 看護卒, to become an intermediary reinforcing role between the unit and hospital. The *kangosotsu* was a conscripted medic, wearing the same uniform as the unit-medics did, but served solely in field hospitals and patient evacuation units – units that

[82] Rikugun eisei jiseki hensan iinkai (ed.), "Dai-ikkan: Senji eisei kinmu (jō)," Op. Cit., pp. 11-16
[83] Yamada Ichirō, Op. Cit., p. 244.
[84] On the various methods of disease prevention see Yamada Ichirō, Op. Cit., pp. 241-43. On frostbite see pp. 243-45.
[85] Yamada Ichirō, Op. Cit., p. 235.

transported patients from field hospitals further back.[86] Each division was to select 40 men, who would undergo one month of basic infantry training, followed by three months of medical training - as opposed to the one year military and medical training that unit medics underwent. According to the suggestion for the role, they were aimed not just at reinforcing these two units, but at militarizing hospital care once again; the orderlies had only peacetime experience serving in hospitals in the rear, thus creating difficulties in the context of battle.[87] In other words, the Army searched for a compromise between the unit-medic reform and the needs created in the field. The compromise was to create an intermediate medic role between the two; the Army left the hospitals in the rear to employees and the Japanese Red Cross, but reinforced the front by adding a conscripted medic specifically to serve in hospitals and patient evacuation.

"Conquest of the Silent Foe"

Military medicine on the battlefield is solely comprised of the relief, collection and transportation of the wounded. Largely categorized, it includes relief work on the front line, in dressing stations, hospitals and the work of collection and transportation. (The history of) military medical facilities in battle is recent. During the violent disorders of the Crimean war and those before it, no one cared for the wounded on the battlefield. (The wounded) would collapse from bleeding, hunger and thirst, and die of exhaustion… The first major war in which a systematic structure achieved a reliable outcome, was the 1870 Franco-Prussian War... (But) the Franco-Prussian War took place already 35-6 years ago. Since then weapons have changed, tactics have advanced. The occurrence of casualties is consequently different than in the past. The might of firearms has doubled in (intensity) and it unavoidably influences relief work in a substantial way. On the other hand, surgery has undergone transformation from disinfection to detoxication, leading to changes in the treatment of wounds, as well as in drugs, bandages and (medical) machines. The methods and facilities for the care of battle casualties have changed and are not as they were during the Franco-Prussian War…It is necessary to incessantly strive for

[86] Katsura Tarō, "Kakushidan kangosotsu chōshū no ken", Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (2 August 1899), JACAR reference number: C10062245900; Naikaku, "Rikugun kangosotsu fukusei," Goshomei genpoin Collection, Kokuritsu kōbunshokan Archive (7 October 1899), JACAR reference number: A03020420400.

[87] Ōyama Iwao, "Kangosotsu wo kakuhohei rentai ni oite yōsei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (15 July 1899), JACAR reference number: C06083128400; Katsura Tarō, "Kangosotsu kyōiku kisoku," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (28 August 1899), JACAR reference number: C08070530500.

improvement, based on the fresh experience of this war (the Russo-Japanese War)… our military medical facilities will create plans for improvement. The advancement of our military medicine will not only benefit the recovery of our fighting capability, but will also diminish the misery of the battlefield. It is possible to say that continuing research (of battlefield medicine) would contribute to humanity and civilization.[88]

The above excerpt was taken from an essay written by top medical officer and future Surgeon-General Nakadate Chōsaburō following the Russo-Japanese War. In the essay he wrote various suggestions to improve the Japanese military medical system, based on the experiences of the war. Nakadate looked at the past and created a global historical narrative of battlefield medical care, whereby the Franco-Prussian War was a central landmark. However, by then it was a historical one, long past. The Russo-Japanese War was the new landmark to follow it within the historical chronology, as the Japanese system implemented the many changes that both war and medicine underwent in the interlude. As such, studying the Japanese experience in battlefield medicine would not just contribute to the advancement of its own services, he argued, but of humanity at large. Nakadate thus placed the history of Japanese battlefield medicine within this wider global story. It is possible to say that his contemporaries in other countries shared his historical view, as foreign observers published various accounts of the Japanese military medical system and its performance during the war. The war became an experiment ground for the developing systems and techniques whose results were valuable for the various armies to analyze and learn from, not just for Japan.

It is notable that Nakadate once again focused his comments specifically on wounds and wounded evacuation, while as described above, the previous Sino-Japanese war was so heavily affected by disease. This was arguably due to the nature of the Russo-Japanese War, the casualties it produced and the way Japanese military medicine came to be seen in the world.

[88] Nakadate Chōsaburō, "Nichirō sen'eki ni jikken seru gunji eisei no kaizen shoken," *Senji eisei kinmu-rei kaisei iken,* Op. Cit., pp. 185-86.

Japan deployed roughly 950,00 troops to fight in the war, almost four times as many as those mobilized during the Sino-Japanese War. It resulted in an estimation of over 80,000 deaths, as opposed to the over 13,000 of the Sino-Japanese War.[89] However, the number of casualties from wounds during the Russo-Japanese War surpassed that of disease - what Louis Seaman famously termed Japan's "conquest of the silent foe."[90] According to Kowner, it is possible to estimate around 60,000 deaths from wounds, versus 21,000-23,000 deaths of disease.[91] The Japanese Army's medical system became a source of fascination for countries, such as Britain and the United States, and a model to emulate, particularly for its perceived success in disease prevention.

Tying battlefield medicine with the benefit of humanity and civilization in general, Nakadate also echoed the emphasis the Japanese government placed on medicine during the war, also as a diplomatic tool. Japan put much more effort than in the previous war to present itself as a "civilized humanitarian country," particularly through the treatment of POWs. This was the case also during the Sino-Japanese War through the aforementioned images of the Red Cross. But the Japanese government reinforced this effort during the Russo-Japanese war, following the 1899 Hague convention. The much greater international attention given to the war presented Japan with an opportunity of highlighting its perceived enlightenment.[92] Medicine was tied to these values, and so Nakadate particularly pointed out the importance of military medicine in constructing a larger concept of humanity, with Japan leading the way.

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[89] Drea, Op. Cit., p. 116.

[90] Louis L. Seaman, *The Real Triumph of Japan: the Conquest of the Silent Foe* (New York, NY: D. Appleton and Company, 1908).

[91] Kowner tackled the difficult problem of contrasting statistics by comparing different figures from different sources. See: Rotem Kowner, *The A to Z of the Russo-Japanese War* (Lanham, MD: The Scarecrow Press, 2009), pp. 80-81.

[92] On humanitarianism as a form of diplomacy during and following the war see Naoko Shimazu, *Japanese Society at War* (New York, NY: Cambridge University Press, 2009) pp. 167-176.

And yet, despite the changed ratio and the ascribed success, according to Surgeon-General Koike Masanao, the number of wounded and sick soldiers was still substantial: a total of 457,035 men in need of care - 220,812 wounded and 236,223 sick soldiers - almost half of the total number of soldiers mobilized for the war.[93] How did the medical system deal with this sharp rise of patients, particularly the men on the ground – medics and stretcher-bearers?

Looking beyond statistics to the situation on the ground reveals a somewhat different picture than the above-mentioned laudatory accounts. In a report written following the Russo-Japanese War, a group of medical officers went through each item of the wartime medical mobilization regulations and surveyed the performance of each division on the field. Next to each item the authors inserted suggestions for reform, based on the experience of the war. Nakadate's aforementioned essay was included in its appendix. Many of the suggestions focused on the interconnected challenges faced by the system of medical evacuation, as a result of the further expansion of distance, speed, and the size of the Army. As a result, the system suffered a shortage of personnel and sufficient space to house the sick and wounded. As described above, these were fundamentally the same problems encountered during the Sino-Japanese War but on a much larger scale.

Learning from the Sino-Japanese War, the Army expanded the number of divisional field hospitals to 3-4, though not to the originally planned 6.[94] This was possibly facilitated by the new intermediate medic role of *kangosotsu* mentioned above. According to the wartime mobilization charts, the staff of field hospitals included 34 *kangosotsu* field hospital medics and 6 *kangoshu* unit medics.[95] However, the report also noted more than once that this number was insufficient,

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[93] Koike Masanao, "A Short Review of the Results Achieved by the Japanese Army Medical Service during the Russo-Japanese Campaign," *The Lancet* (5 January 1907), p. 46.
[94] *Senji eisei kinmu-rei kaisei iken,* Op. Cit., p. 86
[95] *Senji eisei kinmu-rei*, authorized by Army Minister Terauchi Masatake (5 October 1903), appendix chart no. 2.

and was to be more than doubled. This was also the case with the wounded transportation units, in charge of conveying the patients away from the field hospital further back; there were supposed to be 8 *kangosotsu* medics and no *kangoshu* unit medics at all, while the post-war report recommended changing the numbers to 12-20 *kangosotu* field hospital medics and add 6-10 *kangoshu* unit medics.[96] The new medic role thus proved its indispensability in battle. However, this emphasis on the shortages of caring hands and the suggestions for such a significant increase of personnel implied that field hospitals and other stops on the patient transportation line were severely congested. Indeed, the report noted that while the capacity of field hospitals was 200 patients, during the war they were often filled by over 500 patients, even reaching 750 during the Battle of Mukden and more on other occasions.[97]

These recommendations created a very different impression from that which appeared in accounts written by the aforementioned foreign military observers, praising Japanese field hospitals in particular. Herrick argued that the observers had their own motivation for possibly exaggerating their reports to promote military medical reforms at home.[98] Bay suggested that the Japanese Army monitored which hospitals foreign observers had access to, creating a misleading impression. The gap between image and reality was made vivid by one of the most famous memoirs from the war - "Human Bullets," *Nikudan* 肉弾, authored by Sakurai Tadayoshi. According to Bay, Sakurai was treated in a field hospital in Manchuria after being injured during the first attack on Port Arthur in February 1904. He described himself almost deserted in an

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[96] *Senji eisei kinmu-rei,* authorized by Army Minister Terauchi Masatake (5 October 1903), appendix chart no. 5; *Senji eisei kinmu-rei kaisei iken*, Op. Cit., appendix charts 2; *Senji eisei kinmu-rei kaisei iken,* Op. Cit., chart no. 3 following p. 98, chart 3. Following p. 106, pp. 129, 154. Part of the report is divided according to specific division. Each suggested slightly different numbers.

[97] *Senji eisei kinmu-rei kaisei iken,* Op. Cit., pp. 86, 102.

[98] Claire Herrick, "'The Conquest of the Silent Foe': British and American Military Medical Reform Rhetoric and the Russo-Japanese War'," in Roger Cooter, Mark Harrison & Steve Sturdy (eds.), *Medicine and Modern Warfare* (Amsterdam: Editions Rodopi B.V., 1999), pp. 99-129.

extremely crowded hospital, housing 1000 patients - five times its planned capacity of 200. The personnel were incapable of dealing with the extent of suffering around them and the patients were left to lie waiting, covered with maggots.[99]

Stretcher-bearers were overwhelmed as well, and not only because of the vast numbers of patients to carry, but also because of a change in the nature of fighting. Kinoshita Hiroya, head of the *eiseitai* of the fifth division, wrote an essay towards the end of the report, suggesting numerous reforms of the *eiseitai* units. In an extraordinary passage in his essay he discussed the unique difficulties faced by stretcher-bearers during the war:

> The difficulties that the two companies of stretcher-bearers faced during the current war in frequently collecting and conveying the wounded men from the front line are beyond imagination. Their toil cannot be described. They experienced throbbing pain, both of their shoulders as if covered in purple, while their skin became severely inflamed. The frequency in which they had to go to and fro left them with no time to eat or sleep either.[100]

One of the reasons for this situation and Kinoshita's corresponding request to substantially increase the number of stretcher-bearers was the expansion of the distance between the line and the dressing stations. Stretcher-bearers were to traverse a much longer distance than in previous wars, as they went back and forth between the two locations.[101]

The expansion of the said distance was apparently due to the fact that the two armies used new weapon technologies during the war, which widened the range of fire - machine guns and artillery in particular.[102] Consequently, medical personnel set up dressing stations further back from the site of battle, widening the distance between the line and the supporting care facilities.

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[99] Alexander R. Bay, "Russo-japanese War Photo Album" in Michael Sappol (ed.), *Hidden Treasure*. (New York: Blast Books, 2012), pp. 192-93.

[100] Kinoshita Hiroya, "Eiseitai no hensei oyobi sono kaisei iken," *Senji eisei kinmu-rei kaisei iken,* Op. Cit., p. 211; *Senji eisei kinmu-rei kaisei iken*, Op. Cit., pp. 814-16.

[101] Kinoshita Hiroya, "Eiseitai no hensei oyobi sono kaisei iken," *Senji eisei kinmu-rei kaisei iken,* Op. Cit., pp. 20, 211-12.

[102] S. P. MacKenzie, "Willpower or Firepower? The Unlearned Military Lessons of the Russo-Japanese War," in David Wells & Sandra Wilson (eds.), *The Russo-Japanese War in Cultural Perspective, 1904-05* (New York, NY: St. Martin's Press, 1999), p. 32.

Dressing stations and field hospitals were to remain beyond the range of fire, forcing the stretcher-bearers to pass a much longer distance with the wounded on their shoulders. According to the report, the number of carts used to carry the patients from the dressing stations to field hospitals was insufficient as well. Thus, the literal burden on the shoulders of the stretcher-bearers grew heavier and for longer and more frequent periods of time. Many were also injured or killed as a result, at times diminishing their number by as much as half.[103]

Since evacuation took place through a chain of stations, problems in one site resulted in problems in another, creating a domino effect.[104] The shortage of stretcher-bearers caused congestion in dressing stations that were already full, often over their capacity, making unit-medic service even more challenging as well. Hence, the report noted the shortage of unit medics on the line as another factor contributing to the extension of time the wounded spent in dressing stations. Moreover, while in the previous war many medics fell ill, this report emphasize the risk of medics getting injured or killed in battle, draining the medical capability of the line.[105]

Finally, even though the death rate from disease dropped, many soldiers still fell ill, taxing the medical services, and eventually changing once again the goals and nature of the medic role. As mentioned above, one suggestion in the report was to expand the responsibilities of stretcher-bearers to carrying the sick as well as the wounded. This suggestion demonstrated how gradually the perception of the battlefield changed from a place of wounding to a place of disease as well, requiring a synthesis within the medical framework.[106] This change affected the perception of medic care once again. The authors of the report noted problems with employed orderlies in hospitals in the rear and recommended them to be replaced by soldiers, who

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[103] *Senji eisei kinmu-rei kaisei iken*, Op. Cit., p. 83, pp. 814-16.
[104] *Senji eisei kinmu-rei kaisei iken*, Op. Cit., pp. 17-18.
[105] *Senji eisei kinmu-rei kaisei iken*, Op. Cit., pp. 83-84, 99, 157-58.
[106] *Senji eisei kinmu-rei kaisei iken*, Op. Cit., articles 66, 69, pp. 16-17, article 102, p. 28.

underwent military training. By so doing, they implied that what some of the orderlies lacked was not necessarily medical skill, but wartime military discipline.[107] Moreover, in places like Manchuria the Army met with difficulties in finding local orderlies to employ as reinforcement for transportation hospitals.[108] Medics on the other hand were conscripted soldiers, and hence required to serve and obey orders. And so, in 1909, only 4 years after the war, the Medical Department eliminated the two existing medic roles and replaced them with a new all-in-one medic - a conscripted soldier, who was to serve in all Army hospitals and units. 21 years after Hashimoto Tsunatsune's reform aimed at limiting medic service exclusively to the unit, the Army replaced the *kangoshu* unit medic with two hospital and unit medics. It renamed both *kangosotsu* - as they were before the reform of 1888.[109] This structure carried through all the way through the Pacific War.

Conclusion

The chapter presented the history of medics as a story of crossing borders. The medic served as a bridge between combat and medical care, physically and geographically. The development of the role resulted from Armies traversing more expansive geographical territories, and from the movement of military and medical knowledge across territories. The history of the role in Japan was part of an international change in the concept of medical mobility and the role of speed in medical care. Coupled with the expansion of the scale of battle and the rise of the soldier's body as an object of care, these changes were formative factors in the shape the role

[107] *Senji eisei kinmu-rei kaisei iken*, p. 160.
[108] *Senji eisei kinmu-rei kaisei iken*, p. 36-37.
[109] Naikaku, "Goshomei genpon meiji yonjūni-nen chokurei dai-hyakuichi-gō rikugun hojū jōrei-chū kaisei," Goshomei genpon Collection, Kokuritsu kōbunshokan Archive (15 April 1909), JACAR reference number: A03020796900.

assumed and the creation of its offspring – the stretcher-bearer. Equally important was the factor of experience. Each war became an experimentation ground, putting to the test reforms, technologies and structures that have only been seen elsewhere or on the drawing boards. One significant example of this process of learning was the balance between preoccupation with wounding and disease. Following the Satsuma Rebellion, the Medical Department reformed its patient evacuation structures around wounding. The Sino-Japanese War introduced disease as an equally if not more significant threat. And finally, the Russo-Japanese War produced a more balanced preoccupation with both. Medical personnel were to move through physical space with speed, whether the cause was injury or disease.

These changes affected how the Army formed the medic role and redefined it over time; during the Sino-Japanese War there were only unit-attached medics. Medics were to be first and foremost providers of emergency care. During the Russo-Japanese War there was an additional intermediate medic role for frontline hospitals and transportation units, to reinforce the care of the wounded and the sick in hospitals and stations across the line to help the smooth movement of patients down the medical evacuation lines. And finally, following the war, the Army prioritized hospitals across the board by recreating the medic role as belonging to each, though as mentioned in the previous chapter, unit medics continued holding a higher rank than hospital medics.

Each war also raised the importance of medics for the functioning of the system, and concomitantly put them at higher risk than they were in the past. Being the most numerous, medics and stretcher-bearers reached a more significant number of soldier-patients across a wider territory than physicians. The physicians were the foundations upon which the system was built, but the medics and stretcher-bearers carried it on their shoulders. What did it signify for

medics to serve in such a role? The next section of the dissertation will focus on this question, while examining how medic service changed by the 1930s and 1940s, when the scale of warfare continued growing to unprecedented levels, and when the challenges medics faced became the most extreme.

Part II
Medic Lives in War

Chapter 4
"Why Medic?" Conscription, the Body and Image

Why do you think the military chose to appoint you to the role of medic, eiseihei 衛生兵*?*[1]

'I had bad hearing and as a result, wasn't fit to be an infantry soldier.' 'I skipped military drills at school and was consequently tagged as an idler, unfit to be an officer.' 'I was smart and serious in my studies at school.' 'I had experience in dealing with the body/medicine.' 'I don't know – the military said I was to be a medic and that was it.'

Following enlistment, a conscripted soldier became the army's property. During his period of service, the army determined the soldier's place in the world, what he was to do at every moment, where and who he was to be. As discussed in previous chapters, the Japanese medic roles were originally voluntary. Yet, as the Japanese Army began using conscripted soldiers as medics from 1883, it took away their agency in choosing to serve in the role. Often than not, the Army did not explain its choice, leaving the medic with different interpretations for their selection to the role. The above explanations are a paraphrase of replies received in interviews, conducted for the purposes of this research with former medics, who served in the Japanese Army during the Pacific War (1941-45). They did not necessarily even ponder the question of "why" until posed to them many years after the fact:

I don't know why... What did I think about the role of medic? I don't know. Before I joined the army, I knew about infantry and artillery etc. But, about medics - I didn't really hear about, so I couldn't say. Didn't think anything really. Just thought – 'medic, alright.' (Matsumoto Masayoshi)[2]

[1] The text in italics consists of questions and comments I made during oral history interviews. The parenthesis include text that I added later to bridge the translation gap and better explain the meaning and context of the interviewees' replies. The ellipsis signifies that part of the original conversation has been omitted.
[2] Author interview with Matsumoto Masayoshi, 5 March 2014.

The Army decided - and the soldier followed. Yet, some replies revealed how former-medics created a narrative, comprised of different elements – physical and non-physical – that rationalized the path the military set them on. The former-medics did not know why, but they could imagine different possibilities for their selection to the role. The chapter will unpack these explanations, by placing them within the wider historical development of conscription and the central place the soldier's body held within it.

The criteria of a role reflect the way it is perceived by those who create the criteria. The changes these criteria undergo, thus also reflect how this perception changes over time. By examining the history of medic conscription criteria within the larger context of conscription, the chapter will assess the place the medic held within the Army framework. Moreover, since these criteria were not transparent to the medics themselves, comparing the explanations made by former-medics with the official criteria and the gap between them, will reveal popular perceptions of the role during the Pacific War.

To contextualize the medic within the larger military framework, the first part of the chapter will analyze the development of conscription criteria in general, and the changes they underwent from the early Meiji to the Pacific War. It will focus on the centrality of the body of the recruit in the process of selection and will argue that height in particular came to be perceived as a reflection of military fitness. It will also suggest that as the scale of warfare gradually grew, the Army deliberated between maintaining physical standards and expanding its pool of recruits. The second part will position the different medic roles within this process, as they changed over time. It will analyze the specific criteria that medics were to fill within the general conscription criteria, and in comparison to other roles. It will argue that medics were different than other Army roles, since their criteria were almost exclusively non-physical,

focusing on intellect and personality. It will demonstrate that one of the only physical characteristics ascribed to medics, differentiated between unit and hospital medics – a restriction of height; unit medics were to meet the physical prerequisites made of all conscripted soldiers, but hospital medics were not to be overly tall. The chapter will argue that this restriction implied that the physique of the hospital medic became secondary in the Army's perception of the role, since height was the Army's standard for physical fitness. This perception carried through to popular perceptions of medics in general.

By juxtaposing the criteria with testimonies by former medics and popular culture sources from the 1930s and 1940s, the third and final part of the chapter will probe what it signified to be chosen to serve as a non-combatant within the military and within an increasingly militaristic society. It will explore the ways in which the image of the role projected on the physicality and social standing of the caregivers themselves. It will argue that because medics – unit and hospital medics - were identified with medicine and because they were non-combatants, members of society, the Army and some of the medics themselves ascribed the role with a lesser physique than combatant soldiers. The analysis of the medic's place within the military, and by extension, the image medicine had within the military, would shed light on the increasing militarization of Japanese society, and the expansion of its mobilization in the Pacific War.

1) The Conscription Exam – Soldier as Body

I underwent the conscription exam in 1942. In 1941 there were three classes of conscription – A, B and C. But in 1942, when I underwent the exam, there were A, B, 2nd B and C. Four classes. The reason why 2nd B-Class appeared was that those who were "physically weak," *kinkotsu hakujaku* 筋骨薄弱, who were too skinny - their numbers grew… C-Class was for those who were physically disabled. Now, until then there were A and B-Class (conscripts), but at that point there were more people who were neither B nor C-Class. So, the category of 2nd B-Class was created and, I am embarrassed to say, I was 2nd B-Class. I was very skinny. I weighed barely 48kg back then. So, after the conscription exam ended, only those of us who were 2nd B-Class

conscripts remained and got scolded by the conscription officer. 'It was because of the likes of you that the category of 2nd B-Class was created!' he said. So, having a 2nd B-Class enlisted meant that everybody was being made a fool of, that Japan was losing the war. And so, as the call-up letter arrived for me, a 2nd B-Class conscript, I was made a fool of as well…

Why medic? Well it wasn't me who decided. It was written on the call-up letter[3]… Medics were usually those who completed a middle school level (education)… Those who could use their head. That was more or less the thing. But, as the level of soldiers gradually deteriorated, towards the end of the war many elderly soldiers joined the forces. Among them there were even two who were illiterate. An illiterate medic – how could such a medic be used? ... When I tried to imagine what the personnel officer was thinking (when he chose them) I realized that both (illiterate medics) were farmers. One (worked) in the bacteria examination room. It was called "the pathology examination room." The medic's number one job there…was to look through a microscope. But, actually, there were various jobs to do even there. So, the old farmer was in charge of caring for the guinea pigs. He was great…because he was a farmer… The number of guinea pigs grew significantly thanks to him. (Mutō Masatoshi)[4]

Mutō Masatoshi grew up in Yokohama, but because his family was from Kumamoto, when he was called up for military service in 1943, he entered a regiment based in Kyushu. He later served in two Army hospitals as a medic. When asked about his selection to the medic role, he divided the selection process into two stages. First, the military assessed fitness for service. Taking into consideration the level of his physical fitness, Mutō considered his enlistment as a reflection of Japan's poor position in the War in 1943. In other words, he was enlisted despite his physicality and not because of it. The second stage of selection was to a specific role – medic. In this case, Mutō emphasized intellect and education - his ability to learn. Here too he pointed out the sharp contrast between planning and implementation in the latter half of the Pacific War, when the Army enlisted men who could not read or write to a role which was based on learning. When he tried to make sense of it, Mutō reached the conclusion that as times grew desperate, criteria became increasingly flexible, as did the very definition of the medic role. The personnel

[3] Reserves recruits were called for service by a call-up letter, often termed "the red letter," *akagami* 赤紙, because of the color of the paper on which it was written. See for example one of the more well-known wartime memoirs by veteran Manabe Motoyuki, *Aru hi akagami ga kite: ōshōhei no mita teikoku rikugun no saigo* (Tokyo: Kōjinsha, 1994).

[4] Author interview with Mutō Masatoshi, 14 June 2014.

officer enlisted illiterate men to serve nominally as medics, but who did not actually tend the wounded or sick. If someone as feeble and small as Mutō could serve as a soldier by 1943, then a medic who could not read or write could care for guinea pigs.

Mutō's division of the two stages of selection largely reflected the official military procedures. The military first assessed fitness for service, according to almost entirely physical criteria, and only then divided the eligible recruits into specific roles, according to a variety of criteria and the judgment of the conscription officer. This section will focus on the first stage – the physical criteria the Army established to define eligibility for service. It will explore how the Army defined these criteria and how they changed over time to the extent that men like Mutō, who would otherwise be exempt from service, found themselves called up into active service.

The Conscription Medical Exam

Mutō explained his selection to the role of medic by first returning to a very specific moment - the conscription exam - as the event, which determined his path in the Army. The conscription exam was the first point of direct contact a soldier had with the military. The decisions made based on it had significance in and out of the Army, making it - particularly in wartime - a life-altering gateway. Medical officers, *ikan* 医官, and non-commissioned medic officers, *kangochō* 看護長 examined the potential conscripts and determined their eligibility for service.[5] The exam thus defined the makeup of the military, illustrating how central medicine grew to be for the military to function.

As described in the first two chapters, the new national army implemented conscription gradually. It was relatively limited in the early Meiji years and enabled those of means to avoid

[5] One early example is Rikugunshō, *Rikugun kakuhei tairyoku kensa tetsuzuki*, Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (July 1886), JACAR reference number: C08070135300.

service by, essentially, purchasing an exemption. Gradually the military reformed its regulations to expand conscription, reaching a peak in 1889. Largely following the Satsuma Civil-War (1877) and the growing military activities in Korea in the 1880s, the 1889 reform strove to expand conscription to the entire male population by canceling all former forms of exemption - except physical constraints.[6] The main purpose of the conscription exam was, thus, first and foremost to determine who was fit for service.

The methods, criteria and procedures of the medical exam changed numerous times between 1871 and the Pacific War. In general, however, its procedures were based on dividing the soldiers according to levels of fitness, whose definition changed over time. Until 1887 this division was largely according to the lines of "fit" versus "unfit." From 1887 the division became more elaborate, according to the level of the conscripts' fitness and health, making each conscription category increasingly into a body type, *taikaku* 体格.[7] These ranks or body types were the basis for the division into conscription classes as well.

As Mutō mentioned, these classes changed over time, yet all the way through the Pacific War there were two classes of recruits that consistently passed the conscription exam; A-Class, *Kōshu* 甲種, consisted of men who filled the height requirements and had strong and healthy build. Theirs was the ideal military physique and according to Algoso, the epitome of a new definition of masculinity.[8] Men who had an A-Class body would then participate in a draw that

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[6] Iijima Shigeru, *Nihon senpei-shi* (Tokyo: Ueno Akira, 1943), pp. 452-53; Ōe Shinobu, *Chōheisei* (Tokyo: Iwanami shoten, 1981), p. 83; Naikaku, "Rikugun chōhei kensa tetsuzuki wo sadamu," Kōbun ruijū Collection, Kokuritsu kōbunshokan Archive (June 1888), JACAR reference number: A15111537900.

[7] Rikugunshō, *Rikugun ikan chōhei kensa tetsuzuki no ken*, Rikugunshō Dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1887), JACAR reference number: C06080103300; Iijima, Op. Cit., pp. 452-53; Kuroda Toshio, *Mura to sensō* (Toyama-shi: Katsura Shobō, 1990. Original from 1988), p. 201.

[8] Algoso argued that the exam created a new conceptualization of who was male and female, since conscription was limited to whoever was defined as male. See: Teresa A. Algoso, "Conscription, Masculinity, and Hermaphroditism in Early Twentieth-Century Japan," in Sabine Frühstück & Anne Walthall in *Recreating Japanese Men* (Berkeley, CA: University of California Press, 2011), pp. 241-61. See also Margot Canaday's account of a similar process in

determined, who among them would continue to active service, *gen'eki* 現役, and who would become a reserves recruit, *hojūhei* 補充兵. Unlike active service, reserves recruits were called to serve only during wartime.[9] The following B-Class, *Otsu-shu* 乙種, consisted of men of the same minimal height, yet of a lower "body level," in terms of strength and build. The men in this category would all be recruited directly as reserves recruits.[10] In other words, men could pass the conscription exam and thus be conscripted to the Army without being enlisted into active service. Moreover, the moment of conscription could consequently differ from the moment of enlistment.[11] For that reason this dissertation uses the terms conscription and enlistment separately.

How did the Army distinguish between the body types? During the exam, the examiners would check the examinees in the nude, from the top of their head to the soles of their feet, inside and out; they would measure their height, weight, chest circumference, vision and hearing, and the internal organs, such as the heart, lungs, and digestive system. They would search for

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the American military in the early 20th century, in *The Straight State Sexuality and Citizenship in Twentieth-century America* (Princeton, NJ: Princeton University Press, 2009), particularly Chapter 1, pp. 19-54, and Ch.2, pp. 55-90.

[9] As mentioned in the second chapter, the military reserves consisted of two major categories: reserves recruits, who had no service experience like Yoshida, and former soldiers, who completed active service and entered the first and, a few years later, second reserves (*yobieki* 予備役, *kobieki* 後備役 respectively). Combined, they created a larger pool of potentially fit human resources.

[10] A selection of examples through the period, from 1875, 1888, 1907, 1928, 1940, 1944: Rikugunshō, "Honnen chōhei ikan shokumu gaisoku sōtei," Rikugun tassho Collection, Bōeishō bōei kenkyūjo Archive (February 1875), JACAR reference number: C08070045100, particularly pages 41-42; Naikaku, "Rikugun chōhei kensa tetsuzuki wo sadamu," Op. Cit., JACAR reference number: A15111537900; Rikugunshō, "Chōhei jimu jōrei shikkō saisoku-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1907), JACAR reference number: C06084276800; Kaetsu Mikio & Uchida Ginnosuke, "Chōhei kensa kenkyūroku," *Rikugun gun'idan* (Tokyo, Kobayashi Matashichi, 1928), in particularly pp. 57-62. Reprinted in Ichinose Toshiya (ed.), *Kindai nihon: guntai kyōiku・seikatsu manyualu shiryō shūsei, shōwa-hen*, Vol. 1 (Tokyo: Kashiwashobō, 2010); Army minister Hata Shunroku, "Chōhei jimu hōkoku kitei-chū kaisei no ken," Rikufu Collection. Bōeishō bōei kenkyūjo Archive (April 1940), JACAR reference number: C01005108400; Army minister Sugiyama Hajime, "Shōwa 20 nendo chōhei shintai kensa kisoku," Rikufu Collection, Bōeishō bōei kenkyūjo Archive (January 1944), JACAR reference number: C01007598500.

[11] In Japanese, the two were also termed differently – *chōhei* 徴兵 for conscription, and shōbo 召募 for enlistment.

diseases of different kinds, including mental illness.[12] It is important to note that the disease categories themselves changed over time, as medical knowledge and concepts changed and as the Army defined its priorities more clearly. For example, what Mutō defined as "physical weakness," *kinkotsu hakujaku* 筋骨薄弱 (lit. muscle and bone weakness) appeared from 1909 as a disease category within military disease statistics tables. As former Surgeon-General Iijima Shigeru argued, there was no parallel disease by that term outside of the military.[13] For the military, physical strength and endurance were paramount and thus physical weakness posed a threat equal to disease.

The conscription exam thus created a pool of information on the rate of various diseases and the level of physical fitness of all men over 20, since the garrisons and later – divisions – were geographically bound. Thus, it could be seen as a barometer for the state of health of the Japanese male population, especially since it was the only national exam for adult health.[14] There was no parallel for women.[15] Conversely, as Arakawa argued, the exam also increased interest in the individual's health in general, since it determined the ability of the military to enlist men to

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[12] See for example Iijima, Op. Cit., pp. 442-43, 483-504; Sabine Frühstück, *Colonizing Sex Sexology and Social Control in Modern Japan* (Berkeley: University of California Press, 2003), p. 28; See also sampling of accounts of the exam from 1875, 1888, and 1907: Yamagata Aritomo, "Honnen chōhei ikan shokumu gaisoku sōtei," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1875), JACAR reference number: C08070045100; Naikaku, "Rikugun chōhei kensa tetsuzuki wo sadamu," Op. Cit., JACAR reference number: A15111537900; Imukyoku, "Rikugun shintai kensa tetsuzuki kaisei ni kansuru ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1907), JACAR reference number: C06084281200.

[13] Iijima, Op. Cit., p. 535. There were various terms for physical weakness in the early Meiji. The latest expression, *kinkotsu hakujaku*, appeared in documents even before it became a category of disease statistics, at least as early as 1901. For example see: Rikugunshō, "Senpei" in *Rikugunshō dai jūyon-kai tōkei nenpō*, Tōkei Nenpō Collection, Bōeishō bōei kenkyūjo Archive (1901), JACAR reference number: C14020455600.

[14] This was not unique to Japan. Conscription tables have become a valuable source for historians of different countries. See for example, Roderick Floud, Annabel Gregory, & Kenneth W. Wachter, *Height, Health and History: Nutritional Status in the United Kingdom, 1750-1980* (New York, NY: Cambridge University Press, 1990), pp. 21-22.

[15] The section on health and disease in the military statistics appeared as 医事 *iji* from at least 1882 until 1886 when *iji* was replaced by *eisei* 衛生. See Rikugunshō, "Dai-12 iji," Tōkei nenpō Collection, Bōeishō bōei kenkyūjo Archive (1882), JACAR reference number: C14020431700; Rikugunshō, "Dai-6 Eisei," Tōkei Nenpō Collection, Bōeishō bōei kenkyūjo Archive (1886), JACAR reference number: C14020440400. See also Kei-ichi Tsuneishi, "C. Koizumi: as a Promoter of the Ministry of Health and Welfare and an Originator of the BCW Research Program," *History Scientiarum*, No. 26 (1984), p. 105.

its ranks.[16] Men who were shorter than the minimal height, and/or whose body level was not sufficiently strong and healthy would be discharged according to the judgment of the medical officer, who conducted the exam. Men who suffered from different categories of mental illness were exempt as well.[17] Each discharge reduced the pool of military human resources.

As the number of conscripts grew, the exam became more systematic and the criteria of fitness - more detailed.[18] However, throughout the history the main criterion was height; for a man of conscription age to be found eligible, he had to be sufficiently tall. Only then would various other physical traits matter and be assessed. Even the first conscription regulation from 1871 required men to be strong and healthy and be of minimal height (5 *shaku* 尺, roughly 1.515m).[19] In other words, the military perceived height as an indication of physical strength and ability. Consequently, height became the threshold for military service and as shall be discussed below, a line according to which the Army divided soldiers into roles within its framework, including medics. Hypothetically, one might posit that a shorter soldier could be more agile than a tall one, less conspicuous and so less vulnerable in battle. Moreover, height did not necessarily constitute a strong physique. The particular preoccupation with height thus requires explanation.

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[16] Arakawa Shōji, "Heishi-tachi no dansei-shi," in Abe Tsunehisa, Amano Masako & Obinata Sumio (eds.), *Dansei-shi 2: Modanizumu kara sōryokusen he* (Tokyo: Nihon keizai hyōron-sha, 2006), p. 139. See also Algoso, Op. Cit., p. 247.

[17] Military documents referred specifically to "imbecility," *chigu* 痴愚, already in 1875. But they did so separately from the list of diseases to be checked during the conscription exam. Later, at least from 1888, one finds "mental illness," *seishinbyō* 精神病, and from 1889 - "mental abnormality," *seishin ijō* 精神異常. With time more categories appeared as well and from 1920, the distinction categorized some afflictions as 2nd-B Class. This signified that the men, who suffered from these afflictions, had the potential to serve. See Rikugunshō, "Honnen chōhei ikan shokumu gaisoku sōtei." Op. Cit., JACAR reference number: C08070045100, p. 37; Rikugunshō, "Dai-yon chōhei," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (1888), JACAR reference number: C14020429000; Army minister Ōyama Iwao, "Chōhei ikan kensa kisoku," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1889), JACAR reference number: C10060184700; Rikugunshō, "Chōhei kensa kisoku oyobi rikugun shintai kensa tetsuzuki settei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (June 1920), JACAR reference number: C02030968200, particularly pp. 0310-0311. See also Shimizu Hiroshi's edited volume, focusing specifically on mental illness and the Japanese military: *Nihon teikoku rikugun to seishin shōgai heishi* (Tokyo: Fuji shuppan, 2006).

[18] See a summary of the reforms in Katō Yōko, *Chōheisei to kindai nihon* (Tokyo: Yoshikawa Kōbunkan, 1996), pp. 46-50.

[19] Iijima, Op. Cit., pp. 357-58.

Height as a Reflection of Strength

Why height? The centrality of height as a conscription criterion could be explained by changing perceptions of human size, physical growth, theories of race, and the transnational nature of military knowledge. During the Tokugawa era (roughly 1600-1868) popular sentiment considered the Dutch – the quintessential Westerners – as extremely tall. This image persisted in the 1860s to include Westerners in general.[20] One of the main goals of the new Meiji military was to assert Japan's stature as equal to the Western "other." Height was a physical manifestation of this wish for equality. The new regime's attempt to promote a Western diet was partly motivated by these perceptions. According to Cwiertka, advocating the adoption of Western nutrition was part of the "Civilization and Enlightenment" movement, *Bunmei kaika* 文明開化, aimed at making Japan an equal and accepted member of the leading Euro-American powers. Concurrently, the Meiji reformers perceived the Western physique as large and strong, and associated it with Western nutrition – particularly the consumption of meat. The emperor's public consumption of meat in 1872 was then aimed partly at encouraging the creation of a new and larger Japanese physique.[21]

The 19th century was also the era of the development of a variety of theories and practices concerning human growth and evolution, through attempts to define populations and groups. Physical anthropology and ethnology, Social Darwinism and eugenics, concepts of race, and the "East-Asian race" in particular, were in the process of formation.[22] When it came to race, researchers seemed to have focused more on physiognomy, the skin and the cranium, rather than

[20] Grant K. Goodman, *Japan and the Dutch* (Richmond, GB: Curzon Press, 2000), p. 125; M. William Steele, *Alternative Narratives in Modern Japanese History* (London, GB: RoutledgeCurzon, 2003), p. 25.
[21] Katarzyna J. Cwiertka, *Modern Japanese Cuisine: Food, Power and National Identity* (London, GB: Reaktion Books, 2006), pp. 18-21, 24, 27-29, 33.
[22] On the constructions of race in East Asia during this turbulent intellectual and political period see the Rotem Kowner and Walter Demel's edited volumes *Race and Racism in Modern East Asia: Western and Eastern Constructions* (Leiden: Brill, 2013).

on height, but nonetheless height also received attention in surveys and appraisals of populations.[23] Francis Galton's famous work on the relation between height and heredity is such an example. Galton explained height as a reflection of the "sum of the accumulated lengths or thicknesses of more than a hundred bodily parts".[24] In other words, height reflected the growth and total-build of the body. Two years earlier, Takahashi Yoshio, one of the earliest proponents of eugenics in Japan, who was influenced by Galton, compared average height in Japan and the West. He reached the conclusion that there was a gap of 4 *sun* 寸 (1 sun roughly equated 3.03cm) between the height of the average Japanese and Western male. The Japanese male was actually, he noted, equal in height to the average Western woman. Takahashi perceived this disparity as inferiority and was therefore, one of the reasons for his controversial recommendation for intermarriages between Japanese and Europeans to improve "the Japanese race."[25]

It is probable that these perceptions of height as a defining and valorizing factor of populations, colored the preoccupation with height over time. It was within this atmosphere that Japanese decision makers acted. However, Takahashi wrote his treatise over a decade after the promulgation of the first conscription law and referred to a number of factors in addition to height, such as weight and head circumference. His treatise, especially his suggested solution, was highly criticized.[26] Most importantly, when one examines the criteria for the medical exam elsewhere, one finds that height was a central element in the development of conscription exams across the board.

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[23] See for example Rotem Kowner, "Between Contempt and Fear: Western Racial Constructions of East Asians since 1800," in Rotem Kowner & Walter Demel (eds.), Op. Cit., pp. 101-112.
[24] Francis Galton, "Regression towards Mediocrity in Hereditary Stature," *Journal of the Anthropological Institute*, Vol. 15 (1886), p. 249.
[25] Takahashi Yoshio, *Nihon jinshu kairyōron* (Tokyo: Ishikawa Hanjirō, 1884), pp. 102-03.
[26] Sumiko Otsubo, "The Female Body and Eugenic Thought in Meiji Japan," in Morris Low (ed.), *Building a Modern Japan* (New York: Palgrave Macmillan, 2005), pp. 63-64.

As more and more countries expanded rates of conscription, they searched for objective criteria beyond one's personal history. The focus moved to the body of the potential recruit and height became its litmus test. High-ranking French medical officer Georges Morache wrote a few works on military medicine in France and elsewhere in the late 19th century. According to Morache, the first criterion for physical aptitude for military service in France was height, *taille*. The creators of the exam were preoccupied with creating a minimal height for service, as they searched for ways to filter out those not strong enough to withstand the exhaustion of military life - as they did already, he argued, in Ancient Rome. Morache surveyed how the minimal height changed in France numerous times from the reign of Louis XIV, indicating that height requirements depended on the targeted size of the military; as the size of the military grew, the required height gradually diminished to facilitate it. During the Napoleonic wars, he argued, height dropped more than ever before because of the desperate need for men and because the Army used also armaments that could be fired by shorter men. Finally, Morache associated height with the health and wellbeing of the population on the one hand, and with race on the other. Referring to works from the 1860s on anthropology and ethnology, Morache argued that the disparity of height between different areas of France could be explained by racial origins. Lowering the minimal requirement of height was thus also aimed at flattening the manifestation of this "racial disparity" within the population. Height, according to Morache, was then perceived as the indicator of health, racial origins, physical strength and the ability to fight and use weapons. Morache later added that height alone was not sufficient – to investigate a recruit's physical ability height was to be paired with factors, such as the size of the feet and the

development of the thorax, by measuring chest circumference. Yet, the latter came after the recruit filled the basic requirement of height.[27]

Exams in Prussia, Austro-Hungary and Belgium were also based on predetermined height requirements. Recruits who did not fill them, or suffered from incurable diseases, were exempt. Shortness was then paralleled to physical disability.[28] According to Floud, Gregory and Wachter, this was the case in Britain as well. As military service expanded to a larger portion of society the physical condition of the potential recruits became a matter of concern and height was its measure. While Morache noted race as a factor, the extent of human growth in Britain was connected to poverty and labor conditions, nutrition, disease, and by extension, also social class.[29] In other words, height carried with it both physical and social valence. This was the case also before the 19th century, but as researchers began surveying populations during the 19th century, height received more attention than before. These surveys followed and corresponded with military measurements of recruits. It is thus probable that the two influenced each other.[30] In any case, the growing European armies envisioned the extent of their potency resting on the shoulders of Goliaths - not Davids.

The Japanese conscription exam was most probably influenced by these European perceptions, which tied human growth with physical fitness, and was preoccupied with similar dilemmas. In 1943 former Surgeon-General Iijima Shigeru wrote a history of the Japanese soldier selection system, *Senpei* 選兵, where he affirmed that the roots of the exam and selection system were European. Iijima cited the aforementioned Ishiguro Tadanori, one of the founders of

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[27] Georges Morache, *Extrait du Dictionnaire Encyclopédique des Sciences Médicales: Article Hygiéne Militaire* (Paris: Libraire de l'Academie de Médecine, Libraire de la Faculté de Médecine, 1873), pp. 728-33.
[28] Morache, Op. Cit., pp. 721-23.
[29] Floud, Gregory, & Wachter, Op. Cit., pp. 2-3.
[30] See for example J. M. Tanner, *A History of the Study of Human Growth* (Cambridge, GB: Cambridge University Press, 1981), particularly pp. 116-40.

the Japanese military medical system, and his description of the first medical exam the Meiji military conducted in Osaka in 1871. In the exam, the military presumably followed the teachings of Dutch military physician Anthonius Franciscus Bauduin, who taught at the Osaka Military Hospital until the year before.[31] His students wrote down and translated his lectures, and published them as the *Senpeiron* 選兵論. According to the first volume of the work the purpose of the exam was to distinguish the weak, diseased and disabled, from the strong and healthy to fulfill the principle of *Fukoku kyōhei* 富国強兵, "wealthy country, strong army." The slogan represented one leading goal of the new Meiji regime, which envisioned the country's prosperity as depending on the existence of a robust military.[32] The Army's strength depended in turn on the physical strength of its soldiers. The conscription exam determined that strength.

Bauduin's *Senpeiron* elaborated the exam procedures and described how each part of the examinee's body was to be placed under inspection. While it did not include a section on height, it is possible that height elimination was the stage preceding the exam described in the essay. When the Meiji government promulgated the first conscription ordinance a year later in 1872, it was accompanied by regulations for the physical exam, including - Ishiguro stated – the measurement of height. The military department created the regulations based on the respective French and German laws, without consulting the freshly minted Military Medical Department. Only following Ishiguro's remonstrance, the government entrusted the definition of the physical

[31] Nakanishi Akira, *Nagasaki no olanda itachi* (Tokyo: Iwanami shoten, 1975), p. 218.

[32] Anthonius Franciscus Bauduin (oral rendition), Ogata Koreyoshi (translation), Horiuchi Hokumei (textual rendition), *Senpeiron, Maki no ichi* (Tokyo: Nagaharu Sono Publisher, 1871), p. 1; Andrew Gordon, *A Modern History of Japan* (Oxford, GB: Oxford University Press, 2003), p. 70.

exam, together with all matters concerning the management of the soldier's body, to the Medical Department.[33]

"Suitable Height" in lieu of Social Class

"Height" was a central factor in defining fitness, but "suitable height" was a relative and subjective category. It required definition of its own. In his account, Ishiguro described how challenging he found this definition, not only because he believed it determined the physical potency of the military, but also - its social makeup. After the military entrusted the exam to the Medical Department, Ishiguro conducted a research of height in four stages. The first two stages included measuring the height of sample groups to assess the average height of the eligible male population, as no relevant data existed. After he calculated an average height based on the measurements of 640 men, he reached the conclusion that the figure could not be considered representative. All of the men were of Samurai descent and from the major *Han* domains. Yet, the average height was to be used as criterion for conscription of men from the entire population. This was at the very beginning of conscription, when the concept of collecting members from the entire population – from every area and more importantly, every echelon of society - was very new. Consequently, he decided to repeat his research by creating a new sample group. This suggests that Ishiguro considered family and geographical background as tied to physicality – a line of thought that persisted throughout the examined period and echoed the French and British views described above. Ishiguro collected 517 strong and healthy men of the age of 20 from

[33] Ishiguro Tadanori, "Ishiguro Tadanori-shi no chōhei shintai kensa kaikyū-dan," in Iijima, Op. Cit., p. 445; Ishiguro Tadanori, Kaikyū kyūjūnen (Tokyo: Ōzorasha, 1994), p. 172.

different domains and classes to create a wider sample group.[34] Height thus also served as means for flattening the social background of the new military. It is possible to argue that it replaced class and thus was to facilitate the creation of a wide population based national army.

The next stage was to establish a minimal height requirement based on the sampling. This too was not to be taken for granted. Ishiguro deliberated on whether to set the criterion above, below or on the average that he found. For that purpose, he investigated parallel figures from other countries – the Netherlands, France and England – based on a Japanese translation of an unnamed Dutch book. What puzzled him was that the minimal heights seemed quite short, while height was supposed to be an indication of strength. Moreover, the limits did not fit the imposing figure of British soldiers whom he saw in Yokohama. To make Japan an equal, its soldiers were to be of the same striking height as the foreign soldiers he saw in person. However, setting the limit too high, especially when combined with other physical requirements would have necessarily resulted in a small military. The Dutch book explained that the limit was to be slightly lower than the average height precisely to facilitate the creation of a large military. Victory on the battlefield was increasingly determined by the power of numbers as more and more countries strove to expand their militaries through general conscription. Thus, Ishiguro decided that the minimal height would be slightly lower than the average he calculated – 5 *shaku* 3 *sun*, roughly 1.6m.[35]

Ishiguro used the methods of sampling and calculation, comparison and observation to establish the central condition for service to a perceived objective scale of criteria, instead of social background. Throughout, he believed that this quest for physical criteria was central to the country's future. The details of the physical exam changed over the years, but Ishiguro's

[34] Ishiguro, in Iijima, Op. Cit., pp. 445-446； Ishiguro Tadanori, 1994, pp. 172-73. The number of men Ishiguro measured differs in the two accounts.
[35] Ishiguro, in Iijima, Op. Cit., pp. 446-47; Ishiguro, 1994, p. 173.

deliberations persisted through time as one of the key dilemmas of conscription: how to commensurate physical requirements with the growing need for more and more bodies to fight. This could already be seen in Ishiguro's time, since the military eventually set the limit lower than the figure Ishiguro wrote in his memoir - at approximately 1.55m and from 1875, lower still at approximately 1.52m.[36] It was the dilemma of "physical quality" versus numbers, shared by different armies as the scale of mobilization expanded and as the definition of physical strength changed as well.

Numbers versus Fitness

As Mutō noted, the fact that he was enlisted into active service was the result of the specific circumstances of his time and the stage of the war in 1943. With every war, the Japanese military expanded its lines. To do so, it changed its conscription criteria. Between the initiation of the conscription exam in the 1870s and the Pacific War, one detects a gradual process of lowering the bar for service. This process could be detected, for instance, already in 1888 - the year of numerous military reforms following the Satsuma Rebellion (1877), as described in the 2nd and 3rd chapters. In that year, the military created a category of "temporary failure" in the medical exam; men who suffered from a list of diseases, and had the potential to be cured and subsequently serve were to return the following year to undergo the medical exam again, instead of being discharged.[37]

Another set of reforms aimed at widening the military's pool of reserves. During the Russo-Japanese War (1904-05), the military mobilized an extremely large number of men – almost a million – and according to Ōe, the vast majority of them were not in active service, but

[36] Iijima, Op. Cit., p. 426; Matsushita Yoshio, *Chōheirei seitei-shi* (Tokyo: Naigai shobō, 1943), p. 165
[37] Iijima, Op. Cit., pp. 452-53; Ōe, Op. Cit., p. 83; Naikaku, Op. Cit., Jacar reference number: A15111537900.

in reserves.[38] Expanding the ability to conscript into the reserves, thus had a significant implication on the military's fighting capability. In 1907, two years after the Russo-Japanese War, the Army determined that those who were hitherto classified as C-Class conscripts, *heishu* 丙種, but had the ability to perform lighter tasks, were promoted to the level of B-Class, instead of being, in effect, discharged.[39] That same year, the military divided the B-Class category into two sub-categories – 1st and 2nd B-Class – thus incorporating to it more eligible men. Mutō was eventually one of these enlisted 2nd B-Class recruits. By the time Mutō enlisted, there was another 3rd B-Class category he did not mention, created in 1939 two years after the beginning of the War in China.[40] The division into sub-categories thus widened the category of B-Class, and as a result, enabled the military to incorporate a larger number of potential recruits into its reserves. Concomitantly, it implied that ideally, the military preferred to enlist the first sub-category before the others. Enlistment of the second and third, like Mutō, demonstrated how desperate the Army grew for more serving men towards the end of the Pacific War.

During the long process in which the military lowered its standards for conscription, the interwar period stood out as a brief interlude when some requirements went down but some also went up. This contrast reflected the nature of the interwar period as a time of preparation for the next much larger scaled military engagement, while facing budgetary constraints and anti-armament movements. Japan participated in the First World War on the side of the Entente Powers, suffering over a thousand casualties – significant, though incomparably fewer than its

[38] Ōe, Op. Cit., pp. 93-94.
[39] Iijima, Op. Cit., pp. 454-55; Rikugunshō, "Rikugun shintai kensa tetsuzuki kaisei ni kansuru ken," Op. Cit., JACAR reference number: C06084281200.
[40] Rikugunshō, "Chōhei jimu jōrei shikkō saisoku-chū kaisei no ken," Op. Cit., JACAR reference number: C06084276800; Army minister Hata Shunroku, "Chōhei jimu hōkoku kitei-chū kaisei no ken," Op. Cit., JACAR reference number: C01005108400.

counterparts or its own casualties in previous wars.[41] The war provided Japan an opportunity to raise its status on the world stage, aligning itself with other major victorious world powers, such as Great Britain and the United States – a position, which Japan aspired to for many years. On the other hand, Japan refused to fight side by side with the powers on European soil, and preferred focusing its efforts on territories that were more useful for the growing Japanese empire. Consequently, Japan was able to enjoy the spoils of victory and expand its territory to include former German controlled territories, such as Shandong, as well as a group of islands in the South Pacific, including Palau and Saipan.[42]

The scale of the First World War was unprecedented in world history. The tools it used and the price it cost in human lives caused great shock and trauma, and created a widespread anti-war movement and global efforts for disarmament. In Japan as well, anti-war and anti-military sentiments were strong following the First World War and particularly, after the Siberian Intervention (1918-22); in the latter, Japan joined the Entente forces largely in the hope of deepening its influence in Manchuria, by entering Russia following the Bolshevik Revolution. However, the Japanese forces – around 70,000 men - were the last to evacuate as they got caught in a guerilla war against the Red Army in the brutal cold of Siberia. The campaign was so severe that the Army even selected and trained logistics soldiers to act as reinforcement medics, just as it did during the Russo-Japanese War over a decade earlier.[43] The campaign cost a large amount of money, over 2700 dead and unrest at home.[44]

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[41] According to Drea, Japan suffered around 400 deaths and 1000 wounded: Edward J. Drea, *Japan's Imperial Army: Its Rise and Fall, 1853-1945* (Lawrence, KS: University Press of Kansas, 2009), p. 137.
[42] Drea, Op. Cit., p. 141; Hōya Tōru, Ichinose Toshiya, Takahashi Noriyuki & Yamada Kuniaki, *Nihon gunjishi* (Tokyo: Yoshikawa Kōbunkan, 2006), pp. 341-42.
[43] Imukyoku, "Kangosotsu kinmu hojūheieki shichō yusotsu kyōiku kisoku seitei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (November 1918), JACAR reference number: C02030842800.
[44] Drea, Op. Cit., pp. 142-44; Hōya, Ichinose, Takahashi, Yamada, Op. Cit., pp. 343-44.

The heavy price in lives and resources as well as the international atmosphere raised more and more voices calling for disarmament and a reduction of the size and budget of the military.[45] Ironically, however, the 'war to end all wars' also created a new standard for mass mobilization. As Iijima recounted, the "European War" demonstrated to Japan and the world that the next military engagement would involve the implementation of the concept of "Total War";[46] the mass mobilization of a country's resources to support the war effort. This included expanding the size of the military, as well as harnessing the population at home in support of the war. When it came to the military itself, discussions took place within the military for reforming it into a, verbatim, "people's military" - both in terms of popular support, and by expanding the scale of conscription.[47] To facilitate this expansion, Iijima suggested changes in the standards of conscription in 1919, a year following the beginning of the Siberian Intervention. Serving as a high-ranking medical officer at the time, Iijima suggested enabling nearsighted men, who were hitherto disqualified, to be eligible A-Class conscripts; if their vision could be sufficiently corrected by the use of glasses they could serve as any other soldier. He also argued that men with certain bodily imperfections, who could not perform specific tasks, could still be enlisted to perform others. Thus, a man with flat feet could potentially serve in cavalry or as a medic, instead of infantry, which involved a great degree of walking. His suggestions were accepted the following year and the military created charts determining different vision requirements per military role.[48]

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[45] Fujiwara Akira, *Nihon gunjishi* (Tokyo: Nihon hyōron-sha, 1987), p. 164-170.
[46] Iijima, Op. Cit., p. 461.
[47] Fujiwara, 1987, pp. 169-70.
[48] Iijima, Op. Cit., 461-62, 470-73; 494, 506-07, 516-17; Rikugunshō, "Chōhei kensa kisoku oyobi rikugun shintai kensai testuzuki settei no ken," Op. Cit., JACAR reference number: C02030968200 (particularly pp. 00312-00315, 00320-00323).

While the military gradually found ways to incorporate more soldiers, who were formerly considered "physically imperfect" into its lines, it also raised the most important criteria of service, necessarily diminishing the number of recruits – the minimal height for service. In 1927, seven years following the above Iijima reforms, the military raised the minimal height for active service from 1.515m to 1.55m, as part of a major reform of the conscription law.[49] Due to the economic crises of the 1920s, following the initial prosperity brought by World War I, the military budget was more limited, presumably making the expansion of conscription more difficult.[50] The raising of the bar, however, was accompanied by steps to improve the level of fitness of the general population, to enable it to eventually reach this higher standard.

Throughout the years the government became increasingly preoccupied with raising the level of fitness of the general population, so they could live up to the bar of conscription. The Factory Act of 1911 could be seen as a reflection of this attempt. Though very limited, it was a landmark aimed at improving labor conditions in factories for women and children, curbing disease, pacifying unrest following the Russo-Japanese War, and also boosting productivity.[51] It could also be seen as a measure aimed at creating a more resilient and robust future urban pool of conscripts, particularly since the burden of service fell more heavily on the rural areas.[52] It did

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[49] The change from *Chōheirei* 徴兵令 to *heiekihō* 兵役法. See item 68-1 of the "Heiekihō shikōrei," in Rikugunshō chōbōka (ed.), *Heiji hōki shūran* (Tokyo: Senryūdō Kobayashi Matashichi, 1927), NDL reference number: 000000658211, p. 46. See also Takaoka Hiroyuki, "Sensō to "tairyoku": senji kōsei gyōsei to seinen danshi," in Abe, Amano & Obinata (eds.), Op. Cit., p. 180.

[50] Gordon, Op. Cit, 139-144.

[51] A series of protests and unrest characterized the early 1900s. One of its causes was the burden of military service and the heavy loss that particularly rural communities suffered in both the Sino-Japanese War of 1894-95 and the Russo-Japanese War. These losses had both personal and economic implications for the families who lost their loved ones. On rural unrest during the early 1900s see: Ann Waswo, "The Transformation of Rural Society, 1900-1950," in Peter Duus (ed.), *The Cambridge History of Japan, Vol. 6: the Twentieth Century* (Cambridge, GB: Cambridge University Press, 2008), pp. 541-605. On the expansion of the industrial class during and following the Sino-Japanese and Russo-Japanese Wars, and its perception as an imminent "social question" see Sheldon Garon, *The State and Labor in Modern Japan* (Berkeley, CA: University of California Press, 1987), pp. 23-29.

[52] Iijima argued that due to the physical nature of agricultural life, men from the countryside were often found fit for service, while city men – who spent a lot of time in sedentary positions, such as students and craftsmen – had a

not focus on adult men who already potentially failed the exam. Rather, its object were women, whose body, according to Frühstück, increasingly became the focus of concern from the 1910s as the bearers of future recruits, and children workers who were to become recruits themselves.[53]

This concern reached new heights during the 1920s and 1930s, when discussion on conscription became a discussion on the state of Japanese physicality in general. During the 1930s Koizumi Chikahiko raised concerns over the physical level of the Japanese population and its effects on the military. As late as 1937, while he was Surgeon-General, Koizumi wrote a treatise, bemoaning the deterioration of the level of Japanese recruits' physical strength and ability, particularly in comparison to other countries.[54] This too was not unique to Japan. For instance, according to Zweiniger-Bargielowska, anxiety over the perceived physical deterioration of the population developed in Britain following the First World War as well. The War revealed the low state of health of many of the potential British military recruits, leading to a high rejection rate.[55] This global concern resulted from the premonitions of an imminent and much wider military engagement.

The mode of action in Japan was the promulgation of various policies through the establishment of the new Ministry of Health and Welfare, the *Kōseishō* 厚生省, which tightened

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weaker build. As a result, the majority of the men who passed the conscription exam came from an agricultural background, causing the burden of service to fall more heavily on those from the countryside: Iijima, Op. Cit., p. 457.

[53] Frühstück, Op. Cit., pp. 3-4; Garon, 1987, pp. 27-29; Tadashi Hanami, *Labour Law and Industrial Relations in Japan* (Dordrecht: Springer Science & Business Media, B.V., 1979), pp. 37-38; Ehud Harari, *The Politics of Labor Legislation in Japan: National-International Interaction* (Berkeley, CA: University of California Press, 1973), pp. 18-19.

[54] Koizumi Chikahiko, *Gunjin Eisei* (Tokyo: Kinbara Shōten, 1927), NDL reference number: 000000770535.

[55] Ina Zweiniger-Bargielowska, "Building a British Superman: Physical Culture in Interwar Britain," *Journal of Contemporary History*, Vol. 41, No. 4 (October 2006), particularly pp. 601, 608-09. On the high rejection rate during the military medical exam, particularly of members of the working class, see also David Silbey, "Bodies and Cultures Collide: Enlistment, the Medical Exam, and the British Working Class, 1914-1916," *Social History of Medicine*, Vol. 17, No. 1 (2004), pp. 61-76.

the control of the military over the national body.[56] For example, from 1940 the government required by law that local municipalities conduct yearly physical exams of the under-aged to monitor their physical development. The criteria followed those of the conscription exam. A year later, the Ministry of Health and Welfare required the "weak" (*kinkotsu hakujaku*, the same term as the abovementioned conscription disease category) to undergo special training, to make them fit for military service when the time came.[57] This was by no means a new idea. Lone pointed out that already in 1894, following the beginning of the Sino-Japanese War, the Ministry of Education instituted more physical education in schools to cultivate a stronger future body of soldiers, as was the case elsewhere. The exercises were even accompanied by war songs.[58]

In many ways the Koizumi reforms were part of a long process in which the military harnessed public health and medicine to facilitate the mobilization of society, starting in the early Meiji but becoming more substantial following the First World War and the Great Kantō Earthquake of 1923. In the same year as the earthquake, Ishiguro Daisuke published his research on global wartime military medicine, comparing the state and the performance of different militaries in different wars. He emphasized the importance of mobilizing medicine during wartime and national disaster, not just to support and maintain the troops, but society in its totality:

As a nation, in the event of (wartime) mobilization, medical services are not simply limited to the military. They should be the focus of the nation in its entirety. Namely, maintaining population growth, diminishing the national death rate, protecting pregnant and nursing mothers, rearing infants, ensuring food supply, maintaining and increasing national nutrition etc. Additional

[56] Takaoka, Op. Cit., pp. 182-185.
[57] Naikaku (signed by Yonai Mitsumasa, Matsuura Shigejirō, Yoshida Shigeru), "Kokumin tairyoku-hō," Goshomei genpon Collection, Kokuritsu kōbunshokan Archive (April 1940), JACAR reference number: A03022439600; Takaoka, Op. Cit., pp. 186-88.
[58] Stewart Lone, *Japan's First Modern War: Army and Society in the Conflict with China, 1894-95* (London, GB: St. Martin's Press, 1994), p. 96. See also J.A. Mangan's edited volume on the history of sports and physical education and its tight connection with militarism in various European countries in *Militarism, Sport, Europe: War without Weapons* (London, GB: Frank Cass, 2003).

(activities include), managing and regulating (the work of) general health providers, the economic utilization of recovered wounded and sick soldiers, promoting laborers' efficiency together with the development of the munitions industry, maintaining the health of the strategically important domestic territories, enforcing communicable disease control, (establishing) facilities to provide emergency care in cases of natural disaster, consolidating official regulations concerning medical supplies, protecting and increasing (the supply of) raw materials, the use of substitutes and waste; we must research such matters. It is necessary to create an extensive, far-reaching, deliberate and meticulous plan."[59]

Medicine was to serve the nation, so that the nation could increasingly serve the military. This became even more extreme during the 1930s and particularly the 1940s, when numbers began to surpass physicality.

Every Body Counts

The deliberation between numbers and physicality gradually disappeared as the Japanese military expanded the scale of warfare in the late 1930s and 1940s, more than ever before. Following the beginning of the War in China in 1937 and particularly after Japan entered the Pacific War in 1941 the military loosened its conscription criteria more and more to the extent that the conscription exam eventually lost its meaning. As Japan prepared for its conflict with the United States and subsequent expansion deeper into the Pacific Ocean, it required more men to take over and manage its growing territories. Every body counted. The military consequently revised again and again what "able body" signified. For example, in October 1937, three months after the beginning of the War in China, the Army dropped the height limit for service from 1.55m to 1.50m.[60] In 1939 the Army created the aforementioned 3rd B-Class conscript

[59] Ishiguro Daisuke, *Senji eisei kinmu kenkyū-roku* (Tokyo: Kobayashi Matashichi, 1927. Original from 1923), pp. 1-2. Underline added.

[60] Hayashi Senjūrō, Sugiyama Hajime, "Heiekihō shikōrei-chū kaisei-su," Kōbun ruijū Collection, Bōeishō bōei kenkyūjo Archive (February1937), Item no. 68, JACAR reference number: A14100596900.

category.[61] In 1941 the Army combined the second reserves into the first and so extended the pool of available reserves to include older veterans as well. The military enlisted the first and second reserves recruits for service as well.[62] It even began enlisting men who were C-Class conscripts – those who suffered from various physical disabilities and weaknesses, or whose height was in a range shorter than the minimal height. Until then, the group was essentially dismissed from military service entirely. Consequently, lot drawing became superfluous - the military enlisted most men who underwent the exam for service.[63]

The policies for improving the Japanese physique did not succeed as planned either, since the level of physicality was not simply a matter to cultivate, but also to maintain; as Japan entered the Pacific War and as its strategic position worsened, so did the situation on the home front and as a result - the level of physicality of its people. According to Havens, due to the shortage of food, medicine, and other supplies, Japanese youth were shorter and thinner in 1946 than in 1937, while disease rates rose as well.[64] Yet, the military continued demanding more and more soldiers to fight and replace the many who died in battle or were incapacitated in other ways. Moreover, the Japanese empire was larger than ever, requiring men to control a vast geographical space. Loosening the conscription criteria served as means to supply these men, blurring the lines between the "military" and the "civilian" even further; the portion of society that was directly affected by the war, through the departure of a loved one grew to an unprecedented degree. By the time the military enlisted Mutō for active service in 1943 Japan's

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[61] Army minister Hata Shunroku, "Chōhei jimu hōkoku kitei-chū kaisei no ken," Op. Cit., JACAR reference number: C01005108400.

[62] Kuroda, Op. Cit., p. 210; Naikaku (signed by Konoe Fumimaro, Akita Kiyoshi, Tōjō Hideki, Oikawa Koshirō), "Heiekihō shikōrei-chū kaisei no ken," Goshomei genpon Collection, Kokuritsu kōbunshokan Archive (March 1941), JACAR reference number: A03022582900.

[63] Kuroda, Op. Cit., pp. 201-02.

[64] Thomas R. Havens, *Valley of Darkness: the Japanese People and World War Two* (New York, NY: W.W. Norton & Company, 1978), pp. 115-32, 142-46.

strategic position in the war increasingly worsened and its pool of eligible "physically strong" recruits dwindled. From 1944 conscription age dropped to 19.[65] In 1945 the military started enlisting 17 and 18 year olds for active service or into the reserve recruit pool, without undergoing the conscription exam at all.[66] It is also noteworthy that from 1944 the Army expanded conscription to include Korean and Taiwanese men.[67]

According to Ōe's estimates, the percentage of men who were called into active service from the total who underwent the conscription exam rose steadily from 20 in 1933 to 90 by 1945.

1933	1938	1939	1933	1945
20	40	50	77	90

Figure 13: Enlistment rates into Active Service

By the time of the defeat, the Army and Navy mobilized over 7 million men to fight – in active service and reserves. They comprised about 40% of the total number of Japanese men between the ages of 17 and 45.[68] 2,300,000 military men were estimated dead.[69]

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[65] Kuroda, p. 209; Naikaku, "Chōhei tekirei rinji tokurei," Goshomei genpon Collection, Kokuritsu bunshokan Archive (December 1941), JACAR reference number: A03022883200.

[66] This was mainly aimed at service in Japan itself, to deal with aerial bombing and the imminent Ally landing. See: Kuroda, Op. Cit., pp. 210-11. See also Kawai Masahiro, "Rikugun no bōei shōshū seido to sono jittai: okinawa ni okeru bōei shōshū," *Senshi kenkyū nenpō*, No. 3 (March 2000), p. 46. Ōe, Op. Cit., p. 87

[67] Until then, thousands served as volunteer soldiers, *shigenhei* 志願兵.The change in the conscription law took place in 1943, but enforced in 1944. Ōe, Op. Cit., p. 142; Naikaku (signed by Tōjō Hideki, Yuzawa Michio), "Heiekihō-chū kaisei hōritsu," Goshomei genpon Collection, Kokuritsu bunshokan Archive (March 1943), JACAR reference number A03022778600; Naikaku (signed by Tōjō Hideki, Iwamura Michiyo, Shimada Shigetarō, Andō Kisaburō), "Heiekihō-chū kaisei hōritsu," Goshomei genpon Collection, Kokuritsu bunshokan Archive (October 1943), JACAR reference number: A03022789200; Yamazaki Masao, "Rikugun gunseishi kōgai," in Matsumoto Ichirō (ed.), *Rikugun seiki ruijū: kenkyū shiryō (zen)* (Tokyo: Ryokuin shobō, 2009), pp. 125-28; Yamazaki Masao, "Gunsei yomoyama hanashi," in Matsumoto (ed.), Op. Cit., pp. 808-09. For more on the implications of race and the problematic position of Korean soldiers in the Japanese military, see Takashi Fujitani, *Race for Empire: Koreans as Japanese and Japanese as Americans during World War II* (Berkeley, CA: University of California Press, 2011), particularly pp.40-77. For the Taiwanese case see Kawasaki Masumi, *Kaette kita taiwanjin nihonhei* (Tokyo: Bungei shunjū, 2003).

[68] Ōe, Op. Cit., pp. 143-44.

[69] Hōya, Ichinose, Takahashi, Yamada, Op. Cit., p. 398.

2) Medic Criteria – How to Choose a Medic

While the criteria for military service were almost entirely physical, the reason Mutō believed the Army chose him specifically for the medic role were not physical. This section will reveal that the Army criteria for medics throughout the historical period were indeed first and foremost non-physical as Mutō believed. However, some physical considerations also came to play a certain role in the process of their selection, reflecting the position medicine held in the Army.

As described in the previous chapters, the medic category underwent numerous changes from the Meiji era to the Pacific War. As a reminder, the most significant changes the roles underwent concerned the location of their service – units versus hospitals:

Year	Conscripted Medics
1888-1899	Only Unit Medics
1899-1909	Unit Medics and Intermediary Field Hospital Medics
1909-1945	Unit and Army Hospital Medics
1919-39	Hospital and Reinforcement Medics (Reserves)[70]

Figure 14: Main Changes in Medic Service Location

[70] The category of "reinforcement medics," *hojo-kangosotsu* 補助看護卒, is an additional example of an ad hoc solution, turned into a long-term position. During the Siberian Intervention of 1918, the Army trained logistic soldiers as reinforcement medics. In 1919, the Army replaced the emergency measure with a permanent one – the enlistment of soldiers to serve as reinforcement medics. This additional category was to act as reinforcement mainly to Army hospitals and infantry units in wartime. The military eliminated this special category in 1939 and allocated its responsibilities to active service medics and reserves recruits. See: Hoheika, "Kangosotsu kinmu hojū heieki shichō yusotsu no sei wo haishi hojo-kangosotsu no seido wo mōkeru ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (January 1919), JACAR reference number: C02030875200; Eiseika, "Hojo-kangosotsu kyōiku kisoku seitei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (November 1920), JACAR reference number: C02030958200; Heibika, "Shichōhei tokumuhei oyobi hojo-eiseihei no haishi ni kansuru ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1939), JACAR reference number: C01004576100. See also: Yamazaki Masao, "Rikugun gunseishi kōgai," in Matsumoto (ed.), Op. Cit., p. 173.

With each military engagement the Army negotiated and renegotiated the medic roles. It initiated different ad hoc solutions as well as major changes to the system, according to the needs and available resources of the moment, and the lessons of the past.

The space in which medics served – unit versus hospital – affected the definition of the role and as a result, the process of their enlistment and the requirements of their role. Similar to the general loosening of the criteria for service, as time passed the differences between unit and hospital medics blurred and as subsequent chapters will show, the same medic could serve in both a hospital and a unit at different times in his service. This section will follow the changes in the process of medic selection and explore how the changing requirements of medics reflected the changed way in which the Army perceived the role and its place in the Army hierarchy.

Serious, Benevolent and Literate

When Surgeon-General Hashimoto Tsunatsune defined the medic as solely a unit role in 1888, medics became an inextricable part of their unit from the very start of their military service. As discussed in the second chapter, unit medics were to first acquire the skills of their unit and only then, did their commander choose the ones from among the trainees who would continue to medical training, making them at once both unit and medical soldiers. Unit medics thus underwent a double process of selection on two different occasions. During the conscription exam, the conscription officer selected soldiers to their units, based on the largely physical criteria of the particular unit - infantry, artillery, cavalry etc. Following basic training, the company officers were to select soldiers to serve as medics based on their performance during basic training. The commanding officers were to choose "those who were sincere, serious and

benevolent, who could read, calculate and write."[71] In other words what differentiated between the unit medics and other soldiers in their unit was their personality and level of education. Apart from a decade between 1923 and 1933, this was largely the process that unit medics continued undergoing all the way through the Pacific War.

Commanding officers thus had a heavy responsibility. Not only were they to monitor the soldiers' progress in training, they were also to be attuned to their personalities and capabilities. Some adopted certain measures to help them make their decision. Former-medic Satō Kazunori for example, served in Manchuria and during the Battle of Leyte of 1944 as a unit medic. He recalled that after three months of infantry training, his squad commander began the process of dividing the soldiers into more specific roles. To do so, he also made soldiers take a written exam. The questionnaire Satō and others filled included general questions, to help determine what the individual was suited for, including their family background.

> There was probably some connection to one's family background, since eventually… of the two of us who were selected (to train as medics), one had a niece who was a pharmacist and the other – me – my father served during the Russo-Japanese war, not as a medic, but as a stretcher-bearer... (Stretcher-bearers) would (carry) the wounded like so (gestures). They would undergo separate training, which conformed with medic (training). They would also learn some military medicine, *eiseigaku*, 衛生学. So those who had relatives with some connection to medicine were to write it as part of their personal history (in the written questionnaire)… Besides, as I said, after three months of training (the officer) more or less got wind of your personality. I believe that the squad officer was also influenced by that (in his decision). (Satō Kazunori)[72]

Both the official criteria and Satō's interpretation of his own selection to the role were based on non-physical characteristics. In Satō's case the commanding officer actively sought information from the soldiers to assist him in making his decision. His method itself was based on the

[71] Naikaku (government document, signed by Prime Minister Kuroda Kiyotaka and Army Minister Ōyama Iwao), "Chokurei dai-kyūjū-ni-gō, rikugun eiseibu gen'eki kangoshu hojū jōrei," Goshomei genpon Collection, Kokuritsu bunshokan Archive, JACAR reference number: A03020028200.
[72] Author interview with Satō Kazunori, 17 December 2013.

precondition that the soldier was sufficiently literate, automatically screening out those who could not fill in the questionnaire in the first place.

From 1909 the Army used conscripted soldiers to serve both as unit and hospital medics. The process hospital medics underwent was similar to unit medics, but in reverse. Like unit medics, hospital medics were to be "sincere, serious and benevolent, and literate" (篤実温厚文筆). But, unlike unit medics their peers were the hospital staff. They underwent basic training with soldiers, whose home base was in the vicinity of the hospital – usually infantry units. However, following basic training, they continued undergoing medical training in an Army hospital where they remained after training and served as medics.[73] In other words, unit medics returned to the soldiers with whom they underwent military training, to be their medical care provider. They were to meet the same requirements of their peers, in addition to their medical skills. Hospital soldiers, on the other hand, served largely with the men they underwent medical training with, doctors, nurses at times, and other hospital staff. Their peers were non-combatants. Unit medics served in a quintessential military environment. Army hospitals were a medical environment, though they were officially Army units as well. The subsequent chapters will argue that even in the unit setting, medics often served in a smaller hospital-like environment and that hospital discipline grew more militarized with time. However, this distinction remained as a basic point of divergence between the two medic roles.

Another important difference between the selection processes to the two roles might have also stemmed from an additional quintessential military difference between them – rank. As discussed in the second chapter, according to the 1888 reform, to cultivate trust and respect

[73] Rikugunshō, "Kangosotsu no hojū ni kansuru ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1909), JACAR reference number: C06084700100; Naikaku (signed by Katsura Tarō and Terauchi Masatake),"Rikugun hojūrei-chū kaisei," Goshomei genpon Collection, Kokuritsu bunshokan Archive, JACAR reference number: A03020796900.

towards the unit medic and thus provide him with the authority the Army deemed necessary for a care provider, the Army granted unit medics a higher rank than other soldiers in their unit - private first-class.[74] When the Army revived the hospital medic role in 1909, the Army assigned it the lower rank of private second-class.[75] As mentioned above, unit medics were selected after basic training, whereas hospital soldiers were selected already during the conscription exam. According to Yamazaki, because unit medics were of a higher rank than hospital medics, the Army was to be more careful in selecting soldiers for the role.[76] Selection of unit medics was thus not only concerned with ensuring the right people for the role, but also preserving the credibility of the ranks. That required more time, and thus unit medics were to be chosen after careful consideration. Hospital medics rose to the rank of private first class only after a year - and thus could be chosen in a quicker manner during the conscription exam. In other words, more than the actual performance, it was the rank, according to Yamazaki, that determined the division of selection.[77]

Despite the similarities between hospital and unit medics, the fact that they underwent the same medical training, that they were to fill similar requirement in terms of personality and skills, and that in many ways, their roles were essential the same, their selection process was different, because of the different nature of the two roles. This difference in selection had one more

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[74] Hashimoto Tsunatsune, "Eiseibu gen'eki kangoshu hojū jōrei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (12 October 1888), JACAR reference number: C06080636600, pp. 2397-8.

[75] Naikaku (signed by Katsura Tarō and Terauchi Masatake),"Rikugun hojūrei-chū kaisei," Op. Cit., items 99 & 141, JACAR reference number: A03020796900.

[76] Yamazaki Masao served in the Army in a variety of functions during the 1930s and 1940s. He was also placed in charge of military personnel mobilization, management and enlistment for over a decade. Following the Pacific War he emerged as one of the main forefathers of the research of Japanese modern military history. Matsumoto Ichirō, "Kaisetsu," Matsumoto (ed.), Op. Cit., pp. iii-iv.

[77] Yamazaki Masao with Katogawa Kōtarō & Shirai Masatoki, "Gunsei yomoyama hanashi, 11," Matsumoto (ed.), Op. Cit., p. 613.

manifestation, which reinforced this different perception of the roles within the Army framework – the physical difference of height.

Serious, Benevolent, Literate - and Relatively Short

For one decade – between 1923 and 1933 – both unit and hospital medics were conscripted to their roles during the conscription exam. Following 1933, unit medics returned to the previous situation whereby they were first chosen to their unit and then – from among their peers, while hospitals medics continued being allocated to their role from the very moment of their conscription exam.[78] This decade is particularly telling, since it allows a comparison between the two roles on common grounds; the same conscription officer would decide at the same time, who would serve as unit medic and who – as hospital medic. How did he make this decision? In 1927, four years after this change in the selection process, the military promulgated a new conscription law – the "Military Service Law." The new law enacted new conscription procedures and included a chart that was to guide the conscription officers in their complicated task. This chart is invaluable, because it allows a peek into the processes of selection and place medic criteria in a wider perspective.

The chart divided the military roles into three sections: "physical requirements," "other," and "skills and professions." According to the chart, infantry soldiers were to have a certain level of vision, which differed according to conscription classes. They were to have especially strong legs, high physical endurance and perfect hearing. Some of them were to be gunsmiths, tailors and shoemakers. Military engineers were to have the same level of vision as infantry soldiers and be physically strong. As many as possible were to know how to manipulate a ship and different

[78] Rikugun gun'idan (ed.), *Rikugun eisei seido-shi* (Tokyo: Kodera Akira, 1913), pp. 359-60.

engines, were to have knowledge of construction and woodwork, and some were to have experience in fields, such as metalwork, stonemasonry, excavation, engineering and architecture. Tank soldiers were to have better vision than infantry soldiers, perfect hearing, physical strength, a calm disposition, and agility. The criteria then fluctuated between physicality and specialized levels of professional skills and knowledge.

Medics differed from the rest due to an almost exclusive emphasis on non-physical criteria and non-professional skills. Under "other" the chart stipulated that medics were to have "a kind personality, suitable for treating patients." All the other Army roles included physical requirements under this bracket. Some included also non-physical requirements like tank soldiers, who were to have a calm personality as well. However, this requirement was in addition to a variety of other physical traits. Under "skills," medics were to have "as much learning as possible."[79] Unlike engineers, they were not required to have any specific knowledge of medicine, but the ability to learn. The only physical requirement was that medics were to have the same level of vision as infantry soldiers. In 1937, the table added another requirement of hospital medics – to have perfect hearing. This requirement was also not related to a level of physical strength. Unit medics, however, were to continuously meet the same requirements of their respective units, which were the various physical requirements written in the chart for all the other roles. [80] Both unit and hospital medics were then noticeably different from other roles, since what consistently set the medics apart were largely non-physical traits – personality and

[79] Shirakawa Yoshinori, "Heiekihō shikō kisoku," *Kanpō* (30 November 1927), pp. 59-60, NDL reference number: 000000078538.

[80] Sugiyama Hajime, "Heiekihō shikō kisoku-chū hidari no toori kaisei-su," *Kanpō* (22 February 1937), p. 575, NDL reference number: 000000078538. The 1937 chart also specified that a few medics were to be metal craftsmen, since they were to serve as medical engineers under a sub-category of hospital medics. A few were also to know how to drive – presumably to serve in patient evacuation units. About the role of medic engineer, *makōsotsu* 磨工卒, see Suzuki Noriko, "Nihon rikugun ni okeru kangosotsu to makōsotsu no kankei," in *Nihon ishigaku zasshi*, Vol. 56, No. 2 (2010), p. 167.

level of education. When it came to the differences between them however – they manifested themselves largely according to the physical requirements of their roles.

There was an additional physical requirement, which did not appear in the conscription charts, which differentiated hospital and unit medics even further – hospital medics were to be shorter than soldiers serving in most of the military roles, including unit medics. While the government made the 1927 law and its later versions public, it added a confidential addendum to the law, which included additional criteria conscription officers were to take into account in the selection process. These criteria were tables dividing the military roles according to height. As the previous section described, to enter active service a soldier had to be of minimal height. The addendum broke down the acceptable height range into sub-categories according to role. The military changed the division and definition of the groups over the years as the roles changed and as the military requirements of height gradually lowered. Hospital medics, however, were consistently in the lower brackets. According to the 1927 addendum, unit medics were again to have the same physicality as the soldiers of their respective units. However, when it came to hospital medics the chart specified that "the allocation of a large number of men who are tall in comparison to the different units sent to battle should be avoided."[81]

As described in the previous section, during the late 1930s and especially in the 1940s the criteria of height as a bar for military service increasingly lowered. The drop of height was manifested in the inner division of conscripted soldiers into roles as well. So much so that by 1944 the military did not even specify the criteria with numbers, but with relative terms. Within this division, the military consistently placed Army medics in the group of the shortest soldiers. It is important to note that medics were not alone in this group. In 1937 even infantry were

[81] Chōboka, "Chōhei jimu kokoroe kunrei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (December 1927), items 37-6, 37-7, JACAR reference number: C01001018400.

included in the same bracket. However, from 1939 cavalry, infantry, and the various categories artillery soldiers were all in the taller brackets. Moreover, the tables consistently added a special comment to ensure that medics were not overly tall within their height bracket.

	1937	1939	1944
Height Group 1	Roughly 1.58m	Roughly 1.57m	Relatively Tall
Height Group 2	Roughly 1.55m	Roughly 1.54m	Medium Height
Height Group 3	**Roughly 1.52m** Army medics	Roughly 1.52m	**Relatively Short** Army medics
Height Group 4	-	**Those who reach 1.50m** Army medics	-
Comments	The selection of medics should avoid the appointment of many men who are tall in comparison to other army fields.	The selection of medics should avoid the appointment of many men who are tall in comparison to other army fields.	-

Figure 15: Sub-division of Height according to Military Field[82]

As discussed in the first section, the central factor to determine physical strength in the military was height. If the Army consistently placed hospital medics in the shortest brackets and specifically noted they were not to be overly tall, it implied that the Army considered their physical capabilities as secondary to other combatant soldiers. If one goes even further back, one finds earlier evidence of this trend. The Army began conscripting hospital soldiers in 1909. However, as discussed in the previous chapter, in 1899 following the Sino-Japanese War it created an earlier hospital medic role as a compromise to serve only in field hospitals and patient transportation units. The intermediate medics were to be literate, like unit medics. However, while unit medics followed the requirements of their units, the intermediary medics were to be shorter than most soldiers throughout their history - from 1899 and until the elimination of the

[82] Based on Chōboka, "Chōhei jimu kokoroe-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1937), item 37-1, JACAR reference number: C01001440000; Heibika, "Chōhei jimu kokoroe-chū kaisei no ken," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (April 1939), item 37-1, JACAR reference number: C01001684300; Sugiyama Hajime, "Chōhei jimu kokoroe-chū kaisei no ken kunrei," Rikugun dainikki Collection, Bōeishō bōei kenkyūjo Archive (November 1944), item 37-1, JACAR reference number: C01007855600.

role in 1909. If one jumps then to 1920, three years before the enlistment of both hospital and unit medics during the conscription exam, one finds both the hospital medic and the newly created reinforcement medic also in the lowest conscription bracket. Finally, in 1923 when unit medics were also selected during the conscription exam, they also appeared in the height tables as a category of their own. Their appearance demonstrated clearly the distinction between hospital and unit medics – hospital medics were to be short. Unit medics were to be tall, but in their case too – to be among the shorter soldiers within the tall group.

1899	1904	1907	1920	1923	
Intermediary Field Hospital Medics	Intermediary Field Hospital Medics	Intermediary Field Hospital Medics	Hospital Medics	Hospital Medics	Unit Medics
Minimum 1.55m	Minimum 1.50m	Minimum 1.55m	Minimum 1.58m	Minimum 1.58m	Minimum 1.61
Second to last category. Shorter than all Army roles, except Army tailors and Army shoemakers.	The shortest of all Army roles, except low-ranking logistics soldiers.	The shortest of all Army roles.	The shortest of all Army roles, except medical engineers, military musicians, ship builders, Navy medics and accounting soldiers.	The shortest of all Army roles, except medical engineers, military musicians, ship builders, Navy medics and accounting soldiers.	Unit Medics could be in the tallest group of 1.61m, but among the shorter in the group.

Figure 16: Early Medic Height Requirements[83]

One might argue that in a military framework that required strong soldiers to fight, it was understandable that it would prefer to allocate those it deemed stronger – in this case, the taller

[83] Katsura Tarō, "Meiji 31 nen kunrei otsu dai 3 gō rikkaigun chōhei shinchō teigenhyō-chū no tuika no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (April 1899), JACAR reference number: C10061961500; Gunmukyoku hoheika, "Rikkaigun chōhei shinchō teigenhyō-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (December 1904), JACAR reference number: C03026020900; Rikugunshō, Gunmukyoku hoheika, Kyōiku sōkan, "Rikkaigun chōhei shinchō teigenhyō-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1907), JACAR reference number: C06084276900; Hoheika, "Rikkaigun chōhei shinchō teigenhyō-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (March 1920), JACAR reference number: C02030926100; Hoheika, "Rikkaigun chōhei shinchō teigenhyō-chū kaisei no ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (February 1923), JACAR reference number: C02031102900.

soldiers – to battlefield roles. Moreover, as a medical role, it also stands to reason that the special requirements of medics were largely non-physical, albeit in a military framework. The result, however, was that medicine came second to combat in the military ranking system and as a result, to a certain extent in popular regard. The military was an institution that glorified combat and physical strength and resilience. By consistently defining medics by non-physical requirements and in the case of hospital medics – as shorter than any other Army role - it indirectly contributed to the development of a perception of medics as weaker than other combatant roles and in some cases, of not being military enough. Even though, many medics died during duty and even though the lives of other soldiers depended on them, popular perceptions that trivialized medics developed within the larger Army framework and many of them centered on the body.

3) The Medic Image in the Military

Yamashita Keitarō, widely known by his stage name Yanagiya Kingorō, or simply Kingorō for short, came to be known as one of the great *Rakugo* masters – a form of traditional comedic storytelling known for its use of puns. He also largely contributed to the establishment of a new genre in the 1930s - "military *Rakugo*," *heitai rakugo* 兵隊落語 – which bases its comic tales on military life. Kingorō based his skits on his own experiences in the military and would tell them in both civilian and military settings. He was enlisted as an A-Class conscript and sent to Rana in Korea in 1920 as member of an artillery unit. He was discharged soon after due to an illness, which caused him to lose all of his hair. He termed his baldhead, which gradually became his trademark, the "gift" he received from the military. In 1931 he was again

enlisted to the Second Reserves and joined the Azabu infantry regiment in Japan, and in 1938 he travelled in China to entertain the troops.[84]

In his military skits Kingorō portrayed a soldier of his namesake - Yamashita Keitarō. Somewhat reminiscent of Jaroslav Hašek's *The Good Soldier Švejk*, Yamashita repeatedly got himself into problematic and comic situations. For example, one of the skits he performed in the early 1930s focused on the moment of the conscription exam:

Conscription officer: Hey, Yamashita, you passed as an A-Class conscript!
Yamashita: Ah, passed. Damn. (*shimatta* しまった)
Conscription officer: What???
Yamashita: Um, I said I probably locked the front door of my house before I came (*shimete kita hazu desu* しめて来たはずです. Word play between "damn" and "shut").
Conscription Officer: Aren't you happy to become a soldier?
Yamashita: Ah, yes, h-a-p-p-y.
Conscription officer: What? Are you crying??
Yamashita: Yes, tears of joy.[85]

In the different skits, Yamashita continued fumbling as he addressed his superiors. Time and again he tried to avoid as much danger and military responsibility as possible, and to protect himself in a framework to which he clearly did not suit, or particularly wish to be part of. And yet, Kushner argued that the military allowed Kingorō to perform, and even enlisted him to entertain the troops, as part of a gradual process whereby the government mobilized comedy for propaganda purposes. Some of Kingorō's skits were recorded, and according to Kushner, were widely disseminated during the mid 1930s.[86] One of them was entitled "Kingorō as Medic," *Kingorō no kangohei* 金語楼の看護兵.

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[84] Takemoto Kōzō, "Sensō to engei" in Morinaga Michio (ed.), *Morinaga Michio sensei koki kinen ronshū: geinō to shinkō no minzoku geijutsu* (Osaka: Izumi shoin, 2003), pp. 81-82; Yamashita Keitarō, *Nakiwarai gojūnen: denki* (Tokyo: Ōzorasha, 1998), pp. 71-72, 120, 151.
[85] Yamashita, Op. Cit., p. 108.
[86] Barak Kushner, *The Thought of War: Japanese Imperial Propaganda* (Honolulu, HI: University of Hawaii Press, 2006), pp. 93-116.

Kingorō created the skit in 1933, two years after the Manchurian incident, and the same year of Japan's withdrawal from the League of Nations. The medic skit followed soldier Yamashita when he was already placed in an artillery unit. It began when an officer called him over for a short conversation:

Officer: Hey Yamashita! Yamashita! Come here for a moment. You have applied to become a medic. Do you have any knowledge of medicine? (*igaku no hō wa, akarui ka?* 医学の方は明るいか？)
Yamashita: Yes, I do! (*akarui de-arimasu* 明るいであります)
Officer: You're knowledgeable then. To what extent?
Yamashita: Completely knowledgeable.
Officer: Is that so. To what degree are you knowledgeable??
Yamashita: I am practically as bright as day (the word for knowledgeable, *akarui* 明るい, also signifies bright).
Officer: Come on, be serious. Not that kind of brightness. I am talking about the understanding of medicine.
Yamashita: Whether I have little knowledge of medicine or none - I absolutely want to become a medic!
Officer: We can't take someone who doesn't even know how to take a pulse, simply because he says he wants to.
Yamashita: But I do know how to take a pulse. I believe a person who has a pulse is alive, and he who does not have a pulse is dead.
Officer: Obviously. But you say you have a little medical -
Yamashita: -knowledge, yes! I feel confident in my ability!...[87]

During the rest of the skit Yamashita continues to repeatedly express his will to serve as medic, due to his professed dedication to the Imperial Army and his determination to serve his country. The skit then takes a turn, and we find Yamashita in the midst of stretcher-bearing training. We understand that he managed to exhaust the officer into complying. Yet, as expected, Yamashita does not do so well in training. 'Who turned left, while everybody else turned right?' the drilling officer asks. It was of course Yamashita. The officer scolds him and explains to him that unlike simple military marching, while carrying a stretcher, such a mistake results in dropping the wounded. Yamashita insists that there was no danger of that happening, since no one was on the

[87] Yanagiya Kingorō, "Kingorō no kangohei," *Shodai Yanagiya Kingorō meien rakugoshū (2)* (Columbia Music Entertainment, March 1934, 2008, CD).

stretcher in the first place. Later in the skit the officer scolds him yet again for moving slowly in training, but being very quick to take a break. 'How could a person like that serve as medic?' the officer asks. 'What would you do as a medic if you saw a member of the artillery unit wounded?' Yamashita replies that he would tell the wounded to hold on and would then raise him up. Alternatively, he would just tell the wounded to go to the hospital. And so it continues.

It is noteworthy that of all possible roles, Kingorō chose the medic as the object of fictional Yamashita's desire - the same Yamashita who incessantly tried to shirk responsibility and any kind of risk. In that, it seems, lay Yamashita's zeal - he perceived the role as low-risk, or at least of lower-risk than a regular artillery soldier. Though he insisted it was for the good of his country, it seems that he wanted to serve as medic because he believed he would be safer. The two officers, on the other hand, believed that to be a medic one needed some medical knowledge and understanding, responsibility and dedication to the role. Yamashita clearly was bereft of these qualities, but he still managed to persuade his way into training.

The skit demonstrated the paradoxes, which the image of the role encapsulated within the military framework. According to the skit, some considered the medic role as a "way out," a means for a soldier to escape danger by removing himself from the act of fighting, even if not from the scene of battle itself. It was perceived safer to treat the wounded on or behind the battlefield, than to fight and risk wounding, especially by common soldiers like Yamashita, or those who were removed from the reality of combat. On the other hand, those who experienced battle understood what medic service entailed and recognized the danger medics faced, as shall be discussed in the two subsequent chapters. For them, the medic was the facilitator of care, on whose actions, knowledge and skills the wounded depended. The two officers in the skit recognized the importance of the role and thus – of maintaining the level of those who served in

it. The first officer even assumed a necessary familiarity with medicine before undergoing medic training – which was not part of the official military criteria as discussed above. The skit also implied that like any role, not everybody that the army allocated to it, was necessarily suited for it. In Yamashita's case, his zeal for the role triumphed over his almost striking unsuitability to the detriment of his future fictional patients.

Comedy is built upon mocking basic assumptions and tropes that the audience shares or is familiar with. The humor of the above skit lied precisely in the gap between what medics were supposed to be and Yamashita's clear divergence from that image. It relied on the audience's familiarity with the concept of medic as a military medical caregiver, as well as its preconception as a safer, less combative role. As mentioned above, Kingorō's skits were very famous and widely disseminated. Arguably, the ambivalent image of the medic role it presented reflected contrasting views of the medic role in the Army and society. This image became even stronger as warfare expanded during the War in China and the Pacific War.

Medical Caregivers with an Imperfect Body

Suzuki Tatsuo was born in Hiroshima prefecture. He volunteered to serve as a medic in the Navy in 1942 when he was only 14 years old. The Navy enlisted its high-ranks from among volunteers and its lower ranks - from among volunteers and conscripts. As the Japanese empire began its expansion to a maritime empire, the centrality of the Navy in creating and maintaining it grew. Thus, as of 1937, the Navy began to rely on conscripts more than before to expand its lines and during the Pacific War it also lowered the minimal age of its applicants from 17 to 14.[88] Suzuki was one of the youngest applicants. To join the Navy, the first stage he was to undergo

[88] Toyama Saburō, *Kaigun* (Tokyo: Kondō Shuppansha, 1991), p. 62-63; Ōe, Op. Cit., pp. 140, 144-45.

was the conscription medical exam. Though the medic role was significantly different in the Army and the Navy, Suzuki's story arguably reflects an image of the medic that existed in the military in general, especially since both Army and Navy soldiers went through the same initial stage before entering service – the conscription medical exam.

My hearing was bad. Those with bad ears, if they went to Manchuria, a cold place - they could catch meningitis, so I was sent back... I was the only one sent back from the *Giyūgun* 義勇軍.[89] I was embarrassed. So, I applied to the navy. I was only 14 years old... After I was sent back from the *Giyūgun* I worked at the post office for six months. After half a year I applied to the navy. But my hearing was bad. I wanted to be a military pilot, but I thought it wouldn't work (because of my hearing), so as my first priority I applied for the role of medic, *eiseihei*. Then, I underwent the physical exam. I didn't have any (apparent physical) problem. The medical officer checked me and pulled me out in front of everybody and said 'here is a slacker… There's nothing wrong with him, but he put 'medic' as his first choice.' He scolded me in front of everybody. Then, when I told him the reason, he (physically) checked me once again and found a tympanic membrane perforation - that is, there was a hole the size of a matchstick in my eardrum. So, he said to me 'you won't be able to be an army pilot. Well, good luck then as a medic' and so I applied to be a medic… I made a decision. I went to the *Giyūgun* and was sent back. So, I figured, I won't be able to be a military pilot, so a medic - as a medic I would be alright. Anyway, I really wanted to join the military. At the time, everybody wanted to. So, well, boys two years younger than me applied and joined. Those who were up to my age, they became pilots… went through flying training and as a result also died as special attack soldiers, *tokkō* 特攻. Thinking back today, I was lucky. It was thanks to my serving as medic that I managed to return alive. (Suzuki Tatsuo)[90]

Suzuki's account sheds light on different perceptions of the medic role, in the past and in hindsight. At the time, Suzuki believed that his imperfect physicality prevented him from serving in more physically taxing roles, especially after he was sent back from the Youth Voluntary Army. He calculated that the medic role would probably require less rigid physical qualities, and was thus a good compromise that would still have allowed him to volunteer. However, during the medical exam his choice met with anger and contempt. The conscription officer assumed that

[89] The "Youth Voluntary Army," *Manmō kaitaku shōnen giyūgun* 満蒙開拓青少年義勇軍, sent boys and girls largely between the ages of 15-19 to Manchuria to cultivate the land and populate it between 1938 to 1945. From 1940 Korean youths shipped out to Manchuria as well. For more see: Jin'no Morimasa, *Sensei wasurenaide!: "Manshū" ni okurareta kodomo-tachi* (Tokyo: Nashinokisha, 1988); Shiratori Michihiro, *Manmō kaitaku seishōnen giyūgun-shi kenkyū* (Sapporo: Hokkaido Daigaku Shuppankai, 2008).

[90] Author interview with Suzuki Tatsuo, 23 Dec 2013.

a boy or man who had no physical disability was to volunteer for the most combative roles. The fact that Suzuki volunteered for service at all at such a young age was taken as a matter of course.

The conscription charts did not support the conscription officer's assumption. The charts stipulated that Navy medics were to have a high level of vision, which equated that of A-Class infantry soldiers in the Army. They were to have perfect color vision as well, and be of a strong and robust body. The additional height charts, as discussed above, often positioned them above Army medics in height, though they were also in the relatively lower height brackets. Nothing additional was mentioned concerning education or personality - only a strong physique, which was precisely what Army medics were not required to have.[91] And yet, for the conscription officer Suzuki encountered, it was shameful to even volunteer for the role of medic, if otherwise fit for combat. Only after he checked Suzuki's ears did the conscription officer retreat from his tirade and replaced it with a concession; if Suzuki were indeed "imperfect," it was acceptable for him to serve as medic. In other words, medics were associated to a certain extent with physical imperfection as a way to justify their non-combatant nature.

Yoshida Takashi provided a similar explanation to his selection to an Army medic role. Yoshida was born and raised in Ibaraki prefecture. He underwent his conscription exam in 1941 before the Pacific War broke out, when he was 20 years old. He was categorized as a 2nd B-Class conscript following the military medical exam and was informed that he was to be a reserves recruit medic. For that purpose, he underwent three months training and was then sent home. Two years later he was called to active duty, through an emergency measure following the Battle of Guadalcanal. In September 1943 he found himself on his way to the "Southern Territories,"

[91] Sugiyama Hajime, "Heiekihō shikō kisoku-chū hidari no toori kaisei-su," Op. Cit., p. 575.

Nanpō 南方 and the jungles of New Guinea. When asked to explain his selection for the medic role many years later, Yoshida replied the following:

There was a conscription exam, *heitai kensa* 兵隊検査, at (age) 21. Actually - after you turned 20. Then - at that time, you would usually just be made a simple infantry soldier... But, you see, my hearing, it wasn't good. So, I was not fit to be an infantry soldier… That pretty much settled it. (Yoshida Takashi)[92]

If there weren't anything wrong with my ears, I would have surely been made an infantry soldier... I had a small hole in the eardrum of both ears… That is why I wasn't made an infantry soldier...

But why do you think you were chosen for a medic? Why not a different non-combat role? In something like the Accounts Division (*keiribu* 経理部) *for example?*
Well, the medical officer who conducted the exam - it depended on his judgment.

But, do you have your own interpretation for why he thought you right for this particular role?
Well, because the medic role is easier (*raku* 楽). Looking back today, I can say I was lucky. Other men who went through the conscription exam with me, almost all of them were infantry soldiers. Infantry soldiers were like disposable goods. Roughly 80% of infantry soldiers were from a farmer's background... So, farmers' sons, these young men, for them the army was a place that gave them good wages… When looking at (my) unit, you could see that the vast majority came from a farmer's background. I was a *salary-man* (worked in a number of companies)… It is possible that taking this point also into consideration, (the army decided that) I would be a medic… (Yoshida Takashi)[93]

For Yoshida, the question was less about why he became a medic, but rather, why he was not made an infantry soldier like the majority of his counterparts. He was not selected for the role, so much as allocated to it by default. The reason he gave for this was physical, or rather an incomplete physicality; the hole in his eardrums perforated the potential fitness he believed was required of an infantry soldier. He thus distinguished between the medic body and the infantry body, by defining the medic body first and foremost as a non-combatant one. Even when he was pushed further to posit, why he was made specifically a medic and not any other non-combatant role, he returned to his physicality; if it were otherwise, he believed he would have surely served

[92] Author interview with Yoshida Takashi, 29 Oct 2013.
[93] Author interview with Yoshida Takashi, 19 Sept 2014.

as an infantry soldier. Only when asked for the fourth time, he provided a possible additional factor - his profession, which he again measured against the infantry; the majority of infantry soldiers came from an agricultural background, while he was a company worker. Here too he hinted at a physical versus mental distinction – farmers worked in the field, often leaning on their physical strength whereas Yoshida, as a company worker, relied on mental endeavor.

The second part of his reply aligned with the conscription requirements described in the previous section. However, his descriptions of his physique as a contributing factor - does not. According to conscription charts, reforms of conscription criteria from 1920 enabled men with eardrum perforation to serve in the Army; men who had a hole in one eardrum, which did not obstruct hearing, would be categorized as 1st B-Class conscripts. Those, who suffered from this problem in both ears – to 2nd B-Class.[94] Before that, men who suffered from this problem were discharged. The fact that Yoshida was enlisted was due to those reforms and the pressing need for more personnel by the early 1940s. However, as mentioned above, in 1937 conscription tables specified that medics were to have perfect hearing. That was one of the only physical criteria for medics.[95]

The fact that Yoshida saw his selection to the medic role as the result of him not being fit enough to serve in the infantry resembled Suzuki's account. Both emphasized the importance of the judgment of the particular conscription officer. It is possible that like in Suzuki's case, Yoshida's conscription officer believed that the combination of an imperfect physique with skill made Yoshida suitable specifically for the role of medic. The regulations, charts and criteria discussed above were aimed at guiding the conscription officers, but they were quite general. At the end of the day the officers had the final say and as a result, their agency in the selection

[94] Iijima, p. 499; Rikugunshō, "Chōhei kensa kisoku oyobi rikugun shintai kensa testuzuki settei no ken," Op. Cit., JACAR reference number: C02030968200 (particularly p. 0362).
[95] Sugiyama Hajime, "Heiekihō shikō kisoku-chū hidari no toori kaisei-su," Op. Cit., p. 575.

process was substantial. While the illusive factor of "judgment" was influenced by official criteria, unofficial factors such as image arguably played a role too in the decision making process, which in turn, the officers helped reproduce.

"One is Bugle, Two is Iodine"

Haraoka Isamu was born in Saga prefecture. Like Yoshida, he underwent the conscription exam in 1941, when he was told he would serve as "iodine."

During middle schools, that is five years from the age of 15, there were subjects like bayonet training… I didn't like them, so I would feign a stomachache, a cold, different fake illnesses… and so I didn't attend the drills... When I went to the army – back then, when you finished middle school of the old system, you would take a ground officer candidate exam, (to see if you were suitable for becoming) an army commissioned officer... but, as I said, I barely attended a third of the drills and accordingly, was found unsuitable… I was tagged as the guy, who skipped drills and was not suitable to be a commissioned or non-commissioned officer. Then, there was sergeant-major Tajiri, who was in charge of personnel. He called me. 'Come over Haraoka… What is it with you, not going to drills?? Usually, you would be able to become a non-commissioned officer or an officer. But you didn't attend even a third (of the drills). So, you will be an "iodine," *yo-chin* ヨーちん.' To be qualified for active service your body had to be completely healthy, and (you had to be as tall as) 503 *sun*, 1 meter 55 and up… Eyes and ears - if they had a problem, (you) weren't good enough (for active service). You would join active service if you passed the physical exam as an A-Class conscript, *Kōshu gōkaku* 甲種合格. I did and went to active duty. If anything was wrong, you would pass as B-class, *Otsu-shu* 乙種 and wouldn't join the army immediately. If there were a war, you would be called directly... C-class, *heishu* 丙種 were men with a disability who would be discharged from service. I was A-Class and could join the army, but because I didn't go to the drills at school I wasn't found fit for being a non-commissioned or commissioned officer and was told by that sergeant major – "you – you'll be a *yo-chin*." So, I answered 'what is *yo-chin*?*'* because I didn't understand. It was because within the army, medics were called (nicknamed) *yo-chin...* (Haraoka Isamu)[96]

Unlike former-medics Mutō, Suzuki and Yoshida, Haraoka was a fit A-Class conscript, and a very tall one at that - well over 1.70m. Moreover, he argued that he had the potential of becoming more than a common soldier – that he could have been enlisted to high-ranking positions of command due to his education. As he explained, those who completed five years of

[96] Author interview with Haraoka Isamu, 9 May 2014.

middle school could pass an exam that divided them into different potential military officer ranks. Despite that, the conscription officer decided that Haraoka would serve as medic.

Haraoka implied that his selection to the medic role was a form of punishment for being undisciplined. Haraoka described how the spirit of militarism infiltrated schools – a measure which began following already the First World War to facilitate total mobilization, by cultivating the military spirit among the young. From the late 1930s it increasingly included also military drills and content.[97] Yet, Haraoka did not particularly enjoy the military drills. And so, the personnel officer scolded Haraoka for not fully participating in the early preparations for military service. Haraoka pinpointed this as the reason for him being selected - not for a medic, but for a *yo-chin*. The difference in terminology was significant.

> In the past if you got hurt, there was iodine produced from seaweed... a dark brown colored liquid. It was spread (over the wound). That was the 'number one' ointment. This iodine – *yodochinki* ヨードチンキ – was called *yo-chin* (for short). That is why medics were called "*yo-chin*, *yo-chin*." That is why (the enlistment sergeant) told me – 'hey, you are to be a *yo-chin.*' But I didn't understand what *yo-chin* meant. 'What is that?' I asked, 'idiot' he replied. '1 is *yo-chin*, 2 is bugle, 3 is a draft horse buttocks slapper,' is how the saying went… I asked 'what does that mean?' He replied, (it means these are) the easiest branches of the military. '1 is *yo-chin*,' means that medic was the easiest (role). '2 is bugle' means playing the bugle, totte tottera- (bugle sound). (The bugle players signaled when to) get up in the morning and in the evening - (when to) go to sleep. (As the song went) "The poor new soldiers - time to sleep and cry again." … Then, '3 is a draft horse buttocks slapper.' Draft horses were six horses that pulled the cannons in three lines of 2, 2, 2… In the past, artillery wasn't mechanized. I was in a field artillery unit, where you shoot cannons. That is why horses were used to pull the cannons… Their buttocks - 'yes, move!' (the horse was slapped by a soldier to make it move forward). That was an easy job. That is why (according to the saying) the easiest (roles) were *yo-chin*, 2 was bugle (player) and then there was the draft horse buttocks slapper. That is why when I asked 'what does (*yo-chin*) mean,' it meant medic. (Haraoka Isamu)[98]

When the personnel officer told Haraoka what his role would be he specifically chose to use a trivializing term, instead of the official term. The verse he used to describe it, once again portrayed the medic as an easy, and thus less esteemed role.

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[97] Fujiwara, 1987, pp. 181-82; Havens, Op. Cit., pp. 25-32.
[98] Author interview with Haraoka Isamu, 9 May 2014.

According to Seki Ryō, a former military physician, the term was used specifically for unit medics, not hospital medics. Seki argued that it originated in the frequent use unit-medics made of iodine in treating various wounds, particularly blisters so many soldiers suffered from while on the march. Medics would drain the blister with scissors or a needle, and smear or insert iodine to disinfect it. While it caused sharp pain, the blister would consequently heal more or less over night. On the one hand, Seki noted, the term – as expressed in the song Haraoka mentioned – had a diminishing connotation, implying that smearing iodine was all the medics could do. On the other hand, it also demonstrated their healing capabilities on the field. Seki himself recalled that when he was a doctor on the march and suffered badly from blisters, a medic taught him this method of treatment, which the physicians did not learn and were not familiar with.[99]

Mutō Masatoshi referred to this gap between the medic image and the actual conditions medics, and particularly unit medics met in battle:

> When entering each of the units, medics were usually ridiculed. They were made a fool of by being called "*yo-chin*, *yo-chin.*" Such people (who used these terms) were soldiers who'd never been to war. If they went to the front, they would see how much work a medic actually did. A unit-attached medic moves with the regular unit. The unit performs under fire. So, there's a trench, a hole that is dug in the ground, to which everybody went in…. When it's targeted, the medic can't stay in the back. That is why when everybody goes up (the medic) has to provide treatment in the midst of the flying bullets… That is why many die. I, when I became a medic, I thought that medics were the ones who stay in the back, treating the wounded, not a bad role at all I thought. Far from it. (Mutō Masatoshi)[100]

In his narrative Mutō created a distinction between the image of the role he held before he entered the military, the image others who did not have battlefield experience held, and what he defined as the reality of the medic military service. The image placed medics in the safe rear, in hospital settings or behind the line of fire. Some medics however, particularly unit medics, were more vulnerable, because instead of fighting they had to treat others. Mutō's description was

[99] Seki Ryō, *Gun'i-san yomoyama monogatari* (Tokyo: Kōjinsha NF bunko, 1998), pp. 80-81.
[100] Author interview with Mutō Masatoshi, 14 June 2014.

more similar to that which appeared in the medic textbooks, mentioned in the second chapter. As discussed in the second chapter, possibly to address this problematic image, the military emphasized that "the honor conveyed to the medic by treating patients according to what they have learned, is no different from that which is obtained through holding a weapon and striking the enemy."[101]

Yoshida also mentioned the verse Haraoka noted and the gap between the image it portrayed and the reality of warfare.

'One is bugle, two is medic.' It meant that being a medic was the easiest, because he didn't take up a gun… An infantry soldier goes to battle. Immediately to battle, so he (learns) how to handle a rifle, machinegun etc… It's very intense. Medics don't have that, so it's easy. It was easy when you served in Japan, but on the front – not at all. (On the front) infantry soldiers and medics had no distinction. (Yoshida Takashi)[102]

As shall be further discussed in the sixth chapter, out of the 500 medics, who were drafted with him, only 50 survived the war. In other words, according to Yoshida, the difference between medics and infantry soldiers in terms of risk and hardships did not exist on the frontline. Rather, the distinction was more between soldiers who served in Japan and those who were sent abroad. On the frontline, especially on the field, Yoshida noted, the medic was the only one responsible for everybody's health and for that reason he had to make sure he took care of his body properly. If he were sick there would be nobody to care for the other soldiers.

Following this line, it is noteworthy that in two other interviews, former-medics described how in the context of battle, the term *yo-chin* could also become a friendly term of

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[101] Rikugun imukyoku, *Kango kyōtei* (Tokyo: Kobayashi Matashichi, 1915) pp. 1-2; *Kangosotsu kyōtei sōan* (Kyoto: Wada Buyōsha, 1924) pp. 1-2; Rikugun imukyoku, *Kangohei kyōtei*, (Publication unknown, 1931. Original from 1928), pp. 1-3; Rikugun imukyoku, *Eiseihei kyōtei* (Tokyo: Buyōdō-shoten,1932. Original from 1928), pp. 1-3; Rikugun imukyoku, *Hojo kangohei kyōtei* (Tokyo: Buyōdō-shoten, 1934), pp. 1-3; Gunji fukyūkai (ed.), "Dai-yon-hen: Eiseihei kagaku gijutsu," Gunji fukyūkai (ed.), *Eiseihei suchi* (Tokyo: Buyōdō-shoten, 1938. Original from1933), pp. 1-3; Rikugun imukyoku, *Hojo kangohei kyōtei* (Tokyo: Shōheikan, 1939), pp. 1-3; Rikugunshō imukyoku, *Eiseihei kyōtei* (Tokyo: Buyōsha-shoten, 1940. Original from 1928) pp. 1-2; *Eiseihei suchi-zen* (Tokyo: heisho shuppansha, 1941), pp. 388-90.

[102] Author interview with Yoshida Takashi, 29 October 2013.

endearment in a process of reappropriation. The abovementioned Satō Kazunori, for example, described how in his case, *yo-chin* became a positive rather than a negative term:

Yo-chin was (used) between friends. (Between) the soldiers in the department, among friends (we would call out) something like 'hey *yo-chin'*… As for the wounded, I mean, I was a young soldier - second year or third year soldier. It wasn't a bad word. 'Hey, *yo-chin*, come over,' was said half jokingly (to me). There was no need to be formal, you see. And still, it didn't have a bad meaning. Something like a nickname. (Satō Kazunori)[103]

Yoshida noted that in his case too, the term, which originally specified an easier, and thus, less prestigious military service, grew in battle into a term of endearment, due to the medicinal significance it held:

A medic would always carry iodine, "*yodochinki,"* as part of his daily medical supplies. When an infantry soldier would get injured in action etc, (the medic) would immediately apply iodine to the opening of the wound, to disinfect the bacteria and cure it. When it touches the opening of the wound it is very painful and because of that, it is the most hated. But on the other hand, (the wound) is quick to heal and so, for a medic (iodine) is invaluable. That is why, (medics) were called by infantry soldiers etc "yo-chin" as a shortened term of endearment.[104]

Another similar example was that of the term *yaku-san* 薬さん, roughly translated as "Mr. medicament." Contrary to *yo-chin*, this term has come up only once during an interview with former-medic Matsumoto Masayoshi, who served as a unit medic in China. Yet it carried a meaning similar as that of the former testimony:

…Concerning the relationship (between the medic and) the patients - everybody cherishes you, the medic. *Yaku-san* - *yaku* means medicament. Everybody said '*yaku-san*, *yaku-san*.' They cherished you, because if they got sick, they had to receive proper medicine... Yes, that's how the soldiers would call (the medic). '*Yaku-san*, *yaku-san*' they said. That is why, in this respect, the medic, well, he was in a good position among the soldiers. Was cherished by all. (Matsumoto Masayoshi)[105]

Both *yo-chin* and *yaku-san* became a metonymy for the medic himself, replacing him with a medical object. The negative and positive interpretations that soldiers ascribed to this

[103] Author interview with Satō Kazunori, 17 December 2013.
[104] Taken from letter correspondence with author from 3 November 2013.
[105] Author interview with Matsumoto Masayoshi, 5 March 2014.

metonymy could be a reflection of the ambiguous position that medics held within the military; on the one hand, medics were soldiers who often risked their own life to treat and save others and thus, were respected and appreciated by soldiers who depended on them. On the other hand, medics were non-combatants in an increasingly militaristic framework that glorified combat and sacrifice. In such a framework, the concept of the medic was also associated with weakness, less prestige and less courage, contrary to combatant soldiers whose role was associated with battle. As the weapon rose in the hierarchy higher and higher above the medical-kit, the problematic medic image seeped deeper into people's consciousness including the military establishment itself.

Conclusion

The first section of the dissertation focused on the development of medic roles within the new and changing Meiji Army. It described how important military leaders believed medicine to be for the functioning of the military and the place they envisioned medicine would hold in its framework. It argued that with each military engagement medicine became increasingly enmeshed in the Army's various structures, as epitomized by medic roles. This chapter argued that while medic roles became an inextricable part of the Army, in many ways they were unusual in the Army landscape due to the same factors that made them into medics in the first place.

It was a role predominantly based on knowledge, skills and personality in a framework whose foundation was built upon the body and its strength. When it came to the unit medic, the Army defined the same physical characteristics for the medic as the rest of the soldiers in his unit. His non-physical skills set him apart. The hospital medic, on the other hand, was to be the shortest of most Army roles. Since height was the military's standard for physical strength, this

distinction placed the hospital medics on the lower edge of the Army's physical hierarchy. The Army thus distinguished unit and hospital medics not just according to their space of service, duties and rank, but also according to the characteristics of their body.

The chapter also argued that by the 1930s and increasingly by the 1940s, an image of the medic developed that surpassed the distinction between hospital and unit – that a medic was an easier role and consequently, not as military in nature as combatant roles. In some cases, this image associated the medic – whose role was to care for other soldiers' bodies – with a lesser physique. And yet, from the late 1930s and particularly during the 1940s, the general bar for military service lowered substantially across the board. Men who would not have been deemed eligible for service a few years earlier, found themselves enlisted due to the expansion of warfare, growing mobilization of the general population, and especially due to the deterioration of Japan's position in the war. Despite that, medics like Yoshida partly associated their selection to the role to an incomplete physicality. Suzuki applied to the role precisely because he believed that with his imperfect physique, it would be possible for him to serve as medic and not in more combative roles. His conscription officer, who made the selection decisions, shared this perception as well.

Nicknames created for medics – particularly unit medics – revealed that this image of medics as having a lesser body, or of being in a safer and easier position, was tightly connected to their practice of medicine. The nickname iodine, *yo-chin*, demonstrated how first aid medicine defined the unit medic role, but also was the source of its trivialization. Unlike Yoshida and Suzuki, Haraoka was tall and fit, but he believed, the officer selected him to the role as a form of punishment. The practice of medicine was thus a source of disparagement for the men who served in the role. It was also, however, a source of respect.

On the battlefield, as Yoshida, Matsumoto, and Satō mentioned, the importance of the medic's association with medicine became clear, as more and more soldiers were sick and wounded and relied on the medic for care. The association of medics with medicine also created a feeling of endearment towards them. While a medic did not fight like infantry soldiers, when the latter were wounded it was usually the medic they depended on.

Medicine was seen as having a protective force over those who practiced it by taking away from them the duty of fighting. Yoshida and Suzuki attributed their own survival in the war to their role of medics. However, in wartime medics were far from safe. Unit medics in particular were vulnerable in a unique way, when they were sent out to treat wounded soldiers in the open field. Moreover, towards the end of the Pacific War, as supplies ran low and the main cause of death was hunger, medics perished like any other soldier. As aerial bombings grew fierce, no place was safe, hospitals included. This will be the focus of the next two chapters – what were the experiences of medics who served during the War in China and the Pacific War? How did they navigate their ambiguous image and how did it affect their relationship with other soldiers? How did their unique position within the military framework form their experience of war?

Chapter 5
Medics at Work: Training, Praxis and Empire

(I was) a unit medic. (There were also medics) who were not attached to units - hospital medics. There were medics, nurses and military physicians in hospitals. In a unit there was about one military physician. When fighting got rough, this was not sufficient. The one military physician of the unit was not always there. The non-commissioned medic officers would replace him, and in certain times and circumstances would conduct simple operations. Usually, a medic would not operate, but when the military physician wasn't there and the war was rough, an experienced medic, a non-commissioned medic officer, would perform rudimentary surgical operations… I treated battle wounds, and also worked at the medical care room, *imushitsu* 医務室, treating diseases… (I also accompanied) detachments. A detachment was a small force of about 10, 20 soldiers from within the unit (which was sent out on missions). You couldn't send a doctor with them. So, in such cases, an experienced medic, a non-commissioned medical officer, would go with the detachment and provide treatment (if needed). We would also conduct pacification works (*senbu kōsaku*, 宣撫工作). It was imperative to maintain the peace in the area where the unit was stationed. So, there was medicine called, "pacification medicine," which was to be used by the local Chinese people. (Imazu Shigeru).[1]

Imazu Shigeru was born in Yamanashi prefecture in 1921. He passed the conscription exam as an A-Class conscript and was enlisted to the Army in 1942. Shortly after, the Army sent his unit to China, where Imazu was to undergo training and serve. While stationed in Beijing, he and one other soldier were selected from among 200 soldiers in his company to undergo medic training. Believing that medics were not "real soldiers" as opposed to combatants, he was disappointed and requested to be excused from the role, but to no avail. A command was a command, and to training he went. Between 1943 and 1945 he served as a unit medic within an infantry battalion in Northern China, and participated in that capacity in a number of battles. In April 1945 he

[1] Author interview with Imazu Shigeru, 16 December 2013.

transferred to a Special Guards battalion, *tokubetsu keibi daitai*, 特別警備大隊, where he served until the end of the war, a few months later.[2]

"The War in China," otherwise termed in Chinese scholarship as "the War of Resistance,"[3] began with great violence in 1937, which came to be epitomized by the Nanjing Massacre six months later. Japanese tactics focused on waging major battles in strategically central points, such as Shanghai and Nanjing. While the Japanese military won these battles, it did so at a very high cost in terms of casualties. Moreover, despite these victories, massive air raids and demoralizing atrocities committed by the Japanese troops, Chinese forces continued resisting and retreated further south, pulling the Japanese forces deeper into China.[4] The fierce fighting led to massive reinforcement throughout the war, weighing heavily on the Japanese military even before it began fighting on numerous fronts from 1941. According to Drea, by the end of 1937 the Japanese Army enlisted a total of 950,000 menn to service and sent 600,000 to China. The numbers grew every year. By the time of the attack on Pearl Harbor in 1941, over 180,000 Japanese soldiers were estimated dead and 425,000 sick or wounded.[5] This expansion created a pressing demand for more medics, the proliferation of Army hospitals, and a change in the structure of battlefield medicine.

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[2] The analysis of Imazu's service is based on an interview conducted by the author on 16 December 2013, as well as an interview held by the "Japanese Veterans Video Archive Project," *Senjō taiken hōhei hozon no kai*, 戦場体験放映保存の会, roughly a year earlier. The association kindly shared its interview record with me.

[3] Chinese historiography debates on when to date the beginning of the "War of Resistance" – 1931, 1934 or 1937. See for example Hans J. van de Ven, *War and Nationalism in China, 1925-1945* (London, GB: RoutledgeCurzon, 2003) pp. 209-11; See Rana Mitter on the concept of Chinese Resistance and Collaboration in *The Manchurian Myth: Nationalism, Resistance, and Collaboration in Modern China* (Berkeley, CA: University of California Press, 2000), particularly pp. 16-19. The term for the war/wars has attracted vast preoccupation in Japanese scholarship as well. See for example Jun'ichiro Shoji's analysis of the various terms in "What should the "Pacific War" be Named? A Study of the Debate in Japan," *NIDS Journal of Defense and Security*, No. 12 (2011), pp. 45-81.

[4] Edward J. Drea, *Japan's Imperial Army* (Lawrence, KS: University Press of Kansas, 2009), pp. 194-99, 206, 243.

[5] Drea, 2009, pp. 197-99; Edward J. Drea, *In the Service of the Emperor* (Lincoln, NE: University of Nebraska Press, 1998), p. 43. Figures are estimations and thus vary. According to Hata Ikuhiko, for instance, between 1937 and 1940 a total of 102,900 Japanese soldiers were estimated to have died in battle and 17,400 from disease.

In the above excerpt Imazu described his activities and responsibilities as a unit medic, demonstrating the great changes the role underwent in comparison to past wars, as the scale and nature of warfare changed. Imazu was a medic serving in a prolonged large-scaled war of attrition and occupation; the Japanese troops continuously progressed into China for eight years, from 1937 to early 1945. But, unlike the Pacific Theater, they remained on the offensive until early 1945, maintaining a growing presence on a vast territory of China over numerous years.[6] As a medic under such circumstances, Imazu engaged in a variety of activities that were on the boundary between war and peace.

On the one hand, Imazu would go out to battle, where he acted as a battlefield medic. As Surgeon-General Hashimoto already predicted in 1888, during battle Imazu had to act independently because there were so few doctors.[7] On the other hand, during the three years Imazu served in Northern China, his unit spent a significant amount of time not fighting. Most of his time, Imazu thus engaged in non-combat activities, maintaining the health of the unit soldiers and treating those who fell ill or were hurt during their daily routines. Finally, he would serve in small detachments, where he also engaged in Imperial medical work that aimed at maintaining the delicate balance between war and peace under occupation; as the Army camped and moved within the Chinese countryside among the local population, it employed violence and often exploited local resources by force.[8] To maintain the peace the Army sent out specifically medics – not doctors - in "pacification squads" to the villages, so they would provide the local population with medical care. The situation in China thus turned medics into a tool for

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[6] Rana Mitter, *China's War with Japan, 1937-1945: the Struggle for Survival* (London, GB: Allen Lane, 2013), p. 352.

[7] See Ch. 2 for Hashimoto Tsunatsune's view of the unit medic role and the 1888 reform.

[8] About the place of food and supplies in the War in China and the use of violence against local population by both the Japanese and Chinese militaries, see Aaron Moore, "An Insatiable Parasite: Eating and Drinking in WWII Armies of the Asia-Pacific Theatre (1937-1945)," in Katarzyna J. Cwiertka (ed.), *Food and War in Mid-Twentieth-Century East Asia* (Farnham, GB: Ashgate, 2013), pp. 110-21.

maintaining war power, as well as alleviating wartime tension – a role which they were not trained or prepared for, and which brought them into interaction with a completely different population than that for which they were trained to care.

The chapter will probe how the oscillation between periods of fighting, abatement, movement and conquest, created a different dynamic of medic service during the War in China, both on the front and the rear. It will explore how the specific circumstances of the war moved medics closer to the battlefield than ever before, but also demanded of them to lead mundane routines and to become imperial care providers in a conquering army. It will argue that this combination made the medic role stand out as a humane provider of care on the one hand, but a facilitator of occupation who sustained the Army's prolonged activities on the other. It will argue that this purpose extended also to hospital medics in the rear as well, though in a different way. Finally, it will suggest that the medic's position as both soldier and medical care provider placed the medic in a uniquely problematic position between violence and pacification, and as a result also forced him to confront idiosyncratic ethical dilemmas.

The chapter will focus broadly on the War in China, until Japan's position began deteriorating - from 1937 to largely 1943-44.[9] It will begin by exploring what knowledge medics carried with them to China following training, what its limitations were, and what it teaches us about how the military envisioned the medic roles on the ground. It will continue to examine the nature of medic service in wartime hospitals in the rear, and move forward to the experiences of unit medics - on the battlefield and beyond. By following the stories of different former-medics, the chapter will analyze how the situation in China redefined the numerous roles a medic was to

[9] As the subsequent chapter will demonstrate, this deterioration took place at different times, according to the location where a medic served, including within China.

play. Finally, it will analyze how these circumstances shaped the relationship between medics, other care providers, and the recipients of their care in increasingly violent surroundings.

1) From Soldier to Medic – Medical Training

Medics were both soldiers and care-providers; military training turned them from conscripts into soldiers, and medical training - from soldiers into military care providers. As discussed in previous chapters, from 1909 the Army enlisted soldiers to serve both as hospital and unit medics, and while their military service largely differed, they often underwent medical training together. Training was intensive and packed with new information that the young soldiers had to memorize. However, it was only the first step in a process of learning that was followed by on the job training in each medic's respective location of service. This section will explore which foundations medic training provided medics and how these foundations shed light on the position of medics in the Army's medical system. It will also examine the atmosphere of medic training and argue that even at such an early stage and even though the content of training was medicine, some violent aspects served as a reminder that medics were part of a military framework at war.

Initial Steps – Medic Textbooks

Hoshiya Kiyoshi passed his conscription exam in 1942 as an A-Class conscript. He hoped to serve in the infantry and so, when he received notice that he was to be a medic he was greatly disappointed.

I was upset, because to me, medics were not real soldiers… Now when I think back, I'm glad I was made a medic. I know the names of the different body parts from the feet to the top of the

head, the internal organs etc. I also learned how to do massage. I learned many things. (Hoshiya Kiyoshi)[10]

Hoshiya acquired his knowledge and skills during four months of medical training in the No. 1 Army hospital in Hankou, China starting in August 1943. It was about six months after he shipped out from Japan. The Hankou hospital was relatively large, with 30-40 physicians, 300 nurses and 230 medics. It was sufficiently far from the fighting at that point of time, enabling it to serve both as hospital and training facility. A year later it was heavily bombed.

Like many of the men interviewed for this research, Hoshiya's training consisted of 'blackboard and chalk' learning in class, taught mostly by military physicians of different specialties. He also underwent practical training instructed by non-commissioned medic officers under physician supervision. For example, the medic-trainees practiced numerous forms of bandaging for each part of the body - from the head, through the groin, to the foot – by trying them on each other. The aforementioned Imazu recalled how the trainees would practice massage techniques and applying splints, by taking turns as patients, and Hoshiya - in giving injections.[11]

Training was not easy for Hoshiya. It was packed with different subjects he was required to learn and memorize in an intensity he had never experienced before. One tool that helped him was a textbook, *Eiseihei kyōtei* 衛生兵教程. As already referenced in previous chapters, in the 1870s, as the Army began creating its medical framework and developing roles of medical soldiers, it used textbooks based on Dutch, German and American teachings. The early textbooks mostly focused on bandaging methods, yet some also included content that became part and parcel of medic textbooks later on, such as anatomy, military hygiene, and emergency care. As it

[10] Author interview with Hoshiya Kiyoshi, 25 February 2014.

[11] Author interview with Hoshiya Kiyoshi, 25 February 2014. The interview was facilitated by the "Japanese Veterans Video Archive Project," *Senjō taiken hōhei hozon no kai*, In this case too, the association kindly shared the notes from the interview it conducted with Hoshiya two years earlier.

systematized the medic roles and their training in 1883, the Army also consolidated and systematized the use of textbooks during training.[12] By the 1930s the textbooks became increasingly long and intricate, reflecting the process of professionalization that the medic role underwent and the growing demands made of him.[13] They could be divided into four main functions, which also reflect the place the Army envisioned medics to hold in the military medical framework by the 1930s: 1) provide emergency care 2) prevent disease 3) nurse the sick and wounded, and 4) assist senior personnel.

All but one of the former medics interviewed for this research remembered using a textbook during their training.[14] The textbooks thus provide a good source of information on the knowledge that medics obtained during their early steps in the Army. Textbook content was largely divided into the following sections: an introduction to the different medic roles, anatomy and pathology, emergency treatment of wounds and diseases (disinfection, stopping bleeding, distinguishing and preventing infectious and non-infectious diseases), bandaging (different kinds of bandages, applying bandages to different parts of the body, applying splints), patient transportation, nursing (maintaining a sickroom, caring for the myriad needs of various patients, assisting in treatment and surgery), massage therapy (different ways of stimulating blood flow in different parts of the body), antisepsis (its importance in disease prevention, the employment of materials such as cresol for sterilizing equipment), pharmacology (writing a prescription, weighing pharmacological components, storing medicine and maintaining the pharmacy room,

[12] Suzuki Noriko, "Rikugun kangogaku kyōkasho: Meiji 5 nen kara Meiji 23 nen made," *Nihon kango rekishi gakkai* (May 2013b), pp. 79-93. Suzuki provides a thorough analysis of the different early textbooks and their development, including a systematic comparison between them.

[13] For example, *Kangohei kyōtei*, authorized by Yamada Hiromichi, head of the Medical Department (Publication details missing. 1931, reprint from 1928), and *Eiseihei kyōtei*, authorized by Yamada Hiromichi (Tokyo: Buyōdō shoten, 1932, reprint of 1928 textbook.

[14] Yoshida Takashi did not use a textbook during his training in 1941. Instead he and the other trainees took notes during classes. The curriculum was very similar to the content of the medic textbooks however. Author interview with Yoshida Takashi, 29 October 2013.

differentiating between medicaments), and medical equipment (preparing different medical kits carried by medical personnel such as military physicians, medics, and stretcher bearers, recognizing each surgical equipment).[15]

The textbooks illustrate the vast amount of information medics were to internalize in a short time.[16] The textbook Hoshiya used was 300 pages long. The memory of its thickness remained vivid in Hoshiya's mind many decades later. It was impossible, Hoshiya argued, to remember all that it contained by heart. For that reason, it also seemed obvious to him that he could take the textbook with him after completing training. However, most of the medics interviewed for this research could not. One possible reason was the shortage of supplies towards the end of the war, which plausibly did not enable the Army to spare its textbooks, reusing them with each course. The main reason, however, was apparently mobility. Hongō Katsuo explained that when out on the field, medics had to carry equipment with them and the textbook was an additional burden.[17] Moreover, they were generally thicker and wider than a common pocket.[18] Hoshiya, on the other hand, served in a hospital following his training and was thus not required to carry his textbook with him, demonstrating the difference between the largely stationary service in Army hospitals and the constantly mobile service of medics further down the chain of evacuation.

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[15] *Eiseihei kyōtei*, Op. Cit.

[16] From 1938 following three months of basic military training, medics underwent five months of medical training. In 1945 medical training was shortened to two months, but as the following chapter will demonstrate, testimonies show that after the beginning of the Pacific War, the period differed according to case. See: Rikujō jieitai eiseigakkō shūshinkai, *Rikugun eisei seidoshi* (Tokyo: Hara shobō, 1990), pp. 696-97.

[17] Author interview with Hongō Katsuo, 21 January 2014.

[18] There were smaller pocket-sized textbooks, referred to by medic textbooks, specifically on emergency medicine on the front. Unlike medic textbooks, they were intended for all soldiers. It should be noted that unlike the medic textbooks, these smaller field textbooks included a section on detecting and dealing with poison gas from 1923, following the experience of the First World War: *Eiseihō oyobi kyūkyūhō*, authorized by Kawashima Yoshiyuki (Tokyo: Kobayashi Matashichi, 1936. There were later reprints, even in 1944). It replaced an earlier *Eiseihō oyobi kyūkyūhō* (Tokyo: Kurimoto Chōshichi, 1923), which replaced *Kyūkyūhō oyobi eiseihō taii*, authorized by Terauchi Masatake (Tokyo: Kobayashi Matashichi, Senryūdō, 1908).

Memorization and First-Year Bullying

Considering the intricacy of the textbook content and that oftentimes medics could not consult it following training, enables us to imagine how demanding training must have been. Former medic Ishikawa Hiroshi described the extreme stress military and medical training placed him under due to an additional component – bullying of first year soldiers.[19] Bullying was common throughout the Japanese military.[20] But, in Ishikawa's case it received a medical tinge. Ishikawa described how a senior soldier, *kosanhei* 古参兵, would wake all the first year trainees in the middle of the night, every night, while they were undergoing medic training at the Asahikawa Army hospital in Hokkaido. The senior soldier would command the first year soldiers to line up and recite parts of their textbook; from the pledge of allegiance to the emperor, to the purposes of massage therapy. If a trainee failed to remember the passage verbatim, the senior soldier would beat him, or at least in one case, command one of the soldiers to.[21]

The choice of the medic textbook as a bullying tool cynically provided the trainees extra motivation to accurately memorize the content of the book. It did not, however, ensure the understanding or implementation of information, and more importantly, it instilled an

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[19] According to Endō Yoshinobu, there is evidence of bullying, *shiteki seisai* 私的制裁, roughly translated as "personalized punishment," at least from the 1920s, evidenced by the Military's attempts to curb the phenomenon. These attempts continued throughout the Pacific War, but bullying kept increasing. Accounts of bullying recur in almost every wartime memoir written by former Japanese servicemen. See Endō's analysis in *Kindai Nihon: Guntai kyōikushi kenkyū* (Tokyo: Aoki shoten, 1994), pp. 264-75.

[20] It should be noted that though the Japanese Military became notorious for it, bullying and especially "hazing" of young soldiers was not limited to the Japanese military. See Kazuko Tsurumi's comparative analysis of military hazing in the Japanese, Austrian and American Militaries: *Social Change and the Individual: Japan Before and After Defeat in World War II* (Princeton, NJ: Princeton University Press, 1970), pp. 95-96. See also pp. 116-119, specifically on forms of bullying in the Japanese military. On the common tradition of harsh and at times even sadistic hazing in American military academies, particularly the West Point Military Academy, see Jōrg Muth, *Command Culture: Officer Education in the U.S. Army and the German Armed Force, 1901-1940, and the Consequences for World War II* (Denton, TX: University of North Texas Press, 2011), pp. 49-67. On pp. 65-65 – see a similar case to that described in this sub-section of an older soldier questioning a younger soldier and punishing him when he did not remember the answer verbatim. According to Muth, the German cadet schools actively forbade hazing: pp. 92-94, 107.

[21] Ishikawa Hiroshi, *Rikugun eiseihei monogatari* (Tokyo: Seibundō, 2008), pp. 65-71, 74.

atmosphere of fear in the process of learning and service. While other medics did not recount similar accounts in respect to textbook memorization, many of them mentioned the beatings they received during their first year of service.[22] For Ishikawa it served as a reminder that he was learning to be a care provider in a specific setting - the military.

'Without Distinction between Friend or Foe'

Imazu Shigeru, whose words opened this chapter, underwent training with 200 other trainees at an Army hospital in Shijiazhuang, Northern China in 1942. He recalled how all of the trainees assembled the day before training began, to receive orders from the director of the hospital. After introducing the instructors and their assistants, the director made a short speech:

> You were all chosen to fill the lofty mission of being a medic. That is why you were assembled here today. According to the International Red Cross Convention,[23] the one who fills this precious mission is entrusted with saving the lives of friends and foes without distinction. During the very little time left, study diligently and thereupon, return to your home units.[24]

As a reminder, Imazu did not originally wish to serve as medic. However, he recalled himself looking at the medic role with different eyes following that speech. It is also plausible that Imazu's vivid memory of the director's words was colored by what happened later in training.

For six months Imazu underwent what was standard medic training, going through all the subjects of the medic textbook. Studies began with anatomy as the foundation of medical

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[22] Author interview with Hongō Katsuo. 21 January 2014. Hongō was even bullied by a supervising military physician; Author interview with Imazu Shigeru, 16 December 2013; Author interview with former navy medic, Kiyozumi Noboru, 26 February 2014; Author interview with Mutō Masatoshi, 14 June 2014; Author interview with Satō Kazunori, 17 December 2013. Yoshida Takashi noted that in his unit he was not bullied, specifically because he was a medic and was appreciated. Author interview with Yoshida Takashi, 29 October 2013.

[23] As mentioned in previous chapters, Japan entered the Geneva Convention in 1886. The Army minister Ōyama Iwao commissioned its translation into Japanese, and from 1887 all soldiers were to learn its text. Kurosawa Fumitaka, "Kindai nihon to sekijūji," in Kawai Toshinobu & Kurosawa Fumitaka, *Nihon sekijūji to jindō enjo* (Tokyo: Tokyo daigaku shuppankai), p. 14.

[24] Imazu discussed this part of his history on different occasions, including during the author's interview with him in 16 December 2013. The exact wording cited above is translated from the NHK interview held with Imazu two years earlier: Imazu Shigeru, "Hito no inochi wo sukuu eiseihei," NHK Online War Testimonies Archive *Sensō shōgen ākaibuzu* (21 January 2011).

knowledge, using a human-like dummy. The dummy helped the trainees understand the structure of the body, the location of the internal organs and the blood vessels. They learned how to face different situations, using appropriate skills, such as sterilizing a wound and stopping bleeding. After these six months, two or three days before the trainees were to leave for their units, Imazu recalled how they were all summoned unexpectedly to the classroom. They did not know the reason, since they already completed the course. Then one of the instructors, a military physician, entered the room, wearing surgical drab. Shortly after, a few soldiers brought into the room a Chinese prisoner of war of about 20 years of age. What followed was a vivisection of the POW. The soldiers, who held the POW gave him a last cigarette to smoke, following which they placed him on the surgery table, tied his limbs to it, and anesthetized him with chloroform. After that, the physician proceeded by pointing out the different organs to the trainees, starting with the feet. He gradually made incisions and took out the internal organs one by one, killing the anesthetized POW in the process before the eyes of the 200 trainees.[25]

In other occasions when Imazu gave testimony of this atrocity, he described the non-commissioned officer and surgical assistants berating the trainees for trembling and being "spineless." Imazu recalled them saying – "The likes of him killed many of your friends. If you keep that in mind you would use this as an opportunity to learn."[26] However, according to Imazu, all the trainees remained silent, and did not even budge when the physician called them by name to practice bandaging techniques on the body. Imazu recalled the shocked silence in the room,

[25] Imazu described the vivisection in detail on the NHK video interview, for further reference: Imazu Shigeru,"Shittō ga hajimatta," NHK Online War Testimonies Archive (21 January 2011).
[26] Imazu Shigeru,"Shittō ga hajimatta," NHK Online War Testimonies Archive (21 January 2011); Imazu Shigeru, "Watashi no senshi," collection of local testimonies by former servicemen in Kōfu, Yamanashi, collected by Asakawa Tamotsu at the Yamanashi Peace Museum and Archive, pp. 3-4; Shinbun akahata shakaibu shuzai-han (ed.), *Moto nihongei ga kataru "daitōa sensō" no shinsō* (Tokyo: Nihon kyōsantō chūō iinkai shuppankyoku, 2006) pp. 86-87.

and the downward looking faces of many of the trainees, as they encountered, and passively participated in the brutality of war for the first time.

Following World War II, researchers tried to rationalize group silence and participation in violent dehumanizing acts. Hannah Arendt's concept of the banality of evil, the Milgram experiment and the later Bystander Effect Theory are arguably the most renowned.[27] In the case of the Japanese military, historiography suggested various possible explanations. For example, intimidation and forceful subjugation of soldiers by their superiors as previously described; militarist education that soldiers absorbed before entering service; the lack of space for individual agency within the military structure on the one hand, and military insubordination on the other hand; and finally, cultivated disdain particularly towards China.[28] Instead of trying to explain the above war crime, I would like to focus on what it signified for medic training to end with a murder.

The contrast between this act and the initial words, Imazu remembered the hospital director saying on the first day of his training, was extreme.

It was shocking, because medics know more than anybody else how precious life is, being the people whose role is to rescue.[29]

It has been almost 60 years since...I was in my 20s, like a child. At that time I didn't fully understand what war signified. I grew up learning a mistaken premise that since the enemy could attack me I needed to attack him. That I had to kill the enemy so he wouldn't destroy my country…That is why when the hospital director told all the 200 soldiers, right before training

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[27] Hannah Arendt, *Eichmann in Jerusalem* (New York, NY: Viking Press, 1963); Stanley Milgram, "The Perils of Obedience," *Harper's Magazine*, Vol. 247 (December 1973), pp. 62-77; John Darley & Bibb Latané, "Bystander Intervention in Emergencies: Diffusion of Responsibility," *Journal of Personality and Social Psychology*, Vol. 8 (1968), pp. 377-83.

[28] The most well known was Maruyama Masao's analysis. See particularly Maruyama Masao, translated by Ivan Morris, "Theory and Psychology of Ultra-Nationalism," in Maruyama Masao, Ivan Morris (ed.), *Thought and Behavior in Modern Japan* (Oxford, GB: Oxford University Press, 1969), pp. 12-13, 18-19. See also Tsurumi's analysis of Maruyama, Op. Cit., pp. 91-92, 95-96. The question of spontaneity versus organized violence and the place of the individual often comes up in respect to the Nanjing Massacre. See for example Fujiwara Akira, "The Nanking Atrocity: an Interpretive Overview," in Bob Tadashi Wakabayashi (ed.), *The Nanking Atrocity, 1937-38: Complicating the Picture* (New York, NY: Berghahn Books, 2007), particularly pp. 36, 41-43.

[29] Imazu Shigeru, "Watashi no senshi," Op. Cit., p. 4.

began…that saving lives was a precious mission held by each of us…I was honestly confused. I learned that the essence of war was killing, that war meant harming, killing the adversary. Then as I was within war…I was told that saving lives was a lofty mission. So my 20 year old self kept searching for common ground between the two…I couldn't understand it…I still don't understand it.[30]

The horrifying war crime Imazu described was by no means representative of medic training. Besides Imazu's testimony there was one other known case, made public by a former Navy medic who served in the Philippines.[31] There were, however, other cases of vivisections of POWs in other contexts. The best known are the 1945 vivisection of American crewmembers of a crashed B29 airplane conducted in the Kyushu University medical school, and the notorious experiments conducted by Unit 731.[32] There might have been more cases during medic training as well, which were not divulged. Imazu himself did not speak about his experience until very late in his life. He explained his openness, as rooted in contemporary political debates over Japanese constitution reform, specifically of Article 9.[33] He wanted to let the younger generations who never experienced war understand what war could lead to – an explanation

[30] Author interview with Imazu Shigeru, 16 December 2013.

[31] In 2006, haunted by his wartime memories, Makino Akira related a number of war crimes he witnessed and participated in, including vivisections of Philippine prisoners of war in 1944 by a military physician, also supposedly for educational purposes. Makino's testimony was reported in different news sites. Some of the English language reports referred to him as doctor – more often than not the media confuses medics with doctors. See for example: Justin McCurry, "Japanese Veteran Admits Vivisection Tests on POWs," *The Guardian* (27 November 2006. http://www.theguardian.com/world/2006/nov/27/secondworldwar.japan. Last accessed: 23 May 2016); "Japanese Doctor Admits POW Abuse," *BBC News* (26 November 2006. http://news.bbc.co.uk/2/hi/asia-pacific/6185442.stm. Last accessed: 23 May 2016); "A Life Haunted by WWII Surgical Killings" *The Brunei Times* (31 October 2007. http://www.bt.com.bn/node/23909/print. Last accessed: 23 May 2016). In the Japanese media see: "Seitai kaibō: 'filipin demo' 84 sai moto eiseihei ga shōgen, jūmin 30 nin ijō ga gisei," *Mainichi Shimbun*, Tokyo Edition, p. 26 (19 October 2006).

[32] Concerning the Kyushu vivisection, see: Suzuki Akihito, "Kyūshū daigaku igakubu jiken," Ikō Toshiya, Mori Takemaro, Takaoka Hiroyuki & Yoshida Yutaka (eds.), *Ajia taiheiyō sensō jiten* (Tokyo: Yoshikawa Kōbunkan, 2015), p.144; As Suzuki explained, the incident became well-known through Endō Shūsaku's novel, *Umi to Dokuyaku* (Tokyo: Bungei shunjū, 1958). Numerous books and articles were written on the history of Unit 731 as noted in the introduction. There is also a testimony of a Japanese military physician who served in an Army hospital in Shanxi, China. He argued that physicians in his hospital would conduct vivisections on Chinese POWs on a regular basis purportedly for training purposes: Yuasa Ken with Yoshikai Natsuko, *Kesenai kioku* (Tokyo: Nicchū shuppan, 1996, Original from 1981).

[33] See introduction for more on the debates and their implications on the oral history testimonies collected for the purposes of this research.

given by many of the interviewees for their willingness to speak about their own experiences in the past decade. Be that as it may, it is important to state that medic training did not include vivisections of POWs as a matter of course. Thousands of Japanese trainees underwent medic training without ever witnessing what Imazu witnessed. Instructors used diagrams, human-like dummies as Imazu described as well, and on some occasions, bodies of deceased patients from the hospital in which training took place.[34]

Nonetheless, the atrocity Imazu described, his analysis of it, and the vast contradiction it presented to the creed of the role, reverberate a wider problematic shared by many medics, particularly in the 1930s and 1940s - the fundamental discord between the framework in which they served and the medical purposes they were to fill. They did not serve in what became a standard medical setting, such as a civilian hospital, clinic, or patient home. They served in a violent military framework that was in the midst of an increasingly brutal war. Violence was everywhere – from the extreme nature of the wounds and diseases the medics treated, to the environment in which they functioned. Medics were to embody the Geneva Convention and its ethical doctrine, while being ever more surrounded, and at times while actively participating in violent acts. The two were often inseparable. As shall be discussed below, many medics did treat both 'friends and foes,' but the distinction between the two categories was ever-present and for Imazu, this point was made clear already during training.

2) Medic Lives in a Warzone – Army Hospitals

After completing their training each medic went back to his unit, where war called the rules - not the textbooks. Though they held the same title and learned the same topics during

[34] For example: Matsumoto Masayoshi learned anatomy by using diagrams. Satō Kazunori recalled a skeleton model in class. Suzuki Tatsuo remembered using a dummy that could be opened up to reveal the internal organs.

their medical training, medics served in a variety of roles, which required different skills and translated into diverging experiences. While the quintessential location of war is arguably the battlefield – the focus of the next section - this section will concentrate on the life of medics in Army hospitals in the rear within a warzone. By analyzing the dynamics that evolved in these settings, as medics treated mostly Army soldiers, but to a lesser extent also local population, it will explore how war reached the rear through medical practice.

Medics in a Wartime Hospital

As Japan expanded its empire, it built military hospitals to serve its troops. In China the Army established field hospitals near the site of battle, transportation hospitals over its patient evacuation routes, and even rear Army hospitals. Yet, since they were within China, these rear hospitals were also within a warzone. This location affected the condition of the patients they treated, the intensity of the work and eventually, as the war progressed – their level of safety.

The aforementioned Hoshiya Kiyoshi remained to serve at the Hankou No. 1 Army Hospital from 1943, upon the completion of training. Each of the 80 soldiers who completed the course with him returned to their home units. Some remained in China, and others were sent directly to the Pacific where they faced very different circumstances. When the time of assignment came, Hoshiya recalled thinking that he did not mind which hospital ward he would be assigned to - except the pathology ward. As luck had it that was precisely where he was assigned. As a medic at the pathology ward, Hoshiya had three main duties. He was to examine urine samples and – what deterred him most – dissect the bodies of deceased patients. Every day, the pathologist, assisted by four medics, dissected 5-6 bodies of Japanese soldiers, who died of wounds or disease. The purpose of the dissections was to determine cause of death, both for

military records, and to prevent further contamination among the troops, in case of infectious diseases. Finally, Hoshiya and other medics from the ward would also take turns in guarding the bodies in nightshifts to keep the rats away.[35]

As a pathology ward medic, Hoshiya did not often interact with living patients. The one occasion for such contact was during nightshifts, which were required of all medics to ensure the wards would be manned at all times. This changed when Hoshiya transferred to the surgical ward. Every day wounded soldiers poured in from the front. The Hankou hospital was in the rear, and was meant to be the final stop in the line of evacuation before patient-soldiers headed back to Japan, if such was needed.[36] As a result, patients arrived at the hospital after receiving initial care, but also after certain duration of time passed from the moment they were wounded.

The passing of time affected the state in which patients were admitted in the hospital. The most vivid memory Hoshiya had of the service in the surgical ward was of a patient, whose wounded knee was covered with maggots upon arrival. Maggots would accumulate on wounds when bandages were dirty and not replaced frequently, especially when the weather was warm. The aim of the line of evacuation was to divide the burden of wounded treatment, make better use of human resources and so ensure swifter care of the wounded to prevent such situations. Yet, the state in which the wounded arrived demonstrated how difficult it was to provide sufficient care to each soldier when the wounded were so numerous. According to a nurse who served in the same hospital from 1942, every evening the wounded would arrive in truckloads.[37]

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[35] Author interview with Hoshiya Kiyoshi, 25 February 2014. *Senjō taiken hōhei hozon no kai* association interview notes with Hoshiya Kiyoshi, 1 September 2011.
[36] Hasegawa Miyoji, "Kansō kanja tenzoku ni kansuru ken," Rikugunshō dainikki Collection, Bōeishō bōei kenkyūjo Archive (June 1942), JACAR reference number: C04123787500.
[37] "Jūgun kangofu sanjō nōri ni," *Yomiuri Shimbun* (15 August 2013. http://www.yomiuri.co.jp/local/ishikawa/feature/CO004019/20130815-OYT8T00190.html. Last accessed: 23 May 2016).

It was during his service at the surgical ward that Hoshiya also encountered Chinese patients. According to Hoshiya, medics would check each admitted soldier for infectious diseases in shifts. At one time, when Hoshiya conducted the exam, Chinese soldiers were also admitted to the hospital, including a woman soldier. Hoshiya did not mention how common this situation was. It seemed that the vast majority of patients were Japanese, and occasionally there were Chinese patients as well. It even seemed that it was more extraordinary for him to see a woman patient, than a Chinese one. In any case, he noted that as a medic, his duty was to treat them all as patients, without distinction.

Service in the hospital was not easy. Hoshiya had to continuously study, adapt, provide care to numerous patients, and face haunting sights. Since it was a military hospital in wartime, the personnel were also subjected to military discipline, most of the patients were soldiers, and most importantly, the condition in which the patients arrived and the maladies they suffered from were of an extreme and violent nature that was specific to war. Another nurse who served in the hospital from 1940 to the end of the war described how unbearably cold it was in the hospital during winter, how extremely hot in the summer, and how busy the work was, treating numerous sick patients, often without any respite.[38] And yet, in 1943, the hospital was still safe. From Hoshiya's testimony it seemed that even at that late stage of the war, the hospital had sufficient supplies and was distant enough from battle. This gradually changed the following year, when American air raids began, hitting the hospital, and killing and wounding a number of Hoshiya's comrades. Luckily for him, the Army transferred Hoshiya to an infantry unit detachment in Wuchang shortly before the bombing began.

[38] Hidaka Ichirō & Hidaka Midori, *Watashi wa senpan nanoka: jūgun kangofu monogatari* (Tokyo: Nikkan gendai, 2009), pp.285-289.

Medics and Nurses, War and Gender

People generally believe that field hospitals are safe institutions located in the rear, in an imposing building, with white robed angels (*hakui no tenshi* 白衣の天使). Of course, newspapers, magazines, novels, movies etc., mistakenly mix up transportation hospitals with field hospitals. Not only do actual field hospitals not have white robed angels, they have no satisfactory buildings either. Even though it is a hospital in the back separated from the frontline as much as possible, and even though it does not engage in fighting, (as part of) a splendid frontline unit, ammunition still comes to pay sick visits, *Omimai* お見舞. Also, (the field hospital) has to prepare itself for (direct) attacks from Chinese soldiers (lit. "remnants of defeated army," *haizanhei* 敗残兵).[39]

When describing the situation in the field hospital and distinguishing it from hospitals further in the rear, former-medic Harada Fukuju emphasized two synonymous factors: the degree of safety and the presence/absence of "white robed angels." This difference was firmly rooted in gendered concepts. Women nurses were the beloved caregivers giving the wounded a feeling of home by their feminine presence following the Nightingale ideal, as the soldiers moved away from the site of battle.[40] According to Pennington, soldier-patients took special comfort from being treated specifically by women.[41] Medics were men serving on the front. As described in the previous chapter, unit medics were referred to by the nickname "iodine," associating them with first aid, which was an exclusively male task. In some cases, however, they were called the unit's "male Nightingale."[42] This mixture of gendered dynamics and images were particularly evident in rear and transportation hospitals, where medics served side by side with women nurses, often performing the same tasks. These shared experiences, similarities and disparities created a special dynamic between medics and nurses, which differed from medic service in units and field

[39] Harada Fukuju, *Eiseihei no techō* (Tokyo: Tanka kenkyūkai, 1940), pp. 151-52.
[40] Hashimoto Takehiko, *Ruikotsu no tani: biruma heitan byōin kaimetsuki* (Tokyo: Ohshisha, 1979), p. 91
[41] Lee K. Pennington, *Casualties of History: Wounded Japanese Servicemen and the Second World War* (Ithaca, NY: Cornell University Press, 2015), pp. 84-85.
[42] Fujimoto Hidemi, *Senjō ni okeru kango nisshi* (Tokyo: Bungeisha, 2002), p. 34.

hospitals. It also elucidated the increasing militarization of medicine, and how it gradually blurred gendered boundaries, particularly from the time of the War in China.

The scale and nature of the support the Japanese Red Cross provided the military, reached unparallel heights during the eight years of the War in China and throughout the Pacific War. As discussed in the second chapter, the Japanese Red Cross maintained a close relationship with the Japanese military from the moment of its establishment in 1887. From 1910 it was positioned directly under the supervision of the Army and Navy minister, and it provided invaluable medical support during the Sino-Japanese and the Russo-Japanese Wars.[43] So much so, that according to Takahashi, it became an inspiration for developing forms of military mobilization of the Red Cross in other countries, such as Britain and the United States.[44]

During the War in China, despite the expansion of the number of medics and the prolongation of their period of service, there were still not enough caregivers on the ground. To reinforce its hospitals, the military fastened its control over the Japanese Red Cross, particularly to ensure a sufficient number of disciplined nurses. According to Kawahara, from 1938 the Army and Navy Minister not only supervised, but also managed and directed the activities of the Red Cross to the minutest details.[45] According to estimates, from 1937 to 1945 the military mobilized 29,562 Red Cross nurses and 1,888 head-nurses, all over the Japanese empire.[46]

The nurses underwent a process of militarization, receiving ranks, learning how to salute and march. They were called to duty with "Red Letters," were sent off to the front with great cheers at train stations, were given "comfort bags", *imon bukuro* 慰問袋 and thousand-stitched

[43] Kawahara Yukari, "Dainiji sekai taisen ni okeru nihon sekijūjisha no eisei shien," *Nihon ishigaku zasshi*, Vol. 61, No. 4 (2015), p. 338.
[44] Aya Takahashi, *The Development of the Japanese Nursing Profession* (London, GB: RoutledgeCurzon, 2004), see Ch. 5, pp. 95-112.
[45] Kawahara, Op. Cit., p. 338.
[46] Jūgun-kangofutachi no daitōa sensō kankō iinkai (ed.), *Jūgun-kangofutachi no daitōa sensō* (Tokyo: Shōdensha, 2006), pp. 298-99.

belts, *senninbari* 千人針 to protect them - just as soldiers did.[47] Most importantly, they served in warzones. As discussed in the second chapter, the military originally limited the service of women nurses to hospitals in Japan. It gradually changed its policy, allowing nurses to serve on hospital ships from the time of the Boxer Rebellion of 1900. During the First World War the Japanese Red Cross also sent nurses in limited numbers to reinforce the allies' care facilities in Europe. Based on that experience, from 1922 the Red Cross allowed women into warzones. It was, however, from 1932 and particularly 1937 that the military called for nurses in large numbers into its warzones.[48] Nurses thus moved closer and closer to the site of battle.

The military came to rely on the mobilization of nurses to the war effort to such a degree that from 1944 it did not limit itself to the Red Cross and began its own nursing training program; from 1944 the Army took it upon itself to recruit and train women between the ages of 15 and 18 to serve as Army nurses.[49] This was the final break from Ishiguro Tadanori's division of medical spheres. As argued in the second chapter, one of the reasons for the creation of the Japanese medic role was the perception that the military could not train or provide for women within its male framework, requiring its own personnel. The definition of the battlefield still remained masculine during the 1930s and 1940s, and the mobilization of nurses also enabled the military to send more medics to field hospitals and units. The gendered distinction of medical space thus persisted throughout. However, it was much more flexible than before, and as shall be

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[47] Kawahara, Op. Cit., pp. 338-39. See for example the following testimonies of former nurses: Fujimura Chiyo, *Jūgun kangofu* (Iwate: Fujimura Chiyo, ≈1994), pp. 2, 60; Kobayashi Kyoko, "Jōshū sensen wo susumu," Jūgun-kangofutachi no daitōa sensō kankō iinkai (ed.), Op. Cit., p. 31; Murayama Michiko, "Shinu koto wa atarimae," NHK Online War Testimonies Archive (14 July 2008); Saga Ryū, "Shanghai kōro no byōinsen," in Jūgun-kangofutachi no daitōa sensō kankō iinkai (ed.), Op. Cit., pp. 27-30; Sogo Yaeko, *Akatsuki no hoshi: Red Cross* (Tokyo: Bungeisha, 2003), particularly pp. 28-53.

[48] Kawaguchi Keiko & Kurokawa Ayako, *Jūgun kangofu to nihon sekijūjisha* (Kyoto: Bunrikaku, 2008), pp. 24, 51-52, 57, 66-67; Sawamura Shūji, *Nihon no naichinge-ru: jūgun kangofu no kindaishi* (Tokyo: Tosho shimbun, 2013), pp. 156-57.

[49] Konoe Tadateru, "Senjō no sekijūji kangofutachi," in Jūgun-kangofutachi no daitōa sensō kankō iinkai (ed.), Op. Cit., pp. 8-9.

seen in the next chapter, broken completely at times.[50] Army nurses even trained while using Army medic textbooks.[51]

These changes in the nature and position of the nurse in wartime, led to the cultivation of multivalent dynamics between Japanese medics and nurses in hospitals; relationships of support and mutual assistance developed in some cases, and friction and tension in others. For example, Hirayama Mikie recalled how medics helped her adapt to the heavy workload after she arrived in 1943 at the Dong'an No. 1 Army Hospital in Manchuria.[52] Fujimura Chiyo recalled how a medic found her and took care of her after she collapsed one day of exhaustion in a hospital hallway.[53] Suzuki Tatsuo, who was only 15 when he started service in a Navy hospital, recalled looking up to the nurses in the hospital as older sisters. The nurses took care of him, helping him with his laundry and other chores, as well as explaining to him different medical procedures. The aforementioned Hoshiya assisted nurses in giving injections to patients at a particularly busy time as well.[54]

Other testimonies indicate that differences in training and experience could cause tension between the two groups. As the demand for nurses grew the Red Cross gradually shortened its period of training.[55] However, there were many Red Cross nurses who underwent a much longer training course of 2-3 years, or who had previous experience working in hospitals in Japan. When they arrived in Army and Navy hospitals abroad, they were more knowledgeable and experienced than common medics, and more on par with non-commissioned medic officers. Consequently, according to testimonies, there were medics who resented nurses, feeling

[50] Shūji, Op. Cit., p. 156.
[51] Takaba Keiko, "Kaitakudan de manshū he," NHK Online War Testimonies Archive (5 June 2014).
[52] Hirayama Mikie, "Ichinen no naichi sōkan," *Jūgun kangofutachi no daitōa sensō*, Op. Cit., pp. 101-103.
[53] Fujimura, Op. Cit., p. 39.
[54] Author interview with Mutō Masatoshi, 14 June 2014; Author interview with Suzuki Tatsuo, 23 December 2013; Author interview with Hoshiya Kiyoshi, 25 February 2014.
[55] Konoe, Op. Cit., p. 8.

inferior.[56] Moreover, while the military conscripted medics and sent them abroad without giving them any choice in the matter, nurses volunteered. Granted, the degree of freedom they had in making their own choice at that time could be contested. Nevertheless, the law did not require women to serve as nurses, but it did require men to join the military. Further still, the military paid low ranking soldiers only a few yen per month, while Red Cross nurses received a much higher pay – of between 10 to 30 times more than medics, according to their rank and location of service.[57] Mutō Masatoshi remarked that soldiers were jealous of nurses for the salary they received, feeling that as common soldiers, they were at the bottom of the food chain.[58]

Finally, nurses faced distinct challenges due to their gender. They were the revered "white robed angels," but they served in a military setting where it was not uncommon for women to be harassed, raped and used as prostitutes. According to Kawahara, at least on one occasion, when Red Cross nurses traveled to Burma by ship, they specifically requested their rooms to be far away from where Korean "comfort women" were kept. This request implied the vulnerable position in which nurses were, unlike medics, and despite often being highly respected - because they were women.[59]

The expansion of warfare in Manchuria and China in the 1930s and 1940s and the demand it created for more medical personnel in Army hospitals blurred, but did not obliterate some of the gender distinctions within the military medical framework. After completing their exclusively male training, medics began their hospital service in a varied environment, in terms of gender, as well as the medical content and specialties they were exposed to and to which they had to adapt. Nursing the wounded and sick and assisting military physicians was an inseparable

[56] Hashimoto Takehiko, Op. Cit., p. 91；Konoe, Op. Cit., p. 8.
[57] Kawahara, Op. Cit., 342-43; Sawa Masatoshi, *Tennō no guntai: waga zaitaiki* (Tokyo: Ochanomizu shobō, 1988), p. 62.
[58] Author interview with Mutō Masatoshi, 14 June 2014.
[59] Kawahara, Op. Cit., p. 348.

part of medic service in any context. However, one of the main factors that differentiated service in the hospital and unit setting was the experience of battle and its specific demands.

3) Unit Medics in Altered Battlefields

One of the first things cavalry unit medic Ikeda Tadashi learned during his medical training was that he was not to die. His training took place in 1940 in a field hospital in Baotou, Inner Mongolia. When he arrived at the hospital, a high-ranking medical officer told the trainees the following:

> Your goal as medics is to provide care to the wounded. Your job is to allow those who are lightly wounded to pick up a rifle again and fight, and to send those who are gravely wounded to the hospital. That is why you are not to take up a weapon yourselves. It is because you are not allowed to die in battle. If you were to die in battle, the main force – the combatant soldiers – would not go out (and fight). It is because there are men in the back to rescue them that they (the combatants) move forward (to battle).

After training, Ikeda described how the soldiers in his unit would call him *yo-chin*, iodine, to trivialize him. But, on the battlefield, just as the officer said, the soldiers would switch to respectful terms, such as Mr. Medic, *eiseihei-san* 衛生兵さん, or Mr. Ikeda.[60] On the field their lives suddenly depended on Ikeda. This was truer than ever for medics in the 1930s and 1940s, when medics were also placed at a larger risk than in the past.

From the 1930s the unit medic's sphere of activity during battle expanded increasingly from the dressing station to the battlefield, due once again to matters of scale. As described above, the expansion of the War in China drained Japanese military human resources, creating a pressing demand for more medics, and led to a change in the structure of field medicine. According to Pennington, in 1937 top decision makers in the Army's medical infrastructure decided to expand the number of medics to allow a wider medical presence in the field. By so

[60] Ikeda Tadashi, *Taizuki esieihei* (Tokyo: Kindai bungeisha, 1990), pp. 5-6.

doing, they wished to shorten the interlude between the moment a soldier was wounded, evacuated and received care, while still keeping military physicians safe at the rear. In other words, they wished to reinforce existing strategy. By 1939, however, the Army continued expanding the number of medics, but also began sending more physicians closer to the front.[61] These changes reflect how the Army placed more emphasis on the importance of immediate medical care. Medics played a central role in facilitating this change.

There was another change of scale that plausibly contributed to the immediacy of medical care in battle, which already started in the early 1930s – the proliferation of small-scaled combat in the context of occupation. Though the War in China included major battles and large campaigns, as it developed into a long war of attrition and occupation it included many small-scaled operations, involving smaller units. This development arguably began already following the Manchurian incident in 1931 and the establishment of the Manchukuo puppet regime. According to Coox and Drea, following the incident, the Japanese Guandong Army[62] was purportedly preoccupied with protecting Manchukuo from threats, such as Nationalist China and the Soviet Union, and would initiate small-scaled operations against various opposition groups and "bandits."[63]

The division of combat into smaller components gradually signified that medics carried more of the medical weight per combat force. Consider the following example. Based in Suihua, Manchuria, the Kawamura unit planned and conducted "wipe-out" operations in the Beian region

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[61] Pennington, Op. Cit., pp. 65-66.

[62] The Guandong Army (otherwise transliterated as Kwantung) grew from a Japanese military force stationed in Manchuria in 1905 to protect Japanese interests from the Soviet Union. The force became the Guandong Army in 1919, but according to Coox could be considered a fully-fledged army only following the Manchurian incident, which it instigated in 1931. See Alvin D. Coox, "The Kwantung Army Dimension," in Peter Duus, Ramon H. Myers & Mark R. Peattie (eds), *The Japanese Informal Empire in China, 1895-1937* (Princeton NJ: Princeton University Press, 1989), pp. 396-408.

[63] Coox, Op. Cit., particularly pp. 412-14; Drea, 2009, pp. 123-24.

in February 1940. According to a unit report, the troops received information that "bandit gangs," *hidan* 匪団, were establishing a firm base in the south of the region and so the unit planned a few operations to obliterate the "gang's" centers. Together with a neighboring unit, it divided the targeted territories and sent forces to each. The report focused on an operation near the Xiaoyi Jimihe River in Tieli prefecture, which they believed to be the operation base of the alleged bandit gang. In early February, the unit sent an attack force, consisting of 69 men and 2 commanders, divided into smaller platoons.

It also included an accompanying medical force of 2 physicians and 4 medics. All of them but one positioned themselves slightly behind the location of fighting, where they established a small dressing station to care for the wounded and prepare them for transportation further back. The remaining medic – a private first-class Katō - was responsible for providing immediate care on the frontline during combat.[64]

When private Okamoto was wounded, medic private first-class Katō, who was waiting further in the back, immediately sprang forward to the frontline, grabbed Okamoto by the right hand, and pulled him into a pit about 10 meters back. Using his flashlight, he searched for the wound and detected a small amount of blood flow from its opening. He called out the name of the wounded, to encourage him in his state of anguish, but he did not reply. (Katō then) gave him a hypodermic injection of camphor and placed a compression bandage on the wound, but soon later (the wounded) perished… (Shortly after) Katō heard that Private Korekane of the Okajima platoon was wounded during the attack. With danger in his back, he crawled forward to reach the wounded. Bullets showered down fiercely... He carried the wounded soldier about 20 meters back into a pit, where he inspected him. He cut his uniform and with the aid of a flashlight inspected the scapular region, where he was wounded. There was a little bleeding and (the patient) complained about discomfort in his hands, so (Katō) used a compression bandage to wrap the wound…[65]

[64] Suika Kawamura Butai, "Hokuanshō tetsuriken koitsugemitsukawa jōryū fukin sentō gyōmu shōhō (eisei) / 1 sentō no gaikyō," Shina jihen Collection, Bōeishō bōeikenkyūjo Archive (February 1940), JACAR reference number: C13071228700.

[65] Suika Kawamura Butai, "Hokuanshō tetsuriken koitsugemitsukawa jōryū fukin sentō gyōmu shōhō (eisei) / 2 sensen kyūgo no jōkyō," Shina jihen Collection, Bōeishō bōeikenkyūjo Archive (February 1940), JACAR reference number: C13071228800.

The report continued to follow Katō as he swiftly moved from one wounded soldier to another under fire.

Katō's activities on the line were aimed at quickly stabilizing and reviving the wounded. He applied bandages to stop bleeding and tourniquets when the bleeding was strong. As described in the citation, he also injected "camphor" - a drug aimed at stimulating blood circulation – to revive soldiers who lost consciousness when non-invasive means, such as speech, failed. Katō's actions were not elaborate. His aim was to keep the soldiers alive so they could receive further care at the dressing station behind the line, care that he did not have time or means to perform on the battlefield. He was the only medic moving on the line, the wounded were numerous, and their wounds required immediate measures. As formerly described, each wound and body part required different care, necessitating Katō to be able to differentiate between the wounds and the type of emergency measures they required within seconds. Speed was of the essence both for keeping the wounded alive and for Katō to move on to treat another.

The demand for immediate care placed the medic at risk, since fighting was still taking place and the men he treated were wounded on the field. The report described Katō crawling beneath the bullets, reaching the wounded and then pulling them away to a pit where he could examine the wound safely. Katō survived this operation but many medics did not, precisely because they were so exposed.[66] Ikeda, for example, who was mentioned at the beginning of this section, described his service during a battle in the Ordos desert, where as a medic, he was supposed to find ways to run and hide so as to reach the wounded safely. But, on the flat desert

[66] For example, a search in the Asahi Shimbun newspaper database for articles about medics in the 1930s, results most frequently with lists of names of medics who were injured or died in battle. See for instance "Chōhei hachi-mei shishō," *Asahi shimbun*, Tokyo morning edition (12 January 1932), p. 2, or "Senshishōsha shimei: shanghai no sentō-de," *Asahi Shimbun*, Tokyo evening edition (18 August 1937), p. 1.

there was nowhere to hide. He became, in his words, an easy target.[67] Former-medic Ishizawa Masanobu even recalled his instructor explaining during medic training that medics have the highest death rate of about 30% for precisely that reason.[68] It is not clear whether that was the actual figure. Regardless, this sentence reflected the recognition of the degree in which medics were exposed to fire, risking injury and death, to treat others.

Similar to Manchuria, during the War in China, as the Japanese Army moved in the Chinese countryside it also sent small units - to "clean-out" operations against so-called bandits, and to dissemble foci of the Chinese resistance.[69] Medics would go along on these operations and would perform the tasks that have come to be mostly associated with the role in historical memory – running on the battlefield to find the wounded and provide first aid as Katō did. According to the aforementioned Imazu, for instance, there wouldn't necessarily even be a physician during such operations. He described how his unit engaged in small skirmishes against the "Eighth Route Army," the military arm of the Chinese Communist Party, as it moved deeper into the Chinese countryside. Since they were small-scaled skirmishes, the unit did not establish field hospitals. There were no stretcher-bearers or even stretchers, as was common practice in major battles. The bulk of wounded treatment and evacuation was the responsibility of medics and fellow combatants. There was only one physician, who would usually stay in the unit headquarters, leaving the medical work to the accompanying medics. In other words, there was nobody else to evacuate and treat the wounded. Only the medic on the field.

[67] Ikeda, Op. Cit., pp. 6-7.
[68] Ishizawa Masanobu, *Magotachi he no isan* (Kanagawa: Kobayashi Seigo, 1996), p. 1.
[69] Drea, 2009, pp. 194-97, 200-03, 213-15.

Speed and Disinfection

The importance of speed on the battlefield also manifested itself in the medicine medics practiced. The most notable example was that of disinfection, aimed at preventing the wound from becoming contaminated, and eventually leading to tetanus infection or gas gangrene. Medic textbooks warned medics not to touch a wound with an unsterilized finger or equipment, and to clean the wound by removing foreign objects such as debris and clothing.[70] Medics were to use sterilization gauzes, which included mercury chloride as disinfectant. Further back, the medics would smear iodine on the wound and its surrounding, and use materials such as ether and benzene to clean the skin around the wound as well.[71] The aforementioned Katō did not have time to disinfect each wound he bandaged himself. His effort was to stop the bleeding as quickly as possible. However, according to the unit report, once the wounded arrived at the small dressing station near the line, the medical personnel smeared iodine on the wounds and applied new bandages, following protocol.

The Japanese military emphasized the importance of disinfection and sterilization in the treatment of wounds already in the Meiji era as antisepsis began gaining traction as a medical concept internationally.[72] According to Kurosawa, it became more central following World War I, as military surgery – starting with Germany - prescribed the disinfection of a wound within eight hours from the moment of wounding.[73] The intensification of treatment on the battlefield

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[70] *Eiseihei kyōtei*, Op. Cit., pp. 52-58.

[71] *Eiseihei kyōtei*, Op. Cit., pp. 58-60; *Eiseihō oyobi kyūkyūhō* (Tokyo: Kobayashi matashichi, 1936), pp. 42-47.

[72] The Franco-Prussian War was one of the first major wars in which principles of antisepsis began to be adopted and implemented in battle, following Listerian theories and methods, though in a limited capacity: Jack E. McCallum, *Military Medicine: from Ancient Times to the 21st Century* (Santa Barbara, CA: ABC-Clio, 2008), p. 127. See also M. Anne Crowther & Marguerite W. Dupree, *Medical Lives in the Age of Surgical Revolution* (Cambridge, GB: Cambridge University Press, 2007), pp. 96-121; Roy Porter, "Hospitals and Surgery," in Roy Porter (ed.), *The Cambridge Illustrated History of Medicine* (Cambridge, GB: Cambridge University Press, 2006) pp. 229-30.

[73] Kurosawa Yoshiyuki, "Eisei hokkyū no shiteki kosatsu (dai-5 hō)." *Bōei eisei*, Vol. 31, No. 11 (November 1984), pp. 374-75.

arguably aimed at shortening the time that passed from the moment of wounding and the disinfection of the wound, facilitated by medic activities.

The Japanese medics did not, however, use sulfa powder, which became so closely tied with the image of American medics in historical and popular memory from 1942. The reason for this disparity was arguably more to do with the American military than the Japanese. The Japanese military used sulfa pills all the way to 1945, but not as wound disinfection powder.[74] According to Lesch, the wide use of sulfa powder by the American military was the result of practice and not of proven efficacy. Results of civilian research from 1943 actually indicated that powdered sulfa had no efficacy as a wound disinfectant. However the faith in it on the side of American military caregivers and soldiers, pushed for the persistence of their use throughout the war.[75] The powder was an appealing solution to the needs of disinfection in battle because it was so quick and simple. Thus, American medics became associated with sulfa, while the Japanese medics were termed "iodine."

Saving the Wounded – Caring for the Dead

Despite the fact that medics ran to the wounded and provided immediate care, they did not always manage to save the wounded, as in the case of the aforementioned Katō. In such cases medics would assume an unofficial role, which was more psychological than physical, easing the

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[74] Maki Uemura, *The Japanese Pharmaceutical Industry* (New York NY: Routledge, 2011), pp. 11, 48; See an announcement that appeared in the *Asahi Shimbun* in1939 of government sponsored wartime research to produce domestically imported drugs, including sulfamine: "Gaikoku no kusuri ni kawaru kokusan no okusuri: senjikei no yakkyokuhō kyō kōfu," *Asahi Shimbun*, Tokyo morning edition (23 August 1939), p. 11. See an example of newspapers explaining to housewives how to use sulfa drugs in "Kusuri no shinchishiki: sulufon-zai no hanashi," *Asahi Shimbun*, Tokyo morning edition (8 April 1941), p. 4. Finally, after the Japanese surrender, units prepared inventory lists of medicines they possessed, at times both in English and Japanese. Several of these lists survived and include different sulfa drugs. See for example: Denshin daiichi rentai daisan chūtai, "The List of Medical Materials," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (November 1945), JACAR reference number: C15010906700.

[75] John E. Lesch, *The First Miracle Drugs: How the Sulfa Drugs Transformed Medicine* (Oxford, GB: Oxford University Press, 2007), particularly Chs. 7-8, pp. 207-50.

final moments of the wounded before they passed away. Takeda Teita served in an engineering unit in Northern China from 1940. During his first battle as medic, he accompanied two regiments as they attacked a village, held by Chinese forces. He recalled how he found a soldier who was shot fatally in the stomach. There was nothing Takeda could do for the wounded medically. Instead Takeda gave him some water and listened to his final words, which were 'mother,' *okaasan* お母さん. Takeda recalled being in a similar situation numerous times henceforth, frequently hearing the same final words.[76]

In other cases, medics quite literally helped the deceased to move on, by taking care of their bodies. Fujimoto Hidemi described a case whereby a soldier was shot dead while their company was moving from one location to another. Fujimoto stayed behind, cremated the body while bidding the deceased farewell and praying for him to reach Nirvana. He then collected some of the bones to send back to Japan.[77] According to Namihira, as the Japanese military began fighting overseas it became very difficult to bring back the deceased bodies intact back to Japan. The accepted solution was to cremate and collect some remnants of the deceased to present to the families, so they could conduct death rites.[78]

It could be imagined that while fighting still took place, a medic could not spare the time to pause with each dying soldier, and rather, moved on according to principles of triage to save those who could be saved. And yet, the two examples reveal that the role medics played on the

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[76] Takeda Teita, *Senjō no eiseihei* (Tokyo: Bungeisha, 2001), p. 16.

[77] Fujimoto Hidemi, Op. Cit., pp. 70-72.

[78] According to Namihira, it was during the Sino-Japanese War of 1894-95 that the military declared that soldiers should be buried abroad. From the Russo-Japanese War (1904-05), some the military began the practice of bringing back such remnants, *ikotsu* 遺骨, such as pieces of hair, finger nails, bones etc.: Namihira Emiko, *Nihonjin no shi no katachi* (Tokyo: Asahi Shimbunsha, 2004), pp. 194-98. It should also be noted that the military subscribed to what grew into a "national tradition." Andrew Bernstein argued that cremation was actually contested in the early Meiji. It became a new tradition, as a result of historical processes. About the cremation debate see *Modern Passings: Death Rites, Politics, and Social Changes in Imperial Japan* (Honolulu, HI: University of Hawaii Press, 2006), pp. 67-90. See also pp. 98-105 on military funerals.

battlefield was not always just medical, but also emotional. The medics in these cases were in a sense akin to the catholic priest visiting the sickbed to hear the final confession of the dying. During battle medics were to stand on the line between life and death in the most immediate way.

4) Beyond the Battlefield - a Unit Medic's Daily Life

The medic role reached the highest level of intensity on the battlefield. However, the Japanese military spent eight years in China – over fourteen in Manchuria - during which combat filled only part of the time. In between operations, medics led mundane routines, consisting of care and disease prevention. This section will explore aspects of the commonplace in medics' lives in China and Manchuria and how these routines affected the interaction between caregiver and an increasingly varied group of patients.

Medics as Maintainers of Health

About five months before the War in China broke out, the Army initiated the final terminological change for medic. The change was part of a wider reorganization of the Army, but it also had a symbolic meaning transcending semantics. From *kangohei* 看護兵, "nursing soldier," medics were now termed *eiseihei* 衛生兵, "hygiene soldier."[79] As Rogaski argued, hygiene became a central concept in disease prevention in Japan and its growing empire from the Meiji era. However, it became especially important from 1937, following the beginning of the War in China, since Japan perceived China as a "biologically threatening environment."[80]

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[79] Naikaku (signed by Hayashi Senjūro and Sugiyama Hajime), "Goshomei genpon, Shōwa jūninen, chokurei daijūsango," in Naikaku Collection, Kokuritsu kōbunshokan Archive (12 February 1937), JACAR reference number: A03022080500.

[80] Ruth Rogaski, *Hygienic Modernity* (Berkeley, CA: University of California Press, 2004), p. 254. See Ch. 5 for the construction of the concept of *eisei*, pp. 136-64.

Hygiene was a tool to ensure the safety of Japanese forces and medics were the agents that implemented it. Textbooks instructed them to walk around camp and supervise the level of hygiene of its structures, water and of the soldiers themselves.[81]

Translated literally, the term *eiseihei* signified a much larger responsibility of which hygiene was only one dimension – medics were "life protecting soldiers" (*ei* 衛 signifies guard, *sei* 生, *hei* 兵). On a day-to-day basis, their role was not just to treat, but equally significant, to serve as guardians against disease. As discussed in the third chapter, disease was an equal if not larger killer than the enemy in wartime.[82] Medics were the men on the ground, accompanying the soldiers at all times. Hence, they were to curb infection through measures of prevention and detection. Satō Kazunori for example, would spend his evenings walking around the barracks of his unit after the soldiers went to sleep to make sure nobody displayed any sign of disease.[83] While in hospitals medics would make rounds at night to see that all patients were in stable condition, in the unit, the medic would make rounds to make sure none of the soldiers were to become patients.

This function of disease prevention was not new, but it became more significant with Japanese imperial expansion, which exposed soldiers to a wider variety of diseases. Iijima argued that when Japan began increasing its territorial expansion into Asia starting with Taiwan, it also reinforced military medical research of different infectious diseases typical to each region.[84] Medicine was thus to facilitate expansion, and medics were to help implement it. The

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[81] *Eiseihei kyōtei*, Op. Cit., pp. 9-10.

[82] See for example A.D. Cliff & M.R. Smallman-Raynor, *War Epidemics: an Historical Geography of Infectious Diseases in Military Conflict and Civil Strife, 1850-2000* (Oxford, GB: Oxford University Press, 2004).

[83] Author interview with Satō Kazunori, 17 December 2013.

[84] Iijima termed this field as "Development Medicine," *kaitaku igaku* 開拓医学, and "Development Hygiene," *kaitaku eisei* 開拓衛生 See Iijima Wataru, *Malaria to teikoku: shokuminchi igaku to higashi ajia no kōiki chitsujo* (Tokyo: Tokyo Daigaku Shuppankai, 2005), pp. 157-59.

diseases, on which medic textbooks elaborate, illuminate this aspect of the role of as imperial caregiver. Most of the specified diseases were infectious and tropical diseases often encountered in the Japanese growing empire. To name a few: malaria, dysentery, diphtheria, cholera, typhoid fever, paratyphoid, typhus and smallpox.

The textbooks emphasized prevention over care. As guardians against disease, medics were to prevent, detect and refer sick soldiers to a doctor. Afterwards, they were to treat the sick following the doctor's instructions. In the case of malaria for instance, the textbook explained that it was caused by the "malaria protozoan" that "resides in the bloodstream of a patient or carrier." It identified the carrier as the "anopheles" mosquito and provided detailed descriptions, including illustrations of how the mosquito looked. It elaborated a few measures against the mosquito, such as using mosquito nets and repellents, draining still water and pouring petroleum into ditches to prevent larvae from growing, and taking quinine hydrochlorat in particularly prone areas. The textbook also elaborated on the symptoms of malaria, to enable medics to detect it. It did not pause on treatment.[85]

These diseases were in many ways geographically bound and thus, each medic was to become familiar with the diseases his area was prone, to prevent outbreak. For instance, Matsumoto Masayoshi served in Shanxi, Northern China and he was particularly alert against malaria. Hongō Katsuo served in Jingmen, Hubei where the biggest scourge was cholera. When Satō Kazunori served in Manchuria, on the border with the Soviet Union, the most frequent problem was frostbite – not an infectious disease, but one that required prevention nonetheless.[86] The medics were not simply unit medics, but imperial unit medics.

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[85] *Eiseihei kyōtei*, Op. Cit., pp. 97-100.

[86] Author interview with Matsumoto Masayoshi, 5 March 2014; Author interview with Hongō Katsuo, 21 January 2014; Author interview with Satō Kazunori, 17 December 2013.

Medics and Soldier-Patients

Serving together in the same unit every day, medics became acquainted with many of the soldiers in their unit in a way that hospital medics were not. They would eat with other soldiers, sleep in the same barracks, and go on operations together. This environment created a unique form of relationship between caregiver and potential patients, since medics interacted with other soldiers in both medical and non-medical contexts. The size of the basic unit affected the nature of this relationship.

In a regiment or division, medics would usually spend their days in a defined medical space - the medical care room, *imushitsu* 医務室 - together with military physicians, non-commissioned medic officers and other medics. The room was like a small clinic on the base. The medical personnel would examine and treat soldiers there, and if needed, make arrangements to send the soldiers to a hospital further back. In Imazu's case, his basic unit consisted of roughly 5 companies of about 200 men each. The personnel at the medical care room - 1 physician, 2-3 non-commissioned officers and 7-10 medics at a time – were thus in charge of a 1000 men. Imazu did not know all of the men in his regiment, but he did know some.[87]

Medic interaction with unit soldiers was much more intense in smaller Army detachments, *bunkentai* 分遣隊. During the War in China, units would often send smaller forces of differing sizes to create detachments in remote areas, so as to strengthen the Army's hold. Matsumoto Masayoshi, for instance, was part of a unit positioned in Yuxian in Shanxi in 1944. At a certain point, his unit sent a group of roughly 30 men to build a detachment on the summit of a mountain near a village named Shangshezhen, where they were to remain for a lengthy period of time.

[87] Author interview with Imazu Shigeru, 16 December 2013.

According to Matsumoto, the number of soldiers in the detachment decreased over time, while other detachments in his division consisted of even fewer soldiers – between 10 and 20. Matsumoto was the only care provider at the detachment. As a result he was to act independently. Unlike the textbooks, he had to prevent and detect disease, but also treat the soldiers by himself with the basic equipment he stored in the medical room on their base. In more complicated cases, he would send the soldier-patient further back.[88] He was thus the sole guard and gateway of medical care for the soldiers in the detachment. It also meant he spent much more time with the fewer soldiers in his care.

The unit environment thus created a unique form of relationship between caregiver and potential patients, since medics interacted with other soldiers in both medical and non-medical contexts. This was particularly true in detachments, but also in larger units. Consequently, medics would treat and at times, were forced to cope with the death of friends who were close to them.[89] In one case – albeit from New Guinea- a company soldier described, how the sole medic was transformed after four soldiers in their company were eviscerated during an air bombardment. The medic was charged with putting the remains back together, to prepare them for cremation. The soldier described how the medic never returned to his former self after that, becoming "strange" and eventually dying as a result.[90] Soldiers of all roles felt the loss of departed comrades. However, for medics it was arguably different, as soldiers whose role was to preserve health and life, while constantly confronted by the sight of the dead, sick and wounded.

Conversely, medics were also obligated to treat soldiers who bullied and mistreated them when they were first year soldiers. As Imazu described:

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[88] Author interview with Matsumoto Masayoshi, 5 March 2014.
[89] Harada, Op. Cit., p. 85.
[90] Mitsuhashi Kunitami, *Shima no uta: shi no shima kara seikan* (Tokyo: Nihon hōsō shuppan kyōkai, 1995), pp. 143-61.

Whether I knew a soldier's name or not, when they were sick or wounded, I had to help them… In the military, as elsewhere, there were kind people, good-hearted people, and also cold and unkind people – among the medics as well as other soldiers. Generally speaking, when you spend 365 days with these soldiers, eating together and what not, you can tell. You don't have to be told who is a good person, who is nice, just like outside of the military… When I entered the Army there were men who treated me kindly, and then as you've probably heard, there were those who would slap you till your face-changed color… Such men would pick on those weaker than them, bullying them, and they had no way to resist. I hated that… But then, when these persons were wounded and they asked for help, I couldn't say – 'not interested' and kick them when they were down… Other soldiers of my year would say to me – 'get even. When (the bully) would feel bad and come (to the medical room) to ask for medicine, give him some toothpaste to drink'… But I couldn't do that…[91]

Imazu saw the military as a microcosm of society, which consequently collected men of different temperaments. But, irrespective of his feelings towards them, when they needed care, they were all patients - even the bullies. As medic, Imazu had to put his feelings, previous experiences and personal understanding aside, however tempting it was to do otherwise. It could be imagined that not everyone followed suit. In a hospital in Manchuria, former-nurse Tsumura Namie for example, witnessed a medic slap a patient for putting a thermometer backwards in his mouth. Medical care created a different kind of power relations within the military framework, which could be respected and abused, according to the person in charge.[92]

Finally, medicine created an inversion also in the power relations created by the Army hierarchy. Fujimoto Hidemi, for example, treated a number of commanding officers for dislocated joints:

I went to (the platoon commander's) room, and found First lieutenant Matsui groaning and crouching on the bed in pain. He was usually such a fierce officer, who could crush even the toughest demons, but he could not win over the pain. As he held his right arm, he asked me, seemingly in agony, to please do something quickly.[93]

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[91] Author interview with Imazu Shigeru, 16 December 2013.
[92] Tsumura Namie, "Jūgun kangofu no shōgen," Kawaguchi & Kurokawa, Op. Cit., p. 108.
[93] Fujimoto, Op. Cit., p. 61.

Pain did not differentiate between ranks. At that moment, the commander was dependent upon the young medic, who was usually so far below him in the hierarchy.

Their role as medical caregivers set medics apart from other soldiers in their unit, both on the field and while stationed in camp. Their duties extended all over camp, as well as in a particular medical space. They were the closest to the soldiers, which enabled them to serve as a form of spy against pathogenic intruders. Their lives were intertwined with other soldiers, cultivating friendships and tensions that added an additional dimension to the care they provided. They were interwoven in the military daily life, working to ensure it proceeded smoothly.

Preventing Venereal Disease

Among the many diseases that medics were to prevent, one stood out as a particular concern – venereal disease. The perceived connection between militaries, prostitution, soldiers' health, and by extension - of the entire population, had a longer history in numerous militaries. As military physician Ishiguro Daisuke wrote in 1923:

> Venereal disease does not only diminish the fighting power on the front. Its prevention must be strongly prioritized to protect the health of the nation at large, since upon their triumphant return from battle, (soldiers) import the virus back to their families.[94]

As the maintainers of military health, medics were to make a particular effort to prevent venereal diseases. This concept was not new, but its scale during the War in China, was much larger, due to the nature of the war and the perception of Japanese military life during occupation.

In his thorough research of the military "comfort women," *ianfu* 慰安婦, Yoshimi Yoshiaki argued that following the Manchurian incident of 1931 the military began creating

[94] Ishiguro Daisuke, Op. Cit., p. 65. For an example of militaries in other countries see: Allan Brandt, *No Magic Bullet: a Social History of Venereal Disease in the United States since 1880* (Oxford, GB: Oxford University Press, 1985); Philippa Levine, *Prostitution, Race, and Politics: Policing Venereal Disease in the British Empire* (New York, NY: Routledge, 2003); Daniel Walther, *Sex and Control: Venereal Disease, Colonial Physicians and Indigenous Agency in German Colonialism, 1884–1914* (Oxford, GB: Berghahn, 2015).

policies to ensure and control the sex lives of its soldiers; the Navy and Army assumed a responsibility of supplying its soldiers with prostitutes, euphemistically called "comfort women";[95] women who were either employed, or as it seems in most cases, kidnapped and tricked into serving as sex providers to numerous Japanese soldiers. Consequently, thousands of women of Japanese, Chinese, most numerously Korean, and other nationalities, were sexually enslaved throughout the war.[96] Among those who were tricked, there were also cases of nurses, who wished to work at a military hospital, but were placed in a comfort station instead. It is no wonder that as discussed above, nurses made a special effort to distance themselves from all related to comfort stations.[97]

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[95] Yoshimi Yoshiaki, *Jūgun ianfu* (Tokyo: Iwanami Shoten, 1995), Ch. 1 pp. 13-56, particularly pp. 14-19, 26. The book was also translated to English by Suzanne O'Brien as *Comfort Women: Sexual slavers in the Japanese Military during World War II* (New York, NY: Columbia University Press, 2000). Yoshimi also published a collection of sources and testimonies concerning the history of comfort women in *Jūgun ianfu shiryōshū* (Tokyo: Otsuki Shoten, 1992). Though I base myself largely on Yoshimi's research, other works have been published on the history of comfort women. See for example: George Hicks, *The Comfort Women* (New York: W.W. Norton & Company, 1995); David Andrew Schmidt, *Ianfu – the Comfort Women of the Japanese Imperial Army of the Pacific War* (Lewiston, NY: Edwin Mellen Press, 2000). Finally, see Yuki Tanaka's analysis of the historical treatment of the memory of the comfort women system and how it was tied to the nature of the American Occupation: *Japan's Comfort Women: Sexual Slavery and Prostitution during World War II and the US Occupation* (London, GB: Routledge, 2002).

[96] The historical memory of "comfort women" has become a topic of great controversy in contemporary Japan and beyond it, particularly in Korea. Following individual lawsuits in the 1990s by former Korean comfort women demanding compensation from the Japanese government, the historical memory of the exploitation of comfort women rose to the surface. It became a controversial political topic, particularly but not limited to the relations between Japan and Korea, and has remained so to this day. The 1990s lawsuits spurred historical research of the comfort women system, bringing to light numerous testimonies by former comfort women and Japanese servicemen, as well as surviving military documents, albeit comparatively few, leaving many gaps of information. Concomitantly, various groups - civilian, academic and political - in Japan began denying the history on various grounds. Some deny the nature of the comfort stations as a system created by the Japanese military. Instead, they argue the military used existing local brothels. Some deny that the women were coerced or kidnapped, emphasizing the role of local recruiters and employers. Some protest the estimated numbers. Others criticize the veracity of oral testimonies in light of the scarcity of military documents. Much has been written over the debate. See for example the introductions to the English translation of Yoshimi's book: Suzanne O'Brien, "Translator's Introduction," Yoshimi, translated by O'Brien, Op. Cit., pp. 1-21; Yoshiaki Yoshimi, "Author's Introduction to the English Edition," Yoshimi & O'Brien, Op. Cit., pp. 23-31. See also Maki Kimura, *Unfolding the 'Comfort Women' Debates* (New York, NY: Palgrave Macmillan, 2016); Kitahara Minori & Kim Puja, "The Flawed Japan-ROK Attempt to Resolve the Controversy Over Wartime Sexual Slavery and the Case of Park Yuha," translated by Rumi Sakamoto, *The Asia-Pacific Journal*, Vol. 14, Issue 5, No. 3 (March 1, 2016); Caroline Norma, *The Japanese Comfort Women and Sexual Slavery during the China and Pacific Wars* (London, GB: Bloomsbury, 2016).

[97] Yoshimi, Op. Cit., 22-28, 86-127.

The military created this system seemingly for two reasons. First and foremost, to prevent venereal diseases, by taking over the responsibility of supplying soldiers with women, whose bodies were monitored regularly by military medical personnel. The second reason was to prevent rape, which was already an issue in 1931, but particularly after international criticism was placed at Japan's door following the Nanjing Massacre of 1937. Nonetheless, as Yoshimi pointed out, comfort stations failed in fulfilling both of these two goals.[98]

The main reason for the military's institutionalization of sexual violence, Yoshimi argued, was linked to a third reason - the way the military envisioned military life in China and later – in the Pacific. There was no end to the war in sight. The soldiers were to spend a long period of time overseas. An occupation army needed diversion and a source of release or "comfort." It was part of a service the military supplied to its soldiers, to preserve their wellbeing and, more importantly, their fighting spirit. The women were thus part of the military and were called military comfort women, *Jūgun ianfu* 従軍慰安婦.[99] As Moore revealed, based on wartime diaries and letters, visits to comfort stations became a regular part of the soldier's military life.[100]

The military took it for granted that sex was an inextricable part of a soldier's life and thus it made many efforts to curb venereal disease. While implementation of preventive measures was the responsibility of the soldiers themselves, medics took part in the military efforts in a number of ways. The military authorities used posters, lectures, movies and a section in soldier textbooks to explain about the different kinds of venereal diseases and how to prevent

[98] Yoshimi, Op. Cit., pp. 14-19, 22-27, 43-51.
[99] Yoshimi, Op. Cit., pp. 52-55.
[100] Aaron William Moore, *Writing War: Soldiers Record the Japanese Empire* (Cambridge, MA: Harvard University Press, 2013), pp. 148-53.

them.[101] For instance, they instructed soldiers to use condoms and a specific ointment, which according to Matsuno, the Army began mass-producing from 1932.[102] Soldier textbooks instructed how to wash and disinfect the soldier's sexual organs after intercourse and to avoid relations with an infected woman completely. Most importantly, to prevent infection among the troops, the books instructed soldiers to immediately report and examine any sign of disease, avoid using communal towels, sinks and baths.[103]

Medics provided the soldiers with the means of prevention – condoms and ointments – and additional explanations.[104] Former medic Ikeda described how he assembled the men, when he was stationed in Guyang, to explain how to use condoms and the prophylactic ointment, since there was a comfort station nearby.[105] Matsumoto Masayoshi would distribute condoms to soldiers in his division at Yuxian every Sunday - the soldiers' day off. As Matsumoto noted, "the infection of venereal disease was something we had to prevent at all costs."[106]

The gap between the instructions and the field was great, and as a result soldiers contracted venereal disease despite the military's efforts. Documents and testimonies reveal that many soldiers did not follow the instructions, even though they knew and understood the protocol.[107] Consequently, as Ikeda put it, they received an "honorable decoration" of gonorrhea

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[101] In 1934 the Japanese Military Minister even shared a detailed report on the preventive measures the Japanese military developed with the military attaché of the French embassy in Japan. See: "Fukkan yori fukkoku taishikan-tsuki bukan ate kaitōan," Rikugunshō dainikki collection, Bōeishō bōei kenkyūjo archive (October 1934), JACAR reference number: C01006593500. See the report also discussed by Matsuno Seiya, "Rikugun gunjuhinshō / rikugun eisei zairyōshō 'seihikō'," *Sensō sekinin kenkyū*, Vol. 66 (2009), p. 86.

[102] There were two main ointments - *Niginkō* 二銀膏 or *seihikō* 星秘膏 – which Matsuno argued, the military sent to the soldiers abroad in the millions. See: Matsuno Seiya, Op. Cit., pp. 84-85. The ingredients of each are elaborated upon in the above mentioned report sent to the French military attaché, JACAR reference number: C01006593500.

[103] *Eiseihō oyobi kyūkyūhō*, Op. Cit., pp. 34-35.

[104] "Fukkan yori fukkoku taishikan-tsuki bukan ate kaitōan, Op. Cit., JACAR reference number: C01006593500.

[105] Ikeda, Op. Cit., p. 14.

[106] Author interview with Matsumoto Masayoshi, 5 March 2014.

[107] Daihon'ei rikugunbu kenkyūhan, "Daigogō: shinajihen ni okeru gunkei fūki no kenchi yori kansatsu-seru seibyō ni tsuite," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (October 1940), JACAR reference

and syphilis in return.[108] Those who were infected were often too ashamed to report it and so the infection spread.[109] Medics were thus to conduct tests and report those who were found to be infected as a measure of prevention. Fujimoto Hidemi described a case whereby two men came to him for assistance, asking him to keep it a secret. Despite their request, once Fujimoto realized the soldiers suffered from an STD he took a number of precautions to prevent infection, including reporting the case to the military physician. The physician then informed the unit and other units in the area to beware a "beautiful Chinese girl" the men described as the source of their infection. After disinfecting their penises with cresol, Fujimoto sent them to a field hospital – not just for further care, but also and mostly to prevent them from infecting others in the unit.[110]

Finally, the measures medics took to prevent venereal diseases extended also to women, whom the military saw as the main source of infection. Reports that regulated the function of comfort stations to the minutest detail would include routine medical exams of the comfort women by medical officers from nearby hospitals and units.[111] The examination and care of the

number: C11110764800; Daihon'ei rikugunbu kenkyūhan, "Daisan: seibyō yobō ni kansuru kyōiku shidōjō no choi nami-ni shisetu," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (October 1940), JACAR reference number: C11110765200.

[108] Ikeda, Op. Cit., p. 14.

[109] Yoshimi, Op. Cit., 51. This was the case in other militaries as well. In *No Magic Bullet*, Allan Brandt demonstrated the centrality of moral and social interpretations of sex and the stigmatization of venereal disease, in determining how they were treated and prevented in the United States. Throughout his book he revealed how these interpretations molded and were molded by military activity and the military institution. See also Marilyn E. Hegarty's discussion on the persistence of the association of venereal disease with sin and shame in the United States during the Second World War, making them unspeakable maladies in *Victory Girls, Khaki-Wackies, and Patriotutes: the Regulation of Female Sexuality during World War II* (New York, NY: New York University Press, 2008), pp. 61-62.

[110] Fujimoto, Op. Cit. pp. 56-59.

[111] See for example a report from Changzhou, regulating the visits of an artillery division to a comfort station with Chinese, Korean and Japanese comfort women. The report even specified the different rates per woman according to nationality. See: Battalion commander major Mannami, "Jōshū chūtonkan naimu kitei: dokuritsu kōjō hōhei dai ni daitai," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (16 March 1938), JACAR reference number: C11111919900.

women were under the responsibility of doctors.[112] However, medics participated in this form of medical surveillance, as assistants and at times independently. As former-medic Ikeda noted, "from the viewpoint of disease prevention, the comfort stations were under the jurisdiction of the medical care room."[113] In other words, the stations were an extension of the medic's sphere of responsibility. Hence, shortly after he sent the two above mentioned infected men to a field hospital, Fujimoto and the military physician of his unit received an order to go to the nearby comfort station to examine the women there and make sure they were not infected. Fujimoto also described comfort women coming to the medical care room directly.[114]

The responsibility of preventing venereal diseases hence extended the medic's field of responsibility to the female body. Yet, medics did not learn about the female anatomy during training, or how to conduct gynecological examinations. Their role was envisioned as centering on the male soldier's body. Life in China – and later in Southeast Asia – changed that. Matsumoto Masayoshi recalled that in his battalion there were around 6 comfort women, mostly but not solely to "serve" the higher-ranking soldiers in the unit. As a medic, he assisted the unit physicians in examining the women once a month and learned the procedures from them, through observation. However, the methods he described were very rudimentary. Moreover, the physicians themselves were not gynecologists, and 2 of the 3 only recently finished medical school. Thus, it was arguably not surprising that Matsumoto did not recall any case of infection.

> We didn't have anything like a microscope… Venereal disease could mean different things – gonorrhea, syphilis etc. But we didn't have a microscope so the examinations did not reach the extent of determining which bacteria it was. We just looked (and assessed) - 'this looks clean,' or 'this looks strange.' The doctors would make the suitable judgment call.[115]

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[112] Yoshimi, Op. Cit., pp. 26-27.
[113] Ikeda, Op. Cit., p. 14.
[114] Fujimoto, Op. Cit. pp. 41-42.
[115] Author interview with Matsumoto Masayoshi, 5 March 2014.

Matsumoto could not rely on the doctors any longer once he was sent in a group of about 30 soldiers to establish a detachment on a mountain summit near Shangshezhen. When one of the soldiers in the detachment stepped on a landmine, planted by the Eighth Route Army, Matsumoto had to provide him with emergency care. He applied a silver pole as splint, took out the debris - and unfortunately some of the bone - and bandaged it, before he sent the soldier to a hospital further back. He also continued his duty to prevent venereal disease, even at that detached area.

According to Yoshimi, the Army employed two main ways of collecting women to serve in stations. One consisted of bringing women to China from Japan, and most often from Korea. The second method was for the military to collect women in the field, where the soldiers were posted – a method the military also used in Southeast Asia after 1942. This was particularly salient in the case of detachments. Yoshimi described situations whereby the women were, again, either employed prostitutes, taken by force, or essentially sacrificed by village heads to appease the occupying Japanese soldiers.[116] Matsumoto recalled how in his detachment the soldiers would go out on operations to curb activities of Communist forces in nearby villages. According to Matsumoto, in most of these operations the villages would be empty by the time they arrived; the villagers would anticipate a raid and would flee beforehand, leaving their belongings and livestock behind. On one of these raids there were seven women who did not escape the village in time. The soldiers captured them and took them back to the detachment.

My job was to examine the women for venereal disease, because I was a medic. So, I checked them, gave the soldiers condoms and told them 'be careful.' …[117]

[116] Yoshimi, Op. Cit., 86-98. Yoshimi described the mode of enlistment according to area: Japan, Korea, Taiwan, China, and South-Asia.
[117] Author interview with Matsumoto Masayoshi, 5 March 2014.

According to Matsumoto, about a week after the kidnapping, the commander told the soldiers it was time to release the women and let them return to the village. However, they "requested" the village head to replace them with two other women. The village head came to the detachment with two women, who Matsumoto believed were prostitutes. Matsumoto checked them for venereal disease, gave the soldiers condoms and as before, told them to 'be careful' as he sent them on their way. The soldiers released the two women following the Japanese defeat on August 15th 1945.[118] It could be imagined that the soldiers who captured the local women would have raped them irrespective of Matsumoto's presence in the detachment. Nonetheless, since he was there, he impressed upon the affair a medical stamp.

In all of these accounts, the women were not a concern, apart from a potential source of infection. The question of ethics seemingly had no place. The women were tools within a military that kept ubiquitous comfort stations, which became part of the routine of military life. Medics were in this context, also tools for maintaining this wider system; though it began following decisions from above, it was facilitated by the mundane routine of men on the ground. There were cases where medics tried to help comfort women, or at least ease their pain. Yoshimi referred to two testimonies of medics, who gave comfort women morphine to relieve their

[118] Author interview with Matsumoto Masayoshi, 5 March 2014. Matsumoto voiced his testimony on a number of occasions including with the foreign press, guided by a sense of duty, particularly in light of contemporary politics and comfort women deniers. As in other cases, his testimony received also a lot of backlash. See for example, an interview with BBC News Japan: Rupert Wingfield-Hayes, "Japan Revisionists Deny WW2 Sex Slave Atrocities," *BBC News* (3 August 2015. http://www.bbc.com/news/world-asia-33754932. Last accessed: 26 May 2016). In the BBC report Matsumoto added that the Korean Comfort women were mostly to "serve" the officers etc, and consequently common soldiers would go to search for women in the local villages. See also an article in the South Korean media: "Il chamjeongun-in wianbu jeung-eon…"'jung-gug bunyeoja sanyang' moggyeog," *Yonhap News Agency* (23 May 2013. http://www.yonhapnews.co.kr/politics/2013/05/23/0503000000AKR20130523170951009.HTML. Last accessed: 26 May 2016). See also: David McNeill, "'If We Don't Face our Past, We're Bound to Repeat the Same Mistakes.' Japanese Wartime Medical Orderly Reports on Army's Role in Maintaining 'Comfort Women' System," *Japan Focus*, Vol. 12, Issue 42, No. 1 (19 October 2014. http://apjjf.org/2014/12/42/David-McNeill/4202.html. Last accessed: 30 May 2016).

emotional distress and numbing physical pain. In one of these cases, the medic was punished for it, presumably since morphine was precious and thus limited to soldiers.[119]

It is important to note that the Japanese system and the premises it was based on were part of an international history of the relationship between militaries, prostitution, venereal disease control and the female body, of which medics were part. As Hegarty argued, "during World War II, women's bodies were nationalized and their sexuality militarized." Hegarty demonstrated how before and throughout the Second World War, the American military perceived the female body as a dangerous carrier of disease requiring surveillance. Like the Japanese, the American military perceived the servicemen's need for sex as an unavoidable truth. It also assumed that prostitution created a buffer against rape.[120] Yet, it did not create a system to supply soldiers abroad with sexual partners, as the Japanese military did. Moreover, the American soldiers spent most of their time on the frontline, without as much free time, as the Japanese occupation forces in China and Manchuria. However, according to Shilcutt, in between battles soldiers were indeed infected, and then they turned to their aid men, the medics, for help.[121] It is possible to argue that in the American case, for soldiers mobilized abroad venereal disease was a possible threat, which aid men were to know how to prevent and treat. In the Japanese case, it was part of many medics' daily duties due to the system of comfort stations and the institutionalization of sexual violence under occupation, which as a result, required them to learn how to examine a wider variety of bodies.

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[119] Yoshimi, Op. Cit., pp. 153-54.
[120] Hegarty, Op. Cit. Ch. 4 – "A Buffer of Whores," pp. 85-109. The exact quote was taken from p. 7.
[121] Tracy Shilcutt, *Infantry Combat Medics in Europe, 1944-45* (New York, NY: Palgrave Macmillan, 2013), pp. 16-17, 96no10.

5) Medics as Agents of Imperial Medicine

Though viewed as any other soldier during combat, the medical services medics offered set them apart from other servicemen in their interaction with those who lived under their control. The growing research of the history of Japanese imperial and colonial medicine has begun to reveal infrastructures Japanese authorities planned and developed to mobilize medicine as a "tool of empire."[122] Starting with Taiwan, these works largely focus on medical research and policy initiated from above.[123] By examining medics' activities in China, this section will reveal the place military medicine had in the commonplace routines of life under wartime occupation from below. It will argue that medics facilitated medical interaction with the Chinese population in far off rural areas in both spontaneous and planned ways, as the Army moved within the Chinese countryside. It will also suggest that medics treated both friend and foe as their creed dictated, but the distinction between the two persisted. The section will argue that the medic's care was motivated by both a humane wish to help those in need, but also to facilitate military presence in the countryside, epitomizing the inner-contrasts of the role.

Spontaneous Encounters

Unlike Taiwan, Korea, Manchuria and Tianjin, the Japanese Army did not aim for a long-term occupation of China. As a result, its policies concerning medicine and public health in China differed from those in other territories of the Japanese empire. According to Rogaski, Japan established public health infrastructures throughout the empire to first and foremost protect

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[122] Daniel R. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (Oxford, GB: Oxford University Press, 1981).

[123] See for example, Iijima Wataru's works, such as the aforementioned *Malaria to Teikoku*; Rogaski, Op. Cit.; Michael Shiyung Liu, *Prescribing Colonization* (Ann Arbor, MI: Association for Asian Studies, 2009). Also see Ming-cheng Miriam Lo, *Doctors Within Borders Profession, Ethnicity, and Modernity in Colonial Taiwan* (Berkeley, CA: University of California Press, 2002). Lo's approach is both top-bottom and bottom-up, since she focuses on a group of Taiwanese doctors, who worked within the Japanese colonial medical system in Taiwan.

the Japanese military and population, but they extended to the general population, including through sanitary policing. In China, on the other hand, Japanese health administration was mostly limited to the military and to Japanese settler communities - only rarely also to the local population.[124] Lo argued that Japanese hospitals in China did treat many Chinese patients. However, their premise was to respond to pressing needs - not a mode of building a longstanding health infrastructure, as was the case in Taiwan.[125] These hospitals were also usually in urban centers, leaving the rural areas largely to themselves.

When it came to the countryside, the Chinese authorities throughout the years began initiatives to improve healthcare, but by 1937 they were still limited. According to Xi Gao, following the Sino-Japanese War in 1895, the Qing government began a process of systematization of medicine and the establishment of public health policies.[126] Elman argued that government intervention in public health truly began only from 1910 following a plague epidemic, and was continued with further vigor by the Republican government from 1911.[127] Chiefly following the Japanese example, and by extension - Western methods - the government placed most of its effort on curbing disease by improving hygiene and sanitation. Barnes and Watt argued that by 1937 the government enacted reforms and trained health providers, such as physicians and nurses, to implement the new policies and so create a strong and resilient national body by strengthening that of the individual - as was the case in Japan and elsewhere.[128] The

[124] Rogaski, Op. Cit., pp. 256-57, 260.
[125] Lo, Op. Cit., pp. 152-53.
[126] Xi Gao, translated by Bridie Andrews, Xi Gao & Sabine Wilms, "Foreign Models of Medicine in Twentieth-Century China," in Bridie Andrews & Mary Brown (eds.), *Medical Transitions in Twentieth-Century China* (Bloomington, IN: Indiana University Press, 2014), pp. 174-81.
[127] Benjamin Elman, *A Cultural History of Modern Science in China* (Cambridge, MA: Harvard University Press, 2008. Originally published in 2006), pp. 208-09.
[128] Nicole Elizabeth Barnes & John R. Watt, "The Influence of War on China's Modern Health Systems," in Bridie Andrews & Mary Brown (eds.), Op. Cit., p. 231.

plans were for a national system that would reach the rural areas. But by 1937 they were mostly implemented in urban centers and even there – in part.

When the war broke out policies were still in the process of planning and implementation. During the war most of the government infrastructure moved west together with a large portion of the population, often accompanied by epidemics. The myriad efforts of the Nationalist leadership centered on the territories under their control.[129] As a result, the large part of the rural population remained unexposed to these initiatives and continued as before, relying on local care providers when available and subscribing to Chinese medical views of disease and care. It was into this context, that the Japanese military entered. This section will provide a few examples of how members of the local population would turn to the Japanese Army for medical help in rural areas. In many of these cases, this interaction took place deep in the countryside and as a result, the caregivers were very often medics, not only since they were more numerous, but also since medics were the only caregivers in detachments. Medics thus became the embodiment of medicine in the countryside.

While he served in the detachment near Shangshezhen in 1944, Matsumoto Masayoshi recalled that every now and again people from the local village, mostly those who served as its administrators, would come to see him. They knew there was a medical caregiver in the Japanese detachment. One day a man came to ask Matsumoto to come with him to the village to examine his father. Matsumoto took his medical kit and went. At another time, a 30 or so year old woman came to the medical room in the base to seek help, since she was shot in her back while walking. Matsumoto recalled sterilizing the wound, while using a gauze and iodine. He believed her intestine was hurt as well, since he found millet grains as he examined the wound. Yet, apart

[129] See Barns and Watt, Op. Cit., particularly pp. 227-28-, 230-32,236-37, 238-39, 242-43.

from cleaning and bandaging the wound there was little he could do for her. There was no doctor in the detachment to perform surgery. A month or two later she returned to thank him, offering a chicken. Matsumoto looked at the wound again. Its opening healed, but he did not know what her condition was internally or what happened to her in the long run.

Matsumoto explained that there was no doctor in the village. One of the men, who came to call Matsumoto for his assistance, explained to him that the only doctor available was in another village further away and they would not generally call him for help.

> One day I asked the Chinese administrator who came to call me – 'when you get sick, what do you do?' He replied 'if we are sick - *meifa* 沒法 (in Chinese),' meaning, there is nothing they could do. I asked – 'is there a doctor in the village?' He replied 'there is no doctor... There is one faraway, but we can't call him.' 'Why?' I asked. 'because if we call a doctor, we have to give him *taimen* (possibly 太面 in Chinese) to eat.' *Taimen* was made of wheat, something like Udon noodles… But he explained that they had no wheat. So I asked 'what do all of you eat then?' He replied 'millet.' They would eat something like millet gruel twice a day, morning and evening. They led a very poor life. Within the mountains of Shanxi you had sorghum *Ko-ryan* コーリャン. Some places had corn. It was mostly sorghum, corn, foxtail millet, barnyard millet – these types of grains. The people of Shanxi were really poor.[130]

According to Matsumoto's testimony, the people in the village did not have any immediate source of medical care – neither "Western" nor "traditional." Moreover, the only standard form of care available required certain payment in exchange, which was beyond their means. Under these circumstances, people occasionally chose the Japanese Army base as their answer, though from Matsumoto's examples it seems only in times of emergency.

This form of interaction illustrates the nature of the relationship the detachment had with the adjacent village. According to Matsumoto the detachment maintained a peaceful status quo with the village, at least superficially. Superficially - since Matsumoto noted, it was impossible to know what the villagers were "really thinking." But on a daily basis, life went on quietly and in cases of emergency people would go up to the base as recourse, since none other was available.

[130] Author interview with Matsumoto Masayoshi, 5 March 2014.

Matsumoto used his skills to help those in need, even though his official role was to treat soldiers. A distinction still remained however between the two groups of patients. If for example, Matsumoto suspected a soldier's intestines might have been hurt, he would have provided him initial care and most probably sent him to a hospital to be treated by a doctor. This was not the case with the local Chinese woman.

Fujimoto wrote about similar cases while he was stationed in a village in Wuchang earlier in 1939. In one of these cases, a Chinese woman brought her 10-year-old son to the base's medical care room. After asking the military physician for permission, Fujimoto treated the boy's broken arm and replaced his bandages daily. A few days later, Fujimoto treated a young Chinese woman, whom he referred to as, *ku-nyan* クーニャン, 姑娘 – a "Japanized" Chinese term for "young woman." She suffered from a very high fever. Her family brought her to the medical care room for help. Fujimoto believed she was suffering from malaria, but the military forbade providing quinine to anyone who was not in the military, i.e., civilians. Instead, he gave her two pills of aspirin, which her family later told Fujimoto, lowered her fever successfully. Fujimoto explained that many people in China never took any Western medicine before, especially those living in mountainous areas. As a result, he believed, the effect of the pills was stronger than on those who were accustomed to them.

In these cases and others, which Fujimoto described in his memoir, members of the local population came of their own initiative to the medical care room to seek assistance. Kushner suggested that many in the Chinese population saw the Japanese as yet another "oppressive overlord." What they were preoccupied with most was survival.[131] For Fujimoto, assisting the people as a medic enabled him to use his skills to do good, but within limits; Fujimoto followed

[131] Barak Kushner, *Men to Devils, Devils to Men: Japanese War Crimes and Chinese Justice* (Cambridge, MA: Harvard University Press, 2015), p. 24.

military regulations and did not provide a patient with quinine, even though it might have been the best thing for her. Instead, he worked within the distinctions of the system and provided her with an alternative, a choice he later rationalized with the medico-historical context of the region. Finally, for Fujimoto treating the people aligned also with how he viewed the Army's role in the countryside. Following a description of another case, where he treated a 4-5 year old boy for a dislocated shoulder, Fujimoto noted:

One of the Army's important tasks was to blend into the population. Thus, I wanted to become a non-commissioned medic officer in whom anybody would be able to trust.[132]

Both Matsumoto and Fujimoto's examples took place while their units were settled in the countryside. Miyayama Suezō described quite a different encounter in 1942 or 1943, while he was serving as a unit-medic during a campaign in Yingde, Guangdong.[133] As the unit advanced, it created encampments to prevent the Chinese forces from returning. As a medic, he spent his time in a tent that he set up to treat the unit's wounded soldiers. It was the beginning of the rainy season, and he wanted to spread some material on the soaked floor of the tent. He went to search for such material in a small shed nearby, and when he opened the door he found something he did not expect. There were 5-6 women hiding in the shed, with a newborn baby in a basket. As he took in the scene, Miyayama described, he quickly realized what must have happened. As Matsumoto elaborated in the previous section, the inhabitants of a village or town would flee before the Japanese Army entered the territory – women in particular. One of the women

[132] Fujimoto, Op. Cit., pp. 28-29, 78.

[133] Miyayama related this account over correspondence, which continued over a period of a few months. Each included separate recollections, which Miyayama sent together but, it seems, wrote over time. This testimony was taken from a letter he sent the author on March 2014. Miyayama did not mention dates in his correspondence. However, based on his age and his description of this incident as not long after his training, it is possible to assume that it took place in late 1942 or early 1943. Japan took over Hong Kong at the end of 1941: Diana Lary, "Introduction: the Context of War," in Stephen Mackinnon, Diana Lary & Ezra F. Vogel (eds.), *China at War* (Stanford, CA: Stanford University Press, 2007), pp. 11-12.

probably went into labor as fleeing began, and could not join the others. She thus stayed behind with a few other women, and hid in the small shed.

The women were very alarmed and yelled out when they saw Miyayama. He did not understand what they were saying, but eventually he managed to decipher a few words he memorized beforehand, specifically *i-san* イーサン - doctor in Cantonese. Miyayama explained that there were no doctors in the area. It is probable that when the women saw the Red Cross on Miyayama's arm, they believed he was a doctor. Miyayama then examined the baby, starting with the eyes, which he sterilized to prevent trachoma.

Miyayama never learned how to care for babies. He was not a doctor. He had very little experience beyond his medical training and occasional observations of the one doctor in his battalion. Throughout his testimony one can read between the lines how tense Miyayama probably felt in that situation. He had to do what he was unaccustomed to, in stealth, unexpectedly, with the alarmed women around him, and with limited understanding of Cantonese. After he completed the examination and ascertained the baby was healthy, everyone in the room felt relieved. Miyayama believed it calmed the women to see a soldier who liked babies. Many years later, this brief encounter remained one of the memories Miyayama recalled best from his wartime service, and which he chose to relate.

Miyayama's narrative is different from the other two. As noted, his interaction took place while on a campaign – not during a routine encampment. Moreover, though the women requested his help, the encounter between caregiver and patient took place by surprise, and was colored by anxiety.

I learned that medicine was a benevolent art, *jinjutsu* 仁術. Therefore, I decided to provide treatment in the best way that I could, even though they were Chinese.

In other words, Miyayama possibly had a moment of deliberation, even if very short. The women themselves, he noted, knew the Japanese military included medical personnel, from whom they could request help if needed. But, not necessarily during a violent campaign when all fled.

In all examples, even though a benevolent encounter, the medic remained an occupying soldier. One element that epitomized the gap between the medics and their patients was the language they used. All of the medics memorized some Chinese, but they were far from fluent. As Matsumoto noted, the soldiers combined the little they knew with hand gestures and so maintained some level of communication, but the barrier of understanding remained, especially when considering the various dialects they encountered. The medic was to adapt to a different population – linguistically and medically, caring for those he was not trained to treat. And yet, despite the barriers, the medic's medical skills set him apart from the regular combatant, and even in Miyayama's case, gradually assuaged the apprehension towards him - the soldier.

Pacification Campaigns

The above medical encounters took place as a result of circumstances – not a predetermined infrastructure. There were, however, planned medical campaigns whereby the military actively sent medics to provide care for local populations. Following violent military activity, the Japanese Army in China would launch pacification campaigns, *senbu kōsaku* 宣撫工作; the military would raid villages and create encampments as it moved further into China. This resulted in destruction and the fleeing of local population, as described above. According to reports from 1938 and 1939, pacification campaigns were aimed at strengthening the military's standing in the countryside. By allowing the people to return and by cultivating a sense of distanced trust towards the Japanese military, it could maintain the peace and learn more about

the situation afield.[134] As Mitter argued, the Japanese military assumed it could not rely solely on force.[135]

Many actions could be included under the category of "Pacification Works," differing according to time and place. For example, one report from Hongtong, Shanxi in 1939, described campaigns of public engineering, whereby soldiers changed the course of a river to fill rice paddies.[136] One consistent and central component of many of the campaigns in China was medical care, provided by medics. The purpose was to provide succor to a population that had no other means of care, but also to cajole them into willingly accepting Japanese rule. See for example an excerpt from a 1939 report:

A unit working within the military security areas would show the Chinese people the healthy bodies of the Japanese Army soldiers and officers, and so gradually it will instill (in the Chinese people) faith in Japanese medicine. On the one hand, Chinese people have an avaricious spirit. On the other hand, while sick with malaria, malnutrition and other maladies they have no opportunity of receiving medical care. They only resign to their fate and groan. If the unit politely and kindly provides medical treatment to the extent of its ability, it would surely benefit the pacification works.[137]

The campaigns were to instill faith, but also demonstrate Japanese superiority to the supposedly passive and helpless Chinese population.

In these campaigns, medics and not doctors provided the medical pacification care. This is noteworthy because there were civilian pacification campaigns, albeit under the increasing control of the military, administered by the "Universal Benevolence Organization," *Dōjinkai* 同仁会. The *Dōjinkai* was a medical philanthropy organization established by a group of doctors in

[134] Kōhei dai-hyakuroku rentai, "Jissen no taiken nami shokan shūroku," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (December 1939), JACAR reference number: C13070237100; Shōji butaichō, "Kōdō ni okeru kōsaku," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (June 1939), JACAR reference number: C11110483400.
[135] Mitter, 2000, pp.15-17.
[136] Shōji butaichō, "Kōdō ni okeru kōsaku," Rikugun ippan shiryō Collection, Bōeishō bōei kenkyūjo Archive (June 1939), JACAR reference number: C11110483400.
[137] Kōhei dai-hyakuroku rentai, Op. Cit. C13070237100.

the early 20th century, to promote medicine and public health in Asia, and unofficially demonstrate Japanese medical superiority to the world. Following 1937, the military harnessed the organization's cooperation in pacification efforts in China.[138] The organization ran hospitals, which treated Chinese patients and sent pacification teams, which included specifically doctors, to areas harmed by fighting. The teams provided care and immunized the population.[139]

When it came to the Army, on the other hand, it preferred to send out medics and keep its doctors in the headquarters. Each unit had very few doctors, while medics were more numerous and lower down the hierarchy. Consequently, medics interacted with the general population in a way that military physicians or other soldiers usually did not, especially in far off places. Moreover, the campaigns often set out from detachments, where there were no doctors at all. For the local population, it seems, medics were doctors for all intents and purposes. As former-medic Imazu noted:

> Medics could become close with the people in a way that other soldiers could not, since they saved lives. There was no doctor in the area, which was inconvenient. When a doctor comes he takes a look at any disease, terrible diseases as well. Whatever it is, because he is a doctor he gains trust and respect… But, even in the same medic role, each person was different.[140]

As the men on the ground medics became the tangible face of medicine – among the troops and the people.

The pacification teams were small and consequently limited in capacity, but also potentially less intimidating than a larger force. Former-medic Fujimoto usually joined pacification squads in 1938-39 of about 15 soldiers and 2 officers. He was the only medic. They would set out on campaigns 2-3 times every month to conduct different works in villages about

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[138] See the statement of the head of the *Dōjinkai* in 1937 on the organization's cooperation in pacification efforts: Hayashi Gonsuke, "Dōjinkai shōwa jūsan-nen bunkatsu ni," Gaimushō kiroku Collection, Gaimushō gaikō shiryōkan Archive (September 1937), JACAR reference number: B05015106200.
[139] Lo, Op. Cit., Ch. 6, pp. 151-80; Iijima, Op. Cit., pp. 122-23.
[140] Author interview with Imazu Shigeru, 16 December 2013.

15-20 kilometers away from their base. During the campaigns the squads would return to the same villages a number of times to instill a sense of trust. For instance, Fujimoto noted that during their first visit there were no young women to be seen in the villages, due to "bad things" other soldiers did there before. As the squads returned, women gradually came out from hiding. Most of the people Fujimoto treated suffered from a variety of ailments, since, he argued, they had never received medical care. Fujimoto described being welcomed by the population and even being treated to a feast as a token of thanks. To him the campaigns were "one of the military's most important roles."[141]

Since the pacification efforts usually followed military activity, it stands to reason that the population initially felt reluctance and required some time to trust the Japanese care providers. Saitō Hitoji, for instance, served as a unit medic in Dangyang, Hubei. His unit sent him on a pacification mission in 1942 to establish a small clinic and treat the local people. However, since the Army commandeered most of the houses in the area, the population avoided contact with the Army, including the clinic. Eventually though, Saitō described that people came to receive help, and argued that medical services proved to be the most successful form of pacification.[142]

Both Saitō and Fujimoto depicted a relatively positive picture of the campaigns. Imazu presented a more subtle view, based on his experiences between 1942 and 1945. Like Fujimoto, Imazu was the only medic in a group of 15 men, and his role was to provide medical services to the soldiers in the squad if needed, as well as the local population.

We would also conduct pacification works. It was imperative to maintain the peace in the area where the unit was stationed. So, there was medicine called "pacification medicine," which was to be used by the local Chinese people. There was medicine for the soldiers' use and there was

[141] Fujimoto, Op. Cit., pp. 35-37.
[142] Saitō Hitoji, *Suna no shiro* (Fukushima: Saitō Hitoji, 1987), p. 80.

(separate) pacification medicine, which generally included, for example, stomachache medicine and iodine to put on wounds…[143]

Imazu's testimony revealed that the military created a distinction between medicine provided to soldiers, and that which was provided to the general population. While the Japanese standing in the War was good, this distinction was not so perceptible.

At the beginning… it was alright to use the Japanese - that is the medicine used by the Army - as pacification medicine to win over the Chinese population nearby. But then, the (two) medicines became more and more distinct. When you reached the end of the war, there was no room for leisurely (dispensing of medicine). The medicine for military use was insufficient (at that point of time)… Before it was alright to use military medicine as pacification medicine, such as *seirogan* 征露丸,[144] stomach medicine...even though the medicine for the military and the medicine for pacification units were separate. But towards the end, there was not enough medicine for the military, so there was no (pacification medicine) left either.[145]

While the Army had enough supplies, medics would occasionally even provide the locals with medicine designated for soldiers. But, Imazu noted, when supplies ran short towards the end of the war, the military received precedence. When there was little medicine left, Pacification medicine lost its meaning.

Another important element Imazu emphasized was the agency that the individual medic had in these campaigns. Though the purpose of the campaign was clear, medics would choose how to behave and treat the population.

There were (medics) who abused this, who used (the campaigns) for their own benefit. I - you're not supposed to say so but - I would leave the detachment and as I took charge of these people, (it was important for me) to take good care of the Chinese people.[146]

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[143] Author interview with Imazu Shigeru, 16 December 2013.

[144] Today *Seirogan* is still used but is spelled differently – 正露丸. According to Hoi-eun Kim, *Seirogan*, or "Conquer Russia Pill" was a very common digestive medicine from 1905 throughout 1945. Its ubiquity was indebted to imperialism, since pharmaceutical companies used nationalist patriotism to market their product and as a result also boosted militaristic ideology. After 1949, its spelling changed its meaning to "efficacious-dew-drops," concealing its past. See: "Cure for Empire: the 'Conquer-Russia-Pill', Pharmaceutical Manufacturers, and the Making of Patriotic Japanese, 1904-1945," *Medical History*, Vol. 57, No. 2 (2013), pp. 249-68.

[145] Author interview with Imazu Shigeru, 16 December 2013.

[146] Author interview with Imazu Shigeru, 16 December 2013.

There were those who were kind and helpful and others who were not. Medicine in these situations gave medics power that they could choose how to use. The Army seemed to have been aware of this as implied in the aforementioned report from 1938:

Based on the experience so far, it is believed that when the free treatment is provided zealously, the results of the pacification (campaign) are significantly greater.[147]

In other words, there were medics who were not as "zealous" as others.

The Army thus harnessed medicine to solidify and extend its control in the Chinese countryside through the work of unit medics. By so doing it redefined the medic role as imperial care provider and required medics to treat a completely different population than that which they were trained for. However, the relationship between caregiver and patient, and in this case the success of the campaigns, relied on how the individual medic chose to administer his care.

Conclusion

Japanese expansion into China in the 1930s and 1940s molded medic roles in various unprecedented ways. One important factor in these changes was scale. As the military expanded the scale of warfare, it also expanded the number of medics it sent to treat its proliferating casualties. Concomitantly, as it employed smaller combat units for small-scaled operations, it moved the medic onto the battlefield itself, not just to evacuate but also to stabilize the wounded soldiers on the spot and raise their chances of survival.

While service on the battlefield became almost synonymous with the medic role, medics in China served in a variety of capacities, including by the same individual, due to changing circumstances and needs. The distinction between hospital and unit remained, but became increasingly blurred as one medic moved from one to the other. Changes of scale also affected

[147] Shōji butaichō, Op. Cit., JACAR reference number: C11110483400.

Army hospitals, as the Japanese military and Red Cross moved an increasing number of nurses overseas, positioning medics and nurses in a common environment and moving more medics out to the battlefield. The movement of medics and nurses closer to the site of battle was thus intertwined.

In addition to the expansion of scale, the nature of the War in China refashioned medic roles as well. It was a war of prolonged occupation, as opposed to quick wars of decisive battles, or the establishment of colonies, creating more room for the mundane. As such, the aspect of the medic role as maintainer of health received further traction. As common soldiers among the troops, medics became the military's eyes and ears against disease by maintaining a level of hygiene and by being alert to the display of symptoms of infection, particularly but not limited to venereal disease. They learned which diseases were common in the area they were stationed, thus becoming also the embodiment of border-crossing tools of empire. This was particularly salient in detachments, where the Army entrusted medics with the entire responsibility for maintaining the health of the troops.

Creating these small detachments brought medics closer into contact with local populations as well and added another component to their role as imperial care providers – to the troops and the general population. Medics treated Chinese men and women in hospitals as well, including Chinese soldiers. But, this interaction became much more intensive in far off rural areas, where medics became pacifying agents by using medicine as a benevolent art. They assisted those in need who had no other source of care and often introduced Japanese Western medicine to the local population for the first time. By so doing, the same medics who would accompany campaigns, which caused a large portion of the population to flee in the first place, also furthered the military goal of maintaining the peace and gaining the trust of the people.

The encounter between friend and foe must have been a charged one. Time and again medics described how medicine crossed boundaries of language and culture, assuaging fear and encouraging trust, treating the person behind the nationality. But the distinction between friend and foe remained – from the extreme examples of war crimes, to the choice of which medicine to provide a soldier versus a local man, woman or child.

Though fluctuating between peace and combat, it is possible to argue that in the context of a war of occupation, medics were consistently practicing within a framework of violence. Violence presented itself already in training through consistent bullying, on the battlefield, in the nature of the wounds they treated, their management of dead bodies, war crimes, and their very control of another population. Their role in prevention of venereal disease and in maintaining the military comfort stations was another such example, whereby medics provided a medical stamp to institutionalized and spontaneous acts of sexual violence.

Their intense training did not prepare them to all they were to face. Medics continued learning throughout their service from experience and from others – doctors, nurses, and at times, pharmacists. One central example was the patients they treated. The foundation of their training was the adult male body of the soldier. But, the additional layers to their role required medics to examine and treat also women and children. Medics were to frequently adapt to new circumstances. Their capability to adapt, however, was not yet tested to the extent that it would be in the Pacific from 1943, in certain areas in China from 1944, and in Manchuria form 1945. As Japan moved from a victorious position to fighting a losing war, it forced medics to face the most challenging task of all – filling their role when there were no means left to treat. This would be the focus of the subsequent and final chapter of the dissertation.

Chapter 6
Medics in a "Losing War": When Care Providers Cannot Treat

When it comes to medic training, the situation in a winning war is completely different from that in a losing war. From 1937 to 1941, in Hankou, Nanjing, Shanghai, Wuhan… it was a winning war. After that, (as the military) crossed the Yangtze River and went south to Hunan where we were… We were 1943-1944 soldiers, when (Japan) already lost in Saipan, when American "bang bang planes" already came. We could only walk at nighttime – not during the day. So, the nature of medics in a winning war and a losing war is completely different. In a winning war, planes don't come…

From 1937 to around 1941, 4-5 years, the field hospital was in shape. Simply put, the tents were set up, (equipment) was sterilized, and surgery and everything were possible. But, when (the situation) turned into that of a losing war, *makeikusa* 負け戦, planes kept coming… So the baggage carrying squads, *kōrihan* 行李班 (of the) logistics units carried all the baggage - the medicinal supplies, surgical tools, the tents. They took everything. It was not possible to leisurely set up a tent (anymore)… In a losing war a medic could not perform his duties. There was no food. (We just) had to walk (to retreat).

And medicine?
None, none. That is why, even though we were medics, all we could do was take in the patients. (Hongō Katsuo)

…It was a losing war. There was no time to look at the face of the enemy. Only to escape. We didn't engage in war, we only fled the losing war… As for disease, everybody just died of malnutrition. There was no food. That is why treating someone wounded by an enemy bullet was entirely unthinkable. In the daytime, we would sit still in the thicket in the pouring rain, and in the evening we would start moving on our escape. (Haraoka Isamu)

…It was a losing war. (I) couldn't hope to return alive any longer… New Guinea was all jungles. Nothing else. I was disappointed… I knew we were fighting in the "Southern Territories," *Nanpō* 南方, and I went half feeling like a tourist, taking it easy. But when I actually arrived, this was unthinkable. All was dead bodies. (Yoshida Takashi)[1]

The War in China presented medics with various challenges. They were to treat and evacuate numerous wounded soldiers in various campaigns and operations, ward off disease, and maintain the Japanese expanding occupation. Matters began to change significantly, however, from December 1941 when the military launched its expansion into Southeast Asia and raised the

[1] Author interview with Hongō Katsuo, 21 January 2014; Author interview with Haraoka Isamu, 9 May 2014; Auther interview with Yoshida Takashi, 29 October 2013.

curtain on the deadliest and most disastrous war it had ever experienced. The territories the Japanese military took over by mid-1942 included British Malaya, Singapore, the Philippines, New Guinea and the Solomon Islands, the Dutch East Indies, and Burma, in addition to the already occupied French Indochina and the Northern Marianas. The Japanese military seemed undefeatable as it professedly liberated Asia from Western colonialism, helping each country on its way to independence, while actually and often brutally subjecting it to Japanese interests. As it initiated public works the military committed atrocities and massacres.[2]

The size of the empire demonstrated Japanese might, but it was also the source of its subsequent demise; maintaining such a vast empire, while engaging in war against the well-equipped allies led to a massive overextension of its resources – which, according to Drea, were already overextended in China.[3] As described in the fourth chapter, the military increasingly lowered its conscription criteria, including age from 1944, and expanded enlistment into active service. The scale of mobilization reached unprecedented levels. As Kurosawa Yoshiyuki noted, while in the Russo-Japanese War the Japanese military mobilized 13 infantry divisions, by August 1945 it mobilized 169.[4] And yet, the military expansion could not keep up with the massive scale of the war it initiated; fighting on numerous fronts, the military divided its soldiers, ammunition and equipment between the different warzones. While Japan was winning

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[2] On the concept of "Greater Asia" and its consequences, see for example: Shunsuke Tsurumi, *An Intellectual History of Wartime Japan, 1931-45* (New York: Routledge, 1986), pp.33- 41. On War Crimes and how to interpret them within the wider context of the Pacific War, see John Dower, *War without Mercy: Race and Power in the Pacific War* (New York: Pantheon Books, 1986), particularly pp. 42-48, 263-64, 284-90. See also Aaron S. Moore for more on Japan's public works and the harnessing of technology for empire, in *Constructing East Asia: Technology, Ideology, and Empire in Japan's Wartime Era, 1931-45* (Stanford, CA: Stanford University Press, 2013); On forced mobilization of thousands of local men, women and children throughout the Japanese empire, see Paul H. Kratoska (ed.), *Asian Labor in the Wartime Japanese Empire: Unknown Histories* (Armonk, NY: Sharpe, 2005).

[3] Edward Drea, *Japan's Imperial Army* (Lawrence, KS: University Press of Kansas, 2009), pp. 226.

[4] Kurosawa Yoshiyuki, "Eisei hokyū no shiteki kōsatsu (dai-6 pō)," *Bōei eisei*, Vol. 32, No. 6 (June 1985), p. 161. Kurosawa also noted how this expansion took place gradually each year, with a particular leap in the final year of the war: 1941 – 51 divisions, 1942 – 58, 1943 – 70, 1944 – 98, and 1945 – 169. See p. 171.

and the allies focused on the European Theatre, it could manage this division of resources. However, as the allies reversed the Japanese position from the offensive to the defensive from mid-1942, the system began to gradually collapse, especially as the allies cut off Japanese military supply routes.

As the allies moved closer and closer to the crux of the Japanese empire through its "island hopping" strategy from 1943, finally reaching Okinawa in 1945, they took over control of the air and sea, leaving the Japanese troops stranded. On land as well, the allies cut off transportation routes between the Japanese soldiers in the front and rear. Consequently, even when bases far back held supplies of food and ammunition, they did not reach the soldiers at the frontline.[5] Concomitantly, the Japanese military itself arguably did not prioritize its chains of logistics, as was the case already in the Sino-Japanese and Russo-Japanese Wars. In the final years of the war, as the Army planned to continue fighting for years to come, it began decreasing the daily amount of calories each soldier was to consume. The soldiers thus became emaciated even when they received some supplies.[6]

In this way, the Japanese military left thousands of soldiers without enough ammunition, food, water and medicine. The troops were to somehow fend for themselves, leading to mass hunger, which extended to the local populations; the military increasingly relied on local resources through violent means and at the expense of the people. Soldiers would purchase or exchange goods with local populations, but more often than not, commandeered, stole and pillaged.[7] As Moore argued, this was already the case in China, but it did not reach the same

[5] For more see Drea, 2009, pp. 222-250. On the American strategy of Island Hopping, see William A. Renzi & Mark D. Roehrs, *World War II in the Pacific* (New York: M.E. Sharpe, 2004), pp. 122-29.
[6] Yoshida Yutaka, "Ajia taiheiyō sensō no senjō to heishi," in Kurasawa Aiko, Tessa Morris-Suzuki, Narita Ryūichi, Sugihara Tatsu, Yoshida Yutaka, Yui Daizaburō (eds), *Senjō no shosō,* pp. 64-66.
[7] According to McLynn, for example, about a million Burmese civilians died in the war due to various causes, most of all from famine and disease, see Frank McLynn, *The Burma Campaign: Disaster into Triumph, 1942-45*

levels it did during the Pacific War. In comparison, Moore noted that the American troops also struggled to maintain their supply chains as the war progressed, suffering occasionally from shortages of food and medicine. However, again, in most cases American soldiers did not suffer from the grave and deliberate starvation the Japanese did, excluding POWs captured by the Japanese military.[8] According to Dower, two thirds of Japanese military deaths were caused by illness and disease.[9]

What did it mean to serve as a medic in a context whereby so many soldiers died of malnutrition and related diseases? What happened to a caregiver who lost his ability to treat? The three former-medics cited above, all experienced the war in its most brutal final stages – Hongō Katsuo and Yoshida Takashi in Southern China and New Guinea respectively from late 1943, and Haraoka Isamu in Burma from 1944. For each of them, the term *makeikusa* 負け戦 – losing war - defined their service; they could not be the medics described in textbooks. They were medics serving in a war of defeat and retreat.

The chapter will follow the stories of a number of medics who served during the war. As argued in the previous chapter, medic service differed significantly according to unit and location. According to Kurosawa Yoshiyuki, though the Army made some changes in its medical formations, the system largely remained as it was since after the Russo-Japanese War. During the

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(London, GB: Bodley Head, 2010), p. 1. See also Lizzie Collingham's comparative work on the role of food, and particularly the shortages of food, during the Second World War, in Europe and the Pacific: *Taste of War: World War II and the Battle for Food* (London, GB: Allen Lane, 2011).

[8] Aaron Moore, "An Insatiable Parasite: Eating and Drinking in WWII Armies of the Asia-Pacific Theatre (1937-1945)," in Katarzyna J. Cwiertka (ed.), *Food and War in Mid-Twentieth-Century East Asia* (Farnham, GB: Ashgate, 2013), pp. 113-15, 118, 123-27. There are numerous books concerning the Japanese military's treatment of prisoners of war and related atrocities. See for example Yoichi Kibata, Margaret Kosuge & Philip Towle (eds.), *Japanese Prisoners of War* (New York, NY: Hambledon and London, 2000); Gavan Daws, *Prisoners of the Japanese: POWs of World War II in the Pacific* (New York, NY: William Morrow, 1994). There are also many memoirs and books focusing on specific cases such as: Michele Cunningham, *Defying the Odds: Surviving Sandakan and Kuching* (Sydney: Hachette, 2007); Elizabeth M. Norman & Michael Norman, *Tears in the Darkness: the Story of the Bataan Death March and its Aftermath* (New York, NY: Farrar, Straus, and Giroux, 2009).

[9] Dower, 1986, pp. 297-99.

War in China the Army did plan structural changes aimed at reinforcing frontline care and evacuation. However, the Pacific War broke out and required quick and massive mobilization, including of medics, before the Army implemented these planned reforms.[10] According to the existing structure, the increasing number of Army medics served within the different Army divisions, in various wounded transportation units, field hospitals, transportation hospitals, rear army hospitals, and as of the War in China, also in epidemic prevention and water purification units, *bōeki kyūsui-bu* 防疫給水部.[11] The medics, whose experiences the chapter highlights, served in some of these capacities. As such, they cannot convey the story of every medic who served in the Pacific War. Rather, they serve as prisms for understanding how the particular circumstances of the War of 1941 to 1945 changed medic service irreparably and with it – the place of medicine on the battlefield. To do so, it will also present a few testimonies of nurses and

[10] Unfortunately, the total number of medics who served between 1937 and 1945 is unknown. Right before the Japanese surrender, the military gave out orders to burn military documents, especially those regarding human resources. There is one document, written by former officers in the military's personnel mobilization department, who reconstructed statistics in 1946, based on memory and calculations. The figures are thus entirely approximations and as such, highly suspect. According to their calculations, between 1937 and 1945 the Army conscripted around 71,320 medics. This figure includes only hospital medics, since unit medics were selected only after enlistment. It does not include the vast number of reserves soldiers either: Ōe Shinobu (ed.), *Dōin gaishi: shina jihen daitōa sensō-kan* (Tokyo: Fuji shuppan, 1988), p. 258.
Kurosawa Yoshiyuki gave examples of the scale of personnel in different medical structures, following the Army's official history of military medicine during the Pacific War. The number of medics according to these approximations at the beginning of the war there were as follows:
Infantry Regiments: a total of 78 medics, 11 non-commissioned medic officers and 12 physicians per unit. Within it there were to be 4 medics in each infantry company and no doctors. Doctors were to remain in the higher echelons – 2 in each regiment headquarters and 3 in each battalion headquarters.
Eiseitai Stretcher-bearer units: a total of 88 medics, 28 non-commissioned medic officers, and 15 doctors. Each division had one *eiseitai*.
Field hospitals: a total of 126-27 medics, 31-32 non-commissioned medic officers, 2 medic officers, and 17-18 doctors in each field hospital. Each division had 3 and sometimes 4 field hospitals.
Epidemic Prevention and Water Purification Units: a total of 90 medics, 20 non-commissioned medic officers, and 7 doctors. One unit was to be attached to each division. See Kurosawa, 1985, pp. 173-74.

[11] Kurosawa Yoshiyuki, 1985, particularly pp. 172-78. As their title indicated, the "Epidemic Prevention and Water Purification Units" were to conduct different tests to prevent disease and poisoning among the troops on the field. This role was particularly crucial in China and the Pacific, where unpurified water was believed to be a frequent source of numerous diseases. However, the units became most associated in historical memory with the atrocities of one unit - Unit 731, its human experiments and research of biological and chemical warfare. Its notorious commander – Ishii Shirō – ironically had a strong imprint on many of the purification methods employed by the personnel attached to each of the units. See Kurosawa Yoshiyuki, 1985, p. 174; Seki Ryō, *Gun'i-san yomoyama monogatari* (Tokyo: Kōjinsha NF bunko, 1998), pp. 82-.85. See also Nanasan'ichi kenkyūkai (ed.), *Saikinsen butai* (Tokyo: Banseisha, 1996) for testimonies of former members of Unit 731 and related units.

a physician that would shed further light on the changes the role underwent during the examined period through its interaction with other care providers.

The first part of the chapter will illustrate the process of deterioration medics experienced during the Pacific War, as they – at times gradually and at others quite immediately – lost most of their ability to perform their duties. It will demonstrate the degree of adaptability and initiative required of them as a result. It will argue that to fill their role and survive themselves, medics employed methods and practices, which required improvisation and equally important - luck. The second part of the chapter will discuss the ethical dilemmas many Japanese medics faced as the military pushed its soldiers to "fight till the end."[12] It will analyze a few cases whereby the Army ordered medical caregivers to relinquish their medical credo by killing their patients as their units retreated. By unpacking the circumstances of a few such cases, the chapter will reassess the relationship and balance between the "military" and "medical" as they manifested themselves within the medic role.

1) Expansion, Mobility and Adaptability

From China to the "Southern Territories"

In many ways, Tanizaki Kōichi embodied the process the Japanese military underwent from expansion from China to the Pacific, to its gradual decline. When Tanizaki received his red enlistment letter in 1939 at the age of 20, he was bewildered.[13] Though significantly tall, Tanizaki was very thin and weakly. Consequently the Army categorized him as a 2nd B-Class conscript. But, by 1939 the War in China expanded and the military needed reinforcement. In

[12] See Dower, 1986, pp. 231-33, 261.

[13] The following is based on a memoir in which Tanizaki related his experiences in the war entitled, *Watashi no sensō taiken* (Ubeshi, Yamaguchi: Tanizaki Kōichi, 1991). The events described in this chapter appear in Chs. 1-13, pp. 1-47 (until the arrival in Burma), and Chs. 14-23 pp. 47-80 (following the arrival in Burma).

1940 he entered an infantry unit in Kokura, Fukuoka prefecture. Tanizaki was to be a "reserves recruit," and so his training was much shorter than the regular recruit – one month of infantry training, followed by two months of medical training. As was the case with other trainees, Tanizaki suffered first year bullying and due to his weak physical build, had a rough time getting accustomed to military life, particularly marching. Little did he know that in his near future he would march unimaginable distances in challenging terrains.

In May 1940 he and ten other medics shipped out to Guangdong (Hong Kong), where he was assigned to the No. 2 Field Hospital of Division No. 18. He served in the internal medicine ward of the hospital, which his unit set up in the spacious premises of Zhongshan University. Being a field hospital, its purpose was to treat the lightly wounded so they could return to battle, and prepare the more heavily wounded to be transported further back. There were no nurses in the field hospital. In addition, Tanizaki accompanied "wipe out" operations and thus experienced frontline service as well.[14]

In October 1941 the unit began intensive training for an impending large operation. It included for example, how to climb down a rope and put on a lifejacket. The soldiers also viewed a confidential film about life in Southeast Asia – the landscapes and terrain, the population, the wild animals, and also widespread local diseases. Tanizaki noted that the diseases described in the movie, such as cholera, amoebic dysentery and malaria, existed also in Guangdong. As described in the previous chapter, medics trained already before the Pacific War on how to recognize and prevent these diseases, and also encountered actual cases during their service in China. However, according to Tanizaki, they were not as frequent or widespread as

[14] Tanizaki, Op. Cit., pp. 1-16.

they seemed to be in Southeast Asia. Tanizaki described a foreboding feeling as he imagined the heavy responsibility he would shoulder as a medic in such a challenging environment.[15]

On 4 December 1941 Tanizaki and his comrades set out for this yet unknown great operation. Three days later their ship approached Kota Bharu in British Malaya. It was the first operation of the Pacific War, slightly less than two hours before the attack on Pearl Harbor. From that moment until the end of the war, Tanizaki began what became a long journey of survival, during which he was continuously attached to the field hospital as his home unit. However, often than not, circumstances led him to different units and to improvised ad hoc facilities on a series of "firsts."

One of these first time experiences were air attacks. As the soldiers began preparing for landing, British planes detected their three ships and opened fire. Tanizaki was terrified. He was sent to the frontline while at Guangdong, but the Japanese military controlled the skies; Japanese planes were the ones dropping bombs on Chinese cities and not vice versa. This time, the Japanese soldiers themselves were the targets of air raids and it was completely different.[16] As Tanizaki and others later discovered, not only were the air raids a brand new cause for fear, for medical personnel they also made wounded evacuation extremely difficult if not impossible.

Tanizaki eventually managed to reach the shore, on which numerous bodies of Japanese soldiers already lay. Before running into a palm tree forest to search for cover, his instinct was to go to the soldiers lying on the beach, still moaning. However, as Tanizaki began moving towards them, another soldier yelled out to him from the forest warning him not to approach the wounded, as he and the others were surrounded by land mines. He advised Tanizaki to follow the tracks left on the sand by those who managed to reach the forest alive. Tanizaki followed the

[15] Tanizaki, Op. Cit., pp. 18-19.
[16] Tanizaki, Op. Cit., pp. 19-24.

soldier's advice, while the gravely wounded presumably breathed their last on the shore. A while later in the palm tree forest, a soldier noticed Tanizaki's armband and called him to a small hut nearby, where numerous heavily wounded soldiers were temporarily housed. Tanizaki helped the few military physicians and medics in the hut by nursing the wounded through the night. The following afternoon a soldier called him back to his unit. There too he found two barracks, turned into makeshift hospitals, which overflowed with wounded soldiers.[17]

The sequence of events during the two days of the landing provided an example of the early stages of the Pacific War and the dilemmas medics were to increasingly face as the war progressed; they had to quickly decide under extreme circumstances, whom they could save and at what cost - a dilemma which preoccupied military caregivers for a long time, but reached new heights of extremism in the Pacific.[18] In this case, Tanizaki had to quickly choose whether to treat the heavily wounded soldiers on the shore, while imminently risking a mortal injury, or to escape, save his own life and by extension, enable him to treat numerous others who had a better chance of survival.

Following Kota Bharu, Tanizaki continued moving with his unit, tracing the expansion of the Japanese military. During their advance, Tanizaki provided care in different locations each time the troops stopped; from Kota Bharu he reached Kuala Lumpur where his unit used an existing fully equipped hospital. Two days later the unit continued further south, stopping at small towns on the way, where it set up clinics. They arrived in Singapore in February 1942, where Tanizaki served until April, moving from one location to another, treating the wounded and sick in local houses and tents, even beneath trees. By April the situation seemed to grow

[17] Tanizaki, Op. Cit., pp. 32-38.

[18] Who deserves treatment first is a dilemma that sits at the heart of the concept of triage, which originated in military medicine and carried over to civilian medicine. On its ethical implications and history, see Gerald R. Winslow, *Triage and Justice* (Berkeley, CA: University of California Press, 1982).

calm and Tanizaki even hoped to go back home, since by then he completed two years of mandatory service. However, Japanese expansion did not come to a halt, and Tanizaki was to accompany its movement further into South Asia. His next and final stop was Burma.[19]

When Tanizaki arrived in Rangoon in April 1942 it was calm - so calm that he went sightseeing for a day. Shortly after, he set out to join the frontline units. For the next year or so, he again moved from place to place. In each, he provided care. During his movement, he also encountered gun and shellfire. While he was not wounded himself, he underwent appendicitis surgery, and came down with malaria and amoebic dysentery. Luckily for him, at that stage in 1943 he could undergo an operation, heal smoothly, and take medicine for his diseases. If it were a month later, he would not have probably survived. According to his recollection, two days after his surgery the allies began their first air raids in Burma.[20] According to Asano, Burma served as a crucial supply base for both the Japanese and Chinese armies. For both, one main goal was to ensure their own supplies, while cutting off their opponent.[21]

In 1944 after a number of years of expansion, Tanizaki received an order to retreat. The tables began to turn while Tanizaki was serving at a field hospital in Myitkyina, Northern Burma. His unit sent him to set up care centers in different locations in the area, but air raids grew more and more violent. Following a fierce air raid on one of the mountain villages, he and his comrades closed the care center, and returned to the field hospital. He was next sent out to accompany 60 patients to a hospital further back. When he and the patients arrived at their destination, he learned that while he was gone, his unit was annihilated. According to Asano, the

[19] Tanizaki, Op. Cit., pp. 32-47.
[20] Tanizaki, Op. Cit., pp. 50-60.
[21] See Asano Toyomi's analysis in "Japanese Operations in Yunnan and North Burma," in Edward J. Drea, Mark Peattie & Hans van de Ven (eds,), *The Battle of China* (Stanford, CA: Stanford University Press, 2011), pp. 361-85.

battle of Myitkyina from May 1944 was a watershed in the Burma campaign, as it began breaking down the Japanese defense.[22] It was the beginning of the end.

Tanizaki found himself without a unit, and consequently joined the other field hospital of his division. The hospital was heading towards the jungles by the Indian border to join the Battle of Imphal. It was there, under heavy shelling, that his unit received an order to retreat. That was the moment of transition for Tanizaki. After years of continuous movement forward, Tanizaki began moving backwards, leaving behind a trail of destruction.[23] From that point in 1944 until the end of the war, Tanizaki spent his service fleeing and witnessing the medical system break down.

Tanizaki's story elucidates the extent to which the swift expansion of the Japanese Military from China into Southeast Asia pushed its medical services and personnel to a new degree of mobility. Within three years of service, Tanizaki was regularly on the move - on land and sea, by foot, truck, boat and ship. Moving from Japan to Southern China and from China to and within Malaya, Singapore and Burma, he experienced the spread of Japanese imperialism in the most immediate way. Like his medical kit, Tanizaki carried his medical skills with him to every location, nursing soldier-patients at each stop.

Tanizaki was to continuously adapt to new circumstances, the conditions of various places and their limitations; he rarely served in standard facilities; more often - in spaces turned into makeshift centers of care, following unit decisions. However, within the chaos created by circumstances such as air raids, Tanizaki had to make quick life and death decisions on his own and to choose who was to continue and who was to be left behind. This was the case for many soldiers in the midst of battle, and yet for a medic, as caregiver, these decisions had their own

[22] Asano, Op. Cit., pp. 372-74.
[23] Tanizaki, Op. Cit., pp. 61-66.

ethical implications. This was salient from the moment he arrived on the shore of Kota Bharu, and grew significantly worse following the transition from expansion to retreat. As Tanizaki began fleeing for his life, the gravely ill and wounded were often left behind.

Tanizaki experienced the transition between expansion and retreat, and the dilemmas it conveyed, after he already served under conditions whereby it was possible to treat, heal, and transport the wounded. He could even "afford" to be ill himself, to convalesce, and to continue his service treating others. He knew what it was like to serve within a functioning system, and he witnessed the same system gradually collapse. But others were thrown into this situation and the dilemmas it presented from the very beginning. The service of many medics enlisted between 1943 and 1945 resembled Tanizaki's final two years in Burma, but they brought with them a disparate set of skills, expectations and experiences, as the military enlisted them into its receding lines.

Moving Backwards

As a field hospital medic, Hongō Katsuo, like Tanizaki, was also a medic on the move. But, his movement was continuously within China, where his role made him face the deterioration of the Japanese standing in the War on a daily basis.[24] Like Tanizaki, Hongō also enlisted as a reserves recruit medic in December 1943 - over four years after Tanizaki, and about a year and a half after Japan's position in the war began deteriorating. Following his enlistment, he immediately shipped out to an unknown destination. Since he received a summer army uniform, he assumed he was headed to the "Southern territories." Instead, following a rough

[24] Hongō Katsuo's account in the chapter is based on the author's interview from 21 January 2014, as well as a transcript of an interview conducted on 27 June 2005 by the volunteer association "Japan Veterans Video Archive Project," JVVAP for short (*Senjō taiken hōhei hozon no kai* 戦場体験放映保存の会). The association kindly shared its records and introduced the author to Hongō.

journey of three months, he arrived in Nanjing where it was very cold. After marching for about 10 days without a coat, he arrived at Jingmen, Hubei province in the center of China. He was attached to the No. 1 Field Hospital of the 13th Division, where he underwent one month of infantry training.

Hongō was a short and skinny 3rd B-Class conscript – a particularly low army physical profile. And yet, ironically, he noticed that among his group of trainees, he could be considered quite fit. Almost half of the 86 recruits had some physical disability; one soldier had a finger missing; one couldn't hear; another had an artificial eye, and yet another had three ribs missing. Hongō recalled five men perishing on the way – 2 onboard the ship from Japan and 3 while marching to Jingmen. By the end of the war only 27 of them remained.

In April 1944, following infantry training, Hongō began his medical training. However, it took place, while his unit prepared for the largest operation in the history of the Japanese Army – Operation Ichigō (April 1944 – February 1945). The purpose of the operation was to open a land route to French Indochina and allow the movement of supplies, as well as take over airfields in the south from which American bombers set out on missions to Japan.[25] Moving south with his unit while it was preoccupied with the impending operation, Hongō's medical training was very rushed.

Medic training was something to talk about in the period when (the Japanese military) was winning… Things like bandaging and applying splints – we did it once, but only for appearance-sake. Neither the instructors nor the trainees had ears or noses for it. (We were) unsettled. While winning, there was time, and it was probably possible to conduct proper medic training… When it began being a losing war, thinking about numbers, there were not enough soldiers. All we were about was replenishing the lines. The fact that I survived is itself a wonder.[26]

[25] For more on the operation see Hara Takeshi, "The Ichigō Offensive," in Drea, Peattie & van de Ven, Op. Cit., pp. 392-402. For a wider view of the operation also from the Chinese side see Wang Qisheng, "The Battle of Hunan and the Chinese Military's Response to Operation Ichigō," in Drea, Peattie & van de Ven (eds.), Op. Cit., pp. 403-18.
[26] Author interview with Hongō Katsuo, 21 January 2014.

Medical training lasted only between 10 to 20 days. How could Hongō know how to serve as medic based on such little training? For what he was eventually required and capable of doing under the conditions of the operation, he did not arguably need much training.

During the subsequent battles, Hongō moved vast distances with his unit and set up field hospitals in locations such as Guandu and Hengyang to collect the proliferating wounded soldiers. However, no fresh supplies of food or medicine arrived from the rear. According to Hara, as Operation Ichigō progressed and as the troops moved further south, logistic supplies became increasingly difficult, especially since American air raids largely prevented transport through the Yangtze River or via rail. Hara argued that American aircraft specifically targeted cargo carriers, cutting off the Japanese troops. Consequently, the further down the troops went the fewer the supplies that reached them.[27] Hongō recalled how the soldiers went out to pillage local villages, where they also kidnapped men to serve as ″coolies.″ These forced laborers were to carry the stolen goods and later help with carrying the wounded to the hospital on stretchers. This was significant since the troops passed vast distances till the end of the war, to the detriment of the kidnapped and - according to Hongō - grossly mistreated men.

These efforts were sill insufficient, particularly since there were roughly between 100 and 150 patients to feed at the hospital at a time. Moreover, it wasn't possible to properly cook since the smoke attracted American bombers. As a result, there was little way to properly feed or treat the patient-soldiers.

In our military life the field hospital was not a place where the sick were treated and healed. It was a place where they would wait to die. It was called a field hospital, but hospital it was not. There was no medicine, no bandages, nothing, so nothing could be done. The doctors could not do anything. Only the medics were busy. We would cook rice and feed (the patients). The medicine to treat malnutrition was rice bran… It would make up for vitamin deficiency. When there was a little time to spare we would dissolve (the rice bran) in water until the water was

[27] Hara, Op. Cit., pp. 393-95.

clear and give it (to the patient) as liquid medicine... Rice bran was extremely valuable. Patients could not live under such conditions.[28]

With barely any means to treat, Hongō and the other medics did the little they could to help the patients, by feeding them with what was available. Their superior officer explained to the medics the specific importance of rice bran as a source of nutrition and ordered them to provide it to the patients as medicine.[29] Since the lack of supplies turned malnutrition into a central ailment, rice bran became a type of medicament.

Hongō recalled doing various odd jobs around the field hospital as well. For instance, he would write by candlelight the daily records kept for each patient – the "sickbed diary", *byōshō nikki* 病床日記 - which enabled tracking their condition. This was common practice in Japanese hospitals at the time. However, without medical supplies and consequently, less capability to treat, record taking took more space in the medic's activities. And so, Hongō emphasized, the field hospital was not really a hospital, so much as a place in which the sick and wounded were collected until transportation unit soldiers would come to take them away about a week later, or alternatively, until they died.

The situation continued in this way, moving from one location to another until the Japanese surrender. Hongō's unit received notice of the surrender three days after the fact, to the sorrow of some and joy and relief of others. Hongō recalled himself feeling happy as the prospect of going home was finally visible. The Chinese forced laborers, on the other hand, were stranded miles away from home with no means of returning.

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[28] JVVAP interview with Hongō Katsuo, 27 June 2005.

[29] The Japanese military medical perception of rice bran as a valuable source of vitamins and as such, a disease preventative – particularly of Beriberi - was a product of historical debates and developments, led by the military in the context of the establishment of a scientific system of national medicine. See Alexander R. Bay, *Beriberi in Modern Japan: the Making of a National Disease* (Rochester, NY: University of Rochester Press, 2012).

In many ways, Hongō was not a typical medic. He was not trained as medics were trained till then, nor did he perform the usual duties medics performed, armed with their medical skills. This aberration could be seen already in the makeup of his group. According to Hara, the Japanese Army mobilized about 500,000 men to the operation, 80% of the Army troops in China. And so, as discussed in the fourth chapter, not every able body counted – every body counted. Consequently, as Hongō discovered, the Army shipped out even the weak and disabled to the frontline, where they had very little chance of survival. In the hopeless situation he was in, Hongō did whatever he could, by using more goodwill than actual resources, in nursing and feeding the sick and wounded, and in a sense, serving as administrator for the patients as they lay waiting for their fate.

A Medic of all Trades

Yoshida Takashi's story elucidates the degree of malleability medics were to possess in a losing war, as he was required to fill numerous functions, including those completely unrelated to his role as medic. Like Tanizaki and Hongō, Yoshida was also a reserves recruit medic. As described in the fourth chapter, he believed that his imperfect hearing contributed to his choice for medic, instead of infantry soldier. During his service, however, he found that when it came to physical exertion, the difference between medics and infantry soldiers often disappeared. Unlike Hongō, Yoshida was already enlisted in 1941 and underwent three months of training. But, he was sent home upon their completion. He was mobilized in 1943, two years later, following, he explained, a dire shortage of medics in his unit created by the Battle of Guadalcanal.[30]

[30] The account of Yoshida's experiences in this chapter are based on an author interview from 29 October 2013 and 19 September 2014, subsequent correspondence, and a short memoir Yoshida privately published concerning his wartime experience, entitled *Nyu-Ginia sensen ikinokori taikenki: aru eiseihei no shuki* (Hitachi: Yoshida Takashi, 2013).

As a reserves recruit, his training was relatively short, but not as rushed as Hongō's. Yoshida went through the regular courses, such as wound disinfection, sterilization, bandaging, and stopping bleeding. He also noticed that the curriculum mainly focused on problems, which he perceived as typical to the "Southern territories," such as treating malaria and heat stroke. Malaria was a main scourge in the Pacific, which took many lives among the Japanese, as well as the American and Australian forces.[31] According to Iijima, as Japan expanded to the Pacific, it took over rich source beds of quinine, but also significantly raised the risk of its soldiers contracting malaria. Anticipating this problem, the military deepened its research of the disease in 1941, and took preventative measures, such as circulating explanatory pamphlets to each soldier.[32] As shall be discussed below, malaria became also one of the main ailments that Yoshida was to prevent and treat during his service.

Over the course of the subsequent two years, Yoshida filled various roles. Following enlistment, Yoshida sailed to Palau, where he spent two months waiting for the next voyage to New Guinea.[33] While he was waiting, he assisted in dividing supplies for shipment to the various Pacific fronts from the Palau repository. Unlike Hongō, from Palau he and the other medics split up from the rest of their unit and sailed to New Guinea in a hospital ship. Yoshida believed this separation was aimed at protecting the - by then relatively few - medics, since, Yoshida assumed, the Red Cross mark on the ship made it less vulnerable to enemy attacks. According to the 1907

[31] See for example, Judith Bennett's research on the different ways in which the American and Australian armies dealt with malaria by dispatching special "Malaria-control personnel," adopting preventive measures, and actively intervening in the local ecosystems at the expense of the local population: "Malaria, Medicine, and Melanesians: Contested Hybrid Spaces in World War II," *Health and History*, Vol. 8, No. 1 (2006), pp. 27-55.
[32] Iijima Wataru, *Malaria to teikoku* (Tokyo: Tokyo diagaku shuppankai, 2005), pp. 208-09, 211-12.
[33] For more on the New Guinea Campaign see Peter J. Dean's edited volume *Australia 1943: the Liberation of New Guinea* (New York, NY: Cambridge University Press, 2014) and Stephen R. Taaffe, *MacArthur's Jungle War: the 1944 New Guinea Campaign* (Lawrence, KS: University of Kansas, 1998).

Hague convention, hospital ships were to be protected from bombardment.[34] However, by that stage of the war hospitals as well as hospital ships were not immune to attacks. Moreover, according to Hirota, in the final stages of the war the Japanese military used hospital ships also to carry soldiers and warhorses, in addition to serving as maritime hospitals, making them even more vulnerable to attacks by annulling their immunity.[35] Luckily for Yoshida, his journey passed peacefully. But, right after he landed at Wewak, New Guinea, he had to run to an air raid shelter to escape shelling. He realized that he reached the front.

Yoshida and the other medics arrived before the rest of their troops. In the interim he served again in different capacities. He first worked at the No. 117 Transportation Hospital. Set up in a shack, the hospital was full of patients, but without sufficient medicine or medical instruments. Yoshida recalled, for instance, that in the absence of alcohol, the medical personnel would use iodine to sterilize their syringes. About two months later, in January 1944, he moved to the No. 217 Field Supplies Depot and temporarily served in its medical supplies department. Finally, in mid-May his regiment called him and his medic comrades back, and assigned each to a different company. Each company usually consisted of 200 men, but at that point Yoshida's company shrunk to only 30. It merged with another, amounting together to a total of 70 men.

The following month, the company sent Yoshida with a platoon of 21 men to Samap further south as its sole medical care provider. His period in Samap resembled medic life in detachments in China, as described in the previous chapter. The platoon's role was to serve as security force, but most of the time life was comparatively quiet. The main preoccupation of the soldiers was to search for food – prepare salt from sea water, exchange different goods with the

[34] "Laws of War: Adaptation to Maritime War of the Principles of the Geneva Convention (Hague X); October 18, 1907," *The Avalon Project: Documents in Law, History and Diplomacy* (New Haven, CT: Yale Law School, Lillian Goldman Law Library, http://avalon.law.yale.edu/20th_century/hague10.asp. Last Accessed: 6 July 2016).
[35] Hirota Kazuko, *Jūgun ianfu・kangofu* (Tokyo: Shinjunbutsu ōraisha, 1975), p. 122.

local population, hunt in the jungle and collect roots and sprouts, of which they learned from the local people. According to Yoshida, supplies halted in March and while in May the military managed an airborne operation dropping food and ammunition, it was not sufficient and the units still had to largely rely on themselves. On the way to Samap through the jungles they passed numerous bodies of soldiers, who collapsed of hunger, malnutrition and malaria - an omen for what was to come.

Similar to the detachments in China, the platoon also went on pacification campaigns among the local population. Yoshida would come along and provide care to those in need, and was referred to as "doctor-soldier." As the only care provider, he also treated the platoon soldiers when needed, often improvising due to lack of means. For instance, when one soldier suffered from a cavity and inflamed gums, Yoshida used his syringe to take out the pus from the cavity.

It was in Samap that the platoon ordered Yoshida to assume an additional role, as messenger between the encampments of different security units, in lieu of communication devices. Because of the grave shortage of personnel, it fell to him to fulfill this completely unrelated and dangerous infantry role, even though he was the only medic in the entire company. He had to run in the jungle while carrying a rifle, to protect himself from the enemy, and also, from other hungry Japanese soldiers who could attack him for his supplies. One of his most painful memories that continued haunting him for the rest of his life was of four feeble soldiers he passed on the way. One of them asked him for some food. Yoshida recalled being stumped for words, having to decide whether the soldiers were "savable" or not. They seemed either to be suffering from malnutrition or already dying of hunger. If he were to give them the little food he had, it would have provided only very temporary relief, while presumably putting himself at the risk of falling to the same fate. Like Tanizaki he had to choose between himself – and by

extension, the soldiers of his company - and suffering strangers. Like Hongō, he was a medic without the means to save.

The situation grew much worse following July 1944 as the Allied landing in Wewak began and Yoshida's unit stopped receiving supplies altogether. The Army ordered to save its food repositories for the upcoming operation by what was, in effect, gradually starving its own troops. The consequences were so dire, that Yoshida's commander ordered three companies to steal from the Army's own supplies depot. The Aitape–Wewak campaign began shortly later in November, and in December Yoshida's division headquarters ordered his unit to supply reinforcement – 30 men from his company, 5 from his platoon. Yoshida was originally on the list of these "volunteer troops," *teishintai* 挺身隊, but was eventually taken off it. Yoshida believed it was because he was a medic and had the least combat experience. His role saved his life, since it was clear that those who left would not return. Since he was not joining the men, he did what he could to arm them with a medical preservative; before departure, Yoshida provided each of the soldiers with medicine against the most dangerous disease - malaria. Three of the men ultimately survived, but only because they ran away from the front. Luckily for them, the officers spared them and did not report them.

In early 1945 the remainder of the platoon received an order to leave Samap and set out to the front as well. As they were marching, Yoshida continued treating the men as their medic, improvising while using the means he had. For instance, he gave a camphor injection to a soldier who collapsed on the way. At another time, He provided emergency treatment of – once again - malaria to one of the soldiers, whose temperature sharply rose and could not continue walking. The platoon had to move on, but did not wish to leave him behind. Yoshida possessed acrinamine, which would have required too much time to take effect orally. He then decided to

inject the material, and use water from a nearby stream as solvent. He boiled the water and dissolved in it a portion of the acrinamine, sterilized the syringe and injected it to the soldier, who had to endure the pain of the deep and scorching injection. The soldier's temperature eventually went down and the men continued on their journey the following day.

According to Yoshida, more than the enemy's weapons, moving as a unit was the most frightening. While the unit was on the march, its soldiers were in danger of catching disease, of malnutrition and eventual hunger. The worst fear was to somehow get detached from the group and lost alone in the jungle. As they were walking back, they saw numerous bodies of such soldiers, just as they did when they moved to Samap originally. According to Yoshida, however difficult, the group could help each other persevere and search for whatever food they could find together, raising the chances of survival of each individual.

As they moved onward, the soldiers grew weaker, and marching - increasingly difficult. Their movement from one location to another continued until August 14th, when the Army commander ordered the unit to set out on a "suicide mission," *kesshisen* 決死戦; a mission that had no hope of succeeding, but the Army sent the soldiers to die trying.[36] What saved them from impending death was not medicine, but the Imperial surrender the following day.

Yoshida's two years of service were the final most desperate years of the war, when human and material resources continuously and significantly diminished. During these two short years, Yoshida served in five different roles including as army messenger. The medic, who was supposed to use medicine as his weapon was sent out to the jungle with a rifle, albeit for self-

[36] On suicide missions and the development of the concept of *gyokusai* 玉砕 from 1943, see Dower, 1986, pp. 231-33. See also Francesca Di Marco's analysis of suicide in Japan at the examined period through the field of psychiatry. According to Di Marco, by the 1930s, psychiatry pathologized suicide. However, it absolved a few exceptions, whereby suicide took place as a form of honorable sacrifice for the sake of the "nation." See *Suicide in Twentieth-Century Japan* (New York, NY: Routledge, 2016), particularly Ch. 2, pp. 57-93.

defense.[37] However, his role as medic was also, at one time at least, responsible for his survival. The diminished resources required him to adapt to different roles, to improvise and make do with the meager resources available - food and medicine. Like his counterparts in China, he also served as an imperial medical care provider through his interaction with the local population, but only for a short time, since the situation deteriorated quite quickly.

Most of Yoshida's service was colored by deprivation. The want also placed him, like Tanizaki in a situation whereby he had to choose between trying to save another and preserving his own chances of survival, and by extension - as medic - that of the men whose lives the military entrusted to him. On the other hand, when it came to a sick soldier in his platoon, though he slowed the collective movement down, the soldiers did not leave him behind. At the end of the day, Yoshida's capability to save depended on the initial state of the patient's physique and his level of endurance. Like Hongō, he could not save those who were severely malnourished. At best, prolong the end. Nor could he properly treat the sick once the unit was on the move. The success of his emergency improvisations as of his own eventual survival were the result of his shrewdness, but also largely of luck and timing.

A Medic Who Could Not Hear

Unlike the above medics, Haraoka Isamu began his service as a fit A-Class conscript, but not long after he entered the war he partially lost one of the most central faculties for a medic – his hearing. Serving as a medic in a losing war thus became even more challenging. As described

[37] According to the Geneva Convention, from 1906 medical personnel could carry light arms and still maintain their immunity, as long as they used them "in self-defense or in defense of its sick and wounded." However they lost their protection if they used their arms to "commit acts injurious to the enemy." See "Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field. Geneva, 6 July 1906," *International Committee of the Red Cross Website*, articles 7, 8 (https://ihl-databases.icrc.org/ihl/INTRO/180?OpenDocument. Last accessed: 6 July 2016. Text based on D. Schindler and J. Toman, *The Laws of Armed Conflicts* (Leiden: Martinus Nihjoff Publishers, 1988), pp.301-310).

in the fourth chapter, when Haraoka enlisted in December 1941, he believed his conscription officer assigned him to serve as medic, as a possible punishment for skipping military drills at school.[38] Following enlistment, Haraoka shipped to "Keijō" – Seoul in Korea, to serve in an artillery regiment of the No. 20 Division. He underwent three months of basic training with the conscripts of his regiment, followed by three months of medical training at an Army hospital with fewer than 100 trainees from various units. In May 1944, about two years later, instead of going back home, he was transferred to the No. 49 logistics regiment. Two months later he sailed with the regiment to Burma on board the Dābanmaru ship.[39]

Haraoka was attached to the regiment's headquarters and as a result, he could join the military physicians and non-commissioned medic officers in a relatively spacious room in the ship. The room served as the ship's medical care room, to treat sick soldiers during the voyage. This was significant since the ship, an army transportation ship and originally a commercial ship, was extremely crowded. Most soldiers, the regimental medics included, did not even have room to sit. Thanks to his service in the medical care room, Haraoka could preserve his strength for a subsequent trial, which probably contributed to his ultimate survival; at Cam Ranh Bay an American submarine hit the ship with two torpedoes. The soldiers were forced to abandon ship. Because of a typhoon the waters were very rough and the waves tall, tearing their rafts apart. After swimming for many hours, a Navy rescue boat finally picked them up, but according to Haraoka, by then 1633 out of the 3600 soldiers had drowned.

The rescue boat took them to a Navy hospital, where Haraoka received emergency care even though he was an Army soldier. In general, the Navy and Army medical systems were

[38] Haraoka Isamu's account is based on the author's interview from 9 May 2014, and an earlier one conducted by the JVVAP two years earlier, on 1 May 2012. In this case as well, the association kindly shared its records with the author and introduced me to Haraoka.

[39] For more on the war in Burma see for example, Louis Allen, *Burma: the Longest War, 1941-45* (London, GB: J.M. Dent, 1984); John Latimer, *Burma: the Forgotten War* (London, GB: John Murray, 2004).

separate, but desperate times called for desperate measures. The Navy medical personnel provided Haraoka with an aspirin to lower his high fever and discharged him after three days. Since all the supplies sank with the ship, Haraoka did not have his own medical kit and supplies any longer, relying on whatever he could get in the hospital. Unfortunately, Haraoka explained, his fever resulted from an inflammation in the middle ear, caused by the ocean water. Since it remained undetected and untreated, Haraoka suffered permanent damage to his hearing.

Similar to what Hongō described, Haraoka was not the only soldier with a physical disability. Among his troops, Haraoka noticed men missing an arm or an eye. Hence, becoming hearing-impaired at that point of the war did not disqualify Haraoka from continuing his service, even though on one occasion he was almost cut off from his unit, since he did not hear the calls to move on. On the contrary, because so many died with the sinking of the ship, Haraoka was quickly promoted to a corporal rank non-commissioned medic officer. He became a high-ranking medic, who could not hear potential calls for help.

On 1 December 1944, Haraoka finally arrived in Burma, via Thailand, where his unit began a long march in the Pegu mountain range. The goal was to join the troops in Meiktila for what was to become one of the decisive battles against the British Army. Instead, it became a journey of retreat. The unit was attacked on the way by British military bombers and tanks, depleting its lines. Haraoka recalled that during one tank attack, his unit sent groups of men one by one to explode under the tanks. Since few remained, it seemed like Haraoka was next in line, but luckily for him, he was called to a neighboring village to help as a medic. Ironically, while the soldiers of his unit were committing military suicide, he was saved by a call for medical help.

As the attacks continued, Haraoka's depleted unit had no ammunition or food left. Supplies did not come and the local people fled with their own supplies, leaving nothing behind

to steal. The soldiers ate whatever they could, but as in the previous examples, their bodies continued weakening. There was no question anymore about joining the battle, but of fleeing and surviving. Each was to do the best he could to keep his body stable, adopting various practices. For instance, Haraoka recalled that many soldiers fell ill with dengue fever and malaria. He believed he did not, since he practiced "dry towel rubbing," *kanpu masatsu* 乾布摩擦, a traditional health-preserving technique, still common in contemporary Japan.[40] Haraoka rubbed his skin forcefully with a dry fabric on a regular basis, as he learned to do in school. According to Iritani, children practiced *kanpu masatsu* at school to prevent the common cold.[41] Haraoka on the other hand, recalled that when he was 16 years old his parents sent him to a monastery to treat what they feared to be leprosy and bouts of wild behavior, he termed "attacks of neurosis." The monk at the Jōdo Shinshū Buddhist monastery, a former military officer, put Haraoka under very strict discipline and made him practice *kanpu masatsu* on a regular basis, which became a lifelong habit. Haraoka believed that this habit eventually prevented him catching malaria and Dengue fever, because it made his skin strong and resistant to mosquito bites. Under the circumstances in Burma, *kanpu masatsu* became one of the few measures Haraoka could take to protect himself, when those he learned and trained in were no longer available.

Another example of improvising alternative measures was the use of coal. Haraoka recalled one case of a soldier, who caught amoebic dysentery, but there was no medicine left to treat him. There was no ringer solution to keep him hydrated either. A higher-ranking non-commissioned medic officer, sergeant major Takamori, instructed Haraoka to burn some rice straw, from an adjacent field, to create charcoal ash and give it to the soldier to stop the diarrhea.

[40] The effects of *kanpu masatu* are still a source of preoccupation today. See for example Takahiro Kobayashi, Hiroaki Matsumoto, Osamu Takano, Chikako Tomiyama, Mayumi Watanabe, "Skin Rubdown with a Dry Towel, 'Kanpu-Masatsu' is an Aerobic Exercise Affecting Body Temperature, Energy Production, and the Immune and Autonomic Nervous Systems," in *Biomedical Research*, Vol. 33, No. 4 (2012), pp. 243-48.
[41] Iritani Toshio, *Group Psychology of the Japanese in Wartime* (New York: Routledge, 2010), p. 179.

Haraoka carefully lit the straw while hiding the fire, to prevent detection by bomber planes. The soldier drank the ash concoction and felt better. According to other testimonies, Japanese military medical personnel adopted this measure of ingesting coal in different places, as their medical supplies ran low. The perception of coal as a medicinal substance appeared in classical texts in China and Japan from at least the 16th century, and in advertisements from Europe and America in the mid to late 19th century. [42] It was used and sold as an external disinfectant and as an ingested cure for intestinal problems.[43] There are also a number of testimonies by former Allied POWs captured and brutally mistreated by their Japanese captors, who described ingesting charcoal to treat dysentery like the above example. In all cases, charcoal was the selected solution in the absence of an alternative, in two cases – of the prisoners' own initiative, and in another – following Japanese commands.[44] In the absence of regular medicine, the men turned to this form of home remedy, and quite literally grabbed at straws.

The most common problem, though, was once again malnutrition. As cited in the opening of the chapter, Haraoka and his troops were in constant retreat, and as a result did not engage in

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[42] Li Shizhen's influential *Bencao Gangmu* from 16th century China included, for instance, an entry on coal, *shitan* 石炭. The entry elaborated a variety of therapeutic uses of coal, such as applying coal powder on wounds, ingesting it as powder mixed with liquids such as wine for abdominal and related problems, as well as specifically for menstrual problems. In the Japanese *Yamato Honzō* by Kaibara Ekiken from the early 18th century, on the other hand, the various therapeutic uses of coal included only external applications. However, since the *Bencao gangmu* was influential in Japan as well in its own right, it is probable that the practices it elaborated carried through to Japan as well. See: Li Shizhen, *Bencao gangmu*, Vol. 9, entry no. 28 (Nanjing: Hu Chenglong, 1590. NDL reference number: 000007557874); in English see: Li Shizhen, translated and annotated by Luo Xiwen, *Compendium of Materia Medica,* Book II (Beijing, CN: Foreign Language Press, 2003), pp. 1070-71; On the influence of the *Bencao gangmu* in Japan see Federico Marcon, *The Knowledge of Nature and the Nature of Knowledge in Early Modern Japan* (Chicago, IL: The University of Chicago Press, 2015); Kaibara Ekiken, *Yamato honzō*, Vol. 3, entry 14 (Kyoto: Nagata chōbē, 1709. NDL reference number: 000007326102).

[43] See an 1871 ad in *The Lancet* for charcoal tablets, approved by "the Academy of Medicine in Paris" to treat various intestinal diseases, including dysentery: "Belloc's Charcoal," *The Lancet* (London, GB: 25 November 1871). See also a reference to the marketing of coal tablets in America in 1907, in Frank Farrington, "Practical Business Suggestions," *Practical Druggist and Pharmaceutical Review of Reviews* (February 1907), p. 30.

[44] See Len (Snowie) Baynes, *The Will to Live* (Barnsley, South Yorkshire: Pen and Sword Military, 2013), p. 89; Chester M. Biggs, Jr., *Behind the Barbed Wire* (Jefferson, NC: McFarland, 1995), p. 111; Russell G. Cross, *In the Rays of the Rising Sun: the True Story of Private Glen E. Kuskie's Survival as a Member of the U.S. Army 31st Infantry Regiment During World War II* (Raleigh, NC: Lulu.com Publishers, 2015), p. 143. See also Alan J. Levine, *Captivity, Flight and Survival in World War II* (Westport, CT: Praeger, 2000), p. 143.

fighting. As such, there were no casualties for him to treat. Rather, most of the men suffered and died due to shortage of food and its complications, rendering Haraoka as a medic, helpless.

There was nothing to do. Just to carry my body forward required all of my efforts. It was not so much treatment as malnutrition. There was no way to treat. There were men who grew so weak, skin and bones, that they collapsed and hurt themselves, so I would apply a triangular bandage, stop the bleeding and the like. But that's about it. I went to war to act as medic, but really in a losing war, it took all one had to flee. Just to carry one's own body, required all one's might. Later even a pencil was thrown away - it was too heavy to carry. I had no more energy to carry my medic bag and you couldn't throw away your gun because it was a present from the emperor. But we were so weak, a pencil was too heavy.[45]

Under these circumstances there was no leeway for taking care of the bodies of deceased soldiers in the manner described in the previous chapter. There were so many dead bodies, cremation would have attracted enemy planes and required too much time. According to Yoshida Yutaka, already during the War in China, as fighting got rough, soldiers would leave the bodies as they were without cremation. But, they would cut off a small part of the remains to carry back to the deceased's family. This became much more common during the Pacific War.[46] According to Haraoka, the surviving soldiers were so weak that carrying even a small part of the remains was beyond their physical capability.

At the beginning when one of my comrades died, I would cut off and cremate his pinky as remains, *ikotsu* 遺骨 (to take back to Japan). Since the planes came near, you could not do that in the daytime, so at night, you would hide the fire and take out the bones, wrap them in a towel or something, to carry back to Japan, out of human sympathy. But, later, it took all one had just to carry one's own body, so we had to leave (the bones) somewhere, throw them away.[47]

Similar to the preceding examples, Haraoka did not experience battle in the traditional sense. His experiences were mostly of torpedoes, aerial bombings and tank attacks by a largely invisible enemy. As in the above cases, Haraoka's role as medic was formed by the state of the war. His almost complete loss of hearing early in his journey took away part of his ability to

[45] Author interview with Haraoka Isamu, 9 May 2014.
[46] Yoshida Yutaka, Op. Cit., pp. 83-84.
[47] Author interview with Haraoka Isamu, 9 May 2014.

serve as care provider. If he did not hear calls for the unit to move on, how could he hear soldiers' calls for help? In practice, he rarely treated wounds, since his unit was fleeing instead of fighting. As in previous cases, the shortage of medical supplies required improvisation using the meager resources available, but most of the soldiers needed food more than medical care. Haraoka himself struggled to survive from the moment he set out on his journey from Korea to the Pacific, using any method he could, including traditional practices. Similar to Yoshida's case, there were also a few junctures in which his role as medic saved him against all odds. Improvisation was imperative, but luck was indispensable.

Location, Location, Location

Unlike the above medics, Mutō Masatoshi spent his entire service stationed in Japan. His story illustrates the difference between medic service in the front and the rear, but also how the gap between the two began closing as the war neared its end.[48] As discussed in the fourth chapter, Mutō was a very thin 2nd B-Class conscript. Nonetheless, due to the shortages of human resources the Army enlisted him in May 1943 as a reserves recruit. Before enlisting, he had no interest or connection to medicine, but he was studious and so, he believed, the military assigned him to the role of medic. On the other hand, as also mentioned in the fourth chapter, he recalled that two medics who served with him were illiterate, and consequently were entrusted with various odd jobs, including growing hospital guinea pigs. 1943 was not 1937 or 1941.

After completing basic infantry training and about two months of medical training in August 1943, Mutō began serving as medic at the Kumamoto Army hospital. Built during the Meiji era, the hospital was positioned in the outer citadel of the Kumamoto Castle. Only a 100 of

[48] The following is based on the author's interview with Mutō Masatoshi, 14 June 2014, and additional comments and details provided by Mutō through correspondence.

the 300 trainees continued to active service like Mutō. The Army sent the remaining 200 home, only to enlist them shortly after. They sailed to the Philippines, but perished on the way, when an American submarine sunk their ship. Thanks to his earlier enlistment, Mutō avoided their fate. As he phrased it, the military, *guntai* 軍隊, was first and foremost a "luck-itary" or "troop of luck," *untai* 運隊.[49]

In the Kumamoto hospital, Mutō was assigned to one of the surgical wards, where he spent most of his military service until April 1945. Though there were also nurses serving at the hospital, unlike the examples discussed in the previous chapter, they were largely separated from the male medics, creating nurses-only wards and medics-only wards. As in other Army hospitals, in addition to surgery, Mutō served in shifts as night sentry, which included also guarding the deceased's corpses until they were cremated. From time to time, he also served in night shifts in the medics-only psychiatric ward, to provide care and also prevent patients from escaping.

According to Mutō, most of the patients in the hospital, including the psychiatric patients, were Japanese soldiers who were hurt or afflicted in Japan; many were injured while training, such as pilots suffering from fractures, or soldiers who served in their unit's home base in Japan. From 1944 they included also a few soldiers of Korean descent. He also noted that there were cases of soldiers, who fell ill with local diseases, endemic to the Kyushu area, such as elephantiasis. Most of his duties included nursing the patients, giving injections and providing them with medicine.

Mutō recalled waiting until he saw each patient swallow his medicine, because he believed some would pretend to take the medicine and then throw it away. According to Mutō, many soldiers at that time remained in the hospital for a longer period than usual. The hospital,

[49] Yoshida Takashi and Hongō Katsuo used the same expression while describing their experiences during their interviews on 29 October 2013 and 21 January 2014 respectively.

he noted, was a safe haven for the soldiers, a place where they could eat three meals a day and stay out of danger. As a medic, Mutō described hospital service as follows:

> In a sense, it was easier, when you think about what the front was like. You had three meals a day every day, and in the Japanese Army you got the best food (in hospitals). (Patients) would get special treats. There was good food in the hospital, even if (the rice) included barley.[50]

This was significant since according to Havens, from 1943 rationing and food shortages grew worse within Japan – not just around the empire. Many turned to the black market, and limited consumption quite drastically.[51] As hospital medic, Mutō thus enjoyed something most people at that time could not, even if the portions and quality of food gradually deteriorated in comparison to a few years earlier. It certainly differed from the field hospital Hongō described as a site of death and decline.

Another possible reason for prolonged hospitalization was the quality of available medication. Mutō recalled that by 1944 the medicine prescribed in the hospital, like the food, lowered in quality, and as a result – in its effectiveness. Mutō described how he argued for better medicine and received some locally produced penicillin from the hospital pharmacist. However, he only received a small quantity. This probably took place in 1945, since it was only in 1945 that a military led project managed to produce some penicillin. According to Tsunoda, in 1944 news circulated in Japan concerning Winston Churchill's recovery from pneumonia following the Cairo summit, thanks to the use of a new miracle drug named "Penicillin." It provided the impetus for the Japanese military to launch a secret project to research the drug and modes of its development, perceiving it – as did the American and British militaries – as invaluable for maintaining human resources during the war. Penicillin was thus also a form of weapon. Nevertheless, due to limited resources and channels of information, the project managed to

[50] Author interview with Mutō Masatoshi, 14 June 2014.

[51] Thomas R. Havens, *Valley of Darkness: the Japanese People and World War Two* (New York, NY: W.W. Norton & Company, 1978), pp. 114-32.

create only rudimentary versions of penicillin in limited quantities in 1945, towards the end of the war. As for Churchill, he actually took a Sulfa drug, fearing the new medicine, but that remained unknown at the time. Taking this into consideration, it is remarkable that Mutō had access, even if limited, to the new drug.[52]

And yet, it was not enough. Shortages grew to such an extent that even though the military medical framework strictly followed "Western medicine," Mutō recalled the hospital pharmacist experimenting with *kanpō* medicine, traditional Chinese formulas, to supplement the limited stock of Western medicaments, while using available ingredients.

In addition to his work in the hospital, Mutō also provided care following air raids, which grew frequent in the area starting from April 1945. Although his role was to treat Army soldiers, the expansion of the war to the home front extended his role to the general population. When air raid alarms began, Mutō would take his medical kit and drive to the city in an ambulance to help residents who were harmed. Mutō also recalled conducting three days of civilian training with 4-5 other medics at the Kumamoto communications' bureau, to teach the public basic first-aid. From 1944 the Army's Medical Department commenced civilian training according to the basic foundations of military first aid, which common soldiers, and particularly medics and stretcher-bearers learned.[53] As total war became increasingly tangible, the separation between military and civilian became increasingly ambiguous. As a medic, Mutō helped bridge the two.

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[52] See Tsunoda Fusako's research of the Japanese project in *Hekiso, Nihon Penishilin Monogatari* (Tokyo: Shinchōsha, 1978). On the American push for developing penicillin into a mass produced drug in support of the war effort, see: Roswell Quinn, "Rethinking Antibiotic Research and Development: World War II and the Penicillin Collaborative," *American Journal of Public Health*, Vol. 103, No. 3 (March 2013), pp. 426-34. See also Robert Bud's analysis of the mobilization of Penicillin for Allied wartime propaganda efforts in *Penicillin: Triumph and Tragedy* (Oxford, GB: Oxford University Press, 2007), Ch. 3, pp. 54-74.

[53] The textbook Army instructors used in the course - Rikugun gun'idan, *Eiseihō oyobi kyūkyūhō shidō no sanko* (Tokyo: Rikugun gun'idan, 1944) - was based on that which soldiers, particularly medics and stretcher-bearers, used - *Eiseihō oyobi kyūkyūhō*, authorized by Kawashima Yoshiyuki (Tokyo: Kobayashi Matashichi, 1936. There were later reprints, even in 1944).

Shortly after the beginning of the air raids, however, the Army sent Mutō to undergo further non-commissioned officer training. Mutō did not want to go, because becoming a non-commissioned officer signified more work and responsibility for the same meager pay he received as a lower-ranking medic. He did not care about the rank – only wanted to go home as soon as possible, which he believed would be delayed by becoming a non-commissioned officer. But he had no choice and so, he set out for a 2-3 months training course. Because the Battle of Okinawa began during that time – April 1945 – his training lasted for only one month, and he quickly returned to the hospital. A week later, he transferred to a different hospital - the Miyakonojō Army hospital in Miyazaki prefecture, where he served until the end of the war.

In Miyakanojō, Mutō could feel the war approaching nearer even more than before. The hospital he served in was relatively small, with a capacity of 50 patients, since its main purpose was similar to a transportation hospital – to provide provisional care as the soldier-patients moved further back. As Mutō explained, the Japanese Army established secret airfield bases in the area of Miyakonojō in preparation for an impending Allied landing, they believed would follow the Battle of Okinawa. As such, the hospital was indeed a potential transportation hospital in the event that the area and Kyushu at large turned from rear to the next battlefront. At one point of his service there, Mutō joined a group of soldiers to dig a 230-meter tunnel from Miyakonojō to Kagoshima for about two months. The tunnel was to eventually house an underground field hospital, like the ones built in Iwo Jima and Okinawa, as shall be discussed below. Mutō was almost killed in a sand avalanche while digging, but luckily he survived.

Even though he was a medic, Mutō's main role in the hospital was serving in the accounting room, where he was in charge of purchasing supplies of alcohol and cigarettes for the hospital - a challenging role in 1945. Moreover, at that point of time the number of patients

surpassed 100 – doubling its basic capacity, presumably due to intense air raids. Thanks to his shrewdness, he managed to obtain enough supplies for all, by telling the supply officer there were 300 patients in the hospital, hoping to split the difference.

Food was more challenging at that stage of the war. The soldiers ate mostly foreign low quality sorghum rice. The six villages around the hospital would take turns in providing some vegetables to the hospital, but since most of the men went off to war, there was very little produce, leaving the fields with few hands to cultivate. Consequently, the soldiers from the hospital, Mutō included, would go out in turns to the mountains to pick bamboo shoots, which were available in abundance. It was not a very good source of nutrition though, and Mutō recalled one soldier eventually dying of violent diarrhea.

Serving on the home front throughout the war, Mutō's service differed significantly from the descriptions of the above medics, who served overseas. Even while experiencing harsh shortages, the soldiers in Mutō's hospitals ate three regular meals a day. They did not suffer the extent of want described by other medics around the empire. Unlike them, Mutō could serve as medic – nursing the sick and provide some medicine, even when it became scarce. At a certain point he stopped serving as the quintessential medic in favor of a more administrative role. Hence, like the others, Mutō also became a medic who did not treat, but not due to the inability to treat, so much as a change of post. As long as there were resources, the system continued working until the very end of the war.

Concomitantly, Mutō's story also illustrated the gradual closing of the gap between front and rear. Mutō experienced the gradual deterioration of the situation on the home front as air raids and shortages began affecting life in the rear during the final years of the war. Even military hospitals, which were to be privileged safe havens, felt this deterioration. Towards the

end of the war, rear hospital medics also had to rummage for food of diminished nutritional value. Medicine became so scarce that at a certain point the pharmacist even tried using *kanpō* medicine, which the founders of the military medical system fought so hard to replace during the Meiji era. As Mutō noted, even a broken thermometer was irreplaceable.

Location, however, was formative also within Japan. Stationed in Kyushu, Mutō especially felt the front drawing nearer and took part in preparations for it. There were also medics who faced much more severe circumstances in Japan itself; medics served in various cities under increasingly violent airraids – the most wellknown was the bombing of Tokyo in March 1945; medics served in Hiroshima and Nagasaki when and after the atomic bombs fell, and as shall be discussed below, in Okinawa, which became the final front of the war. In all of these cases, medics were not safe in the rear and faced extreme challenges. Overseas as well, there were medics in areas, which were more violent and detached than others, creating a variety of experiences even around the empire. Together with luck, the individual's location determined the nature of medic service, and his fate.

Finally, an equally important factor combined with location was timing. The war ended before it potentially expanded into Kyushu, sparing Mutō's life as a result. If the American military had landed in Kyushu as planned, Mutō's experiences would have been very different. Moreover, if the war had continued longer than it did, shortages would have become even direr than they were, making the conditions on the home front more similar to places such as Burma.

The following section will focus on the final moments of the war, which pushed medics to the most extreme antithetical position to that which they trained for. While the above focused on the diminishing capabilities of medics to treat, the following will examine cases in which medics turned from preservers of life to administrators of death. Some of the cases have become

well known in historical memory as examples of the ideological extremism the Japanese military and government reached towards the end of the war. The following will go beyond ideology by analyzing the dilemmas medics and other medical personnel were forced to navigate and through their cases, reassess the relationship between medicine and war.

2) Euthanasia or Killing? Surrender, Life and Death

The Individual and the Collective

As discussed above, Hongō Katsuo served in a field hospital during Operation Ichigō in central and southern China. The capabilities of the hospital diminished so significantly due to lack of resources that, Hongō argued, it ceased to merit the term hospital. Nothing demonstrated this more than the treatment of cholera patients. Cholera was - and is - an extremely contagious disease. Medic textbooks instructed medics to immediately remove cholera patients to a different location than that of the other patients, including any object the patient touched before and after he fell ill. The disease manifested itself through violent watery diarrhea and vomiting, leaving the patient in a state of exhaustion. The treatment thus focused mostly on provision of fluids; the medic was to give the patient stimulating liquids, such as mint alcohol (alcohol mixed with menthol) to help overcome the physical exhaustion. Additionally, the medic was to give the patient small quantities of ice or cold water to quench their thirst and moisten their mouth and throat.[54] According to Hongō, in the major hospitals cholera patients would receive infusions and shots of ringer's solution to keep them hydrated due to an extreme loss of fluids.

As discussed above, Hongō's unit had very little supplies of food, medicine, or clean water during the operation. Moreover, the unit was often in retreat, moving from place to place,

[54] *Eiseihei kyōtei*, authorized by Yamada Hiromichi (Tokyo: Buyōdō shoten, 1932. Original from 1928), pp. 88-90.

losing many casualties on the way. As Hongō noted, Army hospitals treated cholera patients in the infectious disease wards, separated from other patients. However, on the field, Cholera infection could signify the annihilation of the unit; in a cholera prone area, without the means to treat and prevent infection, one or two patients could quickly become the source of a unit-wide deadly infection.

The solution the division commander chose for this predicament was extreme. Hongō described how at a certain point the division commander ordered the men at the field hospital not to touch or come near a patient sick with cholera, or even give him water, so as not to catch and infect the rest of the unit. Since cholera patients eventually died of dehydration, in essence, the medical personnel were ordered to leave their patients to die, ignoring their pleas for help. According to another testimony by a Japanese soldier who served in central China in 1937, cholera patients in his unit were quarantined on the field and while not officially ordered to be neglected, they were.[55] In Hongō's case this neglect was by command.

The situation grew more extreme once the field hospital received orders to move on. According to the division commander's orders, cholera patients were not to be touched and thus, were not to be carried with the unit as they moved onward. However, instead of leaving the ten or so patients behind to slowly wither away, the soldiers were ordered to lead the patients to a room, which they set on fire. It is plausible that the particular choice of fire was aimed at preventing the patients from becoming a source of infection to other passing troops. Different public health regimes considered fire as both a disastrous threat and means to battle epidemic infection.[56] According to Shiyung Liu's research, Japanese colonial rule in Taiwan used and

[55] Nohara Teishin, "A Village Boy Goes to War," in Haruko Taya Cook & Theodore F. Cook, *Japan at War: an Oral History* (New York, NY: The New Press, 1992), p. 32.

[56] See for example, the case of the board of health in Honolulu that ordered the burning of homes of plague victims in Chinatown in 1900. The fire eventually got out of control, taking the lives of numerous people: James C. Mohr,

implemented a variety of measures to prevent disease and epidemics, such as sanitary engineering, vaccination campaigns and quarantines, and in some cases, the sanitary police also burnt down villages suspected as carriers of disease.[57] However, the fire was generally aimed at objects and structures - not at people. Unlike Yoshida's case, whereby he perceived the group as a source of sustenance for the individual on the march, in this case, the commander made a decision to brutally sacrifice the individual for the greater good of the unit. He did so first by requiring those whose role was to treat to withhold their care, and then, by ordering them to actively kill to preserve the health of the collective.

Survival of the Fittest

One of the most devastating fronts of the Pacific War was Burma. According to McLynn, the estimated number of deaths incurred on the Japanese side was 144,000 men, 14,326 men on the British side, and possibly 1 million Burmese citizens. In all cases the most common cause of death was disease, accompanied by famine on the Japanese and Burmese sides.[58] The previous section described the experiences of Tanizaki Kōichi and Haraoka Isamu in Burma, as they spent the final years of the war fleeing and dealing with hunger in what became a journey of survival. This line of description was even more salient for Karube Shigenori, who was a young and inexperienced military physician. He was sent to Burma in 1943, where he served in one of three wounded transportation regiments, *eiseitai*, of the No. 31 Division. He participated in this

Plague and Fire: the Burning of Honolulu's Chinatown (New York, NY: Oxford University Press, 2005). See also how burning pathologized objects was combined with quarantine as measures against smallpox epidemics, in Susan Craddock, *City of Plagues* (Minneapolis, MN: University of Minnesota Press, 2000), p. 109.

[57] Michael Shiyung Liu, *Prescribing Colonization* (Ann Arbor, MI: Association for Asian Studies, 2009), p. 11.

[58] McLynn, Op. Cit., p. 1.

capacity in the battles of Kohima and Imphal in 1944 and towards the end of the war, transferred to an infantry unit as its unit physician.[59]

Being a doctor, his service differed from that of medics. However, in more ways than one, his story resembled that of many medics, due to his limited experience and the changes in the nature of the front at that stage of the war. Unlike medics who generally had no prior medical education, Karube was thrown into the military framework immediately after he graduated from medical school. Yet, similar to medics, he began his military life without any experience practicing medicine. Moreover, the expansion of conscription forced him to cut his studies short by six months;[60] until 1943, the military postponed university student service until after graduation. But, since the military enlisted and lost more and more men as the war progressed, it changed this provision, taking out students from schools.[61]

By the time Karube reached the front he was particularly inexperienced. Moreover, he was to begin his life as physician in a foreign land with idiosyncratic conditions. For instance, Karube described how one day early in his service in Burma his head started to hurt. When he took off his hat he noticed an incomprehensible bump. He asked one of the medics to look at it. The medic diagnosed it as a tick; the unit used cows to carry its equipment and they attracted ticks, which could harm the soldiers as well. Karube never saw a tick before, but the medic already suffered from one during his service. The medic then helped Karube remove the tick. In

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[59] Karube's account is based on his memoir, entitled: *Inpa-lu: aru jūgun'i no shuki* (Tokyo: Gendaishi shuppankai, 1979).

[60] Karube, Op. Cit., pp. 101, 103.

[61] The most well-known work on the enlistment of students, the *gakuto shutsujin* 学徒出陣,which became one of the seminal works on the tragedy of the war in Japan in general, is a collection of testimonies entitled – *Kike wadatsumi no koe*. Over the years it became an object of study in its own right and was translated into English as well: Nihon senbotsu gakusei shuki henshū iinkai (ed.), *Kike wadatsumi no koe* (Tokyo: Tokyo Daigaku Shuppankai, 1963. Original from 1949); Nihon senbotsu gakusei kinen-kai, *Listen to the Voices from the Sea*, translated by Joseph L. Quinn & Yamanouchi Midori (Scranton, PA: The University of Scranton Press, 2000).

this case, the medic thus knew more than the doctor, due to his slightly greater experience in these foreign conditions.[62]

Because Karube was stationed in a wounded evacuation unit constantly on the move, and because air raids grew more violent, he was particularly vulnerable. The military physician who was supposed to be a protected asset, replaced by medics on the frontline, found himself directly in the line of fire. Karube described how flustered he was during his first experience of an air raid. Enemy planes detected the unit as it was moving and opened machinegun fire. Karube was so shocked that when a corporal was wounded right beside him, he could only look on. Another higher-ranking physician quickly ran to aid the wounded instead, but he too was flabbergasted by the circumstances. The physician even cried for a medic to fetch him a pair of scissors, completely forgetting he had a pair in his own bag.[63] Karube recalled that after this episode, one of the medics approached both doctors and praised them for their courage:

(You were brave for) providing treatment while the shooting took place. Even though I was called for, as a medic, I couldn't manage to go (out to the field).[64]

Karube described the shame he felt, hearing these words, while recalling his dumbfounded behavior. More to the point here, the medic's words demonstrated how the gap between doctors and medics in this instance broke down, as the distinction between front and rear disappeared.

Two of the main persisting differences between doctors and medics were numbers and rank. Medics were still significantly more numerous than physicians. In the case of the wounded evacuation unit – stretcher-bearers were the most numerous of all. According to Karube, each of his division's three infantry regiments was supposed to have a stretcher-bearer company attached to it, with about 100 stretcher-bearers each. In actuality, it was more close to half of that. The

[62] Karube, Op. Cit., pp. 45-46.
[63] Karube, Op. Cit., p. 37-38.
[64] Karube, Op. Cit., p. 40.

medical headquarters of the unit, would divide its personnel among the three regiments – a total of 10 or so physicians, 130-40 medics and 2-3 pharmacists.[65]

When it came to rank, physicians were still commanding officers and medics – subordinate soldiers. Karube began his active service after only six months of infantry training. After that, he underwent three months of additional military medical training in Singapore, following which he immediately became a probationary officer, *minaraishikan* 見習士官. Usually, military physicians would undergo officer training at a cadet school. However, by the time Karube completed his infantry training in April 1943, the situation was so dire that he immediately headed to the front, and was charged with commanding dozens of soldiers, including medics and stretcher-bearers. The freshly minted medical officer had to immediately adapt to treating patients on the line, and to being responsible for numerous soldiers without any experience – managerial or medical.[66]

Throughout his service, Karube was in constant movement. The role of the wounded transportation unit was to collect the wounded from the frontline in rescue teams and to transport them to a dressing station or field hospital, which the unit established near the frontline. Finally, it would evacuate the wounded from the dressing station or field hospital further back.[67] As the other medics described, in this case too, besides the air raids, unit movement was accompanied by a gradually worsening state of hunger, disease and shortages of medicine. For example, Karube noted that while the Army prepared a supply of quinine to treat malaria, it did not prepare medicine to counter amoebic dysentery, from which many suffered, or a supply of

[65] Karube, Op. Cit., pp. 144-46. The numbers differ somewhat from Kurosawa Yoshiyuki's abovementioned estimation in footnote no.10.
[66] Karube, Op. Cit., pp. 7-8.
[67] Karube, Op. Cit., pp. 144-46.

vitamins which would have helped revive the many malnourished soldiers.[68] Moreover, the landscape was mountainous and difficult to traverse, requiring the unit to move almost entirely on foot. The situation was made worse by the conditions of the rainy season, during which heavy rain continued for hours on end.

The main difference between Karube's account and that of the above described medics was the fact that as a wounded evacuation unit, the medical personnel did not only have to struggle in keeping their unit's soldiers alive and pushing themselves forward. This alone was extremely difficult. Karube himself suffered from recurring bouts of malaria while on the march, as well as of exhaustion and emaciation like everybody else. Unlike regular units, however, Karube's unit had the additional responsibility of transferring the sick and wounded from one place to another – men who could barely walk if at all. There were numerous patients to transport, and very few stretcher-bearers to take them. Moreover, the company had to provide food for all the patients they picked up, while they were already undersupplied.

Consider the following example. In the first hospital Karube's company reached, there were over 100 patients, almost all of them suffering from numerous diseases – most often, malnutrition. According to Karube, each stretcher required 4 men to carry. They were to be replaced three times day – four times in a mountainous area, making it a total of 12 to 16 stretcher-bearers per patient. But they only had around 60 stretcher-bearers in the unit. In that landscape, stretcher-bearers were the only means to transport the wounded and sick, since automobiles could not pass. Eventually, Karube negotiated with the medical physician in the field hospital and they chose only 15 gravely ill patients to be carried on stretcher, continuously

[68] Karube, Op. Cit., pp. 49, 59, 86.

by the same stretcher-bearers without replacement. The rest of the patients were forced to walk. As Karube noted:

We more than understood that making such faint patients walk was equal to pushing them to their death.[69]

To support the feeble patients, the medics and doctors divided the marching line between them. Every now and again a medic would run down the line to maintain communication and connection with the rear. The unit moved very slowly as a result, and patients collapsed on the way. In addition to supporting the patients during the march as best they could, the medical personnel also made sure that none of the patients tried to commit suicide to escape the hardships. At some point, Karube recalled that they even took away hand grenades from the most gravely ill patients, who consistently asked to be "relieved of their pain." In another case, the medics surrounded a gravely ill soldier while marching, to push him forward.[70]

As they continued in this way from one "hospital" to another, moving patients between two points, conditions grew worse. First of all, the hospitals to which they transferred the wounded were themselves in bad shape, with very little supplies, making the fate of the transported patients dubious.[71] As for the transportation unit, the more it moved the weaker and more exhausted its own soldiers became - from malnutrition, disease, and physical exhaustion caused by marching, and carrying the wounded without relief, in addition to their own equipment. They had no vehicles and barely any horses or cows, the few of which often died on the way from malnutrition and exhaustion. At the end of each march, the soldiers continued to a new location to pick up more patients to transfer, with less supplies and depleted energy. As battles began, the number of wounded soldiers also proliferated and required transportation and care,

[69] Karube, Op. Cit., p. 84.
[70] Karube, Op. Cit., pp. 85, 88-89, 93, 105.
[71] Karube, Op. Cit., pp. 114, 135.

with fewer bandages and medicaments. In the humid climate they were in, it took very little time until each wound was covered with maggots.

The situation deteriorated even further by the end of May 1944 when the division finally received a command to retreat. The few surviving patient-soldiers were exhausted, sick, wounded, and malnourished, including the soldiers who were supposed to carry them. The soldiers gradually threw away most of their gear, including their rifles. As they dragged themselves and the sick and wounded on foot, the medical personnel could no longer prevent cases of patient suicide. The medics and doctors could not keep track of all the patients, and many drifted from the lines as they continued marching. Under such circumstances only patients who walked directly near the medics and doctors received care with the very limited means left. Those who were in a different part of the line, had to fend for themselves. The soldiers had no energy to even flee the airplane attacks, which grew more intense.[72]

The deterioration of the medical personnel's ability to treat reached its lowest point at the Sittang field hospital, which housed between 3000-4000 gravely ill patients. Since the British attacks grew more intense each day, Karube's unit was to move the hospital patients to a safer location. Like hospital ships, field hospitals were no longer immune to attacks. The hospital personnel might have also been aware of how its own Army treated local hospitals, and wished to prevent theirs from encountering the same fate; there were cases whereby the Japanese Army raided British-Indian hospitals in Burma, robbing their supplies, interrogating the personnel and patients, and finally executing them.[73]

Karube's unit had very little means to move such a large number of patients, especially considering its own soldiers' feeble state. It could only support ambulatory patients and send

[72] Karube, Op. Cit., pp. 169-70, 182-85.

[73] Donovan Webster, *The Burma Road* (New York, NY: Farrar, Straus and Giroux, 2003), p. 247. Dower mentioned similar examples from Singapore and Hong-Kong: Dower, 1986, p. 44.

some of the gravely ill on boats. The main dilemma concerned a few dozen fatally ill patients, who according to Karube, had no chance of recovery. The remaining options, as Karube described them, were on the one hand, leaving the patients behind, either to await their death or to fall prisoner. On the other hand, they could let them commit suicide, or euthanize them. According to Karube, he and/or other medical personnel in his unit witnessed wounded and immobile Japanese soldiers shot, beat or burnt to death by enemy infantry soldiers. Thus, the dilemma was about how the fatally ill were to die, and not how they could survive. Survival did not seem like a viable option. Eventually, the field hospital personnel – the doctors and medics - received a secret command to euthanize the patients, by injecting them with mercury-chloride. They did not inform the patients of what they were doing. In one case a patient even believed the doctor came to give him some treatment, never ceasing to hope his condition would improve.[74]

Unlike Hongō's account, in this case the killing of patients was not aimed at protecting the collective. Rather, according to Karube's description, it was seen as the least painful solution, when death seemed inevitable. In both cases, the patients had no agency in determining what their end would be. To a certain extent, neither did the doctors and medics who were following orders, with very little leeway to navigate the situation. Nonetheless, they did choose to follow orders and keep the patients in the dark, presumably to spare the patients the pain, but also to maintain order in the hospital. According to Karube, rumors began circulating among the patients in the hospital causing unrest.[75]

It is important to note that in this particular account, there was no mention of the so-called shame of surrender or of dying an honorable death. The doctors and medics did not willingly kill their patients motivated by a sense of nationalism. Rather, Karube described the

[74] Karube, Op. Cit., pp. 229-30.
[75] Karube, Op. Cit., p. 231.

emotional pain the doctors, and presumably medics as well, experienced, when – as he put it - they betrayed their patients by making them breathe their last. The following subsections will present examples whereby ideology did arguably play a larger role, and of cases where medical personnel chose another way.

Death versus Surrender

One of the most famous symbols of the tragedy of the Battle of Okinawa (April-June 1945), both in popular memory and in historiography, was its field hospitals. The Himeyuri student corps of young schoolgirls particularly became a representation of the destructive militarist extremism ruling the final stages of the war. According to Cook and Cook, 1050 of about 2000 girls, whom the Army mobilized to serve as assistant nurses in the hospitals, died during the battle. They are memorialized in the Himeyuri Peace Museum, which to this day is one of the most frequented landmarks in Okinawa.[76] The association of one of the bloodiest battles in the War's history specifically with the deterioration of military medicine and the transformation of field hospitals into sites of death is telling. It epitomizes the reliance of military medicine on maintaining a delicate balance between its two components – the medical and the military. The loss of this balance resulted in the devastation of both.

The Allied landing in the main island of Okinawa was to be the starting point of the subsequent landing on the Japanese home islands, eventually superseded by the Atomic bombs and the Japanese surrender. Instead, it became the final battle of the Second World War. For the

[76] *Himeyuri* signifies lily, and was the name of one of the student corps of nursing assistants. See Cook & Cook, Op. Cit., p. 354. Numerous books and memoirs were written on the different student corps, such as Shiraume dōsōkai, *Shiraume: Okinawa kenritsu daini-kōtō jogakkō kangotai no kiroku* (Tokyo: Kurieitibu, 2000); Miyagi Kikuko, *Himeyuri no shōjo: jūroku-sai no senjō* (Tokyo: Kōbunken, 2011. Original from 1995). There were also two dramatic films made on the *Himeyuri* corps: Imai Tadashi (director), *Himeyuri no tō* (Toei Company, 1953), Film; Kōyama Seijirō (director), *Himeyuri no tō* (Toho Co., 1995), Film.

military, the battle became the final desperate attempt to postpone the Allied landing on the mainland, knowing that victory was highly unlikely. The blurring of the lines between front and rear reached its apex, as fighting took place within the civilian population. Some evacuated before the battle began, but the vast majority remained and was increasingly mobilized by the Japanese military - children as well as adults, men and women. This was true all over Japan, but was put to the test in Okinawa.[77] As such, Okinawa was the epitome of total war. The number of casualties illustrates this point with an estimated number of 12,500 American deaths, 110,000 Japanese military deaths and 150,000 civilian deaths - a third of the island population.[78]

The Haebaru Army hospital underwent a few stages of transformation, redefining medical space according to the shrinking movement of the Army. The Army initially deployed the hospital in 1944 as Unit No. 18803 in Kumamoto, Kyushu. It moved to the city of Naha in June, but following disastrous air raids on 10 October, the Army moved it again to a school in a town named Haebaru. Preparing for the anticipated land battle, the Army and mobilized civilians began to dig alternative spaces for the hospital a month earlier, in narrow dark natural caves and underground tunnels. These bunkered hospital wards and sick rooms, scattered on hills, were to protect the medical personnel and patients from imminent attacks. Concomitantly however, the Army also prepared caves and tunnels for various combatant units on the very same hills near the hospital, actively placing it in danger's way.[79] Even its location demonstrated the paradoxical position the Army placed the field hospital in Okinawa.

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[77] Havens, Op. Cit., pp. 188-89.

[78] Dower, 1986, pp. 298-99; Andrew Gordon, *A Modern History of Japan* (New York, NY: Oxford University Press, 2003), p. 223; Hayashi Hirofumi, "Japanese Deserters and Prisoners of War in the Battle of Okinawa," in Barbara Hately-Broad & Bob Moore (eds.), *Prisoners of War, Prisoners of Peace* (London, GB: Berg Publishers, 2005), p. 50.

[79] Ikeda Yoshifumi, Koga Noriko, Ooshiro Kasugi, Uechi Katsuya & Yoshihama Shinobu, *Okinawa rikugun byōin haebaru-gō* (Tokyo: Kōbunken, 2010), pp. 28-30, 48-49.

The hospital moved into the caves after the American landing began in March 1945 and quickly filled with wounded soldiers. Originally, the Army divided the hospital into different wards within these unlikely spaces – internal medicine, infectious disease, and surgery. Once the battle began, all the wards quickly became surgical, as its caves overflowed with heavily wounded Japanese and some Korean soldiers. Testimonies described the caves as so full that many patients did not even have space to lie down. In many cases, the wounded required amputation to the feeble light of a candle, and under very little if any effective anesthetic.[80]

Anticipating a long battle, the personnel in the Okinawa hospital were forced to sternly economize on food and medical supplies to the extent of great shortages. Wounds would overflow with maggots without enough hands to clean them, or sufficient fresh bandages to replace the soiled ones. There was not enough disinfectant to apply on all the wounds either. According to Tsuhako Hisa - a former student nurse-assistant, aged 17 at the time - when she would accompany a nurse and another student on rounds between the patient caves, they could tell immediately when they entered whether maggots were on the wounds; if there was no foul smell, it meant that maggots were already at work cleaning the wound, but also making their way deeper into the flesh.[81] In the absence of sufficient sterilized medical equipment, the students would use leaves and twigs to remove the maggots.[82]

Medics engaged in treating the wounded to some extent, but according to testimonies their role quickly became a predominantly physical one - digging pits, and carrying the

[80] Ikeda et al., Op. Cit., pp. 43, 55, 65, 69; Author interview with Tsuhako Hisa, 18 April 2014. The interview was kindly facilitated by Futenma Choukei of the Himeyuri memorial museum, whose input greatly contributed to the interview as well.

[81] Learning from wartime experience, surgeons have recently begun using maggots to clean chronic wounds in a quicker and more effective way than medical personnel, a method termed "maggot therapy." The initiator of this method was William Baer, who served as an orthopedic surgeon during the First World War. See Ronald A. Sherman, "Maggot Therapy Takes us Back to the Future of Wound Care: New and Improved Maggot Therapy for the 21st Century," *Journal of Diabetes Science and Technology*, Vol. 3, No. 2 (March 2009), pp. 336-44.

[82] Author interview with Tsuhako Hisa, 18 April 2014.

numerous dead bodies from the caves into the pits. Nurses and assistant-nurses did most of the work assisting the physicians and caring for the wounded.[83] Former student-nurse Tsuhako had very little interaction with medics during her time at the field hospital. She recalled encountering medics and military physicians early on, when she was still at school, since they came roughly once in two weeks to prepare the girls for service. Yet, her main training took place after she began serving in the Army hospital, learning mostly from nurses. Once the hospital moved to the caves, most of her interaction with medics was when they brought food and water to the caves under shelling. However, by April 1945 the majority of them were sent to the front, thus leaving most of the supporting medical work to the nursing staff. From that point, Tsuhako only saw medics when they came from the front, carrying wounded soldiers to the hospital caves. Even the disposal of bodies, which was once the responsibility of medics, became, for a while, one of her chores. She and another student had to roll the bodies with the help of a blanket into pits.[84]

The breakdown of the hospital came in May 1945, when the Army headquarters ordered the medical personnel to retreat southward. They were to take the ambulatory patients with them, and leave the immobile behind with a few lower ranking physicians and medics. In some cases, the patients were told they would be picked up later with motorized vehicles, which never came. The remaining personnel received a secret order to give the immobile patients potassium cyanide in diluted condensed milk. In most of the testimonies, the personnel who gave the patients the cyanide milk were medics.[85]

Despite the similarities, there were a number of differences between the Okinawa case and the parallel example from Burma. First of all, though in the majority of cases it seems that

[83] Ikeda et al., Op. Cit., pp. 67-69.
[84] Author interview with Tsuhako Hisa, 18 April 2014.
[85] Ikeda et al., Op. Cit., pp. 57-63.

the medical personnel followed commands, without informing their patients, there are testimonies of medics and physicians who disobeyed. Those medics and physicians refused to kill the patients they strove until then to save. Medical ethics are arguably and largely constructed by historical context, rather than being eternal and universal.[86] However, the testimonies demonstrate that even in the desperate context of the Battle of Okinawa, where in some cases Japanese soldiers shot civilians and other soldiers who tried to surrender, and forced others to commit suicide, these particular medical personnel considered the command inherently discrepant with their role as medical care providers. They thus had agency in choosing to follow a medical moral code, instead of military discipline, putting themselves at risk as a result; if they were found out, they could have been court-martialed and executed.[87]

Another difference between the two cases concerns the place of mobility. In one case, a former-patient in the field hospital in Okinawa recalled himself drinking some of the poisoned mixture, and noticing a strange taste. He then saw a patient-soldier next to him begin to choke and his eyes to twitch upon drinking the entire portion. He put two and two together, made himself and the other soldier throw up, and somehow managed to escape the cave.[88] The fact that both managed to physically escape illustrated that though less mobile than the patients who could retreat on foot, their condition was not fatal, as that of the patients Karube described in Burma. They were not willing to die either. In other words, the command to poison the patients in the Okinawa caves was less motivated by a wish to euthanize the dying as was in Burma, so much as

[86] See for example, Sarah Ferber, *Bioethics in Historical Perspective* (New York, NY: Palgrave Macmillan, 2013).
[87] Ikeda et al., Op. Cit., pp. 57-58, 60, 62; Author interview with Tsuhako Hisa, 18 April 2014.
[88] The other soldier died shortly after in a bombardment. Ikeda et al., Op. Cit., pp. 57-58. 60.

to prevent them from falling into the hands of the enemy. This was particular likely in Okinawa, where there were various cases of group suicide, including of student nurses.[89]

Ideology played a role in this decision, though a debatable one. According to yet another testimony, there was a case whereby the military doctor chose to give the patients the right to choose what their fate would be. He explained the situation to them and their options: to "die an honorable death" by consuming the poison, or to fall into the hands of the enemy. The medical personnel then gave the patients the mixture. Some threw it away, while others believed they had no hope of surviving and swallowed it. This case demonstrated yet again, that in Okinawa the medical personnel had some, even while very little, agency in choosing if and how to obey the order they received. Furthermore, it demonstrated the importance of ideology and qualified it at the same time. The doctor presented death as the honorable option, as opposed to surrender. Some patients likely saw it as such. Others however, believed surrender signified imminent death. They chose to swallow the poison because they did not see any chance for survival. Committing suicide possibly enabled them to control how they died.[90]

The perceived absence of an option of survival arguably resulted from the demonization of the enemy and in other cases - local populations. Karube in Burma used the term for eye testimony, *mokugeki* 目撃 to describe how he witnessed patients being murdered by British infantry soldiers. In another case, a medic serving in a field hospital in New Britain, New Guinea described how impossible it was to carry the limbless, while believing that if they were left behind alive, they would be murdered by the local population.

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[89] See for example the following two testimonies: Miyagi Kikuko, "Student Nurses of the "Lily Corps"," in Cook & Cook, Op. Cit., pp. 354-63; Kinjō Shigeaki, "Now they Call it 'Group Suicide'," in Cook & Cook, Op. Cit., pp. 363-66.

[90] Ikeda et al., Op. Cit., pp. 58-59.

We were five or six medics with one or two hundred patients to care for. What could we do with those without arms or legs? Carry them on our backs? Left behind, they'd have been massacred by the natives. It happened.[91]

According to testimonies of former student nurses, in Okinawa medics who experienced battle and came back to tell the tale, told the students that the American military would rape and kill them if captured.[92] Arguably, fear equaled and at times trumped ideology in the decision to avoid surrender by any means.[93] And yet despite these fears and considerations, some did surrender. Some medical personnel left their patients behind without harm, giving the patients a chance to live, while keeping their own ethical code as care providers intact.

Surrender and Life

One of the relatively few Japanese soldiers to survive the battle of Iwo Jima (February-March 1945) was former-medic Ishii Shūji.[94] Ishii arrived on the island already in late July 1944 to prepare for the impending battle. During the seven months until the battle began, Ishii described the soldiers continuously fighting a war without a human enemy. Instead, they faced what he described as three relentless enemies – water, vegetables, and disease; Iwo Jima, a volcanic island, had very little water on its territory. There was one well for over 20,000 soldiers. They relied heavily on supplies from Japan, which stopped arriving shortly after the soldiers reached the island, and on periodic rainfall. The same went for vegetables, since there was very little fresh produce on the island. The shortage of water and food, combined with the

[91] Ogawa Tamotsu, "Soldiers' Deaths," Cook & Cook, Op. Cit., p. 278.
[92] Ikeda et al., Op. Cit., p. 69.
[93] Dower, 1986, p. 68. According to Hayashi, many reports written by the American military based on interviews with Japanese POWs, stated that the Japanese soldiers' reluctance to surrender resulted more from fear of death and torture than shame. Hayashi also argued that there was a particularly large number of deserters from the Japanese Army in Okinawa and that by late April 1945, over 100,000 civilians surrendered. See Hayashi, Op. Cit., pp. 53-55.
[94] Ishii's account is based on a memoir he wrote only seven years after the war ended, following a trip he took back to the island: *Iwo-tō ni sasagu* (Tokyo: Seikatsu shinsha, 1952), pp. 117-20.

idiosyncratic geographical conditions of the island and poor hygiene caused infectious diseases to spread, especially malnutrition and extreme diarrhea. In addition, the American military already began bombarding the island from sea and air.[95]

Ishii's role consisted of medical work and preparations for the impending land battle. He was to treat the ill and the numerous soldiers wounded from air raids, and to dig caves to which the field hospital was to move once fighting began. The caves were similar but more elaborate than the ones described above in the battle of Okinawa, which followed the battle of Iwo jima. According to Ishii, the hospital had three underground floors, divided into wards and sick rooms. It was 315 meters deep and 210 meters long. It was supposed to be even longer, but the digging halted once the American landing began in February 1945. [96]

Following the landing, the field hospital moved into the cave and the greatest challenges of all began. The degree of destruction during the battle was so extreme, Ishii argued, that even wounded Navy sailors came to the cave to seek help. As mentioned above, this was uncommon since the Army and Navy generally separated their medical systems. The condition of supplies – medical and otherwise – grew worse with each day. Leaving the cave to fetch water became a life-risking task, because of bombings. At a certain point, the shelling grew so rough that the medics did not even leave the cave to remove the bodies of the deceased, which remained lying inside among the wounded. [97]

Despite it all, Ishii survived. Luckily for the field hospital American soldiers did not notice its cave, even though some came so close, Ishii could see them and even pick up cigarettes

[95] Ishii, Op. Cit., pp. 116-23.
[96] Ishii, Op. Cit., p. 175.
[97] Ishii, Op. Cit., pp. 177-78, 184-85.

and candy they dropped once they left.[98] But the main reason Ishii survived was the "strong humanism" of the commander of his unit officer Noguchi. Noguchi ordered the soldiers not to shoot at the American soldiers by the cave, so as not to give away their position. He preferred to protect the lives of those within the cave, than to attack the enemy. Finally, on April 15th he issued an order to the unit to "accept American protection" on the following day, which signified surrender. As he assembled the men, he told them that he would assume all responsibility of this action and asked them to entrust him with their lives. Ishii recalled how difficult it was for him and the other soldiers to accept the decision. He described a struggle within him between the medical man and the military soldier; the medical man preferred life and the soldier - death.[99]

According to Straus, while it did not officially ban surrender, the Japanese government at the time made it clear that POWs would be executed once they returned to Japan. Moreover, military and government propaganda educated soldiers and society at large that surrendering was the most shameful act for a soldier or sailor. Research pinpointed this as a possible reason for the cruel treatment of POWs by the Japanese Military and also for what Straus argued to be a remarkably low number of Japanese POWs at the end of the war.[100] Dower also argued that many feared that by surrendering, they would bring upon their family social ostracism.[101] The other medics whose stories were described in the first part of the chapter became prisoners of war once the war ended. In this case Noguchi decided to surrender while the war was still continuing. Eventually, three non-commissioned officers decided to remain in the cave and disobey Noguchi's command, but the remaining 72-3 men – who were left of an original unit

[98] Ishii, Op. Cit., p. 195.
[99] Ishii, Op. Cit., pp. 139-40, 211.
[100] Ulrich Straus, *The Anguish of Surrender: Japanese POWs of World War II* (Seattle, WA: University of Washington Press, 2003), particularly pp. 3, 22-24, 33-39, 48. Straus also describes an excerpt from the description of Ishii's surrender, on pp. 57-59.
[101] Dower, 1986, p. 68.

twice as large - followed Noguchi.[102] The will to live was eventually stronger, than the threats against surrender.

One of the most telling episodes in Ishii's memoir took place when he became a Japanese medic hospitalized in an American field hospital. After their surrender and following thorough physical examination, American buses took the Japanese soldiers to a POW camp. Upon arrival, Ishii and the other soldiers of his unit lined up for a roll call, when Ishii collapsed. An American military physician immediately examined him and sent him to the hospital, where Ishii remained until the end of the month. Moving directly from the squalid and deprived life of the cave where death was ubiquitous, to the American pristine and well-equipped field hospital was a shock for Ishii. He lay in a comfortable bed, drank clean water, took showers and ate a rich menu of food. This, while hearing the sound of shooting in the background. For him it was equal to a juxtaposition of heaven and hell. And yet, emotionally the transition was difficult for Ishii.

During his hospitalization, Ishii observed the American medics in the field hospital and felt a professional affinity with them. He described the medics attentively nursing the Japanese patients - physically, but also trying to ease their emotional pain by making them laugh. He particularly commented on the eyes of the two medics in his ward; he commented on how blue and full of compassion were the eyes of one, and how red, bloodshot from fatigue, were the eyes of the other. The latter medic would provide medicine every four hours without fail to the gravely ill Japanese patients at the expense of his own sleep. Ishii expressed his deep admiration to both, not just as a patient, but also as he noted, as a medic himself.[103]

From a medic's perspective, Ishii also noticed how incomparably better equipped the field hospital was. One noteworthy difference was the use of penicillin – which became one of

[102] Ishii, Op. Cit., pp. 139-40, 212.
[103] Ishii, Op. Cit., pp. 142-46.

the symbols of American military medicine during the war, and the feeble capability of the Japanese system in comparison.[104] To the bewilderment of one of the American medics, some of the Japanese patients tried to escape the penicillin injections. Ishii knew what penicillin was, since he read about it in the newspapers. As mentioned above, there was very little penicillin in Japan, and the limited supply routes plausibly prevented the little available to leave Japan. Thus, most people did not hear of it yet. Ishii explained its benefits to the patients, including the aforementioned story of Winston Churchill. By so doing, he served as a form of mediator between the patients and the American medics.[105]

This was possibly the beginning of his assistance to the American medics in the hospital. When Ishii felt better, the medics asked him to assist them, since they knew he was a medic as well. Towards the end of his account, Ishii related a conversation he held with one of the American medics. Ishii, who spoke a little English, recalled how one of the American medics said to him – "you are so lucky. For you the war is over. But for us, it is still ahead."[106] In many ways this sentence encompassed the many paradoxes in Ishii's situation, shared by others but particularly salient to him as a medic. His life was saved by the enemy. He was helping his enemy mirror image care for his comrades, while the war was still taking place. During that time the medical aspect of his role as medic, surpassed that of the military. They were all medics, providing care to patients as people. The American medic's words, however, brought the military

[104] According to Yoshida Yutaka, two other points of divergence were the wide use of DDT by the American military to prevent malaria, and the establishment of frontline modes of blood transfusion among the Allies - both of which the Japanese military medical system did not possess: Yoshida Yutaka, Op. Cit., pp. 75-76. For the development of blood banks in China as a comparison, see also Wayne Soon, *Coming from Afar: the Overseas Chinese and the Institutionalization of Western Medicine and Science in China, 1910-1970* (Doctoral Dissertation. Princeton University, June 2014), particularly Ch. 4, pp. 154-92. It is important to note that the American military medical system was far from perfect and encountered numerous problems, but arguably not to the extent of the Japanese military. See for example, Tracy Shilcutt's work, albeit on the European theatre: *Infantry Combat Medics in Europe, 1944-45* (New York, NY: Palgrave Macmillan, 2013).

[105] Ishii, Op. Cit., pp. 146-47.

[106] Ishii, Op. Cit., pp. 147-48.

aspect of the role back into the picture, reminding him of the continuing war and the place of the medic role within it, but from the eyes of his adversary.

Nurses on the Battlefield

The final example to be briefly discussed in this chapter is that of a case where medical personnel left patients behind alive during a retreat.[107] The No. 376 Relief Squad of Red Cross nurses served in Army hospitals and care centers in Rabaul, New Guinea from 1943. They continued working even as air raids began and became violent, refusing to leave their patients' side.[108] But in 1944 as enemy landing seemed imminent, the Army evacuated the nurses from the potential frontline to the Philippines. A year later, the air raids grew fierce and the nurses received an order to evacuate again from the Army hospital in which they served in Davao. They eventually moved to the No. 4 field hospital of the No. 30 Army Division with whom they retreated into the jungles.[109]

According to Oda Michiko and Takeyama Yoshio, from that point on the nurses underwent almost identical experiences to those described in previous sections by medics; walking vast distances with diminishing physical strength, facing disease, malnutrition, and air raids, with scarce sources of food and medical supplies. Once again, the gendered division of front and rear crumbled. Of the total 22 nurses in the squad, only 7 managed to finally make it alive to an American military base in October 1945, two months after the defeat, as they followed the final command they received from the Japanese military to surrender.[110]

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[107] Based on the memoir by Oda Michiko & Takeyama Toshie, entitled *Sangeshō* (Okayama: Naobijuku, 1995. Original from 1968).
[108] Takeyama & Oda, Op. Cit., pp. 14-16.
[109] Takeyama & Oda, Op. Cit., pp. 20-31.
[110] Takeyama & Oda, Op. Cit., pp. 33-107.

When the nurses originally evacuated from the field hospital in May 1945, they received a command, presumably from the division headquarters, to retreat together with the ambulatory patients. Those who could not walk were to be left behind. The nurses gave the immobile patients some dry bread, apologized for leaving them and bid them farewell. There was no question of killing the patients, nor was there of the nurses staying behind with them, because of their fear – particularly as women - of falling prisoner. When the nurses and the troops finally reached the American base and surrendered, the nurses were greatly surprised to encounter the patients they left behind, healthy and fit in the POW camp. They learned that the American military found the patients, and took them to the American military hospital where they were nursed back to health. When they left the patients behind the nurses did not consider the option that the enemy might take in the patients and treat them. They most likely assumed they would not survive. Yet, by leaving the patients behind as they were, they gave them the chance to survive, which ironically most of the nurses themselves lost once they entered the jungle.[111]

In both this case and in Ishii's example from Iwo Jima, the wounded and sick soldiers managed to survive because they were taken prisoner. Luck and timing had an important contribution as well. As Dower and Straus argued, initially the Allies did not often take prisoners for various reasons, including racial antipathy and the desire for revenge. Only after the Allied position switched to the offensive, did they begin taking prisoners, mostly to obtain intelligence from the Japanese POWs.[112] According to Hayashi, even in the Battle of Okinawa, where Japanese POWs received medical care and food in American camps, there were cases of

[111] Takeyama & Oda, Op. Cit., pp. 31-32, 108-09.

[112] Dower, 1986, pp. 68-72; Straus, Op. Cit., pp. 3-4. See also Niall Ferguson's analysis of Japanese and German surrender in the Second World War, placed within a general analysis of the concept of surrender from both captor and captive's perspective: "Prisoner Taking and Prisoner Killing in the Age of Total War: Towards a Political Economy of Military Defeat," *War in History*, Vol. 11, No. 2 (2004), pp. 148-92.

American soldiers who shot Japanese male captives - soldiers and citizens.[113] Conditions in POW camps also varied according to captor. Following the war, many Japanese died while in camp from disease, malnutrition, and forced labor.[114]

More importantly in this context, in both examined cases, surrender not only saved the lives of the wounded and sick soldiers, but it also enabled the Japanese military medical care providers – doctors, medics and nurses - to maintain their medical ethical credo. The medical personnel had very little means to treat at the point of surrender, but they could also "do no harm."

Conclusion

The previous chapter discussed the variety of functions medics filled during the War in China, on the battlefield and as facilitators of Imperial occupation. As long as Japan was winning, the medics could manage the different challenges they faced. However, as Japan set on its long path towards defeat, every aspect of the medic role began to crumble. They were medics in a losing war. The medics, whose stories the chapter followed, struggled to fulfill their role without medical supplies, improvising by using methods they learned from childhood, repurposing the very few resources they did possess or manage to find on the way, and constantly striving to survive themselves. In some cases, the fact that they served as medics saved them from certain death. However, the greatest challenge medics had no means to face, was that of hunger. As the allies cut off Japanese supply routes soldiers gradually collapsed of hunger and related diseases, to which the only cure was food.

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[113] Hayashi, Op. Cit., pp. 51, 55.

[114] John. W. Dower, *Embracing Defeat* (New York, NY: W.W. Norton & Company, 1999), pp. 48-53. On the repatriation of overseas Japanese civilians and military personnel, see Lori Watt, *When Empire Comes Home* (Cambridge, MA: Harvard University Asia Center, 2009). On the most famous case of Japanese POWs held by the Soviet Union, also see Yoshikuni Igarashi, "Belated Homecomings: Japanese Prisoners of War in Siberia Return to Post-War Japan," in Hately-Broad & Moore (eds.), Op. Cit., pp. 105-21.

These desperate conditions left medics bereft of their ability to fulfill their role. Instead, in different places they became administrators, undertakers, messengers, and stretcher-bearers. This deterioration also narrowed the gap between medics and other medical personnel – specifically, doctors and nurses. All medical personnel, who remained without food or medical supplies, remained equally helpless. Moreover, with the expansion of air raids, nurses and doctors, who were supposed to remain in a safer area than medics and stretcher-bearers, found themselves on the frontline. The division between front and rear evaporated, and in many places, most notably in the Battle of Okinawa, so did the division between military and civilian.

Air raids and the transition between expansion and retreat caused many medics to be in frequent movement over vast distances. Movement was once a special characteristic of the medic role, but by the 1940s, also one of the main causes for its deterioration; it was often while units were moving that many soldiers perished from hunger and related diseases. According to the above testimonies, medics and unit soldiers made great efforts to keep the soldiers of their unit together, without leaving anybody behind. Towards the end of the war, it became almost impossible to do so. This constant movement also forced many medics to negate the essence of the role they filled, by taking the lives of patients who could not keep up with the unit's movement; it was in moments of retreat that medical personnel received orders to kill the immobile.

Hospitals became an almost abstract concept, both in respect to their physical location - in jungles, natural caves, and underground diggings - and in the services they could, or rather, could not provide. Field hospitals around the empire became locations of death, while medics and physicians increasingly became death's administrators. In some cases, the command they followed was aimed at preventing surrender and maintaining the honor of the empire and its

sovereign. Yet, in many cases the decision to kill the immobile patients was the result of the hopeless situation in which the soldiers and their care providers were in, after a long struggle to survive. The relationship between war and medicine reached its lowest point, when the failure of one was both the cause and reflection of the corrosion of the other. In between were the medics, attempting to maintain their identity and mostly, to survive themselves.

Conclusion
The Medicalization of War and Militarization of Medicine

The dissertation investigated the history of the roles of Japanese medics as the epitome of the paradoxical and symbiotic relationship between war and medicine. War in the modern era became ″medicalized″ in more ways than one. Armies used medicine from the moment of conscription to evaluate and categorize their human resources. The development of new weapons and forms of warfare was accompanied by the development of new forms of medical care to provide solutions to their consequences. Military expansion into new territories exposed soldiers to new diseases, resulting in further medical research of these diseases. As Armies grew, wars produced an unprecedented number of wounded and sick bodies in need of care.

Concomitantly, armies produced more and more sophisticated structures to accommodate them, militarizing medicine. Armies created hospitals and centers of care, while its medical personnel turned war zones and battlefields into medical spaces. Army units internalized medicine by bringing medical personnel into their lines, including training some of their laymen soldiers to become designated care providers. International conventions created regulations to protect these military personnel so as to enable them to save lives, while warfare created patients for them to treat. The same conventions required them to provide care and save enemy soldiers, once their own Army succeeded in harming them.

Starting with the question of origins, the dissertation argued that medic roles developed from the intersection of the expansion of military scale, an altered view of the individual body, and medical reforms. Because the soldier's life and body were deemed worthy of preservation, because there were more soldiers to treat over a wider territory, and because medical

Westernization and professionalization required more resources to train physicians, the Army began entrusting laymen with medical responsibilities. Medics were to solve the problem of personnel shortages by taking over responsibilities and risks that physicians were not supposed to take. To enable them to do so, the Army first turned the men into soldiers and then - into medical care providers. The medics' practice of medicine was thus the direct result of their militarization.

Medics proliferated and their duties diversified with each military engagement. Medics spearheaded medical mobility and movement into battle and empire, precisely because they were both common soldiers and care providers. By so doing, they contributed to the development of a different sense of "medical urgency" and brought medicine into areas and spaces that were not typical for medicine at the time – the field and the unit, while camped and on the move. This urgency was most obvious in respect to injury. But, with experience disease came to hold a central place in this perception of medical mobility and speed, requiring medics to prevent, detect and treat diseases as well as injuries swiftly and in a variety of circumstances.

The dissertation also analyzed the consequences that the changing relationship between war and medicine had for the men, who were obligated to embody it. Army medics wore a regular army uniform, with a red cross on their arm, a combination that both asserted their place in the Army and set them apart from other soldiers. As Miyayama Suezō defined it:

I was a medic. I did not carry weapons. Only medicine and tools that were useful for relief work.[1]

The humane nature of their role distinguished them from other soldiers, creating at times an ambiguous image of the medic, because he was a soldier associated with medicine instead of combat. However, the dissertation also revealed the ways in which medics' work enabled

[1] Miyayama Suezō, correspondence with author (some time between November 2013 and March 2014).

warfare and occupation to continue, whether through relief work on the battlefield and in hospitals, through efforts of disease prevention, and their participation in pacification works. The Army and its soldiers relied on medics precisely because of their association with medicine.

The dissertation revealed that in many ways the duties and experiences of Japanese medics throughout their history were similar to that of medics in other armies. This was no coincidence, since the development of medic roles was a transnational one. Medics in various militaries grew from common international circumstances, participated in international warfare, and functioned within internationally set regulations. The Japanese historical context could be placed within this wider global history, led by the growth of military scale and systematization of military medicine. The novelty of structures led countries to gaze at each other, to learn and adapt from the global accumulation of military medical experience. Japan both gazed and was gazed at by other countries. In respect to medics, particularly during the early stages of medic development, the forms they took were affected not only by Japanese wartime experience and the availability of resources. They were also substantially influenced by developments in France and Germany in particular, and also other countries like Britain and America. Thus, all the way through the Pacific War, medics in different militaries worked in similar structures, and followed the same norms and values, creating common grounds between them.

Despite this commonality, there were several points of departure that set the Japanese case apart, particularly during the 1930s and 1940s, as Japanese expansion reached its peak. One example was a different medical heritage. When faced with challenging circumstances, medics at times fell back on “traditional remedies” they learned in childhood, at home and at school, which differed in many ways from the possible improvised steps medics would take in other militaries.

The nature of Japanese expansion was also a distinguishing factor. Japan expanded in the era of empires, which employed medicine as a tool in various cases - the British Empire being arguably the most notable. Yet, in addition to creating colonial structures in similar ways to other empires, by employing physicians and public health policies, the war of occupation in China was different in nature from colonial imperialism. More than physicians, medics became the face of medicine in remote areas, where the Japanese Army established a temporary yet long-term presence. Medics became both a tool to enable military combat, as well as maintain expansion by preserving the peace.

Above all, however, scale – the factor that pushed the development and diversification of medic roles in several militaries – also led to the most significant divergence in the experience of Japanese medics during the final stages of the Pacific War. As growth surpassed levels of sustainability, the Japanese successive military victories transitioned into an extreme and total defeat. From roughly 1943, as the Japanese situation in the war became increasingly desperate, medics lost the ability to fulfill their role and maintain their ethical credo. The Pacific War was a brutal war for all militaries involved and made medic service challenging not only in the Japanese case. However, the extent of the desperation of the situation many Japanese medics were forced to face was very different from that which others did. Throughout, the ability of men to serve as medics relied on their proper training, skills, and, just as important, on their medical ethics. But on the most basic level, it depended on the smooth and regular supply of food, water and medical provisions. When food and medical supplies stopped reaching units, there was very little the Japanese medic could do. Under those circumstances - the expansion of scale beyond control, exacerbated by aerial bombings - the balance upon which the medic role was built, between “the military” and “the medical,” broke.

It is possible to view both war crimes and the affinity between medics in different armies through the prism of this broken balance. War crimes that Japanese medics were involved in were cases whereby military enmity surpassed medical ethics. The POW was no longer considered a human being, but just an enemy. Comfort women were tools to serve the military, and were thus to be maintained. Conversely, Japanese and American medics could feel a professional medical affinity that crossed enemy boundaries, only after the Japanese soldiers surrendered and disarmed.

The medicalization of warfare and militarization of medicine was also a formative element in setting gendered boundaries. Though the history of medics was predominantly a story of men, the dissertation demonstrated how an important part of the story was held by women - as patients (e.g., local women in China, and "comfort women" checked for venereal disease) and care providers themselves. The role developed in an intertwined way with the nursing profession, from its start to its end. The ties between the roles continued to deepen as the definition of each crystallized according to distinct criteria. The differences between them increasingly blurred with time as the distinction between front and rear became increasingly ambiguous. As nurses drew closer to the site of battle and as the safer rear began disappearing making everywhere a front, medics and nurses shared very similar experiences and fates. Numerous men and women died while they were caring for soldier-patients, in Japan and overseas, oftentimes together.

Finally, the personal histories discussed in the dissertation helped reveal the men behind the role. They presented a variety of aspects, duties, and experiences. It is important to note that these histories were only from the 1930s and 1940s, and provided but a glimpse into the wartime lives of thousands. But, these few men gave the role a face, reminding that this history was first and foremost a human story – neither of angels nor of demons. Armies were collectives, but they

consisted of individuals, combatants and non-combatants. These individuals experienced firsthand the medicalization of warfare, as conscription turned their fellow soldiers into potential patients and them – into their medics.

A few of the men, whose stories the dissertation discussed, continued working in medical related capacities after the war. But the vast majority went back to work in agriculture, as company workers, factory workers, as a teacher, photographer, and barber. For them, the medical knowledge they accrued during the war became part of their wartime past. They were healers of circumstance.

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