From the holdings of the Department of Special Collections , Princeton University Library, Princeton, NJ

These documents are either in the public domain, or can only be used for educational and research purposes (Fair use) as per U.S. Copyright law (text below). By accessing this file, all users agree that their use falls in the public domain or within fair use as defined by the copyrightlaw. We do not charge any permission or usage fees for the publication of images of material inour collections, including those provided by Princeton University Library, via our website, catalog, or directly from staff.For more information regarding copyright, credit, and citation please review the information onthe Copyright, Credit and Citation Guidelines page of our website.
https://library.princeton.edu/special-collections/policies/copyright-credit-and-citation-guidelines. If you have any questions, including how to order higher-quality images from the collection, contact Special Collections Public Services via our Ask Us! Form. https://library.princeton.edu/special-collections/ask-us

---

Doctoral Dissertations, 2011-2026 Classics

2016

Aristophanes, Posthumanism, and the Roots of Science Fiction

Cooper, Samuel Durham

Princeton, NJ : Princeton University

---

http://arks.princeton.edu/ark:/88435/dsp017p88ck02j

U.S. Copyright law: The copyright law of the United States (Title 17, §108, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be used for any purpose other than private study, scholarship, or research. If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of fair use that user may be liable for copyright infringement. This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve a violation of copyright law. https://www.copyright.gov/title17/title17.pdf

ARISTOPHANES, POSTHUMANISM, AND THE ROOTS OF SCIENCE FICTION

Samuel Durham Cooper

A DISSERTATION
PRESENTED TO THE FACULTY
OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE
BY THE DEPARTMENT OF CLASSICS

Adviser: Brooke Holmes

September 2016

© Copyright by Samuel Durham Cooper, 2016. All rights reserved.

ABSTRACT

Previous scholars have characterized science fiction as a genre that begins either in 1600 CE, with so-called "modern science," or in the 19th century CE, when the application of science to manufacturing processes (so-called "technoscience") revolutionized the structure and goals of human industry and consumption. This dissertation argues that if science fiction, as a literary genre, is defined by the presence of the characteristics that Istvan Csicsery-Ronay Jr. calls the "seven beauties of science fiction"—fictive neology, fictive novums, future history, imaginary science, the science-fictional sublime, the science-fictional grotesque, and the *Technologiade*—then at least three plays by the Greek comic poet Aristophanes—*Clouds* (423 BCE), *Birds* (414 BCE), and *Assemblywomen* (391 BCE)—may be read as science fiction. This implies that science fiction is not only a product of modern industrial societies, but also of at least one ancient agrarian society. The agrarian science fiction of Aristophanes, which is skeptical of the human pursuit of technical power and consistently highlights the possibility of unintended consequences, provides a salutary counterweight to the dreams of industrial and post-industrial science fiction that culminate in the Singularity, the apotheosis of "mechano-posthumanism," an imaginary point in time beyond which manmade machines will transcend all limitations imposed by their creators and determine the future in accordance with their own unknowable desires. Future research employing the methods established in this dissertation may be able to demonstrate that other ancient Greco-Roman texts, such as the poetry of Empedocles, Aratus, and Lucretius; the myths of Plato; and the tales of Lucian, also belong to the category of agrarian science fiction.

TABLE OF CONTENTS

ABSTRACT

INTRODUCTION: Agrarian Posthumanism and Ancient SF

CHAPTER 1: *Clouds*: The *Phrontisterion* and Its Mechanisms
- -I. Agrarian Spirits, Urban Anxieties
- -II. The Noses in the Clouds
- -III. The Unstable World: Matter Unbound
- -IV. Humanocentrism
- -V. From the Phrontisterion to *The Nether*

CHAPTER 2: *Birds*: Avian Life Meets Human Intelligence
- -I. Denatured Birds or Cyborg Birds?
- -II. Sublime Ironies, Grotesque Cyborgs
- -III. Conclusion

CHAPTER 3: *Assemblywomen*: Urban Egalitarianism and Its Discontents
- -I. Engineering "Equality:" An Alternative to Instrumentalization?
- -II. Randomization: A Poisonous Remedy?

CONCLUSION: Agrarian Science Fiction Beyond Aristophanes

BIBLIOGRAPHY

Introduction:

Agrarian Posthumanism and Ancient SF

"A past that is not yet known is a form of the future. So too is a present unanticipated by the past." ~Istvan Csicsery-Ronay Jr., *The Seven Beauties of Science Fiction*, 4

δολερὸν μὲν ἀεὶ κατὰ πάντα δὴ τρόπον
πέφυκεν ἄνθρωπος· σὺ δ' ὅμως λέγε μοι. Τάχα γὰρ
τύχοις ἂν χρηστὸν ἐξειπὼν ὅ τι μοι παρορᾷς
ἢ δύναμίν τινα μείζω
παραλειπομένην ὑπ' ἐμῆς φρενὸς ἀξυνέτου
σὺ δὲ τοῦθ' οὑρᾷς λέγ' εἰς κοινόν. (*Birds* 451-7)

The human has always been treacherous in every way. Nevertheless,
speak to me.
Perhaps you might point out
something useful
that you see in me
or a more dynamic power
overlooked by my witless mind.
Whatever this is that you see,
Say it publicly. (*Birds* 451-57)

The argument of this dissertation, in a nutshell, is that the lineaments of a kind of mindset well suited to the ethico-ecological needs of the future, which I will call *agrarian posthumanism*, may be glimpsed in a kind of science fiction—henceforth sf—produced in the ancient past by the Greek comic poet Aristophanes.

The strategy of this Introduction is as follows. First, I will offer a brief history of posthumanism, focusing on the ways in which it is rooted in sf. I will distinguish between *mechano-posthumanism*, the strand obsessed with the pursuit of absolute and unlimited power, and *agrarian posthumanism*, the strand obsessed with finitude, humility, and nurture. Next, I will argue that fifth-century Athens, despite being a fundamentally agrarian society, possessed the technological, epistemological, and literary conditions necessary to generate sf, and that it did so mainly in the genre commonly known as Old Comedy. Then I will employ an analytic framework developed by Istvan Csicsery-Ronay Jr. in *The Seven Beauties of Science Fiction* to describe the sf produced by Aristophanes, particularly the three plays *Clouds*, *Birds*, and *Assemblywomen*, on which my three chapters will focus, respectively.

Posthumanism is a blanket term used to denote a number of related, but not mutually consistent, ethico-philosophical movements. As Cary Wolfe, one of the more prominent theorists of these movements, writes in the Introduction to *What is Posthumanism?*, "The term 'posthumanism' itself seems to have worked its way into contemporary critical discourse in the humanities and social sciences during the mid-1990's, though its roots go back, in one genealogy, at least to the 1960's […]."[1] Wolfe sketches two genealogies, one rooted in French academic philosophy—Foucault, Derrida, Deleuze and Guattari—the other in cybernetics and systems theories developed in the context of American military-funded research during and after WWII by "Gregory Bateson, Warren McCulloch, Norbert Wiener, John von Neumann, and many other

[1] Wolfe 2010, xii

figures from a range of fields who converged on a new theoretical model for biological, mechanical, and communicational processes that removed the human and *Homo sapiens* from any particularly privileged position in relation to matters of meaning, information, and cognition."[2] Wolfe's project involves, among other things, bringing together these two strands of research by using the work of Derrida to illuminate the systems theory of Niklas Luhmann, and vice versa, in order to create a critical framework capable of dealing with ethical, ecological, political, and literary questions.

If Wolfe's genealogy and construction of posthumanism emphasizes its roots in philosophy and science, others emphasize its roots in art and literature, particularly sf. Indeed, there can be no doubt that sf, which is thoroughly obsessed with probing the limits and potentialities of both human and nonhuman agency, has served as a privileged imaginative resource for theorists and practitioners of posthumanism. Pramod K. Nayar, who defines "critical posthumanism" as "the *radical decentring of the traditional sovereign, coherent and autonomous human in order to demonstrate how the human is always already evolving with, constituted by and constitutive of multiple forms of life and machines*,"[3] notes posthumanism's debt to sf:

> From much of the sci-fi, the dystopian novels and other popular expressions, we understand that a new cultural history of the human needs to deal with the question: what forms of the human are now extant and existent? Sci-fi also calls upon us to speculate on the future course of human evolution: what will the human *be* like tomorrow?[4]

[2] Wolfe 2010, xii
[3] Nayar 2014, 2
[4] Nayar 2014, 3

Scholars, critics, and creators of sf by and large share the concerns of posthumanists to such an extent that it is difficult to imagine works more essential to the posthumanist reading list than Donna Harraway's "A Cyborg Manifesto" (which, as Cary Wolfe writes, "engages science-fictional thematics of hybridity, perversity, and irony (her terms) that are, you might say, radically ambivalent in their rejection of both utopian and dystopian visions of a cyborg future"[5]); *Green Planets: Ecology and Science Fiction*, a collection of scholarly essays edited by Gerry Canavan and Kim Stanley Robinson[6]; Michel Houellebecq's sf masterpiece *La possibilité d'une île*, or Margaret Attwood's *MaddAddam* trilogy.[7]

Scholars often distinguish posthumanism from "transhumanism," which Wolfe, quoting the journalist Joel Garreau, defines as "a belief in the engineered evolution of 'post-humans,' defined as beings 'whose basic capacities so radically exceed those of present humans as to no longer be unambiguously human by our current standards.'"[8] Sf has arguably been imagining the transhuman since the 1600's (if not, as I will suggest in

[5] Wolfe 2010, xiii

[6] "Especially taken in the context of escalating ecological catastrophe," writes Canavan, "in which each new season seems to bring with it some new and heretofore-unseen spectacular disaster, my coeditor's well-known declaration that in the contemporary moment 'the world has become a science fiction novel' has never seemed more true or more frightening. Indeed, such a notion suggests both politics and 'realism' are now *always* 'inside' science fiction, insofar as the world, as we experience its vertiginous technological and ecological flux, now more closely resembles SF than it does any historical realism. In this sense perhaps even ecological critique as such can productively be thought of as a kind of science fiction, as it uses the same tools of cognition and extrapolation to project the conditions of a possible future—whether good or bad, ecotopian or apocalyptic—in hopes of transforming politics in the present" (Canavan and Robinson 2014, 17).

[7] For a reading of the *MaddAddam* trilogy that focuses on the usefulness of sf for thinking through posthuman problems, see Pusch 2015: "Atwood's work paints a dark picture of humanity's future where humans have managed to almost erase themselves completely. This post-human vision is based on unethical behavior that is guided by megalomaniac desires. The *MaddAddam* trilogy, as a science fictional text with realistic elements, draws the reader's attention to the dangers of real developments, as they are happening right now" (72).

[8] Wolfe 2010, xiii. Kurzweil 2005 is a popular and intellectually forceful account of the aims and logic of transhumanism by one of its leading proponents.

this dissertation, much earlier); what counts as a radical extension of the capabilities of "present humans" obviously changes as technology evolves, and imagining the leading edge of that evolution has always been one of the defining concerns of sf. For Wolfe, transhumanisms constitutes "an *intensification* of humanism," inasmuch as "*the* fundamental anthropological dogma associated with humanism" is "that 'the human' is achieved by escaping or repressing not just its animal origins in nature, the biological, and the evolutionary, but more generally by transcending the bonds of materiality and embodiment altogether."[9] Now, the biological limitations of the human body cannot, almost by definition, be exceeded except by mechanical means; that is surely the reason why, as Nayad writes, "In transhumanism, and especially in its popular manifestation in sci-fi, there is an overarching emphasis on the machination of humans and the humanization of machines."[10]

For Wolfe, as for many other scholars who work on posthumanism, transhumanism is "bad posthumanism" because it reproduces, or even intensifies, humanist fantasies of domination (of flesh and time, by promising immortality; of the limits of intelligence, by promising unlimited superintelligence; and so on) and exploitation. "Good posthumanism," by contrast, embraces finitude (of lifespan, of intelligence, and so on) and the embeddedness of humans in biological systems that include many other kinds of living beings. Transhumanism encourages us to extend our power to take *more* of whatever we want with less and less effort; "good posthumanism" encourages us to nurture ecological health. Hence, transhumanism is entirely in line with

[9] Wolfe 2010, xv
[10] Nayad 2014, 7. For a survey of the current state of technologies designed to extend human percpetual capabilities, see Platoni 2015.

the ideology of *mechanization* that Wendell Berry has identified as the chief enemy of *agrarianism*—which, as theorized by Berry and others, is very much in line with "good" posthumanism.[11] One of the arguments of this dissertation is that transhumanism is best understood, and perhaps referred to, as *mechano-posthumanism*, whereas "good" posthumanism is best understood as *(neo-) agrarian posthumanism*.[12]

In the Introduction to her book *Scripture, Culture, and Agriculture: An Agrarian Reading of the Bible*, Ellen Davis writes,

> Agrarianism is a way of thinking and ordering life in a community that is based on the health of the land and of living creatures. Often out of step with the prevailing values of wealth, technology, and political and military domination, the

[11] "The issue that is raised most directly by these farms-of-the-future," Berry writes in an essay on how academic and governmental institutions were imagining the future of agriculture in the 1970's, "is that of control. The ambition underlying these model farms is that of total control—a totally controlled agricultural environment. Nowhere is the essential totalitarianism and the essential weakness of the specialist mind more clearly displayed than in this ambition. Confronted with the living substance of farming—the complexly, even mysteriously interrelated lives on which it depends, from the microorganisms in the soil to the human consumers—the agriculture specialist can think only of subjecting it to total control, of turning it into a machine.

"But total human control is just as impossible now as it ever was—or so the available evidence constrains one to believe" (Berry 1977, 74-5).

[12] I use the "neo-" prefix here, in parentheses, to signify the not insignificant differences between, say, agrarianism as a way of life that a few people in a highly mechanized, petroleum-based culture such as that of the United States in the 20th and 21st centuries aspire to, and the agrarianism of a fundamentally agrarian culture such as that of Athens in the fifth century BCE. When context reders this distinction clear, I omit the prefix. Fred Turner's excellent book *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* documents the way in which agrarianism, which was initially, in the late 1960's and early '70's, a major component of the communalist "back-to-the-land" movements in connection with which concepts now associated with posthumanism (e.g. "Spaceship Earth"—the planet as a complex, totally interconnected system with finite resources—tools and technology as forces for anti-bureaucratic liberation, etc.) developed, gradually gave way to fantasies of disembodied liberation and libertarian profit-making clustering around the personal computer.

> mind-set and practices that constitute agrarianism have been marginalized by the powerful within most "history-making" cultures across time […].[13]

Whereas mechanization tends to eliminate all life except the "cash crop" from the controlled environment, agrarianism values "the health of the land and of living creatures." Inasmuch as human control is exercised, it ought to be rooted in an embodied awareness of the dynamics of local ecosystems and aim to cooperate with those dynamics, not dominate or replace them. "Natural systems may have been transformed by human presence and agency, but that does not mean that humans could (or ever can) control these systems. Rather, we are included within them; our life depends entirely upon their continued integrity."[14] Hence, Davis's first of four fundamental principles of agrarian thinking is that "the land comes first,"[15] both conceptually and ethically; and inasmuch as "the land" names the nonhuman environment in which humans live, the resonance of this principle with posthumanism's basic axioms is evident.[16] The second fundamental principle she identifies, "the forthright embrace of ignorance,"[17] likewise resonates with posthumanism's emphasis on the finitude, the localization, and the

---

[13] Davis 2009, 1. See also Nelson 1998, a book that deserves renewed attention by Classicists interested in agrarian posthumanism. "The vision of an Amish farmer," writes Nelson, "who sees his care of the land as a sacred duty, who believes that simplicity and honesty, not competition, must underlie human relations, and who sees these two aspects of his life as determining his relation to God, is unified. So also is a view that sees nature as plastic in human hands, human relations as necessarily founded upon competition and the urge of individual needs, and our relation to God as personal and independent of society or the physical world. There now appears to be a movement towards the first vision" (vi).

[14] Davis 2009, 31

[15] Davis 2009, 28

[16] Jared Diamond's *Guns, Germs, and Steel* is a compelling universal history of human civilization—one of the very few such histories that seem at all successful—that is conceptually rooted in the principle that "the land comes first," inasmuch as it attributes differences in the levels of technological and political power attained by different human cultures primarily to botanical differences in the lands in which these cultures arose (rather than, say, to the peculiar "character" or "genius" of the conquering cultures). For that reason, *Guns, Germs, and Steel* may rightly be considered a posthuman history of human civilization.

[17] Davis 2009, 33

limitedness of human knowledge and human agency. This is connected to the problem of the *will to total control* that Berry identifies as the fundamental psychological characteristic of mechanization, inasmuch as "the assumption that we can accumulate enough knowledge to bend nature pliantly and to run the world," which Wes Jackson blames as the cause of the ecological crisis,[18] is evidently rooted in the desire for total control more than it is rooted in a sober assessment of the available evidence.[19] Davis's third principle—"a modest materialism," defined by the question, "How can we meet our material needs, in the present and for the indefinite future, without inflicting damage?"[20]—is consonant with posthumanism's emphasis on materiality, but it is her fourth principle, that "the value of land is not monetary,"[21] that has more to do with posthumanism's emphasis on the aspects of nonhuman things that escape, or exceed, commodification.[22]

---

[18] Davis 2009, 33

[19] Davis, like Berry, emphasizes that the embrace of ignorance need not constitute a repudiation of the scientific quest for "reliable knowledge." On the contrary: her authorities, Wes Jackson and Robert Zimdahl, "have both devoted a lifetime to scientific study […] If they share also the understanding that ignorance is not finally a fixable problem, or even a problem at all, that is not because they repudiate the value of scientific knowledge. What they do reject is the modern conceit that human behavior is invariably ameliorated by more knowledge: If we knew for certain that some of our behaviors were wrong, we would stop them" (Davis 2009, 34).

[20] Davis 2009, 36

[21] Davis 2009, 39

[22] Lemmens 2014 discusses agriculture as a technical system in light of Bernard Stiegler's theory of technology as *pharmakon*—both "poison" and "medicine." "This pharmacological view of technology," he writes, "is anything but a refashioning of the traditional idea of the neutrality of technology. On the contrary, the fact that technology conditions any process of individuation in a pharmacological way implies that psyches and collectives cannot 'use' or 'apply' technologies as they see fit from an autonomous and sovereign subjective standpoint. Instead, they have to negotiate with this condition as that which is foundational to their practices and can, as such, both support and undermine these practices. On the other hand, the fact that technologies condition processes of individuation does not rule out that they can be redesigned by 'users' to support new and alternative 'applications'. That which ultimately decides whether pharmaka act as a poison or function as a medicine—i.e., as a therapeutic—is the presence or absence of a practice of care, an economic practice to be sure, but one in which care is the ultimate value of the valorization

It might seem that (neo-) agrarian posthumanism would want to have little to do with sf, given that, as Istvan Csicsery-Ronay Jr. writes, "The genre has the not wholly undeserved reputation of being a propaganda arm of technocratic ideology."[23] But not all sf, by any means, dreams the dreams of mechano-posthumanism. In his Introduction to *Green Planets: Ecology and Science Fiction*, Gerry Canavan, following Samuel Delany, sketches two dreams and two corresponding nightmares that together structure the imagination of modern sf, and that map, roughly, onto the two strands of posthumanism I have identified:

> One can imagine oneself to be the citizen of a marvelous New Jerusalem, the "technological super city where everything is clean, and all problems have been solved by the beneficent application of science"—or else one can be a partisan of Arcadia, "that wonderful place where everyone eats natural foods and no machines larger than one person can fix in an hour is allowed in. Throughout Arcadia the breezes blow, the rains are gentle, the birds sing, and the brooks gurgle."[24] Each position in turn implies its dark opposite. The flip side of the Good City is the Bad City, the Brave New World, where fascist bureaucrats have crushed the soul of the human, machines have replaced work and love, and smog blocks out the stars; the other side of the Edenic Good Country is the Land of the Flies, where the nostalgic reverie of an imagined rural past is replaced instead by

process. This restores, according to Stiegler, the original sense of the word economy, as 'to economize' originally means to take care" (80).

[23] Csicsery-Ronay Jr. 2008, 112

[24] Hubbard 1997 uses precisely these conceptual categories, Arcadia and New Jerusalem, which he (like Delany) derives from W. H. Auden, to argue that Aristophanes' *Birds* and *Assemblywomen* are anti-utopian.

> a reversal of progress and an unhappy return to the nightmare of history: floods, wars, famine, disease, superstition, rape, murder, and death.[25]

Canavan, again following Delany, adds two postmodern variations on these four imaginative possibilities: "the Junk City—the dysfunctional New Jerusalem in slow-motion breakdown, where the glittering spires haven't been cleaned in quite a while, where the gas stations have all run out of gas, and where nothing works quite the way it did when it was new," and "the positive side of Junk City […] an ecstatic vision of improvisational recombinative urban chaos."[26] To these, one might add two more: the Digital Arcadia, in which so-called "green technology" offers all the benefits of technological control without the ecological downsides associated with 19th and 20th century mechanization; and the Singularity, in which at some point mechanical superintelligence attains autonomous agency and begins to use humans for its own ends, with entirely unpredictable results.

Historians of sf overwhelmingly agree that the social, technological, and epistemological environment in which the genre would develop did not begin to evolve much before 1600 CE and did not attain evolutionary maturity before the 19th or the early 20th century. If that is the case, it implies that there is *no such thing* as agrarian sf, i.e. sf produced in an agrarian culture. Indeed, "agrarian cultures cannot produce sf" is a proposition that most scholars and critics of sf would probably agree is true, for many reasons. Agrarian cultures are rooted in religion, sf-producing cultures in science;

[25] Canavan 2014, 1. All of the essays in this volume are sharply attuned to the perils of mechanization, and to the ways in which these perils are imagined and thought through in sf.
[26] Canavan 2014, 3

agrarian cultures imagine life as cyclical, sf-producing cultures imagine it as progressive; agrarian cultures imagine the universe beyond the local agricultural environment as a different kind of place, populated by gods and heroes and monsters, subject to different laws, while sf-producing cultures imagine the entire universe and the beings that populate it as subject to the same laws; agrarian cultures are intimately aware of the real hardships and real pleasures of rural life, while sf-producing cultures can only imagine rural life as a lost or alien Arcadia.

In the preface to his book *The History of Science Fiction*, which is one of the more expansive histories of the genre that exists, Adam Roberts notes the reluctance of scholars and critics of sf to push the origin of the genre too far back in time:

> Brian Aldiss traced the origins of SF to Mary Shelley's *Frankenstein*; Thomas Disch to Edgar Allan Poe; Patrick Parrinder to H. G. Wells and Jules Verne; Samuel Delaney thinks "there is no reason to run SF too much back before 1926 when Hugo Gernsback coined the…term[27]"—powerful critics all, who find the sort of proto-science fiction given so much attention in this work incongruous to their definitions of the form. Delaney, for instance, has argued that "More,

[27] For Gernsback and his influence, see Westfahl 1999: "As no one can credibly deny, Hugo Gernsback was the man who launched this tradition [the "popular tradition of science fiction criticism"] and established its initial agenda, and some of his contributions are almost universally acknowledged: that he began publishing the first true science fiction magazine, Amazing Stories, in 1926; that by means of skillful marketing and proselytizing, he persuaded his readers, other publishers, and eventually the entire world to believe in the existence of "science fiction" as a distinct category of literature; that he brought previously separated people with an interest in science fiction together, both informally through his magazines' letter columns and formally by founding the first fan organization, the Science Fiction League; and that he thus set in motion the process that culminated in the vast science fiction community that we observe today. My own recurring argument that Gernsback represented the first major critic, and remains the most important critic, of science fiction is acknowledged less universally, although historians of the genre will invariably quote from a Gernsback editorial or two to convey, at least, that he did present some ideas regarding the nature and purpose of science fiction" (187).

> Kepler, Cyrano…would be absolutely at sea with the codic conventions by which we make sense of the sentences in a contemporary SF text" and branded "these preposterous and historically insensitive genealogies with Mary Shelley as our grandmother or Lucian of Samosata as our great-great-grandfather" as "just pedagogic snobbery (or insecurity)."[28]

Science fiction, for Delany and other students and practitioners of the genre, is so rooted in the particularity of the very recent past, that any attempt to push its roots too far back in time risks being charged with scholarly obscurantism.[29] Roberts' own history takes a very cursory look at a few ancient and medieval works that share tropes (such as the "journey to the sky") with sf, but his history of the genre proper begins in 1600. That is also the starting point for *The Cambridge Companion to Science Fiction*; Brian Stableford begins his essay that opens the volume, "Science fiction before the genre," with the following claim:

> The word 'science' acquired its modern meaning when it took aboard the realization that reliable knowledge is rooted in the evidence of the senses, carefully sifted by deductive reasoning and the experimental testing of generalizations. In the seventeenth century writers began producing speculative fictions about new discoveries and technologies that the application of scientific

[28] Roberts 2005, xv, citing Delany 1994, 25-6

[29] One of the earliest, most influential, and most historically expansive attempts to define and characterize the genre is Suvin 1979 (on Suvin and his influence, see Hassler 1999, 228-30). Suvin's definition—"SF is, then, a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment"—is often quoted and repurposed, but when divorced from the intricate historical analyses with which Suvin surrounds it, is so abstract that it seems to define art in general. For more on Suvin, and what he has to say about Aristophanes, see below.

> method might bring about, the earlies examples being accommodated—rather uncomfortably—within existing genres and narrative frameworks.[30]

Stableford makes a distinction between "science fiction" and "anti-science fiction" that will be worth keeping in mind as we approach the agrarian sf of Aristophanes: "The Frankenstein formula," he writes, "of an unruly and unfortunate artefact bringin about the downfall of its creator became established in the last decade of the nineteenth century as the principal narrative form of anti-science fiction, and still retains that status."[31]

In their Introduction to a collection of essays entitled *Classical Traditions in Science Fiction*, editors Brett M. Rogers and Benjamin Eldon Stevens suggest that ancient analogues of sf may exist, though they hedge this suggestion with a terminological compromise. After quoting Roberts' as saying, "I no longer see why a distincitively modern conception of 'science' need underlie 'science fiction,' given that 'science' more broadly conceived as *a non-theological mode of understanding the natural world goes back a great deal further than the nineteenth century*,"[32] they write,

> It seems to us that one indeed stands to find, in certain ancient works, examples of just such a "non-theological mode of understanding the natural world."[33] These

---

[30] Stableford 2003, 15
[31] Stableford 2003, 19
[32] Rogers and Stevens 2015, 14, quoting Roberts 2006, 4, with added emphasis.
[33] It seems to me that, inasmuch as sf has to do not only with science but also, and perhaps even primarily, with technology, Roberts and, following him, Rogers and Stevens, place too much emphasis on the "non-theological" criterion; for, as Francesco Orlando writes, "If, by definition, every form of the supernatural can only partially be understood and perceived, then, similarly by definition, any technological efficiency complicated enough to elude the purview of the senses can be related to the supernatural. As in the modern era, so too in the archaic eras: when, in Greek, the word *tekhne* applied to magical abilities as well, before it was restricted to solely artisanal ones" (Orlando 2006, 383). On the Hippocratic "criticism of magic" and development of explicitly non-theological modes of understanding disease, see Lloyd 1979, 15-29. One of the many important points Lloyd makes is that the belief that many technicians who base their claims to power in a theological mode of understanding the world are manipulative frauds mainly

> works would rightly be called "fictions of understanding." In fact, we believe it would not be too much to call them, and to approach them as, "science fictions." Anticipating, however, some surprise at the suggestion that the rubric of SF, seemingly only modern, is applicable to certain ancient works, we propose an umbrella term: on the model of "science fiction," "knowledge fiction."[34]

This suggestion remains an undeveloped hint, inasmuch as the essays in their volume go on not to examine ancient "knowledge fictions" as such, but to examine the reception of the Classical tradition in such canonical works of sf as Shelley's *Frankenstein*, Verne's *Journey to the Center of the Earth*, Frank Herbert's *Dune*, *Blade Runner*, etc. By reading Aristophanes as sf, my dissertation will follow up on the strong version of their hint. And in doing so, it will address the two questions they identify as "essential to asking what it means, and what we would like it to mean, to be human today:" first, "what does it mean […] that our knowledge of the world is mediated so completely by technologies resulting

---

interested in making money is common even in societies—such as that of fifth century Athens—that generally accept theological modes of understanding the world. A well-known instance of this phenomenon in Greek literature is "Oedipus accusing Teiresias of prophesying for gain (*OT* 387ff: he calls Teiresias μάγον and ἀγύρτην) though he does not deny the art of prophecy as a whole. Similarly accusations of greed and fraudulence are particularly common in the many scenes in which Aristophanes satirises both named prophets and soothsayers and their kinds in general, e.g. *Pax* 1045-1126, *Av*. 958-91, *Eq*. 115ff, 1002ff, cf. Plato, *Lg*. 909ab" (1979, 17 n. 41). In *Clouds*, Aristophanes represents Strepsiades as thinking of Socrates, initially, as a figure of this kind; he is surprised (but not particularly distressed) to learn that Socrates' bases his claims to power on an explicitly non-theological mode of understanding the world—albeit one that involves initiation into the mysterious divinity of the Clouds. In general, in the world of Aristophanes, theological and non-theological modes of understanding the world, or rather weird hybrids of those two abstract categories, coexist and compete (in the "dialogic" way Platter 2007 describes). That seems to me to be true also of the worlds of most sf texts (see e.g. Csicsery-Ronay Jr.'s analysis of the prototypical sf plot-form he calls the "techno-Robinsonade," which includes as an archetypal figure the Shadow Mage, whose "power comes from a *local* understanding of the prerational forces of magic or mind control, and is consequently a manifestation of a world interpretation—in fact, a form of rationality—of more ancient pedigree than technoscience"). Roberts, I suggest, overemphasizes the predominance of the "non-theological" in sf.

[34] Rogers and Stevens 2015, 15

from modern scientific research, especially as it has been industrialized and consumerized following the Second World War?" And second, "Should a scientific understanding of the world guide our social, political, and moral decision-making?"[35]

To return, now, to the question of whether an agrarian culture might be capable of producing sf, let us briefly survey the social, technological, and epistemological situation of Athens in the fifth century BCE. As Moses Finley, Victor Davis Hanson, and other social and economic historians have demonstrated, Athens was a fundamentally agrarian society. The Athenian middle class, the backbone of Athenian society, was composed primarily of farmers who worked small plots that were passed down from generation to generation, and who served as hoplites in the Athenian army. There is little evidence for the ways in which the techniques of farming evolved during the Classical period. While it is likely that Athenian farmers did experiment with different growing techniques and perhaps with slight variations on traditional tools,[36] there were no major developments in farming technology to speak of.[37] Manufacturing of goods such as pottery, leather goods,

[35] Rogers and Stevens 2015, 9

[36] Hanson 1995 argues that the rise in private ownership of small plots of farmland following the Dark Ages (during which a small number of aristocratic families whose wealth was rooted in livestock—horses, cattle, etc.—held most of the power in Greece) made agricultural innovation possible. "Population increase […] alone did not end the Dark Ages. The neglect of farming by the old elite and the presence of unused open ground cannot entirely explain the Greek agrarian renaissance of the eighth century and later. There was no guarantee that the population might not regress into past cycles of decline, as local food production failed to match population growth. Thus one or more of the following must also have taken place: (1) a quiet revolution in agricultural technique and rural social organization in general, (2) an incorporation of new technologies and crop species, (3) an intensification of labor, or (4)—perhaps most likely—*all three* factors, which could coalesce to increase food production, and hence provide the prosperity needed to ensure that a new economic class, the independent small farmer, would be a permanent, rather than a transitory, fixture on the Greek landscape" (Hanson 1995, 41).

[37] "In agriculture," writes Finley, "there was an accumulation of empirical knowledge about plants and fertilizers. But there was no selective breeding (of plants or animals), no noticeable change in tools or techniques, whether of ploughing or exploiting the soil or harvesting or irrigating. […] Neither increased productivity nor economic rationalism (in Max Weber's sense) was ever achieved in any significant measure, so far as we can tell" (1983, 177).

farming tools, and weapons; the mining of silver; the quarrying of stone for use in public buildings; the construction of such buildings; and the construction of ships, were all, as scholars such as Peter Acton have demonstrated, important non-farming aspects of the Athenian economy.[38] But there seems to have been little technological development in these manufacturing processes—certainly nothing to compare, in speed or scope, to the developments of the 19th century.[39]

Technological change may occur through the development of new kinds of devices, but it may also come about through new applications of existing devices. Athens may not have *invented* any new *kinds* of devices capable of generating the fantasies or anxieties of radical upheaval that are the stuff of sf,[40] but it did, during the fifth century, *apply* existing technologies—particularly walls and ships—in radically new ways. After the Persian Wars, it used the ships it had paid for with the silver from the Laurium mines to establish a maritime empire. One of the results of this maritime empire was that it was

[38] Describing the fifth and fourth centuries BCE, Hanson writes, "Seamanship and the navies that protected merchant vessels in the Aegean were now seen as important assets of commerce. Equal wealth was found from trading, mines, crafts, and in the region-wide exchange of natural resources such as clays, stone, metals, woods. A few years of hired killing in Asia could earn far more for a warrior than a plot of grain, vineyard, and orchards in Greece" (Hanson 1995, 353).

[39] "It is a commonplace," writes Finley, "that the Greeks and Romans together added little to the world's store of technical knowledge and equipment. The Neolithic and Bronze Ages between them invented or discovered, and then developed, the essential processes of agriculture, metallurgy, pottery, and textile-making. With these the Greeks and Romans built a high civilization, full of power and intellect and beauty, but they transmitted to their successors few new inventions. The gear and the screw, the rotary mill and the water-mill, the direct screw-press, the fore-and-aft sail, glass-blowing, hollow bronze-casting, concrete, the dioptra for surveying, the torsion catapult, the water-clock and water organ, automata (mechanical toys) driven by water and wind and steam—this short list is fairly exhaustive, and it adds up to not very much for a great civilization over fifteen hundred years" (1983, 176).

[40] On the limitations of Greek technological thought and practice, see Vernant 2006, 299-318: "Greek thought never succeeded in closing this gap between, on the one hand, science based on a logical ideal and, on the other, *empeiria* dependent on random procedures based on observation. This is why even the Alexandrian engineers, who—unlike Aristotle and Archimedes—pay considerable attention to technical applications in their treatises, still use not applied science but a compromise between theory and experiment, which are not properly integrated and whose demands ultimately prove to be conflicting" (311).

able to feed its population with imported grain. That, in turn, made possible the Periclean strategy for winning the war with Sparta: confine the rural population within the walls of the city center, the *astu*, and both fight the enemy and feed the populace using the fleet. Given that Hesiod, whose poetry expresses the mindset of the traditional Greek farmer, was deeply suspicious of ships and recommended they be avoided as much as possible, the Periclean strategy evidently represented a radical revolution in thought about, and application of, technology—sufficiently radical, I would argue, to create the conditions of possibility for sf.[41]

The epistemological situation in fifth century Athens was even more evidently conducive to the production of sf. Athens was a deeply religious *polis*, but its religiosity did not preclude the development of innovative explanations for all sorts of phenomena—astronomical, somatic, zoological, botanical, political. During the fifth century, there was

[41] "Athenian imperialism hastened the democratization process begun by Cleisthenes (507 B.C.). It enhanced social groups who held no land. Twenty thousand citizens now worked outside of agriculture (e.g. Arist. *Ath. Pol.* 24.3; Ar. *Vesp.* 709). Beside conferring prestige on landless *thêtes* who had served so well against Persian ships […] the formal creation of a vast navy from the tribute of allied states turned Athenian attention permanently seaward (Thuc. 1.99.1; Plut. *Cim*. 11), away from purely landed aspirations. The erection of the long walls and the fortification of the Athenian port at Piraeus only cemented this new reliance on naval, rather than infantry power alone (Thuc. 1.107.1-108, 2.13.7). *Citizens of Athens in a psychological sense walled themselves off from their own farmland to connect with the sea*" (Hanson 1995, 359, emphasis added). Arrowsmith describes the situation more lyrically: "Those torn from this [agrarian] culture, like the Athenian peasantry, felt something akin to what we now call alienation, an estrangement from the very ground of their being. And this estrangement is a real though neglected part of that Athenian experience which makes the fifth century so kindred to our own, beneath all differences of scale and culture. It was above all else the Athenian empire, the discovery that by maritime empire, a city could be set free from the immemorial bondage to the earth and its values, that created this new sense of estrangement and immensely widened the gulf between *physis* (nature) and that *nomos* (law, custom) once felt to be firmly grounded in the old *dike* and reality. But the gulf is peculiarly Athenian; at Athens the gulf is felt most intensely and by nobody more than those peasant victims of the Periclean imperial city. The estrangement was as total and terrifying […]" (1973, 124).

a great proliferation of such innovative explanations.[42] Athens was not the only *polis* that nurtured new ideas, but every new idea quickly found its way to Athens. Leucippus and Democritus argued that everything in the universe was made of combinations of tiny, indivisible particles they called *atoms*. They argued that there were infinitely many worlds populated by infinitely many different kinds of creatures, but all subject to the same basic atomic laws. The Hippocratic writers contested traditional explanations of diseases, arguing that visible, tangible stuffs such as bile and phlegm were responsible for illnesses traditionally attributed to invisible, intangible daimonic forces. The sophists contested traditional norms of ethical behavior, suggesting that power was its own justification and that exploiters had no need to fear divine retribution on behalf of the exploited. This atmosphere of epistemological ferment, in which radically new possibilities for understanding the *anthropos* and what the *anthropos* might become were opening up, was perfectly suited to the production of sf.[43]

Sf requires not only the right social, technological, and epistemological conditions, but also a literary form capable of harboring new narratives. Since the 19th century, sf's preferred literary form has been the novel; in the 20th century, film emerged as another important medium for sf. Theater has also been a significant, though understudied, medium for sf: over the past thirty or forty years, some of the most exciting

[42] For the fifth-century "revolutions of wisdom" see especially Lloyd 1979, Lloyd 1987, Holmes 2010, Vernant 2006, 371-408.

[43] "[I]n the sixth and early fifth centuries," writes Lloyd, "it was, within broad limits, perfectly possible both to criticize existing religious ideas and practices and to introduce new ones. To put it negatively, there was no dogmatic or systematic religious orthodoxy. Although there were certain widespread and deeply held beliefs, there was no common sacred book, no one true religion, represented by universally recognized spokesmen—priests or prophets—and backed by an organized religious authority such as a church. The expression of new and quite individualistic views on god and the divine was, as our examples show, not only possible but quite common, and by the end of the fifth century we have evidence of a series of rationalistic accounts of the origin of religion" (1979, 14).

science fictional/posthumanist work has occurred in avant-garde theater, in the work of groups like The Wooster Group,[44] The Civilians,[45] Big Art Group,[46] and New York City Players; and of performance artists such as Marina Abramović, Orlan, Survival Research Laboratories, AndrewAndrew,[47] and Stelarc.[48]

In fifth-century Athens, the literary form best suited to generate sf was the theatrical genre we now call Old Comedy. Where exactly this genre came from and how it evolved into the form of which Aristophanes' eleven fully extant comedies are our only complete examples are questions that will forever remain unanswerable.[49] What we do know is that Old Comedy was performed alongside tragedy at the major civic theatrical festivals, the City Dionysia and the Lenaia, beginning in 486 BCE; on each of the three days of these festivals on which dramas were performed, three tragedies and a satyr play were followed by one comedy. Whereas tragedies almost always followed traditional mythic narratives, innovating in the details and presentation of the story but not in the basic plot, writers of comedy invented their plots from scratch. And whereas tragic myths, being traditional, were set in the distant past, comic narratives were often, though not always, set in the present and oriented towards the future.

Ian Ruffell calls Old Comedy "a brand of popular comedy that married heightened political engagement with imaginative, anti-realistic, and even surreal plot-

---

[44] See especially Savran 1988 and 2005. A selected bibliography compiled by the Wooster Group is available online at http://thewoostergroup.org/twg/Selected_Biblio.html
[45] Kozinn 2010
[46] Gallagher-Ross 2010
[47] http://www.nytimes.com/2011/01/06/fashion/06Andrew.html?_r=0
[48] Farnell 2000
[49] "Aristotle at any rate thought," writes Hanson, citing *Poetics* 1448a36-b1, "(perhaps wrongly) that the entire genre of Greek comedy arose out of an *agrarian* practice. Farmers, Aristotle believed, originally had ventured into town (*kômê*) at night to shout at and ridicule wealthier urban elites whom they felt to be oppressive and threatening. Attic comedy, in this view, was thus a ritualized version of these impromptu outbursts" (1999, 57).

lines that are rarely seen today outside of speculative fiction."[50] A brief survey of the plots of Aristophanes' plays will suffice to substantiate this description. In *Acharnians*, Dikaiopolis makes a private, 30-year peace treaty with Sparta—which tastest delicious, because it's made of wine—and establishes a private *agora* in which he can trade all of the trials and tribulations of Athenian political life for Peloponnesian delicacies. In *Knights*, a sausage seller uses the brutal and cunning techniques characteristic of the masters of commerce to wrest control of Demos, an old farmer whose name signifies the Athenian populace, from a powerful politician who is also Demos's slave; then he boils Demos, which turns the old man into a virile young man who exits leading two sexy peace treaties off to his farm "to thirty-yearize up them" (κατατριακοντουτίσαι, a neologism that Sommerstein notes *ad loc*. is "capable of being etymologized as "to pierce them (*outasai*) three times (*tria*) with a long pole (*kontos*) from below (*kata-*);" *Knights* 1391). In *Clouds*, the farmer Strepsiades goes to literature's first scientific laboratory, the Phrontisterion, in order to learn how to mince words for monetary profit, and ends up turning his son Pheidippides into a violent, superintelligent, atheistic monster. In *Wasps*, old Philokleon can turn himself into smoke (*Wasps* 144-51) in order to escape, or at least try to escape, every technique (μηχανήν, 149) his son can think of to treat the old man's addiction to exercising power as a juror. In *Peace*, the farmer Trygaeus flies on a dung beetle to Mount Olympus where, with the help of other Greek farmers (and without the help, conspicuously, of the representatives of any other profession) he digs up Peace, Harvest, and Cornucopia—three very sexy ladies indeed—presents them to the *boule*, and puts the manufacturers of the tools of war out of business. In *Birds*, two clever Athenians,

[50] Ruffell 2011, 3

disgusted with the power struggle of Athenian political life, go to the land of the birds looking for peace and quiet—and persuade the birds to use their avian capabilities to build a mighty super-city in the sky that can starve the gods into submission and provide innumerable blessings for humans. In *Lysistrata*, the women of Greece gather together and agree to use their mastery of sexual technique to starve Greece's warlike men into agreeing to make peace. In *Thesmophoriazousae*, the poet Euripides must use all of his skill with words and costumes to escape the anger of Athens' women, who feel he has grossly misrepresented them in his plays. In *Assemblywomen*, the women of Athens infiltrate the assembly and push through a package of radically egalitarian socio-economic and sexual reforms, the success of which remains, at the end of the play, uncertain. In *Frogs*, Euripides weighs his words against those of Aeschylus in a contest for the honor of being brought back from the underworld by the god Dionysus to solve Athens' political problems. In *Plutus*, Chremylos and his slave Cario take the god Wealth to the temple of the healer god Asclepius, get his sight restored, and thereby get the city's wealth redistributed from the hands of the evil to those of the good.

In *The Seven Beauties of Science Fiction*, Istvan Csicsery-Ronay Jr. writes, "The attitude of science-fictionality is characterized by two linked forms of hesitation, a pair of gaps. One gap extends between the belief that certain ideas and images of technoscientific transformations of the world can be entertained, and the rational recognition that they may be *realized*, with ramifications for social life. This gap lies between the conceivability of future transformations and the possibility of their actualization. The other gap lies between belief in the immanent possibility (perhaps even the inexorability) of those transformations, and reflection about their possible ethical,

social, and spiritual consequences."[51] The only word that might render the conclusion that Aristophanes' comedies evidently demand to be read in precisely this "attitude of science-fictionality" questionable is "technoscientific." But as my brief plot summaries of the eleven extant plays have deliberately highlighted, technical capabilities in just about every domain of human action and experience—agriculture, commerce, manufacturing, law, war, medicine, politics, research, literature, theater, sex—are the stuff Aristophanes' worlds and world-transformations are made of. And inasmuch as, for Csicsery-Ronay Jr., "sf has always engaged scientific ideas and speculations in order to affirm the freedom of the artistic imagination from the constraints of deterministic and oppressively systematic ideas,"[52] one can comfortably affirm that Aristophanes' plays engage all of the sciences of their day in the mode of sf. Dikaiopolis, the Sausage Seller, The Phrontisterion, Trygaeus, Peisetairos, Lysistrata, Euripides, Praxagora, and Chremylos may all be seen, then, as engines of "technoscientific transformations" of ordinary human life that raise powerful practical and ethical questions to which the poet pretends only with a big wink and a vigorous nod to have all the answers.

In addition to two defining gaps, Csicsery-Ronay Jr. postis seven "beauties" as peculiarly characteristic of sf. They are "*fictive neology*, *fictive novums*, *future history*, *imaginary science*, *the science-fictional sublime*, *the science-fictional grotesque*, and the *Technologiade*."[53] All of these beauties, I claim, are to be found in the comedies of Aristophanes, albeit in ancient and agrarian forms that will not appear immediately familiar to the fan of 19th, 20th, or 21st century sf. But for any connoisseur of cognitive

[51] Csicsery-Ronay Jr. 2008, 3
[52] Csicsery-Ronay Jr. 2008, 112
[53] Ciscsery-Ronay Jr. 2008, 5

estrangement willing to accept Csicsery-Ronay Jr.'s claim that "A past that is not yet known is a form of the future. So too is a present unanticipated by the past,"[54] the unfamiliarity of Aristophanes' beauties may be what makes them most worth paying valuable attention to.

1. *Fictive Neology*. "Readers of sf," writes Csicsery-Ronay Jr., "anticipate words and sentences that refer to changed or alien worlds. All fantastic genres make use of fictive neology. […] Phantasmagoric satire delights in wordplay that simultaneously masks and insinuates the objects of its derision. […] SF is distinct in that its fictive neologies connote newness and innovation vis-à-vis the historical present of the reader's culture."[55] Aristophanes' penchant for, or even obsession with, neologism is well known; indeed, prolific verbal invention is one of Old Comedy's best-known characteristics. Kratinos, an older rival whom in *Knights* Aristophanes praises for his hymn "Goddess of Bribery with Extortionwoodshoes" (Δωροῖ συκοπέδιλε, *Knights* 529[56]), refers in fr. 342 to "a phrasemaker relentless, Euripidaristophanizing," making a new verb out of the names of Aristophanes and the latter's tragic *bête noire*. These coinages certainly belong to the category of "phantasmagoric satire," as do many of Aristophanes' neologisms. But quite a few of the words Aristophanes invents do fit Csicsery-Ronay Jr.'s criteria of science-fictionality, none more so than those that appear throughout *Clouds*, the play that Chapter 1 will focus on. While many of Aristophanes' coinages are one-offs, the noun

[54] Ciscsery-Ronay Jr. 2008, 4
[55] Csicsery-Ronay Jr. 2008, 13
[56] "The epithet 'figwood-shod' (*sûkopedîlos*)," writes Sommerstein ad loc., "modeled on the epic adjective 'golden-sandalled' (*khrûsopedîlos*: *Odyssey* 11.604), contains the familiar pun on *sûkophqntês* 'malicious accuser.'"

Phrontisterion (φροντιστήριον[57]), often translated as "The Thinkery," which first appears in line 94 and serves throughout the play to denote the building in which Socrates and his pupils pursue their investigations into the nature of gnats, watercress, the atmosphere, the stars, powerful rhetoric, and various other phenomena, plays a world-building role entirely comparable to that of such well-known sf coinages as Orwell's "Newspeak" and Gibson's "cyberspace." So does the word Δῖνος, "Vortex," which Strepsiades' takes to be Socrates' name for the ruler of the universe (*Nub*. 380-1) and which serves as the chief signifier of the cognitive estrangement the former farmer is willing to undergo in pursuit of lucrative verbal power.

2. *Fictive Novums*. "In practice," writes Csicsery-Ronay Jr., "sf novums are the radically new inventions, discoveries, or social relations around which otherwise familiar fictional elements are reorganized in a cogent, historically plausible way."[58] As my plot summaries above indicate, many of Aristophanes' plays, though not all, are built around world transformations that can easily be characterized as sf novums. *Clouds* is built around the Phrontisterion, a laboratory of new technoscientific inventions and discoveries with dire consequences for social relations. The Phrontisterion is what Ciscsery-Ronay Jr. calls a "rational novum," for although evidently not realistic (indeed, far too much ink has been spilled on the question of whether *Clouds* offers a historically accurate depiction

[57] This is an example of what Gary Westfahl, who has studied the neologisms of Anglophone sf in detail, labels a *bound-morpheme construction*, for it is made out of the verb φροντίζω, "to think," and an affix, -τηριον, which is not itself a word. Westfahl finds such constructions particularly characteristic of early sf, which "favored scientists or intellectuals as its heroes." "In Westfahl's view," writes Csicsery-Ronay Jr., "the historical movement of technology from the laboratory to everyday life, and finally to the street, is reflected in the shift in dominance from bound-morpheme constructions in the early periods of sf, to the increasing centrality of common speech and freer morphemic moves" (Csicsery-Ronay Jr. 2008, 24).
[58] Ciscsery-Ronay Jr. 2008, 47

of Socrates and his activities—why would it?), it is certainly "realistically plausible."[59] *Birds*, the focus of Chapter 2, builds Cloudcuckooland (Νεφελοκοκκυγία, a neologism first introduced in line 819 that both performs a world-building function analogous to that of *Phrontisterion* in *Clouds* and specifically alludes to the world of that play) out of a more fantastic *novum* that consists of birds and humans being able to talk to each other and of humans being able to grow birdlike wings. Like *Clouds*, *Assemblywomen*, the focus of Chapter 3, uses a rational novum (a radically egalitarian transformation of social, economic, and sexual relations that, however unlikely to have been taken seriously in the Athenian assembly, is much easier to imagine happening in real life than birds understanding human language the way humans do); that it is socio-political rather than technoscientific may make it less evidently science-fictional, but its utopian aspirations and possibly dystopian consequences places it comfortably within the bounds of what may be profitably read as, or in close conjunction with, sf.

3. *Future history*. "Although sf need not always be set in the future," writes Csicsery-Ronay Jr., "the genre is inherently future-oriented. The discovery of an alternative history, a parallel universe, or a concealed past changes the horizon of the future and the meaning of human history just as much as does an explicitly futuristic setting."[60] Not a single one of Aristophanes' extant plays is set in the future. All are set in the present. But they are all, without exception, future-oriented, inasmuch as they are all obsessed with the "next step" the present might take—and whether it will be the step that everyone has been waiting for. Will the war end—even if it is only for one lucky person? Will the titans of commerce take everything the city has, or will Demos return to his

[59] Csicsery-Ronay Jr. 2008, 50
[60] Csicsery-Ronay Jr. 2008, 6

farm? Will the technoscience being developed in the Phrontisterion turn sons against their fathers? Will humans and birds work together to build an imperial city more powerful than Athens ever dreamed it could be? If so, it will be in part because the birds have learned to believe an alternative history of their species, in which they were not always prey to the hunting tools of humans but once ruled the universe as gods (*Birds* 471-547). Will the Athenians learn to accept being ruled by women, to share all of their possessions in common, and to sacrifice freedom of sexual choice for equality of sexual pleasure? If so, it will be because the city's women, who do everything "in the old way" (κατὰ τὸν ἀρχαῖον νόμον, *Assemblywomen* 216) and "just as before" (ὥσπερ καὶ πρὸ τοῦ, *Assemblywomen* 222), have learned "to mine the vein of innovation" (καινοτομεῖν, *Assemblywomen* 584).

4. *Imaginary Science*. Csicsery-Ronay Jr. emphasizes the fictionality of science-fictional science: "sf artists," he writes, "design fictive, ludic mini-myths that build on the playful imitation of technoscientific imagining."[61] "Just as neologisms unite two semantic/conceptual domains that are not 'yet' combined in real usage, and as novums combine two historical-physical trendlines counterfactually, the fictive science of sf combines two cognitive/explanatory systems that real technoscience has not—yet."[62] I have chosen to focus on *Clouds*, *Birds*, and *Assemblywomen* precisely because these three plays, more so than the other eight, "design fictive, ludic mini-myths that build on the playful imitation of technoscientific imagining"—one cannot say it any better than that—

[61] Csicsery-Ronay Jr. 2008, 115
[62] Csicsery-Ronay Jr. 2008, 120

and combine "cognitive/explanatory systems" in novel ways.[63] Each of these plays functions, in part, as a *thought experiment*, which Csicsery-Ronay Jr., quoting David C. Gooding, defines as "a conceptual elaboration of an imaginary model, 'an idealization which transcends the particularity and the accidents of worldly human activities in order to achieve the generality and rigour of a demonstrative procedure.'"[64] There is an inexorable logic to the way in which the plot of each of these plays unfolds. The total instrumentalization of words *must* lead, eventually, to the collapse of familial relationships into violent competition. Given the assumption that humans are incorrigibly cunning and power-hungry, the quest to find peace in a simpler form of life *must* end up, ironically, becoming a trans-species quest for unimaginable power. *Assemblywomen* is a thought experiment plain and simple: "what would economic and sexual life be like," it asks, "if it were played by Praxagora's rules?"

---

[63] Readers of Aristophanes who are not also readers of sf—and that category may well include most Classicists—may suppose that the "technoscientific imagining" that is characteristic of sf is vastly more "scientifically" rigorous than the comic imagination, which tends to come up with solutions to intractable socio-political problems so fantastically simple that a scientifically minded person would doubtless deem them far too good to be true. But Fredric Jameson, who follows Darko Suvin in reading sf as the literary genre most directly and thoroughly motivated by the utopian impulse, points out that "such creation [as Margaret Cavendish describes in a passage from *The Description of a New World Called the Blazing World* that describes precisely what Csicsery-Ronay Jr. means by "imaginary science"] must be motivated: it must respond to specific dilemmas and offer to solve fundamental social problems to which the Utopian believes himself to hold the key. *The Utopian vocation can be identified with this certainty, and by the persistent and obsessive search for a simple, a single-shot solution to all our ills. And this must be a solution so obvious and self-explanatory that every reasonable person will grasp it*: just as the inventor is certain his better mousetrap will compel universal conviction" (Jameson 2005, 11, emphasis added).

[64] Csicsery-Ronay Jr. 2008, 120-1. Lloyd emphasizes the considerable role that thought experiments—often masquerading as real experiments—played in Greek science. Of a claim by the author of *On the Sacred Disease* that "If you cut open the head [of a goat] to look at it, you will find that the brain is wet, full of fluid and foul-smelling, convincing proof that disease and not the deity is harming the body," Lloyd writes, "It is, to be sure, not certain that the writer of *On the Sacred Disease* actually carried out the inspection he suggests: if he did not, that would not be the first nor the last time that a test that could be conducted in practice was treated by an ancient writer as a hypothetical exercise—a thought experiment" (1979, 24).

5. *Science-fictional sublime*. Csicsery-Ronay Jr. finds several sub-categories of the concept of the sublime to be particularly useful for understanding the "sense of wonder" that is one of the most characteristic, and highly valued, effects of sf. The sense of wonder is not just another tool in the sf poet's toolbox; it is a sacred obligation. "Readers of sf expect it to provide an intense experience of being translated from the mundane to imaginary worlds and ideas that exceed the familiar and the habitual. They expect to feel as if they are witnessing phenomena beyond normal limits of perception and thought that people have not been able to witness before, or perhaps even to imagine."[65] Aristophanes, like the other Old Comic poets, never tires of emphasizing the wondrousness of his poetic feats, implicitly or explicitly. In the parabasis of *Peace*, he writes,

> τοιαῦτ᾽ ἀφελὼν κακὰ καὶ φόρτον καὶ βωμολοχεύματ᾽ ἀγεννῆ
> ἐποίησε τέχνην μεγάλην ἡμῖν κἀπύργωσ᾽ οἰκοδομήσας
> ἔπεσιν μεγάλοις καὶ διανοίαις καὶ σκώμμασιν οὐκ ἀγοραίοις,
> οὐκ ἰδιώτας ἀνθρωπίσκους κωμῳδῶν οὐδὲ γυναῖκας,
> ἀλλ᾽ Ἡρακλέους ὀργήν τιν᾽ ἔχων τοῖσι μεγίστοις ἐπεχείρει […]
> After having delivered us from all these wearisome ineptitudes and these low buffooneries, he has built up for us a great art, like a palace with high towers, constructed of fine phrases, great thoughts and of jokes not common on the streets. Moreover it's not obscure private persons or women that he stages in his comedies; but, bold as Heracles, it's the very greatest whom he attacks […] (*Peace* 748-52).

[65] Csicsery-Ronay Jr. 2008, 146

Aristophanes claims to provide *something more* than a good laugh or a trenchant critique. The sublime is a useful concept with which to probe that *something more*.

Csicsery-Ronay Jr. finds Kant's distinction between the *mathematical* and the *dynamical* sublime to be a useful starting point:

> The former involves the experience of infinity—the sense of infinite series extending in conceptual space, and sempiternal series extending into future time. […] The dynamic sublime, by contrast, is a response to the sheer physical presence of powerful phenomena, to the superhuman force manifest in magnificent geological formations, waterfalls, storms; that is, those aspects of nature that cause the ego to feel small in the world.[66]

He supplements these Kantian categories with Burke's conception of the sublime, in which the experience "is linked to the sensation of danger consciously perceived from a position of safety,"[67] and in which "sublime-generating phenomena" may exhibit certain "specifically technological qualities, *succession* and *uniformity*; *magnitude in building*, and *difficulty*."[68] He also makes use of David E. Nye's concept of the "technological sublime," which Nye sees as a peculiarly American mutation with radical consequences:

> The attribution of sublimity to human creations radically modified the psychological process that the sublime involved. Whereas in a sublime encounter in nature human reason intervenes and triumphs when the imagination finds itself overwhelmed, in the technological sublime reason had a new meaning. Because human beings had created the awe-inspiring steamboats, railroads, bridges, and

[66] Csicsery-Ronay Jr. 2008, 148-9
[67] Csicsery-Ronay Jr. 2008, 150
[68] Csicsery-Ronay Jr. 2008, 151

> dams, the sublime object itself was a manifestation of reason. Because the overwhelming power displayed was human rather than natural, the "dialogue" was now not between man and nature but between man and the man-made. The awe induced by seeing an immense or dynamic technological object became a celebration of the power of human reason, and this awe granted special privilege to engineers and inventors.[69]

One can use these concepts—the mathematical sublime, the dynamic sublime, and the technological sublime—to analyze the emotional effects, and the emotional appeal, of the different kinds of posthumanism I have discussed above. Mechano-posthumanism dreams either of a mathematical version of the technological sublime, in which the self-aware *cogito* finally masters its bodily finitude (rather than merely wishing it away, as did believers in the "soul") and rests from its labors; or of a dynamic version of the technological sublime, in which after the Singularity, technoscience, as if it were a sea upon which we humans had been sailing complacently, suddenly wells up into a hurricane that swallows us and makes us disappear (as we pitiful, ephemeral creatures deserve). Agrarian posthumanism allows itself the dynamic sublime in small doses—admiring a powerful storm from the safety of the farmhouse; marveling at the complexity of a single tomato plant—but it is deeply averse the mathematical and the technological sublime, and it is always quick to dump a slop-bucket full of the grotesque on any kind of sublime moment that seems to be getting out of hand.[70]

---

[69] Nye 1996, 60, quoted in Csicsery-Ronay Jr. 2008, 156

[70] In an essay entitled "Daoism, Ecology, and World Reduction in Le Guin's Utopian Fictions," Gib Prettyman writes, "ecology involves two related cognitive processes: unlearning the egoistic and anthropocentric illusions that underlie the psychic ecosystem of capitalism, and learning the real limits that characterize the material ecosystem and circumscribe human culture" (Prettyman 2014, 62). Whereas the technological sublime tends to reinforce the "anthropocentric illusions

Every category of the sublime that Csicsery-Ronay Jr. mentions is represented in *Clouds*, albeit always in close proximity with the grotesque. Socrates' appearance on the *mechane*, the theatrical crane that gave tragic divinities their power of flight—from which he looks down upon Strepsiades and asks, "Why do you summon me, ephemeral creature?" (τί με καλεῖς, ὦ ᾽φήμερε; *Clouds* 223), and then says, to explain what he is doing, "I am walking on air and investigating the sun" (ἀεροβατῶ καὶ περιφρονῶ τὸν ἥλιον, *Clouds* 225)—evidently introduces "a split between those who understand and control machines and those who do not,"[71] inasmuch as for Socrates, as for Empedocles, the physical universe in its entirety is a machine that he controls. Whitman rightly points out that "Socrates is far nearer to being a hero than is Strepsiades,"[72] and we can add without hesitation that Socrates' heroic grandeur is linked to the technological sublime. The entrance of the Clouds, by contrast, particularly their hymn that begins,

> ἀέναοι Νεφέλαι,
>
> ἀρθῶμεν φανεραὶ δροσερὰν φύσιν εὐάγητον
>
> πατρὸς ἀπ᾽ Ὠκεαωοῦ βαρυαχέος
>
> Eternal Clouds,
>
> Let us arise, revealing our bright dewy form,
>
> From deep roaring father Ocean (*Clouds* 276-8),

evokes the dynamic sublime, to which Strepsiades responds—with a hint of the grotesque—

> καὶ σέβομαί γ᾽, ὦ πολυτίμητοι, καὶ βούλομαι ἀνταποπαρδεῖν

---

that underlie the psychic ecosystem of capitalism," the grotesque tends to puncture these illusions.

[71] Nye 1996, 60, quoted in Csicsery-Ronay Jr. 2008, 157

[72] Whitman 1964, 139

πρὸς τὰς βροντάς· οὕτως αὐτὰς τετραμαίνω καὶ πεφόβημαι.

I do revere you, o very honorable ones, and I want to answer those thunderclaps

With a fart; that's how much I fear and tremble at them. (*Clouds* 293-4)

There is, finally, a taste of the mathematical sublime in Pheidippides' demonstration, at the end of the play, of a power to "think beyond"—and overturn—"established laws" (τῶν καθεστώτων νόμων ὑπερφρονεῖν δύνασθαι, *Clouds* 1400), that is, to compel the past and the future to bow before limitless desire.

One of the reasons why *Birds* is good to think with when thinking about mechano-posthumanism is that its emotional effect, like that of one kind of mechano-posthumanism, may be analyzed as an uncanny hybrid of the dynamic and the technological sublime. The birds' peculiar capabilities, in which Peisetairos sees the potential for unlimited *dunamis*, are natural, not man-made; and yet, in order to access this potential, the birds will need the help of a superintelligent human. Conversely, the human engineer expresses real awe at the *speed* with which the birds accomplish the superhuman technological feat he had suggested to them:

Οὗτος, τί ποιεῖς; ἆρα θαυμάζεις ὅτι

οὕτω τὸ τεῖχος ἐκτετείχισται ταχύ;

You, what are you doing? Are you marveling

that the wall has been built so quickly? (*Birds* 1164-5)

Whereas the Clouds serve at first merely as an index of the limitlessness of Socrates' (radically disruptive) explanatory powers, and then, ironically, as a symbol of the actual (and brutal) limitations of that power, the birds show us the sublime spectacle of a nonhuman power that has incorporated, and transcended, human capabilities.

Assemblywomen is perhaps the most difficult of the three plays on which I focus to analyze with the concepts of the sublime and the grotesque. To do so, it will be necessary to add to the three categories of the sublime already discussed a fourth, the *utopian sublime*. Darko Suvin does not name this concept, but it animates his groundbreaking study *Metamorphoses of Science Fiction* and determines the scope of his historical chapters, which is wider than that of almost any other study of the genre, embracing such ancient authors as Plato, Theopompus, Euhemerus, Hecataeus, and Iambulus—none of whom receive detailed treatment, but all of whom play a significant role in Suvin's thinking—and an author like Rabelais, hardly on the radar of most scholars of sf, who does receive detailed treatment. "It could be argued," Suvin writes, "that SF always fuses the old rhetorical trope of 'the impossibilities' (*impossibilia*) with the equally venerable notion of the wished-for country into a new and fertile form in which autonomous worlds are opposed to the author's empirical environment and its norms; and that, historically, at least the initial impulse for SF comes always from the yearnings of a repressed social group and testifies to radically other possibilities of life."[73] I call exhilaration in the face of radically problem-solving alterity that might just be feasible, especially when the impulse towards this alterity comes from those who are foolish in the eyes of those who wield power in this corrupt world, the *utopian sublime*.

Suvin draws a distinction between imagining the "alternative island" in "a magically arrested time" and imagining it in "historical time." For Suvin, the first to imagine utopia in the latter way was Thomas More. One may question the grounds on which he argues that it was not Plato or Aristophanes. Plato, he claims, offered a

[73] Suvin 1979, 89

"timelessly ideal (today quite anti-utopian) blueprint," while in *Assemblywomen* Aristophanes was *mocking* "a female attempt at instituting egalitarian communism without money and toil."[74] Suvin's view of Aristophanes as a conservative satirist,[75] a dream-crusher rather than a dreamer, is probably the only thing that prevented him from considering the Greek comic poet a major sf author, for almost everything he says about the science fictionality of Rabelais can, in my view, be truthfully said (*mutatis mutandis*) of Aristophanes. Be that as it may, the dramatic excitement of *Assemblywomen* certainly stems not only from the sexual and gastronomic appeal of the reforms Praxagora proposes, but also from the entirely rational, if not quite feasible, way in which a politically marginalized group institutes these reforms by mastering the political process from which they are normally excluded. That these reforms produce some unexpected, and grotesque, consequences, and are not universally beloved, is no argument against identifying the utopian sublime as the emotional core of the play.

6. *Science-fictional grotesque*. "The sublime," writes Csicsery-Ronay Jr., "has to do with the mind reflecting on its power, or lack of it, to understand the totality of the world, which of course includes the mind itself. The grotesque has to do with the struggle to accommodate mutable, unstable objects and beings in the world. These objects may include the mind's own mentifacts, its thoughts externalized with respect to their thinker."[76] None of Csicsery-Ronay Jr.'s seven beauties is more evidently characteristic of Old Comedy in general and Aristophanes in particular than this one. After citing the concept of *réalisme grotesque* or *grotesque carnavalesque* that Bakhtin developed in his

[74] Suvin 1979, 94
[75] For Aristophanes labeled a "conservative," see Suvin 1979, 87. Suvin almost certainly derived this view from the great Marxist Classicist G.E.M. de Ste. Croix. For a detailed refutation of de Ste. Croix's view of Aristophanes, see Pritchard 2012.
[76] Csicsery-Ronay Jr. 2008, 182

study of Rabelais, Pascal Thiercy writes, "Cette notion de *grotesque* nous paraît essentielle pour l'étude de la dramaturgie d'Aristophane : elle correspond en effet au fantastique, aux héros comiques, au détournement de la nature et du langage, et enfin à une imagerie tellement dense qu'elle devient elle-même réalité, mais une réalité différente, proche du *non-sense*."[77]

In this dissertation, I will focus on the ways in which the grotesque appears in close proximity to the sublime, puncturing and problematizing the latter *or*, on the contrary, providing the impulse for a pursuit of sublimity. The opening scene of *Clouds* plants the seed of the technological sublime in what Francesco Orlando, in his monumental *Obsolete Objects in the Literary Imagination*, calls the "threadbare-grotesque:"[78] it is while lying awake in bed, being bitten by creditors he imagines as bedbugs (or vice versa, *Clouds* 12-14, 37), in such dire straits that there is not even enough oil in his lamp to shed light on his ledger book (which he blames on his slave—whom he cannot punish, lest the slave run away and join the Spartans (*Clouds* 5-6)—having put in one of the thick wicks (*Clouds* 56-9)), that Strepsiades conceives the ἀτραπὸν δαιμονίως ὑπερφυᾶ (*Clouds* 76)—a paradoxical phrase, difficult to translate, that connotes both the narrowness and secrecy of a hidden "shortcut" (ἀτραπὸν) and superhuman grandeur (δαιμονίως ὑπερφυᾶ): the "monstrous shortcut"—that he believes will save him. In the Phrontisterion, as we have seen, he gets more than a taste of the sublime power this phrase anticipates; at the same time, the threadbare-grotesque imagery that pervades the Phrontisterion casts weird shadows on the luminous dreams of

[77] Thiercy 1986, 14
[78] Orlando 2006, 91-7

glory and power in which the Clouds encourage him to revel.[79] That imagery is linked to the science-fictional theme of *disembodiment*, a psychological process that in *Clouds* results in Aristophanes' most intensely grotesque image of injustice: a son strangling his father until the old man shits in his pants, and thinking it right and just to do so.

Much of the grotesque imagery in *Birds* stems from the imagination of human-avian hybridity that is also the source of the play's sublime effects; indeed, the human-avian grotesque functions as the obverse of the human-avian sublime. But there are also some wonderful grotesque images that involve other kinds of hybridity. Near the end of the play, the birds sing an ode containing four stanzas, each of which "describes a strange and fearful phenomenon, in the form of a parody of reports of distant geographical wonders."[80] Two of these phenomena belong to a category we might call the "botanical grotesque," the perverse obverse of the botanical sublime evoked in Tereus' lyric summoning the birds at the beginning of the play.[81]

In *Assemblywomen* the grotesque functions both to signify the ineptitude of the city's men, thereby legitimating the women's utopian project, and to problematize that project, particularly its erotic dimension. After Praxagora has displayed her mastery of male costume and male speech, Blepyrus, her husband, comes onstage wearing his wife's clothes and tries, unsuccessfully, to take a shit. His inability to relieve himself without

[79] In line 103, Pheidippides describes the inhabitants of the Phrontisterion as "pale and shoeless," τοὺς ὠχριῶντας, τοὺς ἀνυποδήτους. "It seems legitimate to infer," writes Revermann, "that characteristics of the Socratics in the play apply to the master himself: unkempt (836 f.) and poor (175, 835 f.) appearance, probably expressed by wearing a simple cloak (τρίβων), neglect of bodily care (441 f.) induced by parsimony (835-7), and missing shoes (103, 363). The few fifth-century pieces of evidence suggest a similar depiction of Socrates by other comic playwrights" (2006, 189).
[80] Whitman 1964, 194
[81] See Arment ed. 2013 for a collection of classic sf stories that revolve in key ways around the botanical grotesque.

help—he calls for an *iatros*, "someone skilled in the technique of probing anal matters" (τίς τῶν καταπρώκτων δεινός ἐστι τὴν τέχνην, *Assemblywomen* 364)—suggests that the city's men desperately need someone who is able "to heal an inveterate sickness endemic to the city" (ἰάσασθαι νόσον ἀρχαίαν ἐν τῆι πόλει ἐντετοκυῖαν, *Wasps* 651).[82] But the city's young people turn out to be deeply reluctant, to say the least, to accept the requirements of Praxagora's cure for sexual inequality; the young men (and young women) speak of having sex with old women as tantamount to having sex with demons and corpses (e.g. *Assemblywomen* 1030-6, 1054-7, and 877-1111 *passim*).

7. *The Technologiade*. "It is often said," writes Csicsery-Ronay Jr., "that sf has no distinctive myth or storytelling formula, that it thrives by adopting the plots of other genres, punching them up with its distinctively exotic futuristic settings. SF Westerns, detective, and crime stories abound, as do quests, farces, romps, picaresques, Kafkaesques, political parables, philosophical fables, fractured fairy tales, surrealist assemblages, rationalized fantasies, and even terror-and-pity-inducing tragedies."[83] In order to make sense of all this generic *bricolage*, Csicsery-Ronay Jr. argues that "sf's many plot loans and parabolas are structured by two distinctive forms of a category we might call the *technologiade*, the epic of the struggle surrounding the transformation of the cosmos into a technological regime. These two dialectically related forms are the expansive *space opera* and the intensive *techno-Robinsonade*."[84] The space opera is not a particularly useful category for analyzing Aristophanes, but the Robinsonade, "the

[82] Chremes reports that Neokleides, who spoke before Praxagora in the assembly meeting that morning, was shouted down on the grounds that it was unbelievable (δεινά) that a man unable to cure his own eye disease should dare to suggest remedies for the city's collective problems (*Assemblywomen* 397-404).
[83] Csicsery-Ronay Jr. 2008, 216
[84] Csicsery-Ronay Jr. 2008, 217

bourgeois epic of technical world-construction," is. "I approach this design," Csicsery-Ronay Jr. writes, "first through relationships among recurring narrative functions that are modern adventure tales' main diegetic agents. I name these the Handy Man, the Fertile Corpse, the Willing Slave, the Shadow Mage, the Tool/Text, and the Wife at Home."[85]

Old Comedy constructs its narratives by means of precisely the sort of viral *bricolage* that Csicsery-Ronay Jr. identifies as the constructive principle of sf (or at least as the one that is "often said" to operate therein). Tragedy may be the genre it preys upon most explicitly, but it draws just as much from epic, lyric, iambic, and popular song.[86] What Csicsery-Ronay Jr. calls the "techno-Robinsonade" certainly is not the narrative form of all Old Comedies, or of all of Aristophanes' plays, but its evident usefulness for analyzing the three plays on which I focus—*Clouds*, *Birds*, and *Assemblywomen*—may cause one to question the rationale for calling it "bourgeois." Four of Csicsery-Ronay Jr.'s diegetic agents—Handy Man, the Fertile Corpse, the Shadow Mage, and the Tool/Text—are clearly represented in these plays and determine their narrative structure. Let us look at each of them in turn.

"The Handy Man," writes Csicsery-Ronay Jr., "is a figure, usually male, who possesses skill in the handling of tools. He is *polymetis* like Odysseus; unlike him, however, his many ideas and plans are almost exclusively devoted to technical problem-solving. […] He is generally induced or forced out of a culturally comfortable, predictable home environment, to exotic and undeveloped regions. There he either solves a fundamental problem that permits him to function as an entrepreneurial culture hero for

[85] Csicsery-Ronay Jr. 2008, 225
[86] For Aristophanes' "carnival of genres," see Platter 2007. For Aristophanes' engagement with the "iambographic tradition," see Rosen 1988.

his original culture (a modern Jason or Theseus), or he establishes the bases for a cultural transformation on his own terms."[87] Peisetairos, driven from Athens by his desire to escape the trials and tribulations of everyday Athenian life, who functions as an "entrepreneurial culture hero" for birds and humans alike by solving the birds' problem of not being masters of the universe, is evidently a figure of this type; so is Praxagora, who uses her skill in handling the tools of politics—words and physical appearances—to transform Athenian life on her own terms. In *Clouds*, the Handy Man figure is split among three characters: Strepsiades, a wannabe Handy Man; Pheidippides, a mad Handy Man; and Socrates, who falls somewhere between those two poles.

"The Fertile Corpse is the scene of the Handy Man's performance. It is usually not represented in human form, but as a region with strongly displaced qualities of feminine reproduction. It is fertile, because the Handy Man's manipulations induce it to yield bounty, ranging from sustaining food and natural resources to more intangible yields. It is a corpse because it is found to be insentient, the residue of a distributed life-force that has no consciousness. The Handy Man is able (indeed, it is required of him) to make this unconscious feminine body into a responsive, productive field."[88] "Fertile Corpse" is perhaps not the most appropriate name for the analogue of this figure that one finds in Aristophanes, nor does Csicsery-Ronay Jr.'s description apply word-for-word to the Greek poet's narratives. But his claim that the Fertile Corpse "is the psychomythicized form of *resource*"[89] suggests that we can reasonably identify the Clouds in *Clouds*, the birds in *Birds*, and the *polis* in *Assemblywomen* as forms of this

[87] Csicsery-Ronay Jr. 2008, 227
[88] Csicsery-Ronay Jr. 2008, 227-8
[89] Csicsery-Ronay Jr. 2008, 228

figure. The Clouds, who appear to Strepsiades as women—but only, according to Socrates, because they mimic the vices of whomever they see and and they saw Kleisthenes on the way in (*Clouds* 355)—signify unlimited resources of verbal power, as well as the death of the traditional, anthropomorphic gods. In *Birds*, human access to the limitless resources of avian power is mediated by a mythic figure (Tereus) with a deep, dark connection to femininity; indeed, Procne is a very apt symbol of the birds *qua* Fertile Corpse. And in *Assemblywomen*, it is Praxagora's gender-bending task to transform the city's feminized, constipated males into blissful inhabitants of a bountiful *oikos*.

"The Shadow Mage is the embodied antagonist of the Handy Man's project. In this function, the obstructor manifests archetypal qualities in direct dialectical resistance to the Handy Man's. The Mage competes with the Handy Man for the Fertile Corpse and the Willing Slave, and may have a historically prior claim on them. […] His power comes from a *local* understanding of the prerational forces of magic or mind control, and is consequently a manifestation of a world interpretation—in fact, a form of rationality—of more ancient pedigree than technoscience."[90] The best example of the Shadow Mage to be found in Aristophanes is undoubtedly the Clouds, who finally reveal that they have been working throughout the play, in the shadows, to lead Strepsiades (and perhaps also Socrates) back to a fear of the gods of tradition (*Clouds* 1458-61). The role of this figure in *Birds* and *Assemblywomen* is considerably less than it is in *Clouds*, though certain signs of resistance to Peisetairos and Praxagora's respective efforts may be linked to the characteristics and functions of this figure.

[90] Csicsery-Ronay Jr. 2008, 230

"The Tool Text," writes Csicsery-Ronay Jr., "is the set of technical devices and documents that the Handy Man requires to achieve his dominance."[91] In *Clouds*, the Tool Text includes all of the many instruments that Strepsiades sees in the Phrontisterion—the astronomy instrument, the geometry instrument, the map of the world (*Clouds* 200-206)—the religious costume in which Socrates compels Strepsiades to dress before he sees the Clouds, the bed on which Socrates compels Strepsiades to lie down and try to think, and of course the words that Strepsiades and Pheidippides use to annihilate their debts. In *Birds*, the Tool Text consists of Peisetairos' words and various aspects of bird physiology. In *Assemblywomen*, the Tool Text consists of Praxagora's words and the disguises she and her comrades employ to make those words effective, together with the city's household objects (such as her lamp), which she encourages the city's men to relate to not as private possessions but as something like *selves* in their own right, and the *kleroteria*, which she puts to a radically new, and utopian, use.

The techno-Robinsonade story-form is homologous with the myth of Prometheus and Epimetheus as told in Hesiod's *Works and Days* and in Plato's *Protagoras*, which Bernard Stiegler, perhaps the foremost living philosopher of technology, has taken as the key ancient touchstone for his influential posthumanist theory of the co-invention of humanity and technicity *qua* prostheticity (stone tools, writing, ships, clocks, calculators, airplanes, computers, etc.). Prometheus is the primordial Handy Man, terrestrial life (humans and other animals) the primordial Fertile Corpse, fire the primordial Tool Text, Zeus the primordial Shadow Mage. It is precisely because every sf techno-Robinsonade is a reworking—a repetition with significant mutations—of the myth of Prometheus (for

[91] Csicsery-Ronay Jr. 2008, 232

which reason one might rebaptize this story form the "techno-Prometheade," or simply the "Prometheade"—or, as Stiegler might prefer, the "Epimetheade") that sf is the posthumanist genre *par excellence*, the genre that refuses, more than any other, to take the stability or coherence of the human (or any other species, for that matter) for granted. And it is because Aristophanes is the first author to have reworked this myth numerous times, without simply retelling it, in a register not of nostalgia for the mythic past but of attentiveness to the concrete material conditions of the present and anticipation of the future, that it can truthfully be said that Aristophanes invented sf.

To conclude this Introduction, I want to summarize the main reasons I see for reading Aristophanes as sf. First, this framework allows for a much more nuanced interpretation of Aristophanes' thinking than does "political satire," which tends to encourage a reductive methodology that involves constructing (on very shaky grounds) a simplistic, unambiguous, and fixed manifesto that is supposed to represent Aristophanes' political views, and interpreting every line of his plays as artillery shots fired in support of that manifesto. That kind of approach works better for some literary authors than for others; it is never the best approach, and it works very poorly indeed for Aristophanes.[92]

[92] I do not deny that many of Aristophanes' plays—especially the earlier plays—launch verbal missiles directly at a very specific political target. But Fredric Jameson argues that the "objective preconditions" for utopian thinking include a social situation that is also ripe for the one-dimensional attacks characteristic of political satire: "The view that opens out onto history from a particular social situation must encourage such oversimplifications; the miseries and injustices thus visible must seem to shape and organize themselves around one specific ill or wrong. For the Utopian remedy must at first be a fundamentally negative one, and stand as a clarion call to remove and to extirpate this specific root of all evil from which all the others spring" (2005, 12). On the "dialogism" that always complicates Aristophanes' verbal attacks, see Platter 2007: "Specific pronouncements, innuendoes, insults, and attacks do not illuminate clearly a single, shaping consciousness but exist in dialogic relationships with one another. No single style, not even the authorial voice of the *parabasis*, is able to establish itself as an authority beyond

The opposite approach—seeing Aristophanes as "pure literature," or pure verbal play, with no connection to any kind of social, political, technological, or epistemological reality outside the text—is equally reductive. As I hope that my application of Csicsery-Ronay Jr.'s "seven beauties" framework to the plays on which this dissertation will focus has demonstrated, and as the chapters will demonstrate in more detail, the categories of sf criticism offer a multi-faceted yet coherent, flexible yet surgically precise toolkit for analyzing the imaginative work that some of Aristophanes' plays do—in a way that illuminates hitherto unrecognized connections between the imaginative work of these plays and that of a rich and increasingly important corpus of literary texts.

Second, reading (some of) Aristophanes' plays as sf may offer a new perspective on several of the key concerns and debates of posthumanism. It is hardly reductive to claim, as I do, that one cannot read *Clouds* or *Peace* without feeling that Aristophanes felt strongly that the life of the small farmer was the wisest, most richly pleasurable, and most fulfilling way of life—and that this way of life was constantly endangered by human laziness, greed, and outsized ambition.[93] At the same time, one cannot read any of the plays without feeling that Aristophanes understood, as well as any author before or since, the thrill of human ingenuity, the appeal of sublime techno-fantasies, the potency of the nonhuman—whether divine, plant, animal, or object—and the ways in which human technoscience tends to escape, in predictable but often unforeseen ways, the

---

impeachment. Instead, linguistic elements are progressively undermined by incongruous and incompatible sentiments expressed elsewhere. Nor are they reducible to a simple hierarchy within which real and fantastic, oligarchic and democratic, old-fashioned and newfangled elements can be sorted out to reveal the essential attitudes of Aristophanic comedy and to separate them from attitudes that are epiphenomenal, that is, presented for the sake of laughter but with no serious purpose" (30).

[93] Leo Strauss writes, "Farmers are generally loved and respected because they are supposed to be just, since they live from their work and not on others. How much Aristophanes defers to this supposition one sees from a number of his plays" (Strauss 1966, 288).

intentions of those who would use it to get what they want. For all of these reasons, Aristophanes is good to think with when thinking about, and perhaps constructing, an agrarian posthumanism, and a salutary thorn in the side of the assumptions and ambitions of mechano-posthumanism.

CLOUDS:

The Phrontisterion and Its Mechanisms

ὣς ἔφατ': ἐκ δ' ἐγέλασσε πατὴρ ἀνδρῶν τε θεῶν τε.

So he spoke and laughed outright, the Father of gods and men.
(Hesiod, *Works and Days*, 59)

ἄλλο δέ τοι ἐρέω · φύσις οὐδενὸς ἔστιν ἁπάντων
θνητῶν, οὐδέ τις οὐλομένου θανάτοιο τελευτή,
ἀλλὰ μόνον μίξις τε διάλλαξίς τε μιγέντων
ἔστι, φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν.

I shall tell you another thing: there is no *phusis*
of any mortal thing, nor does death bring about completion;
there is only mixture and separation of mixed things
and *phusis* is the name humans apply to this.
(Empedocles fr. B8 DK)

Aristophanes' *Clouds* is the first work of literature in the Western tradition in which a main character is a person with radically unconventional ideas about nature, divinity, and mankind; a person whose life is entirely devoted to the development of those ideas in a place entirely devoted to research; a person whose unconventional ideas grant him, or seem to grant him, the power to affect social and political life in potentially

destructive ways. Aristophanes' Socrates is literature's first scientist, the Phrontisterion its first laboratory. And *Clouds* is a masterpiece of agrarian sf.[94]

Clouds is as steeped in Hesiodic wisdom concerning the necessity of work, of paying one's debts through honest labor rather than through dishonest trickery, and of the dangerous consequences of looking for verbal "loopholes" that will make problems magically disappear, as it is fascinated by the challenge of imagining the physical world in the radically strange ways that the most innovative, conceptually inventive fifth-century thinkers—Empedocles, Democritus, Gorgias, Socrates, and many others—were

---

[94] See Orthofer 2002 for a survey of representations of scientists in theater throughout the ages. Orthofer repeats the common view that Aristophanes "ridicules" Socrates and "satirises" all that is unconventional. Dover's seminal 1968 edition of *Clouds* promoted a caricature of Aristophanes' personality that, while perhaps intended to make a valid point (comic poets are not scientists), ultimately confirms unhelpful stereotypes (comedians are obtuse): "The extent to which artistic devotion, imagination, and craftsmanship could be divorced from genuine intellectual curiosity was greater among the Greeks than we expect to find in artists, novelists, or musicians of our own time. I suggest, then, that although the difference between Socrates and the Sophists was known to Ar., in the sense that the data which constituted this difference were available to his organs of perception, he simply did not see it, and if it had been pointed out to him he would not have regarded it as important. *He drew one basic distinction, between the normal man and the abnormal man*" (liii, emphasis added). Strauss 1966, to which I will refer frequently throughout this chapter, takes the comic poet's intelligence, and his critique of Socrates and science, much more seriously. On the seriousness of *Clouds*, see also Reckford 1987, 388-402: "The *Clouds* is high comedy. It is more than satire, more than merely negative criticism of Socrates, or the sophists, or the new education. From what might have been mere satire, it grows into an imaginative confrontation of cultural change itself, the pain and confusion of transition from the old education to the new. Aristophanes enjoys and recognizes, without ultimately accepting them, the new techniques of argument and analysis. *He is not anti-intellectual; he perceives the inadequacies of the old as well as the losses of wholeness and happiness incurred by the new*; Dionysus is not, and cannot be, simply on the side of the old" (393, emphasis added). Laks and Cottone (eds.) 2013 is a welcome contribution to serious study of the intellectual background of *Clouds*. Willi 2003, 51-156, is essential. See also Meier 2006, 91-111: "one may justly attribute great importance to the catalytic effect the play had on a process of world-historical significance. Here I am thinking primarily not of Socrates' conviction by the people of Athens in the year 399 […] Where the historian may above all have the death of Socrates in mind, it is fitting that the philosopher give thought to the birth of political philosophy. And it is here that the poet of the *Clouds* deserves the praise proper to the midwife" (92).

[94] For the connecting between early religion and killing, see Burkert 1983. "Sacrificial killing," Burkert writes, "is the basic experience of the 'sacred.' *Homo religiosus* acts and attains self-awareness as *homo necans*" (3). For a refreshing, posthumanist perspective on the spirit world of an Amazonian tribe, see Kohn 2013.

imagining it. The gap between Strepsiades, a farmer lured away from agricultural life by a city woman (and thus already at the beginning of the play a very poor student of Hesiod), whose top concern in life is his own financial situation, and Socrates, whose concern is not with money but with what is knowable but unknown, thinkable but unthought, doable but not yet done, is the gap between the "ordinary person" and the "scientist"—or, to define that loaded label, the "epistemic expert/adventurer"—that generates much of the social and psychological drama in sf. And the gap between Socrates and the Clouds, like the gap between Peisetairos and the birds, is the gap between ambitious humanity and what Jane Bennett calls "vibrant" or "vital" matter:

> By "vitality" I mean the capacity of things—edibles, commodities, storms, metals—not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, and tendencies of their own.[95]

This chapter will argue that Aristophanes can help us to theorize that gap, and thereby to do the work of posthumanism.

The analytic term for the literary instantiation of the gap between human mental stability and vibrant matter is the *grotesque*. Csicsery-Ronay Jr. distinguishes the "cheerful popular grotesque" that Bakhtin identified as a key feature of Rabelais's writing and that is most often associated with comedy (including Old Comedy) more generally, "a matter of physical pleasure in corporeal existence, the rich and funky gaiety that sees life processes intimately flowing into one another, rejecting the abstract divisions and

[95] Bennett 2010, viii

intellectual puritanism of the elites,"[96] from the science fictional grotesque, "in which technoscience is the occasion for releasing and revealing the uncontainable metamorphic energies of the world and its discrete things."[97] As the quotation from Empedocles that serves as an epigraph to this chapter indicates, there are good reasons for seeing the science fictional grotesque as a phenomenon that predates "modern" technoscience (1600 CE-present). The mutable, unstable mixtures that Empedocles claimed all living and nonliving beings—including the gods—are, are not the marginal, fringe creatures of Greek mythology (Scylla and Charybdis, the Lotus Eaters, the Kyklopes, the Centaurs—all of whom belong to a category we might call the "mythological grotesque"), nor is Empedocles' language a "cheerful" or "popular" mockery of "the intellectual puritanism of the elites." Mutable, unstable mixture, according to Empedocles, is what everything is at all times, both within the "topsy-turvy" world of the carnival—or of the poem—and without.

Empedocles, then, may well be considered *not only* a poet but *also* a scientist, inasmuch as he presents an imaginative vision not of a long-lost mythical world, but of the world as it is (he claims) in the present; a vision that calls not for a "willing suspension of disbelief" but for sincere and practical belief. For like a modern scientist—and like Gorgias, and like the Hippocratic doctors—Empedocles claims that his vision of the world can provide not only a "sense of wonder," but also practical power:

> φάρμακα δ᾽ ὅσσα γεγâσι κακῶν καὶ γήραος ἄλκαρ
> πεύσηι, ἐπεὶ μούνωι σοὶ ἐγὼ κρανέω τάδε πάντα.
> παύσεις δ᾽ ἀκαμάτων ἀνέμων μένος οἵ τ᾽ ἐπὶ γαῖαν

[96] Csicsery-Ronay Jr. 2008, 183-4
[97] Csicsery-Ronay Jr. 2008, 188

ὀρνύμενοι πνοιαῖσι καταφθινύθουσιν ἀρούρας·

καὶ πάλιν, ἢν ἐθέλησθα, παλίντιτα πνεύματ(α) ἐπάξεις·

θήσεις δ᾽ ἐξ ὄμβροιο κελαινοῦ καίριον αὐχμόν

ἀνθρώποις, θήσεις δὲ καὶ ἐξ αὐχμοῖο θερείου

ῥεύματα δενδρεόθρεπτα, τά τ᾽ αἰθέρι ναιήσονται,

ἄξεις δ᾽ ἐξ Ἀίδαο καταφθιμένου μένος ἀνδρός.

All the medicines there are as a defense against ills and old age

you shall learn, since for you alone I will accomplish all these things.

And you shall put a stop to mighty unwearying winds which on earth

blowing in gusts waste the farmer's field.

And again, if you wish, you shall call back compensating winds,

And you shall produce from black rain timely drought

for men, and you shall produce from summer drought

tree-nourishing streams, which dwell in aether,

and you shall lead back from Hades the life of a deceased man.

(Empedocles fr. B111 DK, trans. Daniel W. Graham)

In a fixed world such as that of Hesiod's *Works and Days*, the only forms of control over the physical world that are available to humans—and they are all partial—are traditional: hard work, paying one's debts, marrying at the right time, crafting the right tools, planting and harvesting at the times indicated by the stars and the flight patterns of birds. A mutable world such as that of Empedocles opens up the possibility for radically new and *absolute* forms of control: if one understands the principles of mixture, then one can transform anything into anything else.

Aristophanes' Socrates is modeled on Empedocles and people like him—Greek scientists, whose science, thanks to the distortions of historical perspective, looks more like fiction than our own—and *Clouds* imagines a world in which it is radically unclear whether everything is as such people say it is—mutable and totally subject to human power—or whether some, if not all, of the old, fixed Hesiodic truths remain in force.[98] If we analyze the plot as a "techno-Robinsonade," it appears that the Shadow Mage (the Clouds) defeats the Handy Man (Socrates) in the end—at least in the end of the version of the play that has come down to us.[99] But it is far from clear that the "uncontainable metamorphic energies of the world and its discrete things" that the Phrontisterion has unleashed will disappear when it burns to the ground.

I. Agrarian Spirits, Urban Anxieties

Hunter-gatherers inhabit worlds inhabited by the spirits of wild animals, particularly but not exclusively those that are hunted, and by the spirits of plants.[100] This sort of worldview is very ancient, but it should not be characterized as "primitive" or "backwards;" after all, plants and animals are living beings, and living beings still seem to many intelligent humans of diverse backgrounds to have something like a spirit.[101]

---

[98] For Hesiod's "metaphysics of farming," see Nelson 1998.
[99] On the different versions of *Clouds*, and the implications of the play's textual history for whether or not it may be seen as a "literary text," see Rosen 1997.
[100] For the connecting between early religion and killing, see Burkert 1983. "Sacrificial killing," Burkert writes, "is the basic experience of the 'sacred.' *Homo religiosus* acts and attains self-awareness as *homo necans*" (3). For a refreshing, posthumanist perspective on the spirit world of an Amazonian tribe, see Kohn 2013.
[101] "If thoughts exist beyond the human," writes Eduardo Kohn, "then we humans are not the only selves in this world. We, in short, are not the only kinds of *we.* Animism, the attribution of enchantment to these other-than-human loci, is more than a belief, an embodied practice, a foil for our critiques of Western mechanistic representations of nature, although it is also all of these as well. We should not, then, just ask how some humans come to represent other beings or

Ancient farmers inhabited a similar world, but one that had evolved in conjunction with their environment. Spirits with deep connections to agricultural crops and livestock played a key role in their imaginative world, but so did spirits with deep connections to the wilderness, on the one hand, and to many non-agricultural (or not directly agricultural) aspects of human civilization—law courts, treasuries, the council (*boule*), the assembly (*ekklesia*)—on the other. In Aristophanes, however, the spirits to whom characters who are in their right minds express the strongest affective attachments are the agricultural spirits, whom the Athenians too often neglect. Here, for example, is the famous Phales hymn from *Acharnians:*

Φαλῆς ἑταῖρε Βακχίου

ξύγκωμε νυκτοπεριπλάνητε

μοιχὲ παιδεραστά,

ἥκτῳ σ᾽ ἔτει προσεῖπον ἐς

τὸν δῆμον ἐλθὼν ἄσμενος,

σπονδὰς ποιησάμενος ἐμαυτῷ,

πραγμάτων τε καὶ μαχῶν

καὶ Λαμάχων ἀπαλλαγείς.

πολλῷ γάρ ἐσθ᾽ ἥδιον, ὦ Φαλῆς Φαλῆς,

---

entities as animate; we also need to consider more broadly what is it about these that make them animate.

"People in Ávila, if they are to successfully penetrate the relational logics that create, connect, and sustain the beings of the forest, must in some way recognize this basic animacy. Runa animism, then, is a way of attending to living thoughts in the world that amplifies and reveals important properties of lives and thoughts. It is a form of thinking about the world that grows out of a specially situated intimate engagement with thoughts-in-the-world in ways that make some of their distinctive attributes visible. Paying attention to these engagements with the living thoughts of the world can help us think anthropology differently. It can help us imagine a set of conceptual tools we can use to attend to the ways in which our lives are shaped by how we live in a world that extends beyond the human" (Kohn 2013, 72-3).

κλέπτουσαν εὐρόνθ᾽ ὡρικὴν ὑληφόρον

τὴν Στρυμοδώρου Θρᾷτταν ἐκ τοῦ Φελλέως

μέσην λαβόντ᾽ ἄραντα καταβαλόντα

καταγιγαρτίσ᾽ ὦ

Φαλῆς Φαλῆς.

ἐὰν μεθ᾽ ἡμῶν ξυμπίῃς, ἐκ κραιπάλης

ἕωθεν εἰρήνης ῥοφήσει τρύβλιον:

Phales, friend of Bacchus,

revel mate, nocturnal rambler,

fornicator, pederast:

after six years I greet you,

as gladly I return to my deme,

with a peace I made for myself,

released from bothers and battles

and Lamachuses.

Yes, it's far more pleasant, Phales, Phales,

to catch a budding maid with pilfered wood—

Strymodorus' Thratta from the Rocky Bottom—

and grab her waist, lift her up, throw her down

and take her cherry.

Phales, Phales,

if you drink with us, after the carouse

at dawn you shall quaff a cup of peace;

and my shield shall be hung by the hearth. (*Acharnians* 264-79)

Notice that Phales can only be encountered in the *deme* (267), the part of the city closest to the fields (as opposed to the *astu*, the urban center, which Dikaiopolis says that he "hates"[102]) where, as Dikaiopolis says in his opening monologue, money never changes hands (*Acharnians* 33-6). Is there something about money, and about the urban systems it facilitates, that is inimical to the world of spirits?

The scenario described in the Phales hymn—a return to the country, a harvest, a feast—is very similar to the scenario described in the second parabasis of *Peace*. There, however, the agricultural sense of the verb καταγιγαρτίσαι (on which see Olson 2002 *ad loc*.) is is separated somewhat from the sexual sense (though sexual pleasure remains, as always, a part of the agricultural equation: *Peace* 1138-9) and elaborated into a narrative of a farmer inspecting his crops:

ἡνίκ᾽ ἂν δ᾽ ἀχέτας
ᾄδῃ τὸν ἡδὺν νόμον,
διασκοπῶν ἥδομαι
τὰς Λημυνίας ἀμπέλους,
εἰ πεπαίνουσιν ἤ-
δη τὸ γὰρ φῖτυ πρῳ̣ὸν φύσει,
τόν τε φήληχ᾽ ὁρῶν οἰδάνοντ᾽:
εἶθ᾽ ὁπόταν ᾖ πέπων,
ἐσθίω κἀπέχω
χἄμα φήμ᾽, ‘ὦραι φίλαι’

[102] στυγῶν μὲν ἄστυ, τὸν δ᾽ ἐμὸν δῆμον ποθῶν (*Acharnians* 33). On the verb στυγέω, and the "fundamental hostility between city (ἄστυ, not πόλις) and country," see Olson ad loc.

When the cicada sings his sweet melody, I take pleasure in examining my Lemnian vines, to see if they are bring the early-bearing fruit to ripeness. Likewise I love to watch the fig filling out, and when it has reached maturity I eat it with appreciation, exclaiming, "Oh! beloved Seasons!" (*Peace* 1159-67)

The phrase διασκοπῶν ἥδομαι, "I take delight in inspecting," is significant, for it implies that the special kind of pleasure that is uniquely available in the fertile fields is not only the pleasure of consumption, whether sexual or gastronomic, but also the pleasure of *care*. Indeed, the pleasure of administering care must preceed the pleasure of consumption.

It is common to refer to the spirit-world, and its associated practices, by the term "religion," and to imagine "science" as a more rational, more useful worldview that is naturally opposed to religion. A religious person, in this schema, attempts to generate a good harvest by sacrificing to Demeter; a scientific person, by contrast, attempts to guarantee that his or her plants have abundant nitrogen. This simplistic schema does not do justice to either the ancient farmer or to the modern farmer with any emotional intelligence. The ancient farmer did many other things to guarantee a good harvest besides sacrifice to Demeter, and plants, like humans, need much more than just nitrogen to flourish: they need a kind of care that is not reducible to the application of a few quick prayers or chemicals.[103]

Spirits, or selves, have obligations to each other, and close personal proximity is an important factor in sustaining and nourishing those obligations. One of the problems

[103] Holmes 2010 describes the effects that novel investigations, practical and theoretical, into the working of the human body, during the fifth century, had upon notions and norms concerning the care of the human self. An analogous history of the evolution of notions and norms concerning the care of agricultural plants and animals has yet to be written.

with the city center, the *astu*, is that the devices it uses to mediate obligation, such as money and ledger books, may obscure the personal face behind the obligation.

Aristophanes' *Clouds* tells the story of Strepsiades' attempt to work around his sacred obligations, and the disastrous ramifications of that attempt. Like Hesiod's *Works and Days*, it starts from the suffering caused by debt.[104] Like Hesiod, Aristophanes links sexual and economic debt through the figure of the costly wife, here associated with both sexual excess and urban artifice (*Clouds* 43-52, 61-74). It was she who first enticed Strepsiades, an *agroikos* (farmer), into the city, her child who has got him into debt; instead of returning to the field, he will follow the Clouds, who also resemble Hesiod's Pandora in many respects, ever deeper into all things urban.[105] Unlike in Hesiod,

[104] J.W. Süvern, an obscure 19th century scholar, provides a useful summary of the action of the play that seems to me to put its emphases in the right places: "as the story is set in motion by the perverse purpose in Strepsiades, as it comes to an end when he is cured; and as this change arises from an unexpected and extravagant result of the experiment upon Pheidippides, who is to be the instrument of the father's design; the school of sophistry in which the youth is to be formed, is clearly the hinge on which the whole action turns; for its influence upon Pheidippides decides the success or failure of the views of Strepsiades, and consequently the issue of the story of the drama. This, therefore, is the view which we must take of the relation of the several parts to each other; namely, that the principal character to which the whole refers, is not Sokrates, who has generally been considered to be so, in consequence of the story lingering so long at his shop, and of his being the sufferer at the conclusion, but Strepsiades himself; whereas Sokrates is the intermediate party who is to instruct Pheidippides for the vicious purposes of the father; and this he executes so perfectly, that the old gentleman is at first deceived; but he soon reaps fruits, the nature of which opens his eyes to his own folly, and to the destructive tendency of this system of education" (Süvern 1836, 2-3). Unfortunately, in the remainder of his essay Süvern succumbs to the tendency he here condemns and focuses almost exclusively upon the figure of Socrates.

[105] For Pandora, see above all Zeitlin 1996, 53-86. "Pandora comes equipped with a thievish nature and is later likened to a fire that consumes and withers man by her appetites for both food and sex (cf. WD 704-6)" (56). "[Woman] is a gift, a technical invention, an artisanal product, a work of art, an artifice. […] She is a hybrid mixture of qualities drawn from different elements and different spheres that combine into a blend, at once an original product and an imitation, whose purpose and nature are to deceive" (57). For the significations of femaleness in Greek drama, see Zeitlin 1996, 341-374; see also Zeitlin 1996, 375-416, on femaleness in Aristophanes. On the femaleness of the Clouds, see Strauss 1966, 21: "They take the place of the Muses, the virgin daughters of Zeus. […] The Clouds are the natural Muses, and Socrates is the priest of the natural Muses. If the imitative arts are a kind of wisdom, they must be akin to the archai. The Clouds derive immediately from the originating beginnings of all things and at the same time

however, where debts are mediated by (often corrupt) kings for whose edification the poet must channel the spiritual voice of the Muses and of Zeus, in Aristophanes, debts are written down in a ledger book, which Strepsiades would rather look at than the moon:

ἐγὼ δ᾽ ἀπόλλυμαι

ὁρῶν ἄγουσαν τὴν σελήνην εἰκάδας:

οἱ γὰρ τόκοι χωροῦσιν. ἅπτε παῖ λύχνον,

κἄκφερε τὸ γραμματεῖον, ἵν᾽ ἀναγνῶ λαβὼν

ὁπόσοις ὀφείλω καὶ λογίσωμαι τοὺς τόκους.

I am driven to distraction, as I see the moon bringing on the twentieths; for the interest is running on. Boy! Light a lamp, and bring forth my ledger book, that I may take it and read to how many I am indebted, and calculate the interest.

(*Clouds* 16-20)

Whereas in the fields, as we have seen in the second parabasis of *Peace* and in Dikaiopolis' Phales hymn, a natural conjunction of interests and obligations between the farmer, as caretaker, and the plant, makes inspecting the plants' growth—and the farmer's livelihood—a pleasure, in the city, keeping track of one's obligations is an affair rich only in brutal ironies: for, as Strepsiades' slave points out, "we have no oil in the lamp" (ἔλαιον ἡμῖν οὐκ ἔνεστ᾽ ἐν τῷ λύχνῳ, 56). Strepsiades' λογίσωμαι (*Clouds* 20) is not only a more unpleasant, but also a costlier, activity than Trygaeus' διασκοπῶν (*Peace* 1161).

Strepsiades describes his debts as stinging like bedbugs (12-14, 37), and as the product of something like a disease. Strepsiades says of Pheidippides,

---

conceal them, for by imitating things they claim to be the things in question; they are by nature deceiving. They reveal the nature of things by concealing it and vice versa, just as rhetoric does."

ἀλλ᾽ ἵππερόν μου κατέχεεν τῶν χρημάτων

but he infected my property with horse fever. (74)

Bedbugs = debt = disease: a complex metaphorical equation that obscures the fact that the agent sustaining debt is not an invisible, voiceless antagonist, but a human being, a person to whom other people have sacred obligations. Aristophanes reminds us of this when the creditors appear in person at line 1214, just when Strepsiades thinks he has acquired the tools he needs to defeat them. The first creditor laments the fact that lending money to Strepsiades has compelled him to become an "enemy," ἐχθρός, to a man of his own deme (ἀνδρὶ δημότηι, 1219). And yet he cannot simply cancel the debt, for he has obligations to his own family and its resources:

ἀτὰρ οὐδέποτέ γε τὴν πατρίδα καταισχυνῶ

ζῶν, ἀλλὰ καλοῦμαι Στρεψιάδην

But I will never, ever disgrace my family estate,

so long as I live, and so I call upon Strepsiades… (1220-1).

The second creditor finds himself in an even more difficult position. He has suffered an accident (1272) and has immediate need of any repayment Strepsiades can offer him—if not the principal, at least the interest. Strepsiades' failure to sympathize in any way whatsoever with the position of his creditors will soon be mirrored by Pheidippides' failure to acknowledge any sort of filial debt to his father, which will drive Strepsiades back into the arms of the old spirits.[106]

II. The Noses in the Clouds

[106] *Clouds* 1380-90, 1476-80.

Strepsiades goes into The Phrontisterion, a thoroughly urban institution and science fiction's first laboratory, not really knowing what he is getting himself into. He wants an easy solution to his financial problems, and that's it. What he encounters in The Phrontisterion is much more than he bargained for: an invitation to turn his worldview upside down, and to experience, and to learn to create in others, *cognitive estrangement*.

When Strepsiades sees Socrates "air-walking" atop the theatrical crane, his first question—after "what are you doing?"—is,

> ἔπειτ᾽ ἀπὸ ταρροῦ τοὺς θεοὺς ὑπερφρονεῖς,
>
> ἀλλ᾽ οὐκ ἀπὸ τῆς γῆς, εἴπερ;
>
> Why in the world are you inspecting the gods from that platform up there,
>
> and not from the ground, if that is in fact what you're doing? (226-7)

LSJ lists this instance of ἔπειτα under the heading "in Att. freq. to introduce emphatic questions" (II.3), and this is indeed an emphatic question, not only locally (naturally, Strepsiades very much wants to know what Socrates, whom he has come to see, is doing) but also within the more general context of religious norms. In traditional Greek religion, you don't go looking for the gods in order to inspect them; they come to you, whether as friend or foe. If you do go looking for the gods, it is to ask them about yourself, not about *their* divine nature.[107] And if you do go looking for them, you are almost certain to go to a traditional cult center such as Dodona, Delos, or Delphi, where your feet will remain firmly planted on soil or limestone or marble—not up onto a platform (ταρροῦ) on top of a theatrical crane.

[107] Compare Socrates to Chremylus in Aristophanes' *Plutus*, who goes to Delphi in the traditional way to ask Apollo whether he should raise his son in accordance with traditional morality or to be a scoundrel (32-43). On consultation at Delphi, see Scott 2014, 9-30. For an overview of the traditional means of interacting with the gods, see Burkert 1985, 54-118.

Socrates' reply takes the form of two interlocking negative hypotheticals. I would never have discovered the truth about "the things between heaven and earth," τὰ μετέωρα πράγματα, he says, had I not mixed my νόημα and my φροντίδα, which are "light," λεπτήν, with air that is "similar," ὅμοιον. Were I to remain on the ground, he claims, the earth would drag to itself "by force" (βίαι) "the moisture of thought" (τὴν ἰκμάδα τῆς φροντίδος).[108]

Socrates' physical theory seems here to be based on the theories of Diogenes of Apollonia,[109] who believed that air was the fundamental substance, and intelligent. Let us note that, regardless of its source, there is nothing anti-agricultural about Socrates' approach to τὰ μετέωρα πράγματα. On the contrary, he adds, "the same thing happens with watercress" (πάσχει δὲ ταὐτὸ τοῦτο καὶ τὰ κάρδαμα); if Strepsiades fails to grasp his point, it is perhaps because Strepsiades is no longer a farmer. That humans operate in ways that are similar to the ways in which plants operate, and that one ought to get close, physically, to anything one wants to observe accurately, are propositions one may expect any sensible and successful ancient Athenian farmer to have accepted readily. Why one might want to observe τὰ μετέωρα πράγματα, or what that might have to do with the cancelation of debt, would porbably have struck the farmer as more mysterious.

Diogenes, of course, is not the only fifth-century intellectual eccentric on whom Aristophanes' Socrates is based. When, a few lines later, in response to Strepsiades saying he has come to learn how to speak (not, by implication, to investigate τὰ μετέωρα πράγματα) he asks, "how did you not know yourself to be getting in debt?" (πόθεν δ'

[108] *Clouds* 227-34. Note also that he says, "The same thing happens with watercress," which foreshadows Pheidippides' use of an incomplete physical analogy to justify father-beating. On anxiety concerning the effects of physical force in the body, see Holmes 2010, 146.
[109] See Dover on 230-33

ὑπόχρεως σαυτὸν ἔλαθες γενόμενος; 242), he sounds like Plato's or Xenophon's Socrates chiding an interlocutor for a lack of self-knowledge.[110] Strepsiades' reply picks up on Socrates language of physical theory. Line 243,

νόσος μ᾽ ἐπέτριψεν ἱππικὴ δεινὴ φαγεῖν

a horsely disease, uncannily devouring, has crushed me,

renders explicit the significant metaphor introduced in line 74 while erasing the human agent, Pheidippides, mentioned there. It is as if Strepsiades has been inspired by Socrates' way of imagining himself as something like watercress to imagine *him*self even more vividly as a victim of natural forces beyond his control.

Immediately after Socrates and Strepsiades have introduced themselves, a direct confrontation with the decisive question of The Phrontisterion's, and in particular Socrates', religiosity, occurs. The apparently random way in which this question is introduced is in fact highly significant. Strepsiades swears by the gods to pay Socrates whatever is necessary so that he can learn "the argument that repays nothing;" Socrates responds by asking by what gods Strepsiades happens to be swearing (245-8). What is significant about Socrates' response is that, if Socrates were worried about getting his money back, one would expect him to interrogate the irony of Strepsiades' promise. By asking instead about Strepsiades' view of the gods, Socrates appears, upon close inspection, to have a religious interest that not only is not determined by, but also in tension with, rational economic self-interest. When Strepsiades asks, in response, if Socrates would prefer that he swear by iron (i.e., money itself), as rumor has it they do in Byzantium, Socrates asks whether Strepsiades would like to know the clear and correct

[110] On Aristophanes' Socrates as interested in promoting self-knowledge, see Moore 2015

truth about τὰ θεῖα πράγματα (250). Strepsiades replies, "Sure, if there is such a thing" (251). Strepsiades here appears as the mercenary skeptic (or at least as a person eager to adopt the discourse of mercenary skeptics), Socrates as the priest.[111]

The Clouds enter the scene one sensory channel at a time. At first, all we hear are their voices, singing from offstage[112] hymns critics have described as "one of the most beautiful lyric passages in Attic literature" (Charles Segal[113]) and as "merely inflated and trite" (as Parker[114] summarizes the position Michael Silk has developed at length[115]). Parker notes that "The combination of parodic strophe with serious antistrophe is unparalleled in Aristophanes…It is, however, possible that, in this instance, the metrical pattern was adaptable to both bogus and real solemnity." He also notes that, in general,

> The chorus of *Clouds* is consistently dignified and detached: it never succumbs to emotional excitement and is never involved in any rough and tumble. It does not use meters associated either with virility and aggression (cretics) or with passion (dochmiacs).[116]

The strophe characterizes the Clouds as observers, while the antistrophe says what they see when they observe Athens. What they see is a city that is flourishing in its cultivation of the traditional spirits. Socrates explains that these Clouds are beings

> αἵπερ γνώμην καὶ διάλεξιν καὶ νοῦν ἡμῖν παρέχουσιν
> καὶ τερατείαν καὶ περίλεξιν καὶ κροῦσιν καὶ κατάληψιν

[111] Strauss 1966, 15-16
[112] Dover ad loc., Parker 1997, 186
[113] Parker 1997, 188
[114] Parker 1997, 188
[115] Silk 2000, 168-79: "[The *Clouds* parodos] is a piece that exhibits none of the Aristophanic qualities we have discussed at length in the previous chapter and yet none of the qualities for which good writing in the high-lyrical sphere is rightly admired" (171).
[116] Parker 1997, 184

who offer us thought and dialectic and intelligence

and marvels and circumlocution and hits and grips (317-18)

and Strepsiades replies,

ταῦτ᾽ ἄρ᾽ ἀκούσασ᾽ αὐτῶν τὸ φθέγμ᾽ ἡ ψυχή μου πεπότηται,

καὶ λεπτολογεῖν ἤδη ζητεῖ καὶ περὶ καπνοῦ στενολεσχεῖν,

καὶ γνωμιδίωι γνώμην νύξασ᾽ ἑτέρωι λόγωι ἀντιλογῆσαι·

ὥστ᾽ εἴ πως ἔστιν ἰδεῖν αὐτὰς ἤδη φανερῶς ἐπιθυμῶ.

When I heard their voice, my soul jumped up and down,

and I was already eager to speak subtly and quibble about smoke

and piercing one thought with another, to argue with another argument—

so much so that if it's possible to see them clearly I really want to. (319-22)

It is hard to see how the Clouds' songs—particularly the antistrophe, which observes with pleasure the beauties of Athens' traditional religiosity—would cause this reaction were it not a pre-existing condition.[117] There is a mismatch, in other words, between Strepsiades' symptom and its purported cause, between the Clouds' solemnity and detachment (as Parker puts it, remember, their tone "never succumbs to emotional excitement") and Strepsiades' ἡ ψυχή μου πεπότηται, "my soul is jumping up and down," and ἐπιθυμῶ, "I strongly desire."

Strepsiades' inability or unwillingness to hear what the Clouds are actually saying when they sing from afar may suggest that he will also misunderstand their appearance when they appear in person. And, indeed, he does—but in a way that points towards a

[117] Compare *Birds* 162-4 (discussed in the next chapter), where Peisetairos responds to Tereus' description of the lovely simplicity of bird life with an enthusiastic vision of how the birds can acquire immense power.

deeper actuality: namely, that the Clouds are played by actors. He cannot see the Clouds at all until Socrates says, breaking the fourth wall, to look "towards the *eisodos*," that is to say towards the theatrical entranceway (326); doing so, Strepsiades admits to being able to see them "with difficulty" (μόλις). Soon, he has a question: "why, if they're really clouds, do they look like mortal women? For those things up there [pointing to the clouds (hopefully) above the theater] aren't like that" (τί παθοῦσαι, εἴπερ νεφέλαι γ᾽ εἰσὶν ἀληθῶς, θνηταῖς εἴξασι γυναιξίν; οὐ γὰρ ἐκεῖναί γ᾽ εἰσὶ τοιαῦται (340-2). He elaborates, at Socrates' behest, that the clouds in the sky over the theater look like sheep's fleece, whereas the actors playing Clouds look like women in that, for example, "they have noses" (αὗται δὲ ῥῖνας ἔχουσιν).

This is the moment at which Strepsiades' stupidity, which the play ultimately valorizes as a better alternative to the narcissism of obsession with novelty, is most epistemologically perspicacious. It is all well and good to observe, as Socrates subsequently encourages Strepsiades to do, that thunderstorms never occur in the absence of clouds, and to infer from that that perhaps it is better to regard clouds, rather than Zeus, as the cause of thunderstorms (369-411). But this argument, by itself, does not prove that clouds should *replace* Zeus in the right-thinking person's worldview. *That* argument ultimately rests on the sensory fact that the Clouds are present, while Zeus is absent. But of course the Clouds who are actually present in the Theater of Dionysus, like those (whatever they might look like) that are present in the theater of the mind, differ from those that, being high up in the sky, are irreducibly distant, different, deferred. That

the former "have noses" is a sign of their supplementarity,[118] and indeed of their artificiality (which accords naturally, in the Greek imagination, with femininity)—that minimum of artifice that the imagination requires.

Socrates' subsequent explanation, that the Clouds look like women because they imitate the mania of whomever or whatever they see, and upon entering the theater they have seen Kleisthenes (348-55), may thus be read not only as a crude *ad hominem* insult, but also (because in Aristophanes "Kleisthenes" acts not so much as a proper name but more as a signifier of the effeminacy of whoever is effeminate—which may be anyone) as an indication of the supplementarity and artificiality inherent in every person's worldview.

If the Clouds' entrance highlights the gap between illusion and reality, the discussion of thunderstorms highlights the slippage that often occurs between personal and impersonal imagination of natural phenomena. Socrates' reply to Strepsiades' question as to what causes thunder is that αἰθέριος δῖνος (380), "etherial whirlwind," causes the clouds to collide with each other. As Andreas Willi has recently pointed out, Strepsiades' reply,

> Δῖνος; τουτί μ᾽ ἐλελήθει,
>
> ὁ Ζευς οὐκ ὤν, ἀλλ᾽ ἀντ᾽ αὐτοῦ Δῖνος νυνὶ βασιλεύων
>
> Dinos? I didn't realize that,
>
> that Zeus no longer exists, but Dinos now rules in his place (380-1),

"(mis)takes Δῖνος for the name of a divinity," whereas "for Socrates, αἰθέριος δῖνος 'a rotation/whirl in the air' may simply be another atmospheric phenomenon."[119] While

[118] For Pandora, and woman more generally, playing the role of the Derridean supplement in Greek thinking, see Zeitlin 1996, 67n.24.

Strepsiades' understanding is a mistake in the sense that it does not correspond to what Socrates wished to communicate, it is a mistake encouraged by the Greek language, for as Willi notes, "Formally, the unusual word or 'name' Δῖνος could be interpreted as a thematized contamination of the regular oblique stem of Ζεύς, Δι- (gen. Διός), with the poetic alternative oblique stem Ζην-."[120] It is not easy to move from the spiritual to the mechanical worldview. Strepsiades, in fact, will find it impossible; his son, on the other hand, will learn the lesson easily enough.

III. The Unstable World: Matter Unbound

The idea that everything is mutable is of ancient provenance. Heraclitus famously declared that it was impossible to step twice into the same river, illustrating the larger principle that, as Plutarch puts it, "it is not possible…to catch hold of any mortal being twice in the same state" (οὐκ ἔστιν…θνητῆς οὐσίας δὶς ἅψασθαι κατὰ <τὴν αὐτὴν> ἕξιν, B91). Furthermore, he declared,

> πυρός ἀνταμοιβὴ τὰ πάντα καὶ πῦρ ἁπάντων ὅκωσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός.
>
> Everything is exchangeable for fire, and fire for everything, just as goods are exchangeable for gold, and gold for goods. (B90)

This dictum seems to anticipate the commercial ideology according to which everything can be transformed by the fires of industry into something profitable. The Greeks certainly associated fire with τέχνη: it was the chief tool of Hephaistos, the divine craftsman, as well as the tool the Prometheus stole for mortals. A fragment of Heraclitus

[119] Willi 2003, 101, and 100-110
[120] Willi 2003, 101

(B58) names "burning," καίοντες, as a tool doctors use. But there may also be an ironic point to fr. B90, inasmuch as fire is associated not only with creation but also, equally, with destruction.[121] Fr. B58 says sardonically that doctors, by burning and cutting, "produce the same benefits as diseases" (ταὐτὰ ἐργαζόμενοι, [τὰ] ἀγαθὰ καὶ αἱ νόσοι). Fr. B43 declares, "violence must be extinguished more than fire," ὕβριν χρὴ σβεννύναι μᾶλλον ἢ πυρκαϊήν. Furthermore, Heraclitus evidently did not conceive of limitless purchasing as a good thing. "It is hard to fight against passion [θυμῶι]; for whatever it wills, it buys at the expense of the soul [ψυχῆς ὠνεῖται]" (B85). And B110: ἀνθρώποις γίνεσθαι ὁκόσα θέλουσιν οὐκ ἄμεινον, "it is not better for men to get whatever they wish."

Whereas Heraclitus spoke about mutability in riddles, the atomists Leucippus and Democritus developed a coherent physics that implied the mutability of all things. This physics is relevant to an interpretation of *Clouds*, for Socrates' physics is similar to that of the atomists in several notable respects.[122] Democritus, for example, claimed that a collision of clouds (σύγκρουσιν νεφῶν, Aëtius' testimonium 68A93) causes lightning; Socrates says,

---

[121] See fr. B66: "Fire coming suddenly upon all things will judge and convict them." Hesiod's Pandora is also associated with fire: Zeitlin 1996, 56, 59.

[122] The extent to which the thought of the atomists influenced Aristophanes, whether directly or indirectly, is unclear. Willi 2003, 103-4, notes the appearances of δῖνος and δίνη in the fragments and testimonia of Democritus and Leucippus, but claims, without explanation, that "For chronological reasons it is unlikely that Democritus is the source of inspiration for our passage in *Clouds* [380-1]." Graham 2010, 616, puts Democritus' birth in the decade 470-460, and notes that "He visited Athens but apparently did not stay there long." Willi's thinking must be that Democritus' ideas are not likely to have been well known in Athens in 423; similar thinking may account for the absence of Democritus in Laks and Cottone 2013. Since the chronological evidence is inconclusive (and, in any case, Leucippus and Democritus were both undoubtedly older than Aristophanes), and since the scientific ideas in *Clouds* are drawn from a variety of sources, I think it is best to highlight and interrogate parallels between The Phrontisterion and the atomists rather than to assume *a priori* that such parallels are illusory.

οὐκ ἤκουσάς μου τὰς νεφέλας ὕδατος μεστὰς ὅτι φημὶ

ἐμπιπτούσας εἰς ἀλλήλας παταγεῖν διὰ τὴν πυκνότητα;

Haven't you heard from me that clouds, being full of water,

colliding with each other burst and clap because of their density? (383-4)[123]

Furthermore, the *Clouds* keyword δῖνος occurs several times in the fragments and testimonia of Democritus. Simplicius preserves the following original fragment:

δῖνον ἀπὸ τοῦ παντὸς ἀποκριθῆναι παντοίων ἰδεῶν.

a vortex of all sorts of forms was separated off from the totality. (68B167)

In Democritus' cosmology, everything that exists consists fundamentally of atoms (also referred to as τὸ πλῆρες "the full") and void (τὸ κενόν), which are constantly in motion (68A40). The δῖνος of the fragment above refers to the infinite number of atomic vortices that separate off from an original totality, producing worlds that develop according to an internal logic (68B5.1, 68A40) and destroy each other when they collide.[124]

For Democritus, then, δῖνος really does seem to play the role of Zeus, at least on a cosmic scale. Democritus' biology, closely connected to his cosmology,[125] is also perhaps an influence, whether direct or indirect, upon the Phrontisterion's approach to life.[126] Plutarch preserves the following fragment (68B154):

[123] On Socrates' theory of thunderstorms, see Dover on 404-7

[124] On Democritus' cosmology, see Taylor 1999, 195-7.

[125] Taylor 1999, 197: "The use of these [biological] terms [in atomist cosmology] indicates not so much a vitalistic conception of cosmogony as the continuity in atomistic theory between the organic and the inorganic. Worlds can literally be thought of as large-scale organisms, since organisms are nothing but highly complex arrangements of atoms, whose pattern of development and decay is ultimately attributable to the necessity constituted by the behavior of the atoms."

[126] On Democritus' biology, see Taylor 1999, 197-9.

μαθητὰς ἐν τοῖς μεγίστοις γεγονότας ἡμᾶς· ἀράχνης ἐν ὑφαντικῇι καὶ ἀκεστικῇι, χελιδόνος ἐν οἰκοδομίαι, καὶ τῶν λιγυρῶν, κύκνου καὶ ἀηδόνος, ἐν ὠιδῆι κατὰ μίμησιν.

We have become the pupils [of animals] in the greatest arts: of the spider in weaving and mending, of the swallow in building, of the songbirds, the swan and the nightingale, in singing, by our imitation of them.

This passage may perhaps indicate Democritus' answer to where, if not from Prometheus, humans learned technical skills. For Diodorus Siculus reports that Democritus believed that life arose through the evolution of inorganic into organic matter: that which was colder produced land animals, the hotter winged animals.[127]

If Democritus provided the most robust and vibrant vision of all things as mutable, it was Sophocles who provided the most robust poetic account of the power of human engineering to change things for human ends. Here I will briefly summarize the contents of the famous choral ode (*Antigone* 332-75) that begins πολλὰ τὰ δεινὰ κοὐδὲν ἀνθρώπου δεινότερον πέλει (332-3). The first strophe sings of human control over the sea and the earth, "loftiest of the gods" (337-8), whom humans "wear out"—even though she is "tireless"—with endless plowing. The antistrophe tells how humans κρατεῖ…μηχαναῖς, "dominate by mechanisms" (347-8), both wild and domesticated animals. The second strophe tells how humans have taught themselves "speech and wind-swift thought (φρόνημα) and city-governing characters (ὀργὰς)" (354-6), and how to

[127] 68B5.1. 68B5.3 says of humans, "But when they became more forward-looking and began to plan, they discovered fire, and conceived a desire for warmer—that is: more decadent—arrangements. They abandoned the practice and condition of a frugal and free life in favor of an artificial order in which luxurious pleasures and joys arose to seduce us like a woman and make us self-indulgent, which the poet calls the invention of femininity." On Democritus' anthropology, see Cole 1990.

escape bad weather and diseases; nevertheless, it is all for nothing, since no escape for death has been found. The final antistrophe addresses the fact that τέχναι can be used either for good or ill, and recommends the good use.

This ode is rightly regarded as a deeply representative expression of the characteristically Greek combination of optimism and pessimism concerning technical innovation and technical power.[128] In *Clouds*, the two poles of this formula are mapped onto two separate but closely related figures: The Phrontisterion, and Socrates most of all, plays the role of technological optimist, while the Clouds eventually reveal that, despite appearances to the contrary, they have been playing the role of technological pessimist all along:

> ἡμεῖς ποιοῦμεν ταῦθ᾽ ἑκάστοθ᾽, ὅντιν᾽ ἂν
> γνῶμεν πονηρῶν ὄντ᾽ ἐραστὴν πραγμάτων,
> ἕως ἂν αὐτὸν ἐμβάλωμεν εἰς κακόν,
> ὅπως ἂν εἰδῇι τοὺς θεοὺς δεδοικέναι.
> We do the same thing each time: whomever
> we happen to recognize is a lover of bad business,
> we lead him on deeper and deeper into the badness,
> until he learns to fear the gods. (1458-61)

The term πράγματα in Aristophanes typically denotes the very most human of human affairs: those that occur in the urban center of the city, the *astu*, in the lawcourts and council and assembly, and concern the acquisition and disposition of *kratos* (power).[129]

[128] See e.g. Heidegger 1996, 51-122, in which a reading of this ode reveals "The Greek Interpretation of Human Beings."
[129] Ehrenberg 1947

That is why, when in *Birds* Peisetairos and Euelpides are looking for a τόπον ἀπράγμονα (44), they must go not only outside the city of Athens, but beyond the Red Sea, for even there, the state trireme *Salaminia* might find them (144-7). In the next chapter we shall see that their search is doomed from the outset, for they carry within themselves the seeds, or germs, of the greatest πράγματα.

As for the Phrontisterion, it unabashedly concerns itself πράγματα of very diverse sorts, all of which somehow involve change. Here is how the Phrontisterion is first introduced into the play. Strepsiades takes Pheidippides to it, points, and says:

> ψυχῶν σοφῶν τοῦτ᾽ ἐστὶ φροντιστήριον.
> ἐνταῦθ᾽ ἐνοικοῦσ᾽ ἄνδρες, οἳ τὸν οὐρανὸν
> λέγοντες ἀναπείθουσιν ὡς ἔστιν πνιγεύς,
> κἄστιν περὶ ἡμᾶς οὗτος, ἡμεῖς δ᾽ ἄνθρακες.
> οὗτοι διδάσκουσ᾽, ἀργύριον ἤν τις διδῷι,
> λέγοντα νικᾶν καὶ δίκαια κἄδικα.
> This is the Phrontisterion of clever minds.
> Here live men, who explain persuasively that the heaven
> is an oven, and this is what's around us, and we are the charcoals.
> These people teach, if someone gives them money,
> to conquer through speech both justice and injustice. (94-99)

This passage implies that some of The Phrontisterion's teachings, in particular its cosmology, are freely available, or at least widely known, while others must be paid for.[130] The world-as-oven cosmology, which for serious thinkers would perhaps have

[130] Strauss 1966, 13

been an analogy rather than a definition, perhaps constitutes the first "instrumental" view of the cosmos.[131] Certainly it is an apt image of the way Aristophanes' Kleon, narcissistic cynicism incarnate, views the world: as a tool to gratify his appetites.[132]

When Strepsiades enters the Phrontisterion, he hears of a variety of different experiments carried out by the thinkers and sees a variety of different investigative instruments. Two of Socrates' experiments involve insects: in one, he devises a method for measuring the footprint of a flea; in the other, he investigates the means by which a gnat produces its buzz. Although they may appear to be frivolous, these experiments call to mind Democritus' claim that "in the greatest matters," ἐν τοῖς μεγίστοις, humans have been the "pupils," μαθητάς (the same word used for the students of Socrates; see e.g. 140, 142), of humble animals such as the spider. And they foreshadow Pheidippides' use of an analogy between human behavior and bird behavior to justify beating his father. The crucial difference between Socrates' approach to animals and Pheidippides', however, is that Socrates observes carefully with, as far as we can tell, no particular commercial application in mind,[133] whereas Pheidippides does not even observe but makes things up on the spot for purely self-serving ends.

As for instruments, Strepsiades sees something that signifies ἀστρονομία (201), something that signifies γεωμετρία (202), and a γῆς περίοδος πάσης (206). When Strepsiades asks, as to the second instrument, whether by γῆν ἀναμετρῆσαι (the pupil's

[131] On the image of the πνιγεύς, see Picot 2013.
[132] See e.g. *Knights* 258-60 (Kleon "eats up," κατεσθίεις, the public funds, and eats magistrates like figs whether they are ripe or not), 312 (Kleon "fishes" for tribute), 1204 (Kleon uses the verb ὤπτησά, "I roasted [the meat]," to describe his victory at Pylos).
[133] On Socrates' general lack of interest in money, see Strauss 1966, 15-16 and 32-33: "Contrary to popular rumor he does not teach 'for money.' He could easily have become rich by demanding money for the art of speaking (876), but he does not have the slightest interest in gain, although his goddesses advise him to take advantage of his pupils" (32).

answer to Strepsiades' question as to the thing's use) he means in particular τὴν κληρουχικήν, that is to say land in the cities of Athens' "allies" allotted to Athenian citizens who would live there as a kind of garrison—in other words, whether this land-measuring thing is a tool for wielding a particular form of political and economic power—the pupil replies, οὔκ, ἀλλὰ τὴν σύμπασαν, "no, any sort of land whatsoever" (204). As for the map, if it is useful it is so in a different way from that in which Strepsiades first thinks to use it—namely, to transport Sparta somewhere farther away from Athens. In sum, although the one teaching of the Phrontisterion by which Strepsiades introduces the place to Pheidippides seems clearly to symbolize an instrumental worldview, the first activities Strepsiades actually hears of and sees first-hand in the Phrontisterion paint a rather different picture.

Let us back up, briefly, and look at the words with which Strepsiades first introduces his "big idea" to use The Phrontisterion to solve his problems:

> νῦν οὖν ὅλην τὴν νύκτα φροντίζων ὁδοῦ
> μίαν ηὗρον ἀτραπὸν δαιμονίως ὑπερφυᾶ,
> ἣν ἢν ἀναπείσω τουτονί, σωθήσομαι.
> But now, after thinking all night long about the way forward,
> I have found one short-cut, devilishly monstrous;
> if I can persuade this one [Pheidippides] to go along, I'll be saved. (75-7)

The participle φροντίζων comes from the verb on which the neologism φροντιστήριον is built: thus, Strepsiades has been thinking before he ever enters The Phrontisterion. Our first clues as to what he has been thinking about lie in the phrase ἀτραπὸν δαιμονίως ὑπερφυᾶ. The first word, ἀτραπὸν, means "short-cut." The next word, δαιμονίως, has

a great deal of semantic overlap with the word Sophocles used to signify human technological potency: δεινά (*Antigone* 332), which Griffith 1999 *ad loc*. glosses as "terrible," "awe-inspiring," "wonderful," "strange," "clever," "extraordinary."[134] The adjective ὑπερφυής has as its primary meaning "growing higher than the rest" (LSJ I), and as a secondary derived meaning, "monstrous, extraordinary, in good and bad sense" (LSJ II). Here it anticipates Strepsiades' first characterization of Socrates' activities up on the *mechane*—τοὺς θεοὺς ὑπερφρονεῖς—not only because ὑπερφρονεῖς and ὑπερφυᾶ sound similar, but also because Socrates will be shown doing physically what Strepsiades has been doing mentally from the (corrupted) comfort of his bed: "thinking above" nature (φύσις).[135]

Unlike Socrates, however, Strepsiades has been thinking from the beginning primarily of his own financial situation, and in particular how σωθήσομαι, "I will be saved." He goes to The Phrontisterion not in order to learn whatever they have to teach there, but specifically in order to acquire a tool for canceling debt. In other words, he instrumentalizes, or tries to instrumentalize, The Phrontisterion. We should bear this in mind when we hear the following exchange:

> Σω. ἄγε δὴ κάτειπέ μοι σὺ τὸν σαυτοῦ τρόπον,
>
> ἵν᾽ αὐτὸν εἰδὼς ὅστις ἐστὶ *μηχανὰς*
>
> ἤδη ᾽πὶ τούτοις πρὸς σὲ *καινὰς* προσφέρω.
>
> Στ. τί δέ; τειχομαχεῖν μοι διανοεῖ πρὸς τῶν θεῶν;
>
> Socrates. Come now, explain to me your constitution,

[134] See also Heidegger 1996 [1984], 63-74

[135] Cf. *Knights* 141: ἔτ᾽ ἐστὶν εἷς ὑπερφυᾶ τέχνην ἔχων, which refers to the Sausage Seller; the irony of the line being that although the Sausage Seller's *techne* is ordinary to the point of being banal, when expanded into a total political strategy it becomes marvelous/monstrous.

so that knowing it I may bring *new mechanics*

to bear upon your situation.

Strepsiades. What? By the gods, do you intend to besiege me? (378-481)

This exchange clearly characterizes Socrates as not only an investigator, but also as an inventor of the sorts of devices Sophocles is thinking of in the Ode to Man (see e.g. *Antigone* 348-50, κρατεῖ δὲ μηχαναῖς ἀγραύλου θηρὸς ὀρεσσιβάτα). At this point, evidently, Socrates has put his more open-ended researches on hold to focus on solving Strepsiades' problems. Strepsiades, who knowing Greek knows that μηχαναί can refer to both war machines and hunting devices (as it does e.g. at *Antigone* 349), begins to wonder at this point, like a patient catching his first glimpse of the dentist's drill, whether the cure, however effective, is going to hurt; or, to put it more abstractly, he worries about finding himself in the "object position," as instrument whether than instrumentalizer.

As for Socrates, he appears here not, like Pheidippides at the end of the play, as a charlatan, but as a careful engineer who wishes to understand what he is trying to modify before he acts upon it. When he says that he will bring new mechanics to bear upon Strepsiades' τρόπος, he is assuming that the latter can be altered, in a deliberate way, by human agency. Any good farmer would share the view that living organisms can be modified in a deliberate way by attentive tinkering. Trying to change an organism like Strepsiades into a master of subtle speech, however, is an undertaking that belongs to the realm of the mad scientist.

IV. Humanocentrism

If it is fair to say that Aristophanes consistently represents human life—or at least male-dominated human life—as inherently (but perhaps not necessarily incorrigibly) competitive, then it should also be fair to say that, in Aristophanes, the "holy grail" of human(ocentric) aspiration is a *loophole*, that is to say a competitive advantage uniquely available to the protagonist(s).[136] Dikaiopolis makes a private peace; the oppressed slaves of Demos discover the Sausage Seller; Strepsiades goes looking for the "unjust logos;" Philokleon can slip through any crack in the wall; Trygaeus manages to fly to Olympus on a gigantic dung beetle… Sometimes in Aristophanes, as for example in *Peace*, the loophole signifies a course of action that is, or should be, available and beneficial to

[136] I take Aristophanes' representation of life as inherently competitive as the key index of his realism. Auerbach, citing ("with satisfaction") counterexamples proposed by Classicists to his thesis that realism was "alien to antiquity," many of which were from comedy or related genres, wrote, "I call the realism that is alien to antiquity serious, problematic, or tragic; I set it in express opposition to the 'moralistic.' Perhaps I would have done better to call it 'existential realism,' but I hesitated to use this all too contemporary term for phenomena of the distant past" (Auerbach 2003 [1953], 561). Today we are perhaps more accustomed than were scholars in Auerbach's day to think in fundamentally economic terms, and from that perspective, nothing is more "serious, problematic, or tragic" than the competitive nature of life at every level, which Greek Old Comedy was peculiarly adept at registering. Humans are capable of impressive feats of cooperation and tend to value these feats as a great good, perhaps the greatest good. But cooperation is vulnerable to internal competition, which in all but the most rigid systems arises fairly easily (see Beinhocker 2007 for computer modeling of economic behavior that illustrates this). And every cooperative entity is, in some larger perspective, in competition with other entities. Thus, the dream of harmony that haunts not only Old Comedy, but also the loftiest religious aspirations, is unattainable—apart from the operativity of some "figure of totality." Aristophanes registers this unattainability at least as clearly as does Balzac, and thus has at least as much right to be called a "serious, problematic, tragic" realist. Cf. Tomberg 2013's sensible, if somewhat superficial, remarks on realism: "I see realism not solely as an historically closed nineteenth-century literary genre with aspirations toward a plausible mimetic description of that moment's socio-cultural and material reality, nor solely as an ahistorical marker for a purely mimetic technique of description, but rather as a commonsensical combination of the two: realism is whatever we are looking for if we are looking for a technique for a plausible mimetic description of a given socio-cultural and material reality."

(almost) the entire community.[137] Other times, as in *Clouds* and *Wasps*, it signifies a course of action that would benefit a minority to the detriment of the majority.

The loophole that in *Clouds* is the focal point of Strepsiades', and eventually Pheidippides', desires, is, from the perspective of a narcissistic hedonist, the ultimate loophole: a technique for eliminating responsibility and consequences completely. In *Clouds*, this technique involves only words; in Jennifer Haley's *The Nether* (2015), which we will look at in the final section, it involves words and electronic bits. In both cases, devotion to the humanocentric loophole involves a turning away from organic life.

In this section, I am going to focus on two sections of *Clouds* that revolve around questions of competitive loopholes: the *agon* between the Greater Logos and the Lesser Logos, and the breakdown of communication between Strepsiades and Pheidippides. The obvious moral implication of both scenes is that the radically self-centered worldview advocated by the figure sometimes referred to as the "lesser Logos," other times as the "unjust Logos," is tempting but ultimately disastrous. The most interesting questions to ask, then, have to do with the details of how Aristophanes portrays the temptation—what makes it tempting?—and why it leads to disaster.

The debate between the Logoi is structured around a series of polar oppositions that the Logoi themselves, and the chorus, articulate in the clearest possible terms. After a vitriolic prelude that introduces oppositions such as δίκη, "justice" (Greater Logos) vs. the nonexistence of justice (Lesser Logos: οὐδὲ γὰρ εἶναι πάνυ φημὶ δίκην, 900-2);

[137] At the beginning of *Peace*, a slave says of Trygaeus, "My master is mad with a new kind of madness, / not like you all [the audience], but something much newer" (ὁ δεσποτής μου μαίνεται καινὸν τρόπον, / οὐχ ὅνπερ ὑμεῖς, ἀλλ' ἕτερον καινὸν πάνυ, 54-5). Trygaeus' madness, unlike Strepsiades', is altruistic. That is no doubt why it is successful—and also why it is so novel.

ἀρχαῖος, "old-fashioned" vs. θρασύς, "shamelessly bold" (915); and σοφίας, "wisdom," vs. μανίας, "insanity" (925)[138]; the chorus says,

> ἀλλ᾽ ἐπίδειξαι σύ τε τοὺς προτέρους
> ἅττ᾽ ἐδίδασκες, σύ τε τὴν καινὴν
> παίδευσιν, ὅπως ἂν ἀκούσας σφῶιν
> ἀντιλεγόντοιν κρίνας φοιτᾶι.
> But you [Greater Logos], explain what you taught
> men of the past, and you [Lesser Logos] explain the new
> education, so that this one [Pheidippides], hearing you debate,
> can make his choice. (936-8)

This choral instruction is highly significant, for it indicates that old vs. new is the fundamental opposition to which other categorical oppositions (such as science vs. religion, unhealthy vs. healthy, modest vs. shameless, etc.) that occur in the *agon* are subordinate.

Greater Logos paints the past as a way of life dominated by modesty and self-control, particularly control over sexual instincts; repetition of traditional models, for which musical models serve as a paradigm; and healthy outdoor activities. In the olden days, children kept silent—an instance of the "control of instincts" theme—and walked εὐτάκτως, "in good order," to the *kithara* teacher's place, where they kept their thighs together (966)—another instance of the "control of instincts" theme—and learned τὴν ἁρμονίαν, ἣν οἱ πατέρες παρέδωκαν (968). This is the kind of education that produced the Μαραθωνομάχαι, the men who defeated the Persians in the Battle of Marathon

[138] Note that μανία is a particularly contested term, since in line 932 Lesser Logos says to Pheidippides about Greater Logos, δεῦρ᾽ ἴθι, τοῦτον δ᾽ ἔα μαίνεσθαι.

(986). Such men hate the *agora* and keep away from the baths (991), they are ashamed at what is shameful (992), and as a result they have strong, well-proportioned bodies (1010-1014).

One of Lesser Logos' main argumentative strategies is to pick apart the oldness of Greater Logos' old way. In the prelude to the main argument, Lesser Logos challenges his rival's claim that justice exists "among the gods" by citing Zeus's legendary violence against his father Kronos (904-6); later, he notes that any adulterer can reasonably claim to be following Zeus's example (1079-82). He also notes the association of Heracles, whom Greater Logos cites as the best and most courageous of the sons of Zeus, with warm baths (1050-2), and reminds Greater Logos of Nestor's and other Homeric heroes' associations with the *agora* (1056-7).

In his citations of mythic counterexamples to Greater Logos' story, Lesser Logos does not go nearly so far down the path of "twisted speech" as he might. He does not, for example, cite Zeus's violence against his father Kronos as an example of *good* behavior, but rather as a counterexample to Greater Logos's claim that justice resides among the gods—i.e., as an example of *bad* behavior. Recognition that traditional myths depicted the gods behaving badly predates the generation of Marathon fighters; Xenophanes (c.570-c.475 BCE), whose moral views are consistent with those of Greater Logos, accused traditional myths of lying for this reason. Gorgias' *Encomium of Helen* goes a step further, praising as good a character whose behavior was traditionally regarded as bad. Lesser Logos promises to enable his devotees to justify behavior conventionally regarded as bad, but he does not explain how he will do this. We will have to infer the mechanics of his methods from their effects upon Pheidippides.

The scenes involving Strepsiades and Pheidippides that follow the *agon* of the Logoi further complicate the "old vs. new" opposition so firmly established at the beginning of the *agon*. The old man learns from his son Pheidippides what he had not been able to learn from Socrates, namely an effective means of dispensing with his creditors. He is an enthusiastic pupil, unable to keep his mouth shut. From the moment Pheidippides emerges from The Phrontisterion to the celebratory feast Strepsiades throws after driving away the creditors, the old man behaves like a youth; it is as if his initiation, which had to be accomplished vicariously through his son, had finally produced the sort of rejuvenation that typically befalls lucky old men, such as Dikaiopolis and Demos and Trygaeus, in Aristophanes' stories.[139]

After the feast, however, things turned sour. Strepsiades reverted to behaving like an old man and asked to hear Simonides.[140] Pheidippides objected that Simonides was a "bad poet" (1362). Strepsiades attempted to compromise, suggesting Aeschylus; Pheidippides shot the suggestion down with a sarcastic witticism. Strepsiades, "biting back his spirit" (1369) like some epic hero, magnanimously gave Pheidippides free reign to play whatever he would like. Pheidippides then gave a speech of Euripides about a brother fucking his own sister (1371-2). Unable to endure this provocation, Strepsiades chastised his son for abusing his liberty; an epic war of words ensued (1375); finally,

[139] Strauss 1966 waxes lyrical on this temporary reconciliation: "The present scene is the only one in which we see father and son in perfect harmony. They had always loved one another, but hitherto their tastes and interests had always differed widely; by having become perfectly reconciled to Socrates, Pheidippides has become perfectly reconciled with his father. The alleged corruptor of the young has not merely enabled the son to perform his filial duty for the first time in his life; he has established perfect harmony between son and father. May this blessed moment last. It is fittingly the moment when the happy and proud father is going to feast his son" (35).
[140] It is appropriate that Simonides is Strepsiades' first choice, considering the former's reputation as the "greedy poet," on which see Carson 1999, 15-27. And it is perhaps deliberately ironic, considering that reputation, that Simonides stands here for one of the "good, old poets."

Pheidippides "beat and flogged and strangled and throttled" his father (1376). The gradual escalation of this argument renders it a fairly realistic representation of how an interfamilial and intergenerational quarrel might arise: subtle gaps (Strepsiades' inability to completely change his taste in music) set in motion an escalating dynamic of conflict.

Pheidippides' first lengthy statement in his own defense charts a trajectory from the enjoyment of life to the enjoyment of *logos* alone:

> ὡς ἡδὺ καινοῖς πράγμασιν καὶ δεξιοῖς ὁμιλεῖν,
> καὶ τῶν καθεστώτων νόμων ὑπερφρονεῖν δύνασθαι.
> ἐγὼ γὰρ ὅτε μὲν ἱππικῇ τὸν νοῦν μόνῃ προσεῖχον,
> οὐδ᾽ ἂν τρί᾽ εἰπεῖν ῥήμαθ᾽ οἷός τ᾽ ἦν πρὶν ἐξαμαρτεῖν:
> νυνὶ δ᾽ ἐπειδή μ᾽ οὑτοσὶ τούτων ἔπαυσεν αὐτός,
> γνώμαις δὲ λεπταῖς καὶ λόγοις ξύνειμι καὶ μερίμναις,
> οἶμαι διδάξειν ὡς δίκαιον τὸν πατέρα κολάζειν.
>
> How pleasant it is to be acquainted with new and clever things, and to be able to despise the established laws! For I, when I applied my mind to horsemanship alone, used not to be able to utter three words before I made a mistake; but now, since he himself has made me cease from these pursuits, and I am acquainted with subtle thoughts, and arguments, and speculations, I think I shall demonstrate that it is just to chastise one's father. (*Clouds* 1399-1405)

It has not taken Pheidippides long to learn that the power his father encouraged him to acquire for purely selfish reasons may be used to further his own purely selfish ends. Nor has it taken the boy who at the beginning of the play was talking of horses in his sleep long to forget the pleasures he used to take in those animals. The companions he now

prefers are not other animals with their own lives, but γνώμαις…λεπταῖς, λόγοις, and μερίμναις: the products of his own brain.

Pheidippides' justification for beating his father, which is the result of the Lesser Logos's teaching, goes a step beyond Gorgias' *Encomium of Helen* in its defense of conventionally bad behavior. For whereas Gorgias seeks to absolve Helen of agency (and therefore moral culpability), Pheidippides assumes both agency and responsibility for his behavior to the extent that he proposes enshrining it in law. What are his arguments for doing so? First, that δὶς παῖδες οἱ γέροντες, "old men are children again" (1417), an argument that emphasizes the mutability of the human person inasmuch as he is bound to a mortal body. Second, that the existing law is nothing more than an effect of human persuasion, so human persuasion can change it:

> οὔκουν ἀνὴρ ὁ τὸν νόμον θεὶς τοῦτον ἦν τὸ πρῶτον
> ὥσπερ σὺ κἀγώ, καὶ λέγων ἔπειθε τοὺς παλαιούς;
> Was not the first one to establish this law a man like you and I,
> who by speaking persuaded the people of his day? (1421-2)

Law, in other words, is also mutable. Finally, he argues that "cocks and other animals like that" (τοὺς ἀλεκτρυόνας καὶ τἄλλα τὰ βοτὰ ταυτί) beat their fathers, and

> τί διαφέρουσιν
> ἡμῶν ἐκεῖνοι, πλήν γ᾽ ὅτι ψηφίσματ᾽ οὐ γράφουσιν;
> how do they differ
> from us, except that they don't write votes? (1428-9),

This shows not so much a mastery of the "naturalistic" mode of explanation that Socrates earlier employed to demonstrate that impersonal forces, not Zeus, cause thunderstorms

(369-411),[141] but rather a selective, self-interested view of the lives of other animals. The problem with Pheidippides' arguments is not that they are unserious or illogical: all the points have some validity. But other valid points are omitted.[142] The reason for that, and the problem with Pheidippides' argument, is that it is motivated solely by Pheidippides' momentary desire to exercise power. Pheidippides inherits and magnifies the narrowly humanocentric attitude with which Strepsiades entered The Phrontisterion. Pheidippides does not consider whether the laws he would overturn, or the new laws he proposes for that matter, would contribute to the welfare of fathers and sons generally, much less to the welfare of the ecological system that links fathers and sons to springs, fig trees, vines, houses, courts, theaters, and sanctuaries.

We always knew that Pheidippides was selfish and shortsighted. What we did not know was that this lover of horses was capable of abandoning that love in favor of clever words and the exercise of raw power. Strepsiades responds by returning hysterically to Hermes,[143] by fleeing the new greed machine and running back to the old personification of moderate greed, and burning down The Phrontisterion. He would've been better off burning his ledger books and playing dumb from the very beginning.

---

[141] Strauss 1966, 39: "the Unjust Speech establishes his recommendations—and therefore in particular the justice of father-beating—on the basis of the stories of the gods or on the basis of the poets whereas…Pheidippides establishes the justic of father-beating by 'physical' arguments. 'Stronger and weaker speech' may mean both 'the Just and the Unjust Speech' and 'poetic and physical speech.'"

[142] Such as, for example, that other birds behave differently from cocks (if cocks even behave the way Pheidippides says they do). We shall see in the next chapter that in *Birds*, Peisetairos' attitude towards birds is also humanocentric (and, in particular, self-interested), albeit less narrowly so than Pheidippides'.

[143] Strepsiades laments οἴμοι παρανοίας· ὡς ἐμαινόμην ἄρα, / ὅτ' ἐξέβαλλον τοὺς θεοὺς διὰ Σωκράτη (1476-7), and then addresses Hermes as ὦ φίλ' Ἑρμῆ, "O beloved Hermes" (1478); this is less a "return to traditional religion," as it is often characterized, than it is a "deathbed conversion" to traditional religion—although one can only say this if one acknowledges that the inherent ironies of Greek religion render any talk of "conversion" ironic: in this case, if one recalls that Hermes is the god of mercenary deception, it may appear that Strepsiades' whole quest in The Phrontisterion occurred under the sign of Hermes.

V. From The Phrontisterion to *The Nether*

Clouds is ultimately about the promises and perils of radical innovation in how humans conceptualize the universe and our place in it. Posthumanism is arguably one such innovation, and its critics might be inclined to read *Clouds* as a stern warning against following the newest trend—especially considering the parallels it is not difficult to draw between the Phrontisterion's devotion to naturalistic explanation (i.e., explanation in terms of impersonal forces rather than personal divinities) and posthumanism's inclination to construct a worldview not centered on human personality or human agency. On the other hand, it would be grossly inaccurate to identify posthumanism with the radically narcissistic worldview Pheidippides carries with him when he exits the Phrontisterion. As a caricature, this Pheidippides seems to me in fact to have much more to say about the dangers inherent in humanism's tendency towards humanocentrism.

This is particularly true inasmuch as what we call "humanism" today is, at least in the academy, radically secular. Humanists may claim quite reasonably that ancient Greeks were primarily interested in themselves and their own welfare—not, like bleeding-heart (or millennially terrified) posthumanists, other animals and the natural environment. But unlike non-religious humanists, the ancient Greeks vested ultimate moral and poetic authority in a divine Other, however illusory.[144] Plato, who understood

[144] Bowden 2005, commenting on a fourth-century inscription (IG ii^2 204) that records the procedure for consulting and revealing to the Assembly the results of this consultation of Apollo at Delphi concerning the "Sacred Orgas" ("an area of consecrated land owned by the sanctuary of Demeter and Kore at Eleusis," the boundaries of which were "a constant cause of friction between Athens and Megara," 90-1), writes: "What is also striking, even for us in an age used to the 'stage-management' of modern political life, is the theatricality of the whole process. What

as clearly as anyone the illusory nature of divinity, never thought of abandoning the illusion; on the contrary, in the *Laws*, he declares very explicitly that it is indispensible.[145]

In *Clouds*, as we have seen, Socrates makes great use of the illusion of divinity; and yet, in the end, the puppets seem to take on a life of their own as they turn violently against the puppet-master. *Clouds* thus bears a certain resemblance to Euripides' *Bacchae*: Pentheus, like Socrates, fancies himself the master of illusion, and yet in the end he is destroyed by the true divine master, Dionysus himself. One should certainly see Dionysus in Aristophanes' Clouds, and one might also see Aristophanes' Clouds in Euripides' Dionysus: the answer to the old question of whether Euripides, tragedy's notorious mad scientist, reverted at the end of his life to traditional religiosity, is perhaps that in fact divinity in Euripides always signifies not so much a particular divine personality thought to reside on Mount Olympus, but rather whatever excess, whatever alien, lies threateningly outside human *kratos*, and demands respect.

---

we have in this decree is the script for a dramatic performance—one rich in stage directions"(93). Burkert 1985 wrote of the fourth century structure uncovered at the site of the Oracle of the Dead at Ephyra: "The centre is a square complex with walls of polygonal masonry three metres thick giving a Cyclopean appearance. Around this runs the approach corridor, once completely dark […] finally leading through a labyrinth with many doors into the central chamber, beneath which a vaulted crypt represents the world of the dead. Perhaps there was a machine for producing ghostly appearances – iron rollers which have been found are interpreted in this way – or perhaps the eating of certain kinds of beans had a hallucinogenic effect; numinous experience and manipulation may overlap" (115).

[145] *Laws* 10, 885b: "No one who believes in gods according to the laws ever voluntarily commits an unholy act or lets any lawless word pass his lips. If he does, it is because of one of three possible misapprehensions: either, as I said, he believes (1) the gods do not exist, or (2) that they exist but take no thought for the human race, or (3) that they are influenced by sacrifices and supplications and can easily be won over" (Θεοὺς ἡγούμενος εἶναι κατὰ νόμους οὐδεὶς πώποτε οὔτε ἔργον ἀσεβὲς ἠργάσατο ἑκὼν οὔτε λόγον ἀφῆκεν ἄνομον, ἀλλὰ ἓν δή τι τῶν τριῶν πάσχων, ἢ τοῦτο, ὅπερ εἶπον, οὐχ ἡγούμενος, ἢ τὸ δεύτερον ὄντας οὐ φροντίζειν ἀνθρώπων, ἢ τρίτον εὐπαραμυθήτους εἶναι θυσίαις τε καὶ εὐχαῖς παραγομένους.) Plato prescribes severe punishment for those who do not believe in the gods (909a-c). The would-be shaman receives one of the harshest penalties: not only is he to be imprisoned for life, but when he dies his body is to be cast outside the city and left unburied; if a citizen buries him, that person must be prosecuted for impiety as well.

I conclude this chapter by looking briefly at Jennifer Haley's *The Nether* (2015), a play that can be read as a re-write of *Clouds* for the computer generation. Here, the realm in which human volition achieves violent omnipotence is no longer the realm of words only, but rather a realm of words and bits: a near-future, fully immersive version of the Internet called The Nether. The plot centers on a well-spoken middle-aged man, Mr. Sims, who has created and manages a virtual house where guests can come and play with, then molest and murder, young children. It is not only permitted, but expected, that guests will use "the axe:" as Iris, one of the young girls, says, "Papa prefers it for returning guests, but we don't have to do it the first time."[146]

Most of the play takes place in a spare, gray interrogation room where Detective Morris, an agent of The Nether's new governing body (it used to be completely lawless[147]), which has outlawed establishments such as Mr. Sims', interrogates him. When a scene takes place in The Nether, doors in the gray façade open to reveal a lush virtual garden.[148] In the world of the Nether, so-called "virtual reality" plays the role of the actual.[149] This is because, in Haley's world, agriculture and genuine non-human life

[146] Haley 2015, 26

[147] "The Nether is no longer some great Wild West. We have a political body that is just as real as anything in-world. And we're making our own laws, with our own form of prosecution." (Haley 2015, 14)

[148] Cf. Ben Brantley's *New York Times* review: "Only the skin tones of the actors relieve the ash and rain-cloud palette of the opening scenes. Granted, we appear to be in an interrogation room, not the kind of place known for festive décor. But the dialogue suggests that what lies beyond this grim chamber is no brighter. Blue skies and leafy green trees, it seems, are a thing of the past. Then a door opens, and a corridor of sunlight cuts through the gloom. It's emanating from a partly glimpsed, perfect sylvan landscape, a garden in which verdant nature has bowed gracefully to human order. Oh, let's go there. Let's go to paradise. On second thought, let's not." http://www.nytimes.com/2015/02/25/theater/review-jennifer-haleys-the-nether-explores-the-dark-side-of-the-web.html?_r=0

[149] As Sims says, "Just because it's virtual doesn't mean it isn't real. Eighty percent of the population work in [virtual] office realms, children attend school in educational realms. There's a realm for anything you want to know or do or think you might want to try. As the Nether

are no longer part of the equation at all, having been replaced by virtual avatars based in inorganic engineering technology.[150]

Mr. Sims' arguments in support of his violent realm are in the spirit of Pheidippides' arguments in favor of father-beating in *Clouds*:

> SIMS: What are you afraid of? Violence? Porn? Did you know porn drives technology? The first photographs? Porn. The first movies? Porn. The most popular content when the Nether was called the Internet? Porn. The urge, Detective—the *urge*—as long as we are sentient, you will never stamp that out. You must have spent time in those collegiate fantasy realms…questing…killing wicked demons and wild boars. And the sex…I've been there…I've seen the cock bulges. In-world men are no comparison, with their soft, interface hands. Don't tell me you never fucked an elf.
>
> MORRIS: No, Mr. Sims, I never fucked an elf.
>
> SIMS: Come on, you're missing out. The point is—it doesn't matter whether you kill a boar or a demon. Whether you have sex with a child or an elf. It's nothing but images. And there is no consequence.
>
> MORRIS: Images—ideas—create reality. Everything around us—our houses, our bridges, our wars, our peace treaties—began as figments in someone's mind before becoming a physical or social fact.[151]

becomes our contextual framework for being, don't you think it's a bit out of date to say it isn't real?" (Haley 2015, 13)

[150] See dialogue on pages 45-46 of Haley 2015, quoted below

[151] Haley 2015, 30

Detective Morris's counter-arguments have a Platonic bent: theater, whether mediated through electronics or through light- and sound-waves traveling through air, must be regulated because the virtual space of the theater is not self-contained.

The main consequence of excessive enjoyment of the Nether is the desire to "cross over," i.e. to leave one's organic body on a life-support system while one's consciousness inhabits the Nether full-time. One may compare this idea with Pheidippides' announcement of a conversion to a life lived in the pleasurable company of words alone, as well as with Euelpides' image, in *Birds*, of the Athenians chirping away "always, their whole lives long" (ἀεὶ…πάντα τὸν βίον) in their lawcourts—in contrast to cicadas, who only chirp a month or two out of the year (*Birds* 39-41). In Euelpides' imagination, the Athenians have already "crossed over" into the realm of actual obsession with the virtual use of power; as we shall soon see, Peisetairos' bird-brained scheme will not counteract, but rather extend, that trajectory.

In a surprising and almost shocking display of the power of costume, it turns out that the person behind the oft-murdered, never-destroyed little girl Iris is actually a gray-haired science teacher named Mr. Doyle. It also turns out that Mr. Sims and Mr. Doyle have something like an affectionate relationship. The ultimate irony, in a play full of ironies, is perhaps that Mr. Sims' most sincere and dramatic display of an affection that can only exist in The Nether must occur *outside* The Nether—and call the desirability of the latter into question:

PAPA: Did you know these trees are called poplars?

IRIS: Yes.

PAPA: No you didn't!

IRIS: Yes I did!

[*He tickles her. Overlapping "No you didn't!"/"Yes I did!" as they giggle.*]

IRIS: I promise! I did!

PAPA: Okay, I believe you! So here's a secret: I have a garden.

IRIS: Our garden?

PAPA: No, my own garden.

IRIS: What's in it?

PAPA: The same things that are growing in ours. And guess what I just planted? I've scoured the world for it.

IRIS: What?

PAPA: A sapling. A poplar.

IRIS: That's real?

PAPA: Real real.

IRIS [*moved*]: Thank you.

PAPA: Don't tell the others.

[*She shakes her head emphatically. They sit for a moment, listening to the wind in the leaves.*]

PAPA: There were poplars growing by our vacation cottage. It was the last grove in the country. I would wake to my bedroom wall aglitter with sunshine, the sound of wind washing through the leaves, and my mother at the window. She said, *The only way you hear the wind is if it has leaves to blow through.*]

IRIS: I miss the trees.

PAPA: I do too.

IRIS: I love you.

[PAPA *hesitates.*][152]

[152] Haley 2015, 45-6

Birds:

Avian Life Meets Human Intelligence

νῦν δ' αἶνον βασιλεῦσιν ἐρέω φρονέουσι καὶ αὐτοῖς:
ὧδ' ἴρηξ προσέειπεν ἀηδόνα ποικιλόδειρον
ὕψι μάλ' ἐν νεφέεσσι φέρων ὀνύχεσσι μεμαρπώς:
ἣ δ' ἐλεόν, γναμπτοῖσι πεπαρμένη ἀμφ' ὀνύχεσσι,
μύρετο: τὴν ὅγ' ἐπικρατέως πρὸς μῦθον ἔειπεν:
δαιμονίη, τί λέληκας; ἔχει νύ σε πολλὸν ἀρείων:
τῇ δ' εἶς, ἦ σ' ἂν ἐγώ περ ἄγω καὶ ἀοιδὸν ἐοῦσαν:
δεῖπνον δ', αἴ κ' ἐθέλω, ποιήσομαι ἠὲ μεθήσω.
ἄφρων δ', ὅς κ' ἐθέλῃ πρὸς κρείσσονας ἀντιφερίζειν:
νίκης τε στέρεται πρός τ' αἴσχεσιν ἄλγεα πάσχει.
ὣς ἔφατ' ὠκυπέτης ἴρηξ, τανυσίπτερος ὄρνις.

Here is a fable for the kings, although they are knowing themselves.
This is what the hawk said when he spoke to the dapplenecked songbird:
high up in the clouds the hawk gripped her with talons and took her;
pitifully she screamed, pierced by the nails cramped in her.
But the hawk overmastering spoke to her and this was his word:
"You fool, why have you screamed so? He that has you is far stronger
and you go where I shall bring you, even if you are a songster;
if I will, I will make a meal of you, or I will let you go.
He is witless who seeks to contend with rivals stronger than he is;
he loses the fight and besides suffers pain and shame together."
So said the hawk, swift-flying, bird with long outstretched wings.
(Hesiod, *Works and Days*, 202-212, trans. David Grene)

Rousseau's narrative of the origin shows us through antithesis how everything of the order of what is usually considered specifically human is immediately and irremediably linked to an absence of property [*impropriété*], to a process of "supplementation," of prosthetization or exteriorization, in which nothing is any longer immediately at hand, where everything is found mediated and instrumentalized, technicized, unbalanced. This process would lead today to something inhuman, or superhuman, tearing the human away from everything that, hitherto, seemed to define him (language, work, society, reason, love and desire and everything deriving thereof, even a certain feeling of death and a certain relation to time: to all of this we shall return), a process by which the realization or "actualization" of the power of man seems to be as well the derealization of man, his disappearance in the movement of a becoming that is *no longer his own*.
(Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, 133)

I. Denatured Birds or Cyborg Birds?

The narrative of *Birds* is the clearest and most straightforward example of the techno-Robinsonade story-form to be found in Aristophanes. Peisetairos, a willing exile from his native *polis*, the victim of a *nosos* that consists in the desire for a kind of peace that can only come (at least in the imagination of tyrants) from the possession of absolute power, is a Handy Man who transforms a liminal region—the sky—previously thought of by gods, humans, and animals alike as nothing but a mostly-empty passageway (from heaven to earth, for the gods, or between feeding and nesting places, for the birds), into a fortified center of absolute power. The Hoopoe, Tereus, plays the part of the Willing Slave,[153] an aspect of the story-form that is absent from *Clouds* and *Assemblywomen*—perhaps because those plays involve transformations within rather than outside the *polis*—but crucial here, for without the assistance of Tereus, Peisetairos' *logos* would be utterly lost on the birds and he would have to muster the technical ingenuity and skill in handicraft of a Daedalus (which there is no indication that he possesses) to get his body off the ground. The Hoopoe provides the root (ῥιζίον, *Birds* 654) that, when eaten by a human, transforms a non-winged human body into a winged human body; before

[153] "The Willing Slave," writes Csicsery-Ronay Jr., "is most familiar in the form of *Crusoe*'s Friday. This agent mediates for the Handy Man by extending the power he manifests in raw form over the Fertile Corpse to human beings that are barely distinct from surrounding nature in their level of civil and technical development. The Willing Slave is the medium of social development. Its most overt form is the myth of the colonized subaltern unreservedly appreciative of its colonization by the higher powers represented by the Handy Man. The Willing Slave is generally male; in this fundamentally phallocentric mythology, he is differentiated from the feminine fertility of the Corpse. He accepts the domination, or guardianship, of the Handy Man, in part to enjoy his protection against the forces of nature and the Shadow Mage, and in part to *learn* to use the Handy Man's techniques and science (cognition), in order to consolidate a sense of autonomous identity and to aid the Master's further extension of his power" (2008, 229).

Peisetairos arrives, he has already taught the other birds, who previously were barbarians (βαρβάρους ὄντας πρὸ τοῦ), how to speak Greek (τὴν φωνήν, *Birds* 199-200).

Attempts to answer the old and persistent question of whether *Birds* ought to be read as utopian or as anti-utopian, or (to use even vaguer, and also somewhat different, terms) as optimistic or as pessimistic, have often focused on Peisetairos, reducing the larger question of whether the *play* is utopian or anti-utopian to the narrower question of whether Peisetairos is a *good* or a *bad* character—or, in audience-response terms, whether the audience is meant to respond *positively* or *negatively* to Peisetairos and his plans.[154] That strategy reflects the broader humanist and humanocentric tendency to reduce the interpretation of a literary text to an evaluation of its human (or mostly human, or human-like) protagonist. A posthumanist reading of *Birds* cannot simply evaluate

[154] Whitman 1964 focuses on Peisetairos as the epitome of the "comic hero"—and a disciple of Gorgias. For Gorgias, according to Whitman, "Speech assists and directs the 'subjective restructuring of the world,' and thus occupies a position of power analogous to, if not identifiable with, divinity itself. And it is precisely such a psychology which underlies the *Birds* of Aristophanes. The airy empire of the birds is created out of words by that demiurge of persuasion, Peithetaerus, in a vast 'subjective restructuring of the world' which is both lyrical and ironic. Peithetaerus knows his Gorgias, and though Gorgias undoubtedly felt that the rightful ends of rhetorical persuasion were good, for the comic hero no such scruple need exist: *peitho* and *apaté* are the most serviceable forms of poneria, in that they build their own reality and lead on to the boundless" (Whitman 1964, 174). Henderson 1997 pooh-poohs the idea that Athenians would have had qualms about Peisetairos: "In my view, there is no reason to doubt that most spectators would have regarded the fantasy of *Birds* as enjoyable, and few would have seen anything sinister or ominous in Peisetairos' success" (142). Nan Dunbar, whose commentary is scrupulously attentive to avian life, writes that "several considerations suggest that the audience were expected to see Peisetairos as a sympathetic character. *(a)* To say that he does not, after all, restore sovereignty to the birds ignores the fact that *since 801 he himself has been a bird—or at least winged, which for comedy is the same thing*—even if the poet himself also sometimes ignores this fact […] *(b)* His vigorous repelling of the various political and social pests who arrive at the city makes him seem a sound citizen with the right ideas. *(c)* He is assisted in his defeat of the Olympians by Prometheus, a god particularly popular in Athens, who personified the ingenuity on which Athenians prided themselves […] *(d)* It is regular in the Succession Myth […] which is arguably the main source of the plot, for the successful leader of the theomachy, or revolt by some gods against other, ruling gods, to become himself the new ruler" (1995, 12, emphasis added). Hubbard 1997 follows Arrowsmith 1973 in reading *Birds* as dystopian and its protagonist as a figure of "desire unbound," like Pheidippides at the end of *Clouds*: "The birds' utopian just society is revealed to be a negative dystopia, a classical precursor of Orwell's *Animal Farm*" (36).

Peisetairos negatively; it must, instead, approach the question concerning the play's utopianism by taking full account of the way the play represents the nonhuman. In the techno-Robinsonade story-form, the Fertile Corpse is the most consistently and thoroughly nonhuman diegetic agent; in Aristophanes' *Birds*, this role is played by the birds. The way in which Aristophanes focalizes his representation of avian life through the myth of Tereus, Procne, Philomela, and Itys raises dark and powerful questions concerning the birds *qua* Fertile Corpse. Is their incorporation into a human plan for universal domination a kind of rape analogous to that of Philomela—a rape that silences the traditional songs they were accustomed to sing in their traditional habitats? (One could call this the "deep ecology" variant of the pessimistic reading.[155]) Or is it a mutation that transforms their avian being into what Donna Harraway calls a "cyborg" being? (One could call this the "cyborg" variant of the optimistic reading.)

This chapter will focus on the gaps between avian life as the birds represent it and seem to experience it, and the human perception of and fantasies concerning avian life, both before and after the founding of Nephelokokkugia. Even when they are building Peisetairos' siege wall to starve the gods, the birds are never simply pawns in human games. They have their own life before the humans arrive, and their eventual collaboration with humans by no means involves reliquinshing agency. Peisetairos may eat two "anti-democratic" birds before receiving *Basileia*, the sexy and presumably anthropomorphic secret to Zeus's power, but he evidently does this with the consent of the majority of the birds; for, were that great throng of strong and inventive birds that

[155] Arrowsmith 1973 is the classic statement of this position. Payne 2010 leans in this direction: "As the gods are reduced to submission, so the birds are denatured by the inexorable logic of the comic plot" (97).

built his siege wall to turn on Peisetairos, there is no reason to think that he would fare any better than the humans in Alfred Hitchcock's *The Birds*.

The dramatic and intellectual power of Aristophanes' *Birds* has much to do with the complex concatenation of sublime and grotesque effects that the play produces. Recall that, as Csicsery-Ronay Jr. puts it, "The sublime has to do with the mind reflecting on its power, or lack of it, to understand the totality of the world, which of course includes the mind itself. The grotesque has to do with the struggle to accommodate mutable, unstable objects and beings in the world."[156] *Birds* weaves together sublime and grotesque effects in dense comic knots that are not easy to untangle. Tereus' lyric invocation of the birds, for example, "the pinnacle of Aristophanes' achievement as a lyric poet and musician,"[157] which exhausts the metrical resources of Greek poetry in representing the huge diversity of birdsong, together with the seemingly endless parade of individually costumed birds, each representing a different species, that answers Tereus' invocation, creates the effect of the natural sublime as nonhuman biodiversity seems to dwarf the capabilities of the human mind and human language. And yet we know, because Peisetairos has already summarized his plan, that all of this biodiversity is about to be enlisted in a project that will awe us in the register of the technological sublime: one language, one wall, absolute power, with the Handy Man at the pinnacle. At the same time, the *nova* that open the boundaries between the species—human ability to grow wings, avian ability to understand and use human speech—unleash a host of grotesque hybrids that even Peisetairos may not be able to control, just as Prometheus

[156] Csicsery-Ronay Jr. 2008, 182
[157] Payne 2010, 93

was not able to put back into Pandora's box the throng of evils unleashed by human acquisition of fire and all of the technological powers that fire signifies.

II. Sublime Ironies, Grotesque Cyborgs

In *Clouds*, the nonhuman makes its presence felt in the form of cloud deities who look suspiciously like mortal women. These deities cultivate the protagonists' humanocentric fantasies with the goal of shocking them back to good sense with the strange and violent fruit of those fantasies. In *Birds*, by contrast, the nonhuman appears in the form of mortal animals whose way of life is initially an object of desire for the human protagonists. Soon, however, the human protagonists are envisioning the potential of their nonhuman acquaintances to generate power that is available for human use, and the birds themselves are imagining grander things than harvesting the fruits of their ancestral landscapes.

Peisetairos and Euelpides, the play's human protagonists, go "to the birds" looking for "a peaceful place," τόπον ἀπράγμονα (44). As we saw in the previous chapter, the term πράγματα in Aristophanes refers to activities that involve the exercise of human power (*kratos*), especially power over other humans in the context of complex urban political institutions. The word ἀπράγμονα, by contrast, refers to a state of affairs that is free of πράγματα, that is to say of the exercise of human *kratos*. Peisetairos' describes his ideal home as a place where the "greatest *pragmata*" (τὰ μέγιστα πράγματα, 128) would be to be invited to a wedding feast with no reciprocal obligations; in other words, to be a passive recipient of pleasure.

The humans enter the theater carrying actual birds.[158] They bought the birds, Peisetairos explains, from a vendor (πινακοπώλης) named Philokrates, who claimed that his birds would lead the humans to Tereus. Initially it seems that the humans may have been led astray by the wily seller, as it is not clear that the crow and the jackdaw have any idea where they are going. Soon, however, the first of many actors dressed as birds appears, and the actual birds are released from further duties.[159]

The first hybrid bird-human turns out to be Tereus' slave bird. He explains that Tereus, who was once human, has retained some characteristically human prosthetics, including a slave who makes use of bowls and ladles.[160] He does not have to explain that Tereus is a hybrid of tragedy and comedy no less than a hybrid of human and bird. If the actual birds that are let go function as a sign of the remoteness of what happens in the theater from what happens in the sky, Tereus functions as the mediator between human and avian that will be necessary for the mutually estranging encounter between the two species to take place. Mark Payne points out a crucial symmetry between Tereus and Peisetairos that illuminates both the logic according to which Tereus functions as Peisetairos' Willing Slave, as well as the way in which the attitude or mode of being that both of these characters share leads them to envision avian life as a Fertile Corpse:

---

[158] See Dunbar 1995, 130: "Two men wearing old men's masks (320, 337; cf. 255, 626, 1401) come slowly up one of the side passages into the *orchestra*. One has with him a hooded crow (κορώνη 5, *Corvus corone sardonius*, mod. Gr. κουρούνα, the S. European race of the subspecies; cf. πολιαί τε κορῶναι at 967 and n. ad loc.), the other has a jackdaw (κολοιῶι 7, *Corvus monedula*, mod. Gr. κάργα). These are more probably real birds attached to strings than dummies perched on arm or shoulder. They are said at 86-91 to have been let go and lost, presumably on the Servant Bird's entry at 60; although in the general panic at 60 dummies could be secreted on the person, or flung out of the *orchestra*, real birds, if suddenly released amid shouting, could be depended upon to fly promptly out of reach, and before 60 would provide the audience with a far more lively and entertaining spectacle than dummies."

[159] See previous note.

[160] In lines 75-9, this "slave bird" (ὄρνις δοῦλος, 70) or "servant and helper bird" (ἀκόλουθον διάκονόν τ', 73) explains that when his master wants sardines from Phaleron, he runs there carrying a bowl (τρύβλιον), and when the master wants soup, he goes after the ladle (τορύνη).

> Peisetairus's hopes for a better life rest on his plan to find Tereus, the tragic hero who was turned into a hoopoe for his crimes against humanity and who now haunts the empty spaces between human habitations. Peisetairus hopes that Tereus may have spotted in his travels a city where he and his companion might live with minimal interference from other people. From an ornithological perspective, however, Peisetairus is himself the hoopoe that he seeks. Aristotle, in his discussion of the lifestyles of birds in the *History of Animals*, cites a long passage he claims is from Aeschylus, in which the hoopoe (ἔποψ) is described as "the overseer [ἐπόπτης] of his own evils." Aeschylus describes the bird as a shape shifter that leaves its spring haunts full of hatred, and "sets off to relocate [ἀποικίσει] in deserted woods and cliffs." As Aeschylus tells it, Tereus, transformed into a hoopoe after the grisly events at home, haunts the margins of human society as an exile from it, drawn back periodically, but unable to stomach it for long. He no longer loathes just his own family but all human beings, and has become a perpetual colonist, forever striking out in search of *terra incognita*.[161]

Before telling the humans anything about bird life, Tereus asks them what they are expecting to find: "what sort of city would you most like to live in?" (ποίαν τιν' οὖν ἥδιστ' ἂν οἰκοῖτ' ἂν πόλιν, *Birds* 127). This is a clever question, for it exposes the inevitable gap between human expectation and avian reality. Peisetairos would like to live in a city in which an invitation to a wedding feast entails no reciprocal obligations towards the host (128-34); Euelpides would like to live in a city in which fathers criticize those who do not take sexual advantage of their attractive sons (137-42).[162] Later on in

[161] Payne 2010, 89
[162] Strauss 191966, 162

the play, other humans will come to Nephelokokkugia under the impression that it is a *polis* of lawlessness and leisure. But as we shall see, the birds work hard, both before their encounter with Peisetairos and after they take upon themselves the role of the gods.

It is Euelpides who first asks Tereus, "what sort of life do the birds live?" (οὗτος δὲ δὴ τίσ ἐσθ᾽ ὁ μετ᾽ ὀρνίθων βίος[163], *Birds* 155). Tereus' reply emphasizes the modest but substantial pleasure of being a bird before addressing practical questions of sustenance: bird life, he says, is "not without charm in the spending" (οὐκ ἄχαρις ἐς τὴν τριβήν, 156). We do without a money purse (ἄνευ βαλλαντίου, 157). "In that case," replies Euelpides, "you have removed much of life's fraudulence" (πολλήν γ᾽ ἀφεῖλες τοῦ βίου κιβδηλίαν, 158). "We feed in gardens on white sesame seeds, and myrtle berries, and poppy seeds, and bergamot-mint," says Tereus. "So," replies Euelpides, "your way of life (βίον) is that of newlyweds (νυμφίων)" (159-61).

Tereus' brief description of bird life, which Peisetairos soon interrupts with his epiphany, will later be elaborated and expanded in several different ways. The charm, *charis*, of bird life will shine forth in the song Tereus sings to summon Procne the

[163] Not only political philosophers but also philologists find it useful to distinguish between two subspecies of the concept "life:" LSJ's definition of βίος begins, "*life*, i.e. not animal life (ζωή), but *mode of life*." LSJ's phrasing is misleading inasmuch as it creates a sharp dichotomy ("not…but") between "animal" and "mode," which suggests an extremely humanocentric, and un-Greek, dichotomy between "animal" and "form." It is true that many Greek myths, such as the battle between the Lapiths and the Centaurs and the battle between the Olympians and the Titans, can be seen as being concerned fundamentally with distinguishing a force devoted to (something like) a *rational* mode of life from a more chaotic, unmolded life force; this, in fact, would seem to be the distinction LSJ has in mind. But the Greeks cannot have thought of ordinary "animal" life—that of sheep, goats, cows, insects, fish, birds, etc., with which the ordinary Greek was vastly more familiar than the 20th or 21st century urbanite—as being as scarily formless as that of the Centaurs or the Titans. In other words, Euelpides' use of βίος in lines 158 and 161 would probably not have struck the ordinary Greek as a metaphorical or extended use of the term (from the human to the animal realm). In Aristophanes, nonhuman animal life may "appear" in human life (e.g. when it is said that the Clouds take the forms of various nonhuman animals—but also, notably, that of women; or when the jurors in *Wasps* "become" wasps) to signify the socially repressed drives that threaten the boundaries of human order, but when nonhuman animals actually appear onstage—which only happens in *Birds* and *Frogs*—they are quite orderly.

nightingale, which offers a harmonious vision of birds and Olympian spirits singing "together-voiced" (σύμφωνος, 221). The pleasures of avian survival, on the other hand, are elaborated in the song Tereus sings to summon the birds to converse with the humans. In terms of its content, this song, which flows from the repeated ἴτω ("come") of line 229 to the δεῦρ' ἴτε ("come here") of line 252, is extremely simple: it enumerates five major groups of birds arranged by habitat, and describes the way in which each group feeds (see Dunbar *ad loc*.). In other poetic dimensions besides verbal signification, however, the song is unusually rich. "The metrical structure of this song," writes Nan Dunbar, "is highly unusual, both in the exceptionally wide variety of rhythms used[164] […] and in the way in which no less than four times (233, 235, 240, 259) acatalectic rhythms ending in a short syllable are followed by a pause and change of meter." Its rhythmic richness is matched by a corresponding sonic richness. Consider, for example, the lines

ὅσα τ' ἐν ἄλοκι θαμὰ
βῶλον ἀμφιτιττυβίζεθ' ὧδε λεπτὸν
ἡδομέναι φονᾶι
and those that,
clustering in the furrow,
titutit-tit like this
so lightly
around the clod,
voice so melodious (234-6),

[164] Parker 1997 writes, "In *Birds* Aristophanes seems to have set out to dazzle his audience with a display of metrical and musical virtuosity. […] The repeated use of certain rhythms with structural and thematic functions, which is so common a feature of Aristophanes' plays, is absent here. On the contrary, the chief metrical characteristic of the play is diversity: every major type of metre found in Attic drama is represented, with, in addition, some rarities" (297).

in which onomatopoetic ἀμφιτιττυβίζεθ, with its flittering consonants, is juxtaposed with the sonorous ἡδομέναι φονᾶι. Listening to this song is a little bit like listening to birds chirp: one imagines that the chirping has to do somehow with feeding or finding a mate, but one is liable to get carried away from such utilitarian considerations by the pure pleasure of the sound. Could it be that being a bird is also a bit like that—pressured by natural necessities at times, but so awash in sensory pleasure that those necessities are often forgotten?[165]

One of the most stressful necessities for any living organism is the need to defend itself against predators. After Tereus' summons, we are given a representation of bird behavior—and human behavior—in that situation. After their initial stutters (1310-12), which highlight the language barrier between the two species,[166] the birds show themselves to be already fairly articulate users of human speech, which allows them to reveal their deeply conservative *ethos*. The birds know who their friends are and who are their enemies, and they are not interested in revising their viewpoint. Thus, they are using human speech only to express an affective state, and not to enter into a dialogue.[167]

The way that Tereus persuades the birds to enter into dialogue is ironic, inasmuch as it suggests that human engineering, towards which Peisetairos is trying to lure the birds, is mainly a human response to an inability to enter into dialogue with other humans. Humans, he says, have learned from their enemies how to *build with great labor high walls and long ships* (379), ἐκπονεῖν θ' ὑψηλὰ τείχη ναῦς τε κεκτῆσθαι μακράς.

---

[165] For an argument that birdsong should be considered "music," not just a purely functional behavior, see Taylor 2013.
[166] Compare, for example, the garbled speech of the Persian ambassador at *Acharnians* 100.
[167] Payne 2010 notes that "In the *Politics*, Aristotle claims that the voice of animals is merely a sign: they can indicate their affective states to one another with it but cannot discuss their causes."

Peisetairos will teach the birds to regard the gods as their enemies, to build a wall against them, and to use their wings as warships. No longer will they sing "together-voiced" with those spirits as they forage for their ancestral fodder.

The words with which the birds invite Peisetairos to speak to them (*Birds* 451-9), which serve as one of the epigraphs to my Introduction, call to mind one of Rousseau's central claims concerning the state of "savage man:"

> But who does not see…that everything seems to remove from savage man both the temptation and the means of changing his condition? His imagination paints no pictures; his heart makes no demands on him. His few wants are so readily supplied, and he is so far from having the knowledge which is needful to make him want more, that he can have neither foresight nor curiosity.[168]

In Aristophanes, as in Rousseau, there is a clear link between, on the one hand, a *lack* of curiosity, foresight, memory, pleonexia (δύναμίν τινα μείζω παραλειπομένην ὑπ᾽ *ἐμῆς φρενὸς ἀξυνέτου*, *Birds* 455-6), and the way of life (*bios*) that is οὐκ ἄχαρις ἐς τὴν τριβήν; and, conversely, a link between curiosity, foresight, memory, pleonexia, and pain, alienation, need for salvation (through *tekhne*):

> πολὺ δὴ πολὺ δὴ χαλεπωτάτους λόγους
> ἤνεγκας, ἄνθρωφ᾽· ὡς ἐδάκρυσά γ᾽ἐμῶν πατέρων
> κάκην, οἳ τάσδε τὰς τιμὰς προγόνων παραδόν-
> των ἐπ᾽ ἐμοῦ κατέλυσαν.
> σὺ δέ μοι κατὰ δαίμονα καί τινα συντυχίαν
> ἀγαθὴν ἥκεις ἐμοὶ σωτήρ.

[168] Rousseau 1973, 62; quoted in Stiegler 1998, 124.

You have brought forth very, oh, overwhelmingly difficult words

human; how I have wept for the misfortune of our fathers,

who left such glories to be betrayed

by their progeny.

But you have come to us, miraculously, luckily,

to be our savior. (539-45)

Here, the birds announce that they are ready to take up the quest for the power that Peisetairos earlier foresaw as their latent potential:

φεῦ φεῦ·

ἦ μέγ᾽ ἐνορῶ βούλευμ᾽ ἐν ὀρνίθων γένει,

καὶ δύναμιν ἣ γένοιτ᾽ ἄν, εἰ πίθοισθέ μοι.

Oh my god!

I envision a great plan concerning the species of birds,

and a power that might arise, if you trust me. (162-4)

While it is unclear in line 164 whether by the δύναμις that might arise (ἣ γένοιτ᾽ ἄν) Peisetairos means power for the birds or power that might flow to humans if they exploit the birds, it is perfectly clear that by agreeing to join forces with the Handy Man Peisetairos, the birds are submitting avian life to the strange (and estranging) logic of the "paradox of power" that Bernard Stiegler describes as the core problem of the "global Western culmination:" "the greater humanity's power, the more 'dehumanized' the world becomes."[169] Aristophanes' *Birds* is the first of numerous sf narratives (including Margaret Atwood's *MaddAddam* trilogy, in which the implantation of human brain tissue

[169] Stiegler 1998, 90

in pigs performs the function that Tereus performs in Aristophanes' *Birds*, and Hitchcock's *The Birds*, in which the source of the birds' ability to coordinate large-scale attacks on human civilization remains a terrifying mystery) that invite us to see this paradox as not exclusively or exceptionally human (albeit articulated in conjunction with human action, foresight, dissatisfaction), but as a paradox of power and technics as such: in this case, the greater the birds' power, the more "de-avianized" the world of the birds will become.

To guarantee that humans will support their takeover of the sky from the Olympians, the birds will have to offer humans some concrete benefits. Such benefits are imagined several times over the course of the play, first by Peisetairos, later by the birds themselves. In lines 586-610, Peisetaerus lists the benefits (ἀγαθῶν) the birds will be able to provide for humans if humans will agree to accept the birds as their gods: protecting fig trees from fig-eating insects; telling humans where to find precious metals (natural resources); forecasting the weather for sailors; pointing out the location of buried treasure (artificial resources). All of these activities have to do with helping humans to acquire wealth (πλοῦτειν), which the birds now know that humans "love inordinately" (σφόδρ' ἐρῶσιν, 592). To the question, "how will we give them health?", Peisetairos replies that health and wealth are coextensive, and Euelpides concurs. To the question, "how will we give them long life?", Peisetairos replies that they can shave time off the proverbially long life of the crow.

In the first parabasis, the birds highlight a variety of services they already perform for humans: indicating the change of seasons, so humans know what tasks to do when (709-715); predicting the success or failure of various endeavors (716-721). In the pnigos

(723-36), they suggest that they will perform these same tasks to greater effect if humans honor them as gods. In the ode that opens the second parabasis (1058-1070), they offer a lyrical description of their crop-protecting prowess: all pests that attack human agricultural products ought to fear the birds, for

> κτείνω δ᾽ οἳ κήπους εὐώδεις
>
> φθείρουσιν λύμαις ἐχθίσταις·
>
> ἑρπετά τε καὶ δάκετα <πάνθ> ὅσαπερ
>
> ἔστιν, ὑπ᾽ ἐμᾶς πτέρυγος
>
> ἐν φοναῖς ὄλλυται.
>
> I slay those who spoil fragrant gardens
>
> with defilements most offensive;
>
> and creepers and biters and all creatures like that
>
> will perish in blood
>
> by the strength of my wing. (*Birds* 1067-71)

In the lines immediately after this, the Chorus Leader proclaims that from now on, all those humans who kill, sell, or confine birds are to be treated like the impious Diagoras of Melos—that is to say, a price is to be put on their heads. Anyone who kills the Philokrates who sold Peisetairos and Euelpides the crow and jackdaw that guided the diseased humans who have now become half-birds to the birds will be paid a talent; anyone who delivers him to the birds alive, so that they can torture him in the way that he tortures innocent finches, thrushes, blackbirds, and pigeons, will be awarded four talents (*Birds* 1076-83). The birds, then, are not figures of "nature instrumentalized," for the

power they will use against humans' natural enemies will also be used against humans who fail to respect them adequately.

If Nephelokokkugia is a cage, Peisetairos had better watch out.

The birds fall—or rise—into the paradox of power by way of a cerebral, or intellectual, or *phrenetic* mutation involving the understanding and acceptance of Peisetairos' χαλεπωτάτους λόγους, which are difficult and troublesome not so much because they imply the need for new modes of avian labor (as we shall see, the birds have no trouble building the great wall Peisetairos envisions) but because understanding and accepting them implies alienation from a charmingly idiotic perpetual present in the consciousness of a past (fictional, certainly—what image of the past isn't?) that was better and that has been lost, in the consciousness of mortality, and in the anxiety to conquer mortality phrenetically, by means of *tekhne*—specifically, by putting a price on the heads of those humans who confine, torture, or kill birds, which will require that the birds amass large sums of money (more than would fit in the small βαλλάντιον they did not need before Peisetairos and Euelpides arrived).

As for the humans, for whom that intelligence which is new and difficult for the birds is not in the least bit new, what they want from Nephelokkugia would seem to be enhanced *mobility*. Stiegler writes,

> The conquest of mobility, *qua* supernatural mobility, *qua* speed, is more significant than intelligence—or rather, intelligence is but a type of mobility, a singular relation of space and time, which must be thought from the standpoint of

speed, as its decompositions, and not conversely (speed as the result of their conjunction).[170]

Aristophanes' reworking of the myth of Prometheus and Epimetheus, which I will suggest below is less anthropocentric than the retelling of this myth that Plato puts into the mouth of Protagoras and thus arguably a better touchstone for Stiegler's posthumanist rethinking of technics than Plato's myth, represents with admirable precision and specificity the somewhat paradoxical conjugation of mobility and immobility that structures technological power. In order to obtain power, the birds must cease flying about all over the place (μὴ περιπέτεσθε πανταχῆι, *Birds* 165); they must desist from never remaining in the same place (οὐδὲν οὐδέποτ' ἐν ταὐτῶι μένων, *Birds* 170); they must establish and fortify *one* city (οἰκίσατε μίαν πόλιν, *Birds* 172); they must, in other words, submit themselves to the discipline of immobility. The organized control of territory requires a degree of immobility; speed can only be calculated, and thereby harnessed as power, within a framework of certain fixed points. But within such a framework, power may be obtained, or enhanced, by way of techniques and/or prostheses that facilitate speedy mobility.

The humans who visit Nephelokkugia after it has been established—the second set of visitors—have no desire to live with the birds or to imitate the simple way of life that Tereus described as οὐκ ἄχαρις ἐς τὴν τριβήν. The messenger's account of the "bird-mania" that has gripped Athens describes ordinary human, Athenian behaviors—the very behaviors that Peisetairos and Euelpides were hoping to escape—in avian metaphors:

πρῶτον μὲν εὐθὺς πάντες ἐξ εὐνῆς ἅμα

[170] Stiegler 1998, 146

ἐπέτονθ᾽ ἕωθεν ὥσπερ ἡμεῖς ἐπὶ νομόν·

κἄπειτ᾽ ἂν ἅμα κατῆραν εἰς τὰ βιβλία,

εἶτ᾽ ἂν ἐνέμοντ᾽ ἐνταῦθα τὰ ψηφίσματα.

First, all of them, as soon as they get out of bed,

fly off at dawn to feed, just like us;

then they perch on the scrolls,

and feed there on the votes. (*Birds* 1286-9)

While these metaphors suggest that there is a fundamental continuity between human life and avian life *qua* modes of sustenance—the sort of human~nonhuman continuity that posthumanism is keen to highlight—it soon becomes clear that the humans the messenger has observed are not so much bird-crazy as *wing*-crazy: they have foreseen various ways in which wings *qua* prostheses available for human use might enhance human power. The ἔρωτες for the city of the birds that grip humans (*Birds* 1316) and the intense desire for monetary wealth (πλουτεῖν…ἐρῶσιν, *Birds* 592) are one and the same.

The birds instruct Peisetairos to prepare wings to distribute to the human visitors (or should we say "customers?")—wings that are now to be imagined not as growing organically from a human body that has ingested a certain edible root, but as inorganic tools that may be stored in a basket (κάλαθον, *Birds* 1325); as if between lines 654 and 1325, an innovation in the technology of flight has taken place—in words that indicate that there are (now) different *types* of wings that correspond to the different categories of *tekhne*:

σὺ δὲ τὰ πτερὰ πρῶτον

διάθες τάδε κόσμωι·

τά τε μουσίχ᾽ ὁμοῦ τά τε μαντικὰ καὶ

τὰ θαλάττι᾽. ἔπειτα δ᾽ ὅπως φρονίμως

πρὸς ἄνδρ᾽ ὀρῶν πτερώσεις.

But first you must arrange

these wings in proper order:

musical wings here, prophetic there,

and maritime, and then be sure you shrewdly

size up the man when you wing him. (*Birds* 1330-4)

This scenario is analogous to the situation in the myth of Prometheus and Epimetheus in the *Protagoras* in which Epimetheus distributes distinct capabilities (*dunameis*) to nonhuman animals, and then Prometheus, correcting Epimetheus' oversight of humankind, distributes specialized *tekhnai* to humans. But these wings do not represent, or generate, entirely new *dunameis* or entirely new *tekhnai*; they do not facilitate qualitatively new capabilities. Instead, they facilitate *enhanced capabilites within existing technical domains—enhanced* in the precise sense of an increased power of mobility, and in the case of the sycophant, explicitly of mobility *qua* speed. Aristophanes does not simply anticipate Plato; he goes further than Plato, in that he imagines, with philosophical precision, *both* the origin of technicity (a second origin, that would take place in the absence of the gods and even *against* the gods, in a hybridizing conjugation of two kinds of animals) *and* the dynamics of technical innovation *qua* enhancement.

The first wing-seeking visitor, a father-beater (*patraloias*), might well be Pheidippides; his enthusiastic exclamation,

οὐκ ἔστιν οὐδὲν τοῦ πέτεσθαι γλυκύτερον.

ὀρνιθομανῶ γὰρ καὶ πέτομαι καὶ βούλομαι

οἰκεῖν μεθ᾽ ὑμῶν κἀπιθυμῶ τῶν νόμων

Nothing is sweeter than flying;

indeed, I'm bird-crazy and I'm flying, and I want

to live with you and I lust for your laws (*Birds* 1342-5),

recalls both the spirit and the letter of the Pheidippides' exclamation after emerging from the Phrontisterion,

ὡς ἡδὺ καινοῖς πράγμασιν καὶ δεξιοῖς ὁμιλεῖν

καὶ τῶν καθεστώτων νόμων ὑπερφρονεῖν δύνασθαι.

how sweet it is to associate with novel and intelligent projects

and to be able to think beyond established laws (*Clouds* 1399),

just as his financial ambition—"to have everything" (πάντ᾽ ἔχειν, *Birds* 1352) that belongs to his father—recalls the financial ambitions of Strepsiades and Pheidippides, and as the verb he uses to describe the violence with which he imagines fulfilling this ambition, ἄγχειν (*Birds* 1348), recalls one of the many verbs used to describe Pheidippides' violence against his father (ἀπάγχων, *Clouds* 1385). It is as if the air-walking of Socrates in *Clouds* has evolved, in *Birds*, into full-fledged flying, and as if Pheidippides' self-justifying citation of avian valorization of youthful strength against elderly weakness has become something more than a specious analogy. Peisetairos response to this visitor indicates not so much moral condemnation of his basic attitude—a chick who has beaten his father, Peisetairos says, is considered "very manly indeed" (ἀνδρεῖόν γε πάνυ, *Birds* 1349), although he also claims that the storks have a written law that requires chicks to reciprocate paternal care (*Birds* 1353-7)—as shrewd calculation

that it might not be in his own best interest to allow a man intent on violently exploiting his benefactors into Nephelokokkugia. He gives the *patraloias* a wing and recommends that he go and fight as a mercenary (μισθοφορῶν, *Birds* 1367) in the service of the Athenian empire. The contrast between Peisetairos and Trygaeus, who journeys to the sky in order to put manufacturers of the instruments of war out of business, could not be more pronounced.

The next visitor, the dithyrambic poet Kinesias, wants wings in order to pursue poetic innovations:

> ὑπὸ σοῦ πτερωθεὶς βούλομαι μετάρσιος
> ἀναπτόμενος ἐκ τῶν νεφελῶν καινὰς λαβεῖν
> ἀεροδονήτους καὶ νιφοβόλους ἀναβολάς.
> I want, having been winged by you, flying
> between heaven and earth, to snatch novel
> air-given, snow-swept preludes from the clouds. (*Birds* 1383-5)

This character, like the *patraloias*, seems to have come to Nephelokokkugia from *Clouds*; he is Socrates, if Socrates were a dithyrambic poet, for his whole *tekhne*, he says, depends upon clouds:

> κρέμαται μὲν οὖν ἐντεῦθεν ἡμῶν ἡ τέχνη.
> τῶν διθυράμβων γὰρ τὰ λαμπρὰ γίγνεται
> ἀέρια καὶ σκοτεινὰ καὶ κυαναυγέα
> καὶ πτεροδόνητα
> Indeed, our *tekhne* hangs from them.
> For the flashy parts of dithyrambs

are airy and dark and dark-gleaming

and wing-propelled. (*Birds* 1387-90)

An effective dithyramb, according to Kinesias, combines dramatically contrasting aesthetic effects in a dynamic mixture, just as a thunderstorm combines brightness and darkness in dynamic movements analogous to those of the wings of a bird in flight. Peisetairos' utter hostility to Kinesias indicates that the Handy Man has no interest in aesthetics—at least not in the aesthetics of the natural sublime. He is more sympathetic to the openly avowed desire to use wings to make money.

The third and final visitor introduces himself as a κλητήρ νησιωτικός (*Birds* 1422), an "island summonser," a person who serves citizens of island poleis subject to Athens with legal summons. That he is not merely an official serving summons in connection with charges brought by others is (as Dunbar notes) made immediately clear when he adds καὶ συκοφάντης καῖ πραγματοδίφης, "and a professional prosecutor, and a poker-after-lawsuits" (*Birds* 1423-4). He does not understand how to use a shovel (σκάπτειν γὰρ οὐκ ἐπίσταμαι, *Birds* 1432)—agricultural work, it seems, is beyond his comprehension—but his mind is full of ideas about how he might use wings to profit from the Athenian legal system more efficiently. In the same way that the cranes that helped to construct the great siege wall (the description of which we will soon examine) swallow building-stones to keep themselves balanced in flight, the sycophant imagines that he can swallow lawsuits and use those as a ballast (ἀνθ' ἕρματος πολλὰς καταπεπωκὼς δίκας, *Birds* 1429) as he flies back from the islands with the cranes. One advantage of this plan is that it will enable him to avoid losses due to the predations of pirates in seafaring ships (ἵν' οἱ λησταί τε μὴ λυπῶσί με, *Birds* 1427); whether pirates

might also acquire wings, or whether there might be pirate-birds, in a possibility he does not consider. But it soon emerges, in dialogue with Peisetairos, that his plan involves not merely the use of new space, but also the use of time—i.e., the conquest of mobility *qua* speed:

Συκ.

ἀλλὰ πτέρου με ταχέσι καὶ κούφοις πτεροῖς

ἱέρακος ἢ κερχνῆιδος, ὡς ἂν τοὺς ξένους

καλεσάμενος κἆιτ᾽ ἐγκεκληκὼς ἐνθαδὶ

κατ᾽ αὖ πέτωμαι πάλιν ἐκεῖσε.

Πε.

μανθάνω.

ὠδὶ λέγεις· ὅπως ἂν ὠφλήκηι δίκην

ἐνθάδε πρὶν ἥκειν ὁ ξένος.

Συκ.

πάνυ μανθάνεις.

Πε.

κἄπειθ᾽ ὁ μὲν πλεῖ δεῦρο, σὺ δ᾽ ἐκεῖσ᾽ αὖ πέτει

ἁρπασόμενος τὰ χρήματ᾽ αὐτοῦ.

Συκ.

πάντ᾽ ἔχεις.

βέμβικος οὐδὲν διαφέρειν δεῖ.

Sycophant

Just rig me with the light, fast wings

of a hawk or a kestrel, so that having subpoenaed

the foreigners there and gotten a judgment here,

I can fly back there again.

Peisetairos

I understand.

You mean the foreigner will lose his case

by default before he can get here.

Sycophant

You understand very well.

Peisetairos

And then while he is sailing here, you'll fly back there

to collect his property.

Sycophant

You've got it.

It's no different from whizzing around like a top. (*Birds* 1453-61)

It is not surprising that Peisetairos has no difficulty understanding the sycophant's scheme, given that its basic principle—exploiting a novel source of speed to generate economic power—is identical to that of Peisetairos' own scheme for acquiring power over gods and humans. What *is* surprising is that Peisetairos tries to turn the sycophant away from pursuing power in this way towards "honest work" (βούλομαι χρηστοῖς λόγοις τρέψαι πρὸς ἔργον νόμιμον, *Birds* 1449-50), and that when he is unable to do so, he runs the sycophant out of Nephelokokkugia without giving him the wings he asked for. It would be no less surprising, however, were Peisetairos to have approved of the

sycophant's scheme, given that the sycophant embodies the precise malady that Peisetairos and Euelpides "flew away" from Athens to escape (*Birds* 35-41). The appearance of the sycophant reveals the nature of Peisetairos' scheme by mirroring it, and reveals Peisetairos to be a form of the sycophant—a mutant super-sycophant.

In both *Clouds* and *Birds*, the difference between human and nonhuman beings is figured as one in which the nonhuman is *older* than the human. The Clouds' first words are ἀέναοι Νεφέλαι, "eternal Clouds" (*Clouds* 275). This *aeternitas* contrasts sharply with dynamic of moral and epistemological upheaval that emerges throughout the play as a defining characteristic of human life: δῖνος, "whirlwind," replaces "high-thundering Zeus, who inhabits the highest heights" (Ζεὺς ὑψιβρεμέτης, ὃς ὑπέρτατα δώματα ναίει: Hesiod, *Works and Days*, 8) as the giver of rain in the *episteme* of the Phrontisterion; novel schemes for solving financial problems supplant the tried-and-true Hesiodic solution of hard agricultural labor; new poets supplant old poets in the affections of the young (*Clouds* 1370). In the parabasis of *Clouds*, the Clouds report that the Moon is angry with the Athenians because, despite all the money she saves them on torches (the Moon knows as well as the birds how highly the Athenians value money), they have turned their timekeeping upside down (ἄνω τε καὶ κάτω κυδοιδοπᾶν, *Clouds* 616)—presumably for financial reasons—so that the gods' calendar is out of sync with that of humans. The structure of ceaseless, dynamic difference inscribed in human life, vividly legible in Aristophanes' *mimesis* of human life, is aptly characterized as what Derrida calls *différance*—difference *qua* deferral, *qua* "taking account of time and of the forces of an operation that implies an economical calculation, a detour, a delay, a relay, a

reserve"[171]—and especially *différance* understood, with Stiegler, as the fundamental concept of all technics and technicity (not only writing) as the means to an eternally deferred end (the *jouissance* Peisetairos will experience when he fucks Basileia).

The parabasis of *Birds* develops the contradiction between the nonhuman *qua* locus of *aeternitas* and the human *qua* locus of *différance* with unprecedented confidence and ridiculously pleonastic lyricism:

> ἄγε δὴ φύσιν ἄνδρες ἀμαυρόβιοι, φύλλων γενεᾷ προσόμοιοι,
> ὀλιγοδρανέες, πλάσματα πηλοῦ, σκιοειδέα φῦλ᾽ ἀμενηνά,
> ἀπτῆνες ἐφημέριοι ταλαοὶ βροτοὶ ἀνέρες εἰκελόνειροι,
> προσέχετε τὸν νοῦν τοῖς ἀθανάτοις ἡμῖν τοῖς αἰὲν ἐοῦσιν,
> τοῖς αἰθερίοις τοῖσιν ἀγήρῳς τοῖς ἄφθιτα μηδομένοισιν
>
> Humans, who in the order of *phusis* live a life (*bios*) shrouded in darkness, figures of clay as frail as the foliage of the woods, you unfortunate race, as unreal as a shadow, the illusion of a dream, hearken to us, who are immortal beings, ethereal, ever young and occupied with eternal thoughts […] (*Birds* 685-9)

In this vision of the order of things, this *phusiologia*, humans are figured as a (barely) Fertile Corpse and birds as masters of a truth both older and younger than anything human. These lines, which pit the unfathomable *aeternitas* of the nonhuman against the frail mortality of the "figures of clay" that humans, with all their intellectual pretensions, are, create precisely the effect that Csicsery-Ronay Jr. calls the "natural sublime." What is so brilliant about *Birds*, from a posthumanist perspective, is that the very birds who speak these lines later appear, in lines 1122-67, as superhuman masters of a *tekhne*—

[171] Derrida 1982, 7-8, quoted in Stiegler 1998, 139

wall-building—of human origin, to such a degree the messenger's description of their activites inspires in Peisetairos, the Handy Man, a sense of wonder akin to the technological sublime—except that in this case, the "technological object" cannot be appreciated solely as "a celebration of the power of human reason," but must be appreciated as an instance of a "cyborg" reason that transcends both its human and its nonhuman components. This, surely, is the first undeniable instance of one of the most profound and characteristic effects of sf—the "*posthuman* technological sublime."

The qualities that make the birds' work (ἔργον) "most beautiful and magnificent" (κάλλιστον καὶ μεγαλοπρεπέστατον, 1125), and that impress Peisetairos (1131-2, 1164-5), are the *size* of the wall and the *speed* with which they built it—qualities associated with the technological sublime.[172] The bird-messenger explains how this conjunction of size and speed came about. First, the birds worked alone: "No Egyptian stone-carrier, no stoneworker, no carpenter was present" (1133-4)—nor, apparently, did Euelpides help. But they employed a division of labor among different avian species. Some species converted behaviors that belonged to them by nature into techniques useful for wall building: cranes, for example, who (lore has it) swallow small stones to steady themselves in flight, carried the foundation stones into the air after swallowing them (1136-7). Other species were even more innovative. To Peisetaerus' question as to how the herons managed to load the mud for making mud-bricks into their feet, the bird-messenger replies,

> τοῦτ᾽ ὦγάθ᾽ ἐξηύρητο καὶ σοφώτατα·
>
> οἱ χῆνες ὑποτύπτοντες ὥσπερ ταῖς ἅμαις

[172] Csicsery-Ronay Jr. 2008, 151

ἐς τὰς λεκάνας ἐνέβαλλον αὐτοῖς τοῖν ποδοῖν.

For this, my friend, they discovered a most ingenious device:

the geese, scooping up the mud, as if with shovels,[173]

threw the mud into the herons' feet with their own feet. (1144-6)

By this point, the birds are not merely the passive receivers and "users" of human technologies; they have learned to invent (ἐξηύρητο) new techniques on their own.

Χο.

οὗτος, τί ποιεῖς; ἆρα θαυμάζεις ὅτι

οὕτω τὸ τεῖχος ἐκτετείχισται ταχύ;

Πε.

νὴ τοὺς θεοὺς ἔγωγε· καὶ γὰρ ἄξιον·

ἴσα γὰρ ἀληθῶς φαίνεταί μοι ψεύδεσιν.

Chorus

You, what are you doing? Do you marvel

that the wall was built so fast?

Peisetairos

By the gods, I do; and with good reason,

for truly these things seem to me like lies. (*Birds* 1164-7)

Bernard Stiegler has developed a theory of anthropogony as technogenesis partly on the basis of a reading of the myth of Prometheus and Epimetheus, in which Prometheus' gift of *tekhne* to humans, which constitutes humanity as such, is a

[173] Is this just a simile, or does it suggest that the birds are now learning from human *tekhne*, just as Democritus suggested humans had learned their *tekhnai* from other animals?

consequence of Epimetheus' forgetting to give humans a unique survival capability. Stiegler often suggests that his is a posthumanist anthropogony, in the sense that, pursuing the logic of such predecessors as Heidegger, Gille, Leroi-Gourhan, Simondon, and Derrida, he refuses to think of humans as sovereign "users" or "masters" of *tekhne*:

> Technics constitutes a system to the extent that it cannot be understood as a means—as in Saussure the evolution of language, which forms a system of extreme complexity, escapes the will of those who speak it. […] Like the machine, the human of the industrial age is dependent on the technical system, and serves it rather than making it serve itself; the human is the "assistant," the auxiliary, the helper, indeed the means of technics *qua* system.
>
> It remains the case that the systematicity of technics, which excludes its being a means, dates from before modern technics, and is constitutive of all technicity.[174]

Nevertheless, despite displacing humanity from a position of mastery in relation to technics, Stiegler's narrative arguably preserves an element of human exceptionalism that is questionable. "The myth that Stiegler has chosen," writes Tracy Colony, "is itself a very anthropocentric myth in that it characterizes all nonhuman life as positively and unitarily constituted in its being whereas the human is thought on the basis of an originary and articulating default. Stiegler's thought of originary technics also forgets the question of nonhuman life and passes over the 'earlier' default of the living with a unitary designation. However […] the thought of *différance* can be seen to overflow the edges of this anthropocentric narrative and expose the question of nonhuman life as an un-thought metaphysical aspect of Stiegler's project. For when *différance* is assumed as constitutive

[174] Stiegler 1998, 24-5

of both human and nonhuman life, the nonhuman must also be understood as in default of origin and aporetically entwined with and articulated by what is other to life."[175]

Aristophanes' *Birds* is evidently a reworking of the myth of Prometheus and Epimetheus.[176] When Prometheus appears onstage near the end of the play, Peisetairos does not recognize him at first; but as soon as the man who has given *tekhne* to the birds recognizes the god who gave *tekhne* to humans, he says, "ὦ φίλε Προμηθεῦ" (which Henderson translates, "Prometheus, old friend!" *Birds* 1503). The name "Euelpides" is built on the word *elpis*, "hope," which was the only good thing that Epimetheus received when he so foolishly accepted the gods' gift of Pandora.[177] I conclude this chapter by suggesting that Aristophanes' reworking of this myth in a way that imagines *tekhne* (always already?) overflowing the boundaries of the human and reacting with nonhuman life in ways that may be actively hostile to human agency, or unstably allied with human agency, might play a significant role in the project of "reopening the question of technics beyond the anthropological limit and rethinking technics from out of and within a common temporality of survival."[178]

III. Conclusion

Alfred Hitchcock's *The Birds* shows us what would happen if avian desire for revenge against human mistreatment, coupled with a human-like capability for coordinated large-scale action, were to escape completely the human control that

[175] Colony 2011, 88. Aristophanes' Hoopoe is an apt symbol of "the nonhuman […] understood as in default of origin and aporetically entwined with and articulated by what is other to life."
[176] On the connections between Aristophanes' *Birds* and the myth of Prometheus, see Bowie 1993, 161-3; Holzhausen 2002; Anderson and Dix 2007.
[177] Hesiod, *Works and Days*, 96-9
[178] Colony 2011, 89

Peisetairos continues to wield at the end of Aristophanes' *Birds*. In the first scene of the film, the heroine, Melanie Daniels, in a spontaneous ruse to flirt with a handsome stranger, pretends to be a bird-seller in a bird-shop. The stranger says he's looking for lovebirds. She takes him to various different cages…this is the last time in the film any bird except the two lovebirds she ends up delivering to his house in Bodega Bay will appear in a cage. As the movie progresses, the birds slowly but relentlessly drive humans—particularly Melanie and the handsome stranger, Mitch—to consider human homes, schools, restaurants, and telephone booths, as cages…as both prison and vulnerable refuge. In doing so, they seem to heed Aristophanes' birds' decree that "if anyone is keeping birds shut up in his yard, let him hasten to let them loose; those who disobey shall be seized by the birds and we shall put them in chains, so that in their turn they may decoy other men" (*Birds* 1084-7).

The irony of birds functioning as the representatives of "destructive, rapacious nature," or perhaps of a rightly incensed and vengeful nature, as they do in Hitchcock's film as well as in Daphne du Maurier's short story *The Birds* (which Hitchcock's film credits as its inspiration but deviates from considerably[179]), is that birds tend to play the role of the nonviolent, easy-to-root-for, surprisingly resilient victims of human rapacity in ecological narratives of the apocalyptic end of biodiversity. As they are not likely to actually band together and wipe humans off the face of the earth, their best future is probably as what Donna Harraway calls a "companion species:" a nonhuman species that

[179] Bellanca 2011, 26: "Hitchcock's 1963 film attributes its basic premise to Daphne du Maurier's story 'The Birds,' one of several fictions from the early and mid-twentieth century that imagine concerted attacks on human beings by ordinarily harmless birds. While the film's plot and characters have more in common with Frank Baker's 1936 novel *The Birds* than with du Maurier's story, it is her work that is officially acknowledged, and she who was financially compensated, for inspiring 'that movie.'"

humans learn cannot and should not be eradicated from the "cyborg" world we live in, but must, for the good of all creatures in the biodemocracy, be allowed to dwell in this world and to shape it, to a certain extent, in accordance with its own ends.[180]

[180] Harraway 2008

Assemblywomen:

Urban Egalitarianism and Its Discontents

I. Engineering "Equality:" An Alternative to Instrumentalization?

Darko Suvin's *Metamorphoses of Science Fiction* mentions Aristophanes' *Assemblywomen* in a way that makes it clear that the pioneering scholar of sf both recognized the Greek roots of communist utopianism and saw Aristophanes as mocking that idea:

> As for the notion that a just state depends on a community of goods, More was much closer to the early Christian Fathers and peasant insurgents—like John Ball—who extolled communism than he was to Plato. Besides, this notion was so widespread in Hellenic literature before and after Plato that Aristophanes could mock in *Ecclesiazusae* (*The Assemblywomen*) a female attempt at instituting egalitarian communism without money and toil […] All such references—characteristically surviving only in fragments or rebuttals—speak of a setup where:
>
> > …all shall be equal, and equally share
> > All wealth and enjoyments, nor longer endure
> > That one should be rich, and another be poor.
> >
> > [*Ecclesiazusae*, ll.590-91, trans. Rogers]

> Such an *omnia sint communia* is from that time forth the constant principle differentiating consistent utopian literature from the established society.[181]

Scholars of Greek literature disagree as to whether *Assemblywomen* ought to be read as utopian[182] or anti-utopian,[183] as a mockery or a celebration of revolution, as pro-Praxagora or anti-Praxagora. I agree for the most part with Ian Ruffell, who argues that

> both utopian and anti-utopian readings of the final plays are internally inconsistent, and rest on a number of questionable assumptions […] an alternative reading of a complex dialogue between utopianism and anti-utopianism is not a convenient fudge which avoids the traditional question, but is actually far more consonant with the way that both comedy and ideology function.[184]

The one problem I have with the claims of both Suvin and Ruffell is that both, in my view, too hastily identify any resistance to the "*omnia sint communia*" imperative as "anti-utopian." Agrarianism, after all, is, or at least can be, a form of utopianism predicated on the private ownership of property: the utopian agrarian may see herself as a steward of her land rather than as its master and possessor, but she may well feel that in order to be an effective steward, she must have unique rights to determine what does and does not happen on that land. Likewise, it is far from clear that a utopian vision of human erotic relationships *must* involve the sort of sexual communism that Praxagora proposes

---

[181] Suvin 1979, 94

[182] See Moodie 2012, 258 n.4, for bibliography. Moodie falls more on this side of things: "As I hope to show," she writes, "this play is neither 'dark' nor 'threatening' in tone, although it is quite political […] As we shall see, a comparison of audience address and audience reference in the *Assemblywomen* and throughout the Aristophanic corpus reveals that Aristophanes creates a closer rapport between the female characters and the Athenian audience than has previously been recognized, thus increasing the likelihood of a spectator's positive response to Praxagora's political decisions." (259-61). But see my discussion of the language of darkness in the scene with the three Old Women.

[183] See Moodie 2012, 258 n.3, for bibliography.

[184] Ruffell 2006, 67

in *Assemblywomen*. Is it not the responsibility of any true utopian thinker—that is to say, a thinker truly committed to the idea that *things could be better*—to think through the potential flaws and pitfalls in any model of collective life that might (or might not) be better that what "established society" offers?

The narrative structure of *Assemblywomen*, as I have suggested in the Introduction, may be read as an instance of what Csicsery-Ronay Jr. calls the "techno-Robinsonade," a story-structure in which the Handy Man uses the Tool Text to defeat the Shadow Mage and render the Fertile Corpse productive, thereby becoming a culture hero.[185] In fact, Aristophanes' play may be read as a kind of feminist techno-Robinsonade: instead of the Handy Man, we have a Handy Woman[186] (Praxagora); instead of the feminine Fertile Corpse, we have a masculine Fertile Corpse (the city's men, who cannot even care for their own bodies, much less the city's collective affairs); instead of the Wife at Home, we have the Husband at Home (Blepyrus). The "Selfish Man," who enters at line 746 and mocks his neighbor for obeying Praxagora's decree that all personal possessions must be deposited in a common store, and Eros, to whom the

[185] The following remarks by Fredric Jameson clarify the connection between utopianism and the "techno-Robinsonade:" "The Utopian calling, indeed, seems to have some kinship with that of the inventor in modern times, and to bring to bear some necessary combination of the identification of a problem to be solved and the inventive ingenuity with which a series of solutions are proposed and tested. There is here some affinity with children's games; but also with the outsider's gift for seeing over-familiar realities in a fresh and unaccustomed way, along with the radical simplification of the maker of models" (2005, 11).

[186] Leo Strauss emphasizes Praxagora's agency and the scope of her transformative plans—both features of the Handy Man-type character: "Praxagora is more unambiguously the initiator than Dikaiopolis and Strepsiades, for Dikaiopolis' design presupposes Amphitheos' intervention, and Strepsiades' design is not achieved without the intervention of the Clouds. Praxagora reminds us of Lysistrate […] but what Lysistrate tried to achieve by force, Praxagora, true to her name, tries to achieve by talking or by fraud. Above all, Lysistrate's objective is much more limited than Praxagora's. Lysistrate wishes to bring about peace; Praxagora wishes to bring about an unheard-of change of regime. What is true of Lysistrate's design is true of the designs that animate the actions of all the other plays hitherto discussed, with the exception of *Birds*; all those designs lack the breadth of Praxagora's designs" (Strauss 1966, 263-5).

young lovers who appear at lines 884 and 938, respectively, appeal against the necessity of having sex with old people before having sex with each other, perform the function of the Shadow Mage. Seen in this light, it is hardly surprising (or symptomatic of an "anti-utopian" attitude on Aristophanes' part) that Praxagora's actions encounter resistance, or that her success is less than total: a techno-Robinsonade without a potent Shadow Mage would not be much of a narrative.

The opening lines of the play immediately indicate that Praxagora has a very different relationship with her tools than Aristophanes' other—male—Handy Men have with theirs. She addresses the lamp that she hopes will signal her location to her comrades and co-conspirators in the form of a prayer:

> Ὦ λαμπρὸν ὄμμα τοῦ τροχηλάτου λύχνου
> κάλλιστ᾽ ἐν εὐστόχοισιν ἐζητημένον:
> γονάς τε γὰρ σὰς καὶ τύχας δηλώσομεν:
> τροχῷ γὰρ ἐλαθεὶς κεραμικῆς ῥύμης ὕπο
> μυκτῆρσι λαμπρὰς ἡλίου τιμὰς ἔχεις:
> ὅρμα φλογὸς σημεῖα τὰ ξυγκείμενα.
> σοὶ γὰρ μόνῳ δηλοῦμεν εἰκότως, ἐπεὶ
> κἀν τοῖσι δωματίοισιν Ἀφροδίτης τρόπων
> πειρωμέναισι πλησίον παραστατεῖς,
> λορδουμένων τε σωμάτων ἐπιστάτην
> ὀφθαλμὸν οὐδεὶς τὸν σὸν ἐξείργει δόμων.
> μόνος δὲ μηρῶν εἰς ἀπορρήτους μυχοὺς
> λάμπεις ἀφεύων τὴν ἐπανθοῦσαν τρίχα:

στοάς τε καρποῦ Βακχίου τε νάματος

πλήρεις ὑποιγνύσαισι συμπαραστατεῖς:

καὶ ταῦτα συνδρῶν οὐ λαλεῖς τοῖς πλησίον.

ἀνθ᾽ ὧν συνείσει καὶ τὰ νῦν βουλεύματα

ὅσα Σκίροις ἔδοξε ταῖς ἐμαῖς φίλαις.

O Lamp, which gleameth in darkness,

hallowed be Thy flame;

I'll hang Thee here

and sing aloud Thy name,

from whence Thou came

and whither Thou shalt glow:

the potter's wheel which spun Thee round;

Thy nose so bright, bright as a sun.

Now send, dear Lamp, Thy promised beams abroad.

Thou alone knowest who is on the way,

for only Thou *should* know it all—always by the bed

when we answer nightly Aphrodite's call,

Thou from Whom we never hide

no matter how twisted we are

in love's latest position.

Thou alone hast lit the slit

between our thighs and singed

the burning bush away;

and Thou illuminate us, too,

when, skeleton key in hand, we pop

our husbands' pantry locks to warm

our poor spare ribs with food and drink.

Not once hast Thou ever told a living soul

and so hast earned a share in our present plans, the ones the girls and I dreamed

up

during last year's Mothers' March for Demeter. (*Assemblywomen* 1-18)

The Christian prayer language that R.H.W. Dillard employs in the above translation reflects the prayer language of the Greek,[187] which resembles the language of the prayer to Helios that opens Euripides' *Phaethon* (see Ussher ad loc.). It is also potentially misleading inasmuch as it might suggest that Praxagora is addressing her lamp as the Almighty God—which of course would be ridiculous. But in the context of Greek religious attitudes, praying to a functional object is not as ridiculous as it might appear. As Andreas Willi remarks, "Ancient prayers and hymns are negotiations with the gods. Unlike Christian prayers they assume that divinities have personal obligations and interests. They regularly include an explicit or implicit argumentation."[188] The first part (1-5) of Praxagora's prayer in an invocation that does not naively mistake the lamp for a god but rather describes it as a manufactured object (τροχῷ γὰρ ἐλαθεὶς κεραμικῆς ῥύμης ὕπο, 4) that holds (deservingly, it is implied) the "shining honors of Helios" (λαμπρὰς ἡλίου τιμὰς, 5). The second part of the prayer (6-18) is an argument of the

[187] See Willi 2003, 16, on ὦ as the typical opening word of prayers.
[188] Willi 2003, 37

form Willi identifies as "*da quia dedisti*," "give because you have given in the past."[189] The requested gift is a simple one, entirely consistent with the function the lamp was created to perform: to shine (and thereby, in this particular situation, to summon Praxagora's companions). The favors recalled are very intimate ones involving the private care of women's bodies in matters of hygiene, sex, and nourishment.

What might it mean to treat a functional object as a kind of divinity? Praxagora's prayer suggests that this would involve appreciating the object's functionality, without instrumentalizing it (i.e., *reducing* it to its function to the point that one would be willing to discard it immediately in favor of another object that performed the same function—say, shining light—slightly better); treating it as something mysterious, however familiar; not being afraid to talk to it, even if it never talked back. That is clearly a utopian, rather than a utilitarian, mode of relating to objects. Whether it is a mode that is consistent with, or encouraged by, communal possession, is less clear.

The way in which Praxagora treats her lamp as a divinity is very different from the way in which Strepsiades treats a δῖνος, "an earthen goblet or cup (δῖνος) which is presumably placed on a pillar,"[190] as a divinity in *Clouds*. In the worldview of the Phrontisterion, which Strepsiades adopts (and which his rustic imagination deforms partly but not entirely), δῖνος has *replaced* Zeus, both by *nomos* and in the truth peculiar to *phusis*: Socrates forbids Strepsiades from swearing by Zeus because, he says, "the *theoi* [the twelve deities of the traditional pantheon] are not legal tender for us" (θεοὶ ἡμῖν νόμισμ᾽ οὔκ ἔστι, *Clouds* 247-8), and shortly thereafter claims bluntly, "Zeus does not exist" (οὐδ᾽ ἐστὶ Ζεύς, *Clouds* 367). Praxagora never suggests that she thinks of her

[189] Willi 2003, 38-9
[190] Revermann 2006, 208

lamp as having replaced Zeus or as ruling in his place (as does Strepsiades: *Clouds* 380-1, 1470-3). On the contrary, she emphasizes female loyalty to "ancient custom" (ἀρχαῖον νόμον, *Assemblywomen* 216), which in *Clouds* is associated with belief in the traditional divinities, and which Praxagora explicitly associates with the steadfast performance of ancient religious rituals such as the Thesmophoria (*Assemblywomen* 223a). Her prayer to her lamp represents an expansion, not a contraction, of the sphere of the sacred.

On the other hand, the radical egalitarianism she proposes and implements does not produce the sort of renewal that a renewed devotion to, or even (as in the case of Aeschylus' *Eumenides*) a just compromise with, the traditional divinities, is supposed to produce. "In the new order," writes Leo Strauss, referring to the scene near the end of the play in which three old, ugly women—Strauss refers to them as "hags"—thwart the prayers and desires of two young lovers, "Eros does not listen to the prayers of the lovers. Death and decay triumph over life and bloom."[191] In the following passage, which is worth quoting at length, Strauss thinks through the paradoxes of Praxagora's egalitarianism:

> Egalitarianism calls for the abolition of all inequalities and therefore for absolute communism (communism regarding property, women, and children); yet, since the most important inequalities are ineradicable, egalitarianism requires that the inferior be given privileges in order to compensate them for their defects; their envy must be appeased. The absurdity of egalitarianism is not as palpable in the case of property as in the case of sex, since whether men are rich or poor depends as much on chance as on natural inequality. This explains why the scene between

[191] Strauss 1966, 277, emphasis added

> the hags and the young lovers is both so important and so unambiguous. The triumph of the hags reflects the triumph of Praxagora. *It is the triumph of art over nature*: *Not the sun, but the lamp is Praxagora's emblem*. It is because Praxagora's scheme in a sense follows from the egalitarian principle that it meets no resistance to speak of in Athens. It is because Praxagora, who has no equal in either sex, is the living refutation of egalitarianism pure and simple that she is not seen and barely heard of in the second half of the play.[192]

This passage leaves no doubt that Strauss considers the paradoxes of egalitarianism to be the central concern of *Assemblywomen*. I conclude this dissertation with a chapter on *Assemblywomen* because the same, or closely related, paradoxes seem to me to be critical concerns of both sf and posthumanism. Is it not odd, and important, that Darko Suvin considers *genuine support* for radical egalitarianism a defining characteristic of a genre in which the protagonist is so often a human radically unequal to other humans in intelligence and ambition? After all, the latter characteristic is not merely incidental, but could easily be taken as the essential characteristic that distinguishes sf from Realism, the genre of the "Everyman"-protagonist. And is it not odd, and important, that posthumanism is split into two strands, one of which dreams of radical *inequality*, an ever-widening gap between those humans who embrace the future of techno-enhancement and those who do not and also between humans who embrace techno-enhancement and every other kind of animal; the other of which advocates a radical ontological egalitarianism, a worldview—human, necessarily, but not humanocentric—in

[192] Strauss 1966, 280

which being a human is not *better* than being a bat, or an orchid, or a stone, just different?

One of the most significant inequalities that Praxagora's design involves, which Strauss does not mention in the above quotation but mentions elsewhere, is slavery. "Blepyrus […] is concerned with the question of the production or reproduction of the wealth that the citizens are to enjoy in common; after all, in the old order the poor, who are much more numerous than the rich, are sufficiently induced by their needs to work hard for their living, and this inducement is about to disappear with the abolition of poverty. […] Praxagora's decision is to the effect that the land will be cultivated by the slaves and the women will weave the clothing; men will have nothing to do but enjoy the fruits of the slaves' and the women's labor.[193] Recall that, according to Strepsiades, the inhabitants of the Phrontisterion claim that the universe (οὐρανός) is an oven (πνιγεύς), and we humans (*anthropoi*) are the charcoals (*anthrakes*) (*Clouds* 94-99). In Chapter 1 I read this image as an early example of the instrumental/mechanical view of the cosmos, while highlighting the ironic fact that the inhabitants of the Phrontisterion display an aversion to food. If the cosmos is an oven, and if it is a functional oven, who eats the food that it makes? One is tempted to reply that it must be the gods the Selfish Man describes, whose hands are always extended because they want to take things from humans (*Assemblywomen* 780-3). Praxagora's design effectively *transforms the* polis *into an oven*, inasmuch as its only role in the production of food will be to prepare for consumption what others have produced. Therefore, it is not only humanocentric, but also elitist. Perhaps the gap between Praxagora and the Phrontisterion is not so wide after all.

[193] Strauss 1966, 271

II. Randomization: A Poisonous Remedy?

Let us now turn our attention, momentarily, away from Praxagora and her comrades, and focus on the city's men. The first male character we see is Blepyros, Praxagora's husband, who goes outside wearing his wife's ἡμιδιπλοίδιον ("little dress") and Persian slippers (*Assemblywomen* 318-19), hoping to find a place to take a shit in privacy. Alas, he is incapable of finding privacy or of taking a shit. "Some sort of choke pear's got my food blockaded inside" (*Assemblywomen* 355). But his troubles don't stop there:

ἀτὰρ τί δράσω; καὶ γὰρ οὐδὲ τοῦτό με
μόνον τὸ λυποῦν ἐστιν, ἀλλ᾽ ὅταν φάγω,
ὅποι βαδιεῖταί μοι τὸ λοιπὸν ἡ κόπρος.
νῦν μὲν γὰρ οὗτος βεβαλάνωκε τὴν θύραν,
ὅστις ποτ᾽ ἔσθ᾽ ἄνθρωπος ἀχραδούσιος.
τίς ἂν οὖν ἰατρόν μοι μετέλθοι, καὶ τίνα;
τίς τῶν καταπρώκτων δεινός ἐστι τὴν τέχνην;
ἆρ᾽ οἶδ᾽ Ἀμύνων; ἀλλ᾽ ἴσως ἀρνήσεται.
Ἀντισθένη τισ καλεσάτω πάσηι τέχνηι·
οὗτος γὰρ ἀνὴρ ἕνεκά γε στεναγμάτων
οἶδεν τί πρωκτὸς βούλεται χεζητιῶν.
ὦ πότνι᾽ Ἱλείθυα μή με περιίδηις
διαρραγέντα μηδὲ βεβαλανωμένον,
ἵνα μὴ γένωμαι σκωραμὶς κωμωιδική.

But what am I going to do? For this is not the only thing

causing me pain; in the future, when I eat, where will the food go?

As it is, whoever this man from Pearville might be,

he's got my back door bolted.

Who will find me a doctor—and what kind of doctor?

One who is *deinos* in the *tekhne* that concerns assholes?

Does Amynon know anything about that? But perhaps he will

deny it, or refuse to help. Somebody call Antisthenes at any cost!

This man can diagnose from groans and grunts

what a shitting asshole wants.

Mistress Hileithya, don't overlook me when I'm bolted and bursting,

lest I become a comic potty! (*Assemblywomen* 358-71)

The analogy between care of the physical body and care of the city appears frequently in Aristophanes. In *Wasps*, Bdelukleon says,

χαλεπὸν μὲν καὶ *δεινῆς γνώμης* καὶ μείζονος ἢ ᾽πὶ τρυγωιδοῖς

ἰάσασθαι νόσον ἀρχαίαν ἐν τῆι πόλει ἐντετοκυῖαν

it is a difficult task, and one requiring *marvelous intelligence*—more than what comedians usually have—*to heal an ancient disease* endemic to the city (*Wasps* 650-1),

before trying to demonstrate to Philokleon, using quantitative reasoning, that the three obols he receives as a juror, and is so thrilled to receive that he has wet dreams about the lawcourt and writes erotic graffiti about the lawcourt wherever he can, do not represent a fair share of Athens' collective wealth. The phrase *νόσον ἀρχαίαν* is notable, for in Aristophanes, the period of time that the adjective ἀρχαῖος denotes is generally thought

of as being free from the problems of individual power hunger and monetary greed, as it is, for example, in the antistrophe of the *parodos* of *Assemblywomen* (302-310c Henderson, 300-310 Ussher), as well as in Praxagora's explanation of the superiority of women (215-18). Perhaps the current problem is merely a symptom of a deeper, older flaw in the Athenian character. When Bdelukleon's quantitative argument fails to produce the desired effect, he devises (μηχανᾶται, *Wasps* 870) a more immersive treatment that closely resembles comic theater. In the prayer to Apollo that precedes this treatment, he refers to it as a "new ritual:"

> δέξαι τελετὴν καινήν, ὦναξ, ἣν τῶι πατρὶ καινοτομοῦμεν.
> παῦσόν τ᾽ αὐτοῦ τουτὶ τὸ λίαν στρυφνὸν καὶ πρίνινον ἦθος,
> ἀντὶ σιραίου μέλιτος σμικρὸν τῶι θυμιδίωι παραμείξας.
> Accept this innovative ritual, Lord, which we have invented for my father.
> Purge him of his excessively harsh and oak-hard *ethos*,
> mixing a bit of honey into his little *thumos*, like condensed wine. (*Wasps* 876-8)

This image invites us to imagine the *ethos* as part of a physical *thumos* that could be sweetened by contact with sweet substances such as honey or condensed wine, which in turn suggests that an *iatros* might be the right sort of technician to call upon to treat Philokleon. But *iatroi*, though sometimes called upon in Aristophanes, never answer the call; they are always absent. In *Ploutos*, Chremylos responds to Blepsidemos' suggestion that they call in an *iatros* to restore Wealth's sight by asking, with heavy irony, "What *iatros* is left in this city? None, because there's no money in that *tekhne*" (*Ploutos* 406-8). Hence, they must restort to a treatment—incubation in the temple of Asclepius—that, like Bdelukleon's "innovative ritual," unites old-fashioned religiosity and theatricality. No

iatros specializing in the *tekhne* of proctology shows up to care for Blepyros—none, that is, except for Praxagora.

Because Aristophanes never made an *iatros* a comic hero, and yet often has his characters call for *iatroi* or see themselves as kinds of *iatroi*, we may conclude that, like Plato, he saw his own *tekhne* as analogous to, but by no means equivalent to or replaceable by, that of an *iatros*. The reason for this is perhaps that while an *iatros* might think of political problems as symptoms of individual physical problems best treated with a strategic regimen, Aristophanes thinks of physical problems as symptomatic of political problems best treated with comic theater. Shortly after the lengthy passage quoted above in which Blepyros complains about his constipation, his neighbor appears and reports that the assembly shouted down the first speaker, a man named Neokleides who suffered from some kind of eye disease, on the grounds that a man who could not figure out how to save his own eyes could hardly figure out how to save the city (*Assemblywomen* 395-404). They did not call for an *iatros* to cure Neokleides' eyes and ask him to cure the *polis* while he was at it, as they might have had they seen eye disease as the root of the problem. What they do implies a belief that every man, if he is able to be a competent political speaker—as every man in an egalitarian democracy ought to be—ought to be able to act as his own *iatros*—that is to say, to care for himself.

Blepyros' opening monologue implies that he is very far from being able to care for himself physically, domestically, or politically—and that these three domains of care are intertwined. Strauss suggests that this makes Blepyros not only ridiculous, but also contemptible. "While Praxagora […] has reached the highest height to which human beings in cities can rise, her husband has reached the lowest low. What is united in the

dung beetle is divided between Praxagora and Blepyros in such a way that Blepyros comes closer to the goal of its lowest aspiration than Praxagora comes to the goal of its highest aspiration. Blepyros' is the most ridiculous situation in which we find any Aristophanean character […] Blepyros—an old man who spends on the toilet seat the time during which his young wife becomes the ruler of the city, and therewith also his ruler—is ridiculous because he suffers from a kind of helplessness or ineptitude that does not arouse compassion."[194]

If Blepyros is contemptible, this is perhaps because he is not only playing a female role, but playing a female role *badly*. The men in *Thesmophoriazousae* who play female roles at least do so rather well. Blepyros plays his role, that of the Wife at Home, very poorly. "The Wife at Home," writes Csicsery-Ronay Jr., "is what she appears to be, the flesh-and-blood woman who is married or betrothed to the Handy Man hero. She is left behind when the Handy Man embarks on his adventures. […] She is often a modern Penelope, faithfully awaiting her husband's return. […] She is the guardian and manager of domestic stability for the Handy Man, who has neither the opportunity nor the inclination to enjoy it, and yet for whom this protected and unenjoyed intimate sphere appears to be mythically necessary. […] She represents one half of the feminine in the modern adventure model, the other being the Fertile Corpse."[195] Blepyros, who while wearing his adventuring wife's nightclothes calls upon the goddess of childbirth to ease his constipation so that he does not grow so pregnant with shit that he bursts open (which would make him, quite literally, an excremental corpse), is a grotesque mixture of the Fertile Corpse and the Wife at Home. His inability to care either for his own body or for

[194] Strauss 1966, 266
[195] Csicsery-Ronay Jr. 2008, 233-4

his own household—the evidence of which, of course, is that his wife is able to steal his clothing and his place in the *ekklesia*—is a symptom of the political lifelessness of the men of Athens in general. Or at least of the husbands of Praxagora's comrades, who are sufficiently numerous to outvote the farmers (*Assemblywomen* 431-2)—a remark that indicates that Praxagora and her comrades are the wives of men who live in the inner city, the *astu*. In fact, Praxagora tells us that she once *lived* on the very hill where the assembly was held:

> ἐν ταῖς φυγαῖς μετὰ τἀνδρὸς ὤικησ᾽ ἐν πυκνί.
> ἔπειτ᾽ ἀκούσουσ᾽ ἐξέμαθον τῶν ῥητόρων.
> During the displacements I lived with my husband on the Pnyx,
> and I learned by listening to the speakers. (*Assemblywomen* 243-4)

Her plan to turn the *polis* into an *oikos* would thus appear to be the natural result of her having once lived—with her husband, let us not forget, and presumably at his behest—in an *oikos* located as far as possible from the fertile fields to which Dikaiopolis and Trygaeus long to return, on the very hill where, in *Knights*, Demos gorges himself on the delicious gifts of power hungry orators. Perhaps this explains why Praxagora can imagine turning the city's men into happy and functioning consumers of gastronomic and sexual pleasure, but not into happy producers of anything except sexual pleasure: she may never have seen a happy farmer.

Praxagora's cure for constipation involves traumatic surgical modifications to the body of the city; it aims to transform human bodies by transforming and repurposing buildings and manmade objects:

> **Βλέπυρος**

τὴν δὲ δίαιταν τίνα ποιήσεις;

Πραξάγορα

κοινὴν πᾶσιν. τὸ γὰρ ἄστυ

μίαν οἴκησίν φημι ποιήσειν συρρήξασ᾽ εἰς ἓν ἅπαντα,

ὥστε βαδίζειν ὡς ἀλλήλους.

Βλέπυρος

τὸ δὲ δεῖπνον ποῦ παραθήσεις;

Πραξάγορα

τὰ δικαστήρια καὶ τὰς στοιὰς ἀνδρῶνας πάντα ποιήσω.

Βλέπυρος

τὸ δὲ βῆμα τί σοι χρήσιμον ἔσται;

Πραξάγορα

τοὺς κρατῆρας καταθήσω

καὶ τὰς ὑδρίας, καὶ ῥαψῳδεῖν ἔσται τοῖς παιδαρίοισιν

τοὺς ἀνδρείους ἐν τῷ πολέμῳ, κεἴ τις δειλὸς γεγένηται,

ἵνα μὴ δειπνῶσ᾽ αἰσχυνόμενοι.

Βλέπυρος

νὴ τὸν Ἀπόλλω χάριέν γε.

τὰ δὲ κληρωτήρια ποῖ τρέψεις;

Πραξάγορα

εἰς τὴν ἀγορὰν καταθήσω:

κᾆτα στήσασα παρ᾽ Ἁρμοδίῳ κληρώσω πάντας, ἕως ἂν

εἰδὼς ὁ λαχὼν ἀπίῃ χαίρων ἐν ὁποίῳ γράμματι δειπνεῖ:

και κηρύξει τοὺς ἐκ τοῦ βῆτ᾽ ἐπὶ τὴν στοιὰν ἀκολουθεῖν

τὴν βασίλειον δειπνήσοντας: τὸ δὲ θῆτ᾽ ἐς τὴν παρὰ ταύτην,

τοὺς δ᾽ ἐκ τοῦ κάππ᾽ ἐς τὴν στοιὰν χωρεῖν τὴν ἀλφιτόπωλιν.

Βλέπυρος

ἵνα κάπτωσιν;

Πραξάγορα

μὰ Δί᾽ ἀλλ᾽ ἵν᾽ ἐκεῖ δειπνῶσιν.

Βλέπυρος

ὅτῳ δὲ τὸ γράμμα

μὴ ᾽ξελκυσθῇ καθ᾽ ὃ δειπνήσει, τούτους ἀπελῶσιν ἅπαντες.

Πραξάγορα

ἀλλ᾽ οὐκ ἔσται τοῦτο παρ᾽ ἡμῖν:

πᾶσι γὰρ ἄφθονα πάντα παρέξομεν,

ὥστε μεθυσθεὶς αὐτῷ στεφάνῳ

πᾶς τις ἅπεισιν τὴν δᾷδα λαβών.

Blepyrus

But what kind of life is it you propose to set up?

Praxagora

The life in common. Athens will become nothing more than a single house, in which everything will belong to everyone; so that everybody will be able to go from one house to the other at pleasure.

Blepyrus

And where will the meals be served?

Praxagora

The law-courts and the porticoes will be turned into dining-halls.

Blepyrus

And what will the speaker's platform be used for?

Praxagora

I shall place the bowls and the ewers there; and young children will sing the glory of the brave from there, also the infamy of cowards, who out of very shame will no longer dare to come to the public meals.

Blepyrus

Well thought out, by Apollo! And what will you do with the *kleroteria*?

Praxagora

I shall have them taken to the agora, and standing close to the statue of Harmodius, I shall draw a lot for each citizen, which by its letter will show the place where he must go to dine. Thus, those for whom I have drawn an R will go to the royal portico if it's a T, they will go to the portico of Theseus; if it's a K, to that of the flour-market.

Blepyrus

To cram himself there like a capon?

Praxagora

No, to dine there.

Blepyrus

And the citizen whom the lot has not given a letter showing where he is to dine will be driven off by everyone?

Praxagora

With great solemnity.

But that will not occur. Each man will have plenty; he will not leave the feast until he is well drunk, and then with a chaplet on his head and a torch in his hand. (*Assemblywomen* 673-692)

Bdelukleon attempts to cure his father of what he sees as a toxic attachment to the δικαστήρια by constructing a model δικαστήριον in his *oikos*; Praxagora, intervening much more radically and on a much larger scale, attempts to eradicate the problems associated with the δικαστήρια by completely transforming their function. She will use the *kleroteria*, the ingenious devices the Athenians used to randomly assign jurors to lawcourts, in precisely the way that they have always been used[196]—except that now, the δικαστήρια will not function as lawcourts, but as dining halls. In the old order, the *kleroteria* minimized the possibility that a defendant might have or develop a unique personal bond with all or part of the jury that would try his case. The function of the *kleroteria* in the new order is presumably to minimize the possibility that any Athenian will develop a unique bond with any particular dining hall or dining utensil, or with any particular set of dining companions. *All* relationships—not just the one between a person accused of a crime and those who are to decide whether the accusation is true or false, or the one between an Athenian man and the powers and privileges of public office—must be submitted to the randomization that the *kleroterion* produces, not just ideologically, but *physically*.

[196] For a detailed reconstruction of the way in which the *kleroteria* were probably used, see Dow 1939.

Hence, just as, in the new order, no sustained, uniquely intimate shared history will structure the relationships between sexual partners or between parents and children—every child will consider every man of the previous generation his or her father (*Assemblywomen* 636-7)—so, in the new order, peculiar intimacy with particular household objects, the sort of intimacy one can only have with *one's own* things, will disappear. We must read the following monologue, in which a man who is dutifully following Praxagora's decree that all personal possessions must be turned over to the female government collects his cooking utensils and speaks to them *as his own things* for what must be almost the last time, with that in mind:

χώρει σὺ δεῦρο κιναχύρα καλὴ καλῶς
τῶν χρημάτων θύραζε πρώτη τῶν ἐμῶν,
ὅπως ἂν ἐντετριμμένη κανηφορῇς,
πολλοὺς κάτω δὴ θυλάκους στρέψασ᾽ ἐμούς.
ποῦ᾽ σθ᾽ ἡ διφροφόρος; ἡ χύτρα δεῦρ᾽ ἔξιθι,
νὴ Δία μέλαινά γ᾽, οὐδ᾽ ἂν εἰ τὸ φάρμακον
ἔψουσ᾽ ἔτυχες ᾧ Λυσικράτης μελαίνεται.
ἵστω παρ᾽ αὐτήν, δεῦρ᾽ ἴθ᾽, ἡ κομμώτρια.
φέρε δεῦρο ταύτην τὴν ὑδρίαν ὑδριαφόρε
ἐνταῦθα. σὺ δὲ δεῦρ᾽ ἡ κιθαρῳδὸς ἔξιθι,
πολλάκις ἀναστήσασά μ᾽ εἰς ἐκκλησίαν
ἀωρὶ νυκτῶν διὰ τὸν ὄρθριον νόμον.
ὁ τὴν σκάφην λαβὼν προΐτω: τὰ κηρία
κόμιζε, τοὺς θαλλοὺς καθίστη πλησίον,

καὶ τὼ τρίποδ᾽ ἐξένεγκε καὶ τὴν λήκυθον.

τὰ χυτρίδι᾽ ἤδη καὶ τὸν ὄχλον ἀφίετε.

Come hither, my beautiful sieve, I have nothing more precious than you, come, all clotted with the flour of which I have poured so many sacks through you; you shall act the part of Canephorus in the procession of my chattels. Where is the sunshade carrier? Ah! this stew-pot shall take his place. Great gods, how black it is! it could not be more so if Lysicrates had boiled the drugs in it with which he dyes his hair. Hither, my beautiful mirror. And you, my tripod, bear this urn for me; you shall be the water-bearer; and you, cock, whose morning song has so often roused me in the middle of the night to send me hurrying to the Assembly, you shall be my flute-girl. Scaphephorus, do you take the large basin, place in it the honeycombs and twine the olive-branches over them, bring the tripods and the phial of perfume; as for the humble crowd of little pots, I will just leave them behind. (*Assemblywomen* 730-45)

The imperatives in this passage—the repeated δεῦρ᾽ ἔξιθι (734, 737, 739), χώρει σὺ δεῦρο (730), θύραζε (731), ἵστω (737), φέρε δεῦρο (738), λαβὼν προΐτω (742), κόμιζε (743), καθίστη (743), ἐξένεγκε (744), and ἀφίετε (745)—all addressed to household cooking utensils, call to mind the kind of world described in the fragments of Teleclides' *Amphictyons* (especially fr. 1, Athenaeus 268a-d) and Krates fr. 16. In the former, the speaker (whose identity is uncertain) describes the "way of life" (βίον) that he provided for mortals "from the beginning" (ἐξ ἀρχῆς) as one in which different kinds of bread would "fight" (ἐμάχοντο) for the delight of being eaten by humans; fish would come into humans' houses (οἴκαδ᾽ ἰόντες), grill themselves, and lie down on the dinner

table[197]; and roast thrushes would "fly down your throat" (εἰς τὸν φάρυγ᾽ εἰσεπέτοντο, 12). In the latter, a character says that he is going to make "everything" (τὰ πάντα)—by which he means not only food made from plants and animals (such as bread and fish: 8-10) but also manmade tools (ἕκαστον τῶν σκευαρίων, 4-5)—ὁδοιποροῦντα, "self-mobile," so that a human will be able to say to a table, "Put yourself here, table, and set yourself" (παρατίθου, τράπεζα, αὐτὴ παρασκεύαζε σαυτόν, 5-6), and likewise to speak in the imperative mood to a κύαθε (pitcher) and a κύλιξ (drinking cup). In Teleclides' utopian vision, humans are the entirely passive recipients of nature's eager and unstinting service. In Krates' utopian vision, by contrast, humans must still *act*, inasmuch as vocalizing an imperative is an action, but they do not have to generate any motive force with their bodies. The above passage from *Assemblywomen* puts a strange twist on the kind of world Krates describes: here, too, we seem to be in a world in which a human can manipulate his tools with words, but here, unlike in Krates, the speaking character orders his cooking utensils not to gratify his senses or satisfy his appetite, but to *come out* of his house so that he can *give them away*.

Two words, πολλούς (733) and πολλάκις (740), emphasize the history that this character shares with these particular possessions: his sieve (κιναχύρα) has sifted *many* bags of flour; his cock has woken him up *many times* to go to the assembly. Is it perhaps this shared history, the repetition of faithful service, that inspires him to call his sieve "beautiful" (καλὴ) and to imagine it walking "beautifully" (καλῶς)?

While this character, whom we may refer to as the "Law Abiding Man," is preparing to take his things to the *agora*, another man, whom we may refer to as the

[197] ἐξοπτῶντες σφᾶς αὐτοὺς ἂν παρέκειντ᾽ ἐπὶ ταῖσι τραπέζαις (7).

"Selfish Man,"[198] comes along and asks what he is doing. The Selfish Man performs part of the function of the Shadow Mage, using the same tools—shrewd intelligence, persuasive speech, deceit[199]—that Praxagora used to devise and implement her plan to work against that plan. He swears that he will not turn over his possessions to the government without investigating the situation for himself:

> μὰ τὸν Ποσειδῶ γ᾽ οὐδέποτ᾽, ἀλλὰ βασανιῶ
> πρώτιστον αὐτὰ πολλάκις καὶ σκέψομαι.
> οὐ γὰρ τὸν ἐμὸν ἱδρῶτα καὶ φειδωλίαν
> οὐδὲν πρὸς ἔπος οὕτως ἀνοήτως ἐκβαλῶ,
> πρὶν ἐκπύθωμαι πᾶν τὸ πρᾶγμ᾽ ὅπως ἔχει.
> By Poseidon I will never; instead, I will first of all
> test and investigate the situation very thoroughly.
> For I will not thoughtlessly throw away my sweat
> and sacrifice for a mere word,
> before I learn exactly how everything really is. (*Assemblywomen* 748-52)

The verbs βασανιῶ, σκέψομαι, and ἐκπύθωμαι characterize the Selfish Man as a hard-nosed investigator, the sort of person who, unlike Blepyros, might make a good political *iatros*. He refuses, no doubt for reasons based in experience, to believe that the Athenians will obey the new law without visual evidence that they are doing so: "I'll believe it when

---

[198] These characters are sometimes referred to as "Citizen A" and "Citizen B;" some scholars think that Citizen A is Chremes. See Ussher on 564, Sommerstein on 564, and Ruffell 2006, 93. Naming Citizen B is a significant act of interpretation, as Ruffell points out: "It is fascinating […] to see how Citizen B is handled by critics. As a shorthand, he is labeled 'The Skeptic' (Ober) or 'The Dissident' (Sommerstein), suggesting perhaps a Protagoras or a Sakharov. In reality, he is neither the one nor the other. His is not a position of moral or philosophical principle so much as personal profit. He is the embodiment of the greed and self-interest that has been satirized throughout the play" (2006, 96).

[199] For Praxagora's intelligence, see e.g. *Assemblywomen* 571-80

I see it" (ἰδὼν ἐπειθόμην, 772). He diagnoses both possessiveness (777-8) and inconsistency between vote and behavior (797-8) as deeply rooted features of the Athenian character. When speaking of his own possessions, he does not describe what they have done for him but what he has done to acquire them (sweat, sacrifice). All of this is perhaps better characterized as cautious than as selfish. Until line 853, the debate between the Law Abiding Man and the Selfish Man does not have the moral clarity of the debate between the Greater Logos and the Lesser Logos in *Clouds*; after all, even though neither man knows it, the laws that the Law Abiding Man is eager to obey have been passed by illegal means.

At line 834, a female herald enters and announces that dinner is ready. "The tables are set," she says, "and heaped high with every kind of treat, and the couches are draped with cushions and coverlets. They're mixing the wine in bowls, and the scent girls are standing by" (838-42). Evidently other Athenians have been quicker to turn over their possessions than the Law Abiding Man; or else the tables, couches, cushions, coverlets, and mixing bowls that the herald refers to were already public property; or else the herald is lying in order to persuade the Athenians to hurry up and contribute their property, so that the scene she describes can become a reality. If at this point the Selfish Man were to decide to delay his decision as to whether or not he would turn over his possessions before he had investigated whether or not what the herald says is true, one could not justly call him a Selfish Man. But that is not the decision he makes. He exits saying,

> νὴ τὸν Δία δεῖ γοῦν μηχανήματός τινος,
> ὅπως τὰ μὲν ὄντα χρήμαθ' ἕξω, τοῖσδέ τε
> τῶν ματτομένων κοινῆι μεθέξω πως ἐγώ.

By Zeus, I need to devise some stratagem,

whereby I can keep the possessions I have,

and also share in the common goodies (*Assemblywomen* 872-4).

This leaves no doubt that the Selfish Man is not only Praxagora's Shadow Mage, but also a symptom of the political disease Praxagora diagnosed in lines 205-8[200]:

ὑμεῖς γάρ ἐστ', ὦ δῆμε, τούτων αἴτιοι.

τὰ δημόσια γὰρ μισθοφοροῦντες χρήματα

ἰδίαι σκοπεῖσθ' ἕκαστος ὅ τι τις κερδανεῖ,

τὸ δὲ κοινὸν ὥσπερ Αἴσιμος κυλίνδεται.

You, *demos*, are the cause of these problems.

For while taking public pay [to do your public duty],

each of you looks to make a personal profit,

and the public good flounders like Aisimos.

The scene involving the Law Abiding Man, his possessions, and the Selfish Man raises but hardly resolves several important questions concerning the effects (and the effectiveness) of Praxgaora's new laws. Are communal possession and randomized use of objects consistent with the kind of intimate, affectionate relationship to his own objects that the character who is willing to obey the new laws displays—or will communal possession and randomized use destroy the unique shared history in which that intimacy and affection are rooted? Will the new laws prove to be an effective cure for the political

[200] See Ruffell 2006, 97-8

problem the Selfish Man's mindset represents, or will they merely offer that mindset a new set of conditions to exploit for personal profit?

The following scene, which examines the effects of Praxagora's new sexual laws, raises a different but related set of questions. The new sexual laws aim to provide equal access to sexual pleasure to all citizens, male and female, regardless of age or appearance. The scene in which Aristophanes imagines these laws being put into practice suggests that sexual pleasure simply cannot be distributed equally, at least not in the way that Praxagora proposes to do so. It suggests that Eros is unwilling to be manipulated by Praxagora's *tekhne*, however well intentioned. If the Selfish Man is the Shadow Mage who opposes Praxagora's plan to revolutionize the use of objects, Eros is the Shadow Mage who opposes Praxagora's plan to revolutionize the use of bodies.

Scholars who read *Assemblywomen* as "anti-utopian" have tended to see Praxagora's sexual laws and the scene in which those laws are enacted as a *reductio ad absurdum* of the idea of communal possession of property,[201] while those who read the play as "utopian" have tended either to sympathize with the "hags" who want to sleep with the young man, or else to dismiss this scene as devoid of significant political

[201] Hubbard, for example, writes, "The most ridiculous extension of Praxagora's program of sexual equality is in the sphere of attempting to equalize sexual attractions, so as to guarantee that all citizens have equal opportunity for sexual activity, whether young or old, beautiful or ugly. It is an inevitable fact of nature that all of us are not equally endowed; the aging process is also an irreversible fact of life. Decreeing that the young and beautiful must first have sex with the old and ugly before pursuing their own inclinations is the ultimate legal intrusion into the concept of personal autonomy. Not only is all private property abolished to become public, but even the privacy of men and women's bodies is abolished to make them available for public appropriation. The result is not social concord, but squabbling among the old to determine who is ugliest and thus most eligible, as well as misery among the young whose personal privacy is violated. The spectacle of Epigenes' rape by three old women is clearly calculated by Aristophanes to be distasteful and unpleasant to the male audience, a vivid symbolic illustration of radical theory spinning out of control, destroying everything the Greek sensibility regarded as beautiful, true, and good" (1997, 39).

content, or both.[202] I argue that this scene, far from being merely a sexual/grotesque version of the debate between the Law Abiding Man and the Selfish Man, raises significant new questions concerning time, *tekhne*, and desire that are good to think with when thinking about mechano-posthumanism.

Because the new laws require that the young and beautiful have sex with the old and ugly before having sex with each other, one might have expected that the old and ugly would wish to appear as old and ugly as possible. But that does not appear to be the case. As soon as she appears onstage, the First Old Woman describes several steps she has taken to make herself seductive:

ἐγὼ δὲ καταπεπλασμένη ψιμυθίωι

[202] Ruffell discusses this scene briefly and in broad strokes near the beginning of his argument that *Assemblywome* and *Wealth* should be read as "utopian" *qua* sincerely pro-communist: "Consider first the infamous conjunctions in both *Ecclesiazusae* and *Wealth* of sex and the city. Of the outcomes of Praxagora's plans, it is the interruption of the romantic interlude by randy old women that has caused most opprobrium from the critics (and not just the male critics, either). The horror! I have to confess that I have always found it rather hard to feel sorry for either of the lovelorn couple at this point. This may just mean that I am a hardened anti-romantic; on the other hand, I worry that we are importing too many notions of romantic love into this scene. Yes the old women are presented as monstrous, but I think we need to look hard at the apparent alternative. […] There is more going on in *Ecclesiazusae* than merrily satirizing both young love and ancient desperation. As Douglas Olson (1988) has shown, the extensive parody here suggests that the cheesy conventions of lyric poetry are as much up for grabs in this scene as an assault on the dignity of the Old Women, though assuredly it does the latter too. Rather more subtly, as he has shown, the lyric that the young man and the young woman sing (952-975b) enacts the new world order, as they intertwine different aspects of active and passive lovers in a parodic reworking of a *paraclausithyron* narrative. So the story that the Old Women interrupt and disrupt is not even the conventional order of things. Indeed, if we are looking to the social (rather than intertextual) order, which is where so many critical narratives do look, and even allowing for the parodied passionate froth and for the comic stereotype of women, it is not clear that a young man ought to be enticing an unmarried young woman to open the door to him. The gap between poetry and reality is already one of the ideological conflicts at stake here. Part of the joke, surely, is that communal love, at least in this formulation, is not a free-for-all, in which everyone is a winner and sexual expression free. Indeed, the role that the older women play here in policing this youthful expression of sexuality might be seen in some sense as analogous to the policing of sexual roles under the previous dispensation (by older women or by others), and placing that policing as much under the microscope as their own behavior under Praxagora's republic" (2006, 83-4).

ἔστηκα καὶ κροκωτὸν ἠμφιεσμένη

ἀργός, μινυρομένη τι πρὸς ἐμαυτὴν μέλος,

παίζουσ᾽ ὅπως ἂν περιλάβοιμ᾽ αὐτῶν τινὰ

παριόντα.

I am plastered with makeup,

standing here idly, wearing a skimpy dress,

whistling a little tune to myself,

waiting to snag a young man

walking by. (*Assemblywomen* 877-83)

The new laws, it seems, do not entirely replace traditional modes of seduction. The old, ugly women would prefer to seduce the young, lovely men by using makeup, clothing, and song to make themselves appear young and lovely; legal compulsion is a last resort.

The Young Woman whose desire for the young man named Epigenes will be thwarted by the new laws draws a sharp contrast between the natural beauty of young women and the artificial beauty of old women, which she associates with death:

μὴ φθόνει ταῖσιν νέαισι·

τὸ τρυφερὸν γὰρ ἐμπέφυκε

τοῖς ἁπαλοῖσι μηροῖς,

κἀπὶ τοῖς μήλοις ἐπαν-

θεῖ· σὺ δ᾽, ὦ γραῦ, παραλέλεξαι κἀντέτριψαι

τῶι Θανάτωι μέλημα.

Don’t envy young women,

for softness naturally resides

in their tender thighs,

and it blossoms on their breasts;

but you, old woman, are tweezed and plastered,

Death's dear one. (*Assemblywomen* 900-5)

Throughout the scene, both Epigenes and the Young Woman continue relentlessly to associate the old women with death: the old women's pursuit of sexual pleasure is, in the view of the young, a pitiful and futile attempt to deny their proximity to death by replacing the natural qualities that make youth attractive with artificial substitutes. The Young Woman suggests that instead of using artificial substitutes for the seductive qualities of youth to snag a well-endowed young man, the First Old Woman might consider using an artificial substitute for the young male penis, i.e. a dildo (*Assemblywomen* 916-17b).

In his study of the ways in which the Greeks imagined novelty, and in particular of the ways the Greeks imagined novelty as a *good* thing, Armand D'Angour demonstrates that novelty *qua* good thing is often associated with brightness and birth.[203] In this scene, the Old Women, who support and enforce Praxagora's new laws, are repeatedly associated with darkness and death. In lines 994-7, Epigenes jokes that he does not want to sleep with the First Old Woman because he is afraid of her lover—the man "who paints funeral urns for corpses" (ὃς τοῖς νεκροῖσι ζωγραφεῖ τὰς ληκύθους). In lines 1030-6, he says that if it is necessary that he sleep with the First Old Woman, she ought to decorate her bedroom as if for a funeral—not a wedding. In lines 1056-7, he compares the Second Old Woman to Empousa, a bogey-monster associated with death. In

[203] D'Angour 2011, 134-161.

lines 1060-4, he says that he is going to shit on himself from fear—a comment that recalls Blepyros' struggles with constipation and suggests that Praxagora's cure for that problem may be as bad as, or worse than, the problem itself. After seeing the Third Old Woman, Epigenes asks whether he is looking at "a monkey covered in makeup" (πίθηκος ἀνάπλεως ψιμυθίου)—an image that exemplifies the science fictional grotesque inasmuch as it combines seemingly incompatible animal and technical imagery to describe a weirdly hybrid being—or "an old woman risen from the dead" (1072-3). His verbal assault on the women who are physically assaulting him climaxes in an appeal to the spectators to turn the Third Old Woman into an inanimate object that signifies death—a signifier, one might say, of the Infertile Corpse that Epigenes feels that Athens has become:

> καὶ τήνδ᾽ ἄνωθεν ἐπιπολῆς τοῦ σήματος
> ζῶσαν καταπιττώσαντες, εἶτα τὼ πόδε
> μολυβδοχοήσαντες κύκλωι περὶ τὰ σφυρὰ
> ἄνω ᾽πιθεῖναι πρόφασιν ἀντὶ ληκύθου.
> As for her, while she's still alive,
> cover her with pitch all over and put her feet
> in molten led up to her ankles, then
> stick her over my grave instead of an urn. (*Assemblywomen* 1108-1111)

"The ending of the *Assembly of Women*," writes Leo Strauss, "is unsatisfactory in the sense that it is repulsive or nauseating, while the endings of all the other plays are exhilarating. It is not sufficient to say that the *Assembly of Women* is the ugliest comedy;

it is *the* ugly comedy."[204] This analysis seems to support Darko Suvin's assessment of *Assemblywomen* as a mockery of the utopian impulse, and to be opposed to Ian Ruffell's reading of the play as a sincere expression of the utopian impulse (albeit one that creates a "complex dialogue between utopianism and anti-utopianism"). But as Fredric Jameson rightly points out,

> [I]t is a mistake to approach Utopias with positive expectations, as though they offered visions of happy worlds, spaces of fulfillment and cooperation, representations which correspond generically to the idyll or the pastoral rather than the utopia. Indeed, the attempt to establish positive criteria of the desirable society characterizes liberal political theory from Locke to Rawls, rather than the diagnostic interventions of the Utopians, which, like those of the great revolutionaries, always aim at the alleviation and elimination of the sources of exploitation and suffering, rather than at the composition of blueprints for bourgeois comfort.[205]

The question is not, then, whether *Assemblywomen* offers a plausible (or even semi-plausible) blueprint for bourgeois comfort based upon altruism rather than selfishness, but whether the selfishness that consists in the desire for unique rights, privileges, and proximity to certain objects and certain bodies is the main source of exploitation and suffering that it identifies.[206] My answer to this question is that the selfishness that the play identifies as the main source of exploitation and suffering (including the suffering

---

[204] Strauss 1966, 279
[205] Jameson 2005, 12
[206] "What we can say above all," Ruffell writes in the final paragraph of the article I refer to at the beginning of this chapter, "is that these plays [*Assemblywomen* and *Wealth*] are critiquing a logic of selfishness and self-interest, and exploring instead notions of trust, altruism and solidarity, not with a concrete program for revolutionary change but as progressive thought-experiments" (2006, 104).

that stems from the grotesque implosion of sublime intentions) is in fact one of which Praxagora is no more and no less free than the husband with whom she once lived on the Pnyx: *city-centrism*, or more precisely, *astu-centrism*.

Conclusion:

Agrarian Science Fiction Beyond Aristophanes

> I used to question Mike's endless reading of fiction, wondering what notions he was getting. But turned out he got a better feeling for human life from stories than he had been able to garner from facts; fiction gave him a gestalt of life, one taken for granted by a human; he lives it. Besides this "humanizing" effect, Mike's substitute for experience, he got ideas from "not-true data" as he called fiction. How to hide a catapult he got from Edgar Allan Poe.
> (Robert Heinlein, *The Moon Is A Harsh Mistress*, 138)

> My point is that we cannot safely dismiss the question of consciousness as merely a polite philosophical concern. It is at the core of society's legal and moral foundation. The debate will change when a machine—nonbiological intelligence—can persuasively argue on its own that it/he/she has feelings that need to be respected. Once it can do so with a sense of humor—which is particularly important for convincing others of one's humanness—it is likely that the debate will be won.
> (Ray Kurzweil, *The Singularity Is Near*, 379)

At this point, it should be clear that there are many ways in which the concepts of sf criticism can help us to analyze and understand at least some of the plays of Aristophanes. Perhaps most importantly, analyzing the plots of *Clouds*, *Birds*, and *Assemblywomen* as instances of the techno-Robinsonade story-form helps us to see why *Clouds* is no more "anti-intellectual" than any number of great sf works that probe the limits and unintended consequences of human science and technology (such as Stanislaw Lem's *Solaris*, Margaret Atwood's *MaddAddam* trilogy, Michel Houellebecq's *La Possibilité d'une île*, Jennifer Haley's *The Nether*, among many others); why *Birds* is neither an escapist fantasy nor a simple political allegory nor a paean to human power,

but rather a rich and multifaceted transposition of the myth of Prometheus from the realm of the divine/human to the realm of the human/animal and from the present-oriented past to the future-oriented present; and how *Assemblywomen* may be read as both utopian and as deeply critical of the idea of randomized communal possession of all property.

I conclude this dissertation by considering, very briefly, whether other ancient texts besides those of Aristophanes may profitably be read as sf, and how including ancient sf in the history of the genre can change our understanding of the genre as a whole.

It does not seem to me far-fetched to suggest that many of the fragmentary texts of the so-called "pre-Socratic" philosophers exhibit some, if not all, of Csicsery-Ronay Jr.'s "seven beauties" of science fiction, or to suggest that analyzing the ways in which those texts generate those beauties may offer at least as powerful a way of describing the effects they aim to produce as analyzing the coherence of their implicit logical arguments (currently the overwhelmingly dominant methodology in Anglophone ancient philosophy departments) or the extent to which they do and do not approximate the concepts and methods of modern science. Neither Parmenides nor Empedocles was in possession of a science that could validate its potency by its predictive or technological power. The powers of both of these poets, and of the other great pre-Socratic philosophers, were strictly *literary* powers. The One of Parmenides offers to the mind a representation of an almost inconceivably pure, almost ungraspably abstract totality the pleasure of which is that of the mathematical sublime. Empedocles' visions, by contrast, create very different effects that can be described as instances of the dynamic sublime and the science-fictional grotesque. For ordinary sixth-century BCE Greeks whose imaginary world was

presided over by the Olympian deities of Homer and Hesiod, Xenophanes' "one god" (εἷς θεός), "not at all like mortals in body nor in thought" (οὔτι δέμας θνητοῖσιν ὁμοίιος οὐδὲ νόημα, fr. B23 DK), who "without any toil shakes all things by the thought of his mind" (ἀπάνευθε πόνοιο νόου φρενὶ πάντα κραδαίνει, fr. B25 DK), must have seemed a fictive *novum* as strange and surprising as the godlike ocean of Lem's Solaris. Almost all of the pre-Socratics practice fictive neology, creating new words for new concepts or investing ordinary words with strange new meanings.

Plato's metaphysical objections to the concept of fiction—which amount to "scientific" proofs that the fictions of other poets are less true, less beautiful, and less edifying than his own—certainly should not dissuade us from analyzing his myths, or even the more analytical portions of his dialogues, as science fiction.[207] Analyzing Plato's corpus through the lens of Csicsery-Ronay Jr.'s seven beauties of science fiction would surely yield numerous insights and resolve a number of persistent and tiresome debates. Nor should Lucian's satirical and skeptical humor prevent us from applying the tools of sf criticism to his corpus.[208] In fact, the role of humor and laughter in science fiction is a topic that I have, perhaps surprisingly, hardly touched upon in this dissertation—and yet it is an important one that deserves careful and sustained investigation. In Robert Heinlein's *The Moon Is A Harsh Mistress*—to cite only one example from canonical American sf—the first symptom that the supercomputer Mike has attained human-like consciousness is that he plays a (politically subversive) joke.

[207] Rochelle 1996 argues that Plato and Ursula Le Guin tell stories for the same reasons. Rea 2010 thinks about teaching Classics and science fiction together.
[208] On Lucian as sf, see Georgiadou and Larmour 1998, Keen 2015.

Including the sf of an ancient agrarian culture in the history of the genre may help us to be more aware of the persistent role of agriculture in the genre. Sf is widely thought of as a genre obsessed with machines, and it certainly is that. But agriculture (like humor) plays a much larger role in the genre than one might think. The hero of the 2015 film *The Martian*—and of the 2011 novel by Andy Weir on which the film is based—is a botanist who manages to survive on Mars until he is rescued only because he is able to grow food there. In Heinlein's *The Moon Is A Harsh Mistress*, the inhabitants of the Moon, which functions as a kind of penal colony to which unwanted humans are banished, are farmers who grow crops and raise livestock within the constraints of the modified lunar environment. Near the beginning of the novel, the Loonies hold a clandestine assembly in hopes of devising a way to improve their situation. Reading Heinlein's description of that assembly, one is liable to feel an uncanny sense of proximity to Aristophanes' Athens:

> Several farmers bellyached and one wheat farmer was typical. "You heard what Fred Hauser said about ice. Fred, Authority isn't passing along that low price to farmers. I started almost as long ago as you did, with one two-kilometer tunnel leased from Authority. My oldest son and I sealed and pressured it and we had a pocket of ice and made our first crop simply on a bank loan to cover power and lighting fixtures, seed and chemicals.
>
> We kept extending tunnels and buying lights and planting better seed and now we get nine times as much per hectare as the best open-air farming down Earthside. What does that make us? Rich? Fred, we owe more *now* than we did the day we went private! If I sold out—if anybody was fool enough to buy—I'd be bankrupt. Why? Because I *have* to buy water from Authority—and have to sell

> my wheat to Authority—and never close gap. […] Fred, you said you didn't know what to do. *I* can tell you. Get *rid* of Authority!"[209]

In Heinlein's lunar world, it is not possible to imagine a total escape or disconnect from the manmade "city" in which buying and selling are the rules of the game, as Dikaiopolis does at the beginning of *Acharnians*, inasmuch as the lunar environment outside the enframing of human *tekhne* is utterly infertile and deadly. Nevertheless, the mindset of the Aristophanic farmer—persecuted, frustrated, resilient, defiant—is still very much a part of Heinlein's world. The country remains, and will surely always remain, a vital component of the city, whether that city is human or posthuman, terrestrial or extra-terrestrial. For that reason, the agrarian element in the sf imaginary deserves sustained and systematic study.

After remarking on the persistence of the agrarian element in the sf of the industrial and post-industrial city, I conclude by emphasizing that each of the ancient, agrarian plays we have examined in detail—*Clouds*, *Birds*, and *Assemblywomen*—is animated by a distinctly and unmistakeably urban imagination. The Phrontisterion is the kind of place one could only find in a city: its research has to do with things pertaining to agriculture—plants, insects, the weather—but not with agricultural production; the tools Strepsiades sees therein are not agricultural tools; it could not finance its activities except in a place where people regularly leave their clothes in public spaces (i.e., the baths), a place in which many people are more than willing to try novel schemes for making money or erasing debt, a place in which words count for more than actions. Despite his frustrations with certain aspects of Athenian life, Peisetairos is so enamored of *city* life as

[209] Heinlein 1966, 29

an idea that his first thought upon encountering the birds is how they, with his help, could extrapolate this idea on a cosmic scale. Praxagora's solution to the problems of selfishness and inequality involves radically extending the use of the randomizing machine, the *kleroterion*, that governed urban legal and political life in Athens, and leaving the fields to the slaves.

This focus on the city as both a laboratory of new inventions—possible or impossible, always questionable—and a model that might be reproduced, with mutations, elsewhere, is continuous with the imaginative tendencies of sf. Cities have changed a great deal in 2,500 years, but the *idea* of the city has not changed that much. Cities are the places in which the naïve nature/culture distinction, which is relatively easy to maintain in an environment in which the most complex manmade tool in sight is a plow and the most complex manmade building in sight is a barn, breaks down; for in a city—that is to say, in the densely built-up urban center the Greeks called the *astu*—the environment is mostly manmade, and the creatures with whom one must collaborate and compete are mostly human. Natureculture hybrids sprout in cities, because in a city, what is human and and what is manmade are no longer synonymous with what is known and controllable. The human absorbs the flavor of the nonhuman—bizarre vitality, incalculable indeterminacy.

Cities, with all their promises (some true, some false) and perils (some unforeseen, some exaggerated), will remain with us as long as we humans and/or posthumans remain. Whatever kinds of humanoids inhabit the future—however mechanized they may be, however they grow their food, however much more intelligent than us they may be, however much they may have forgotten, however many terrestrial

companion species they have left, however they honor the gods—they will have to live together, in systems they have built and only partially control, and talk to each other. I cannot imagine a city that would not have something in common with Aristophanes' Athens, and something to learn by examining its differences from Aristophanes' Athens; nor can I imagine communicative creatures who would not have something to gain from encountering Aristophanes' creatures and their languages.

Bibliography

Agamben, Giorgio. 2011. *The Kingdom and the Glory: For a Theological Genealogy of Economy and Government*. Trans. Lorenzo Chiesa. Stanford.

—2013a. *The Highest Poverty: Monastic Rules and Form-of-Life*. Trans. Adam Kotsko. Stanford.

—2013b. *Opus Dei: An Archaeology of Duty*. Trans Adam Kotsko. Stanford.

Aarseth, Espen J. 1997. *Cybertext: Perspectives on Ergodic Literature*. Johns Hopkins.

Abecassis, Jack. 2000. "The Eclipse of Desire: L'Affaire Houellebecq." MLN 115.4, 801-826.

Acton, Peter. 2014. *Poiesis: Manufacturing in Classical Athens.* Oxford.

Anderson, Carl and T. Keith Dix. 2007. "Prometheus and the Basileia in Aristophanes' *Birds*." *Classical Journal* 102.4, 321-7.

Arment, Chad, ed. 2013. *Flora Curiosa: Cryptobotany, Mysterious Fungi, Sentient Trees, and Deadly Plants in Classic Science Fiction and Fantasy*. Coachwhip Publications.

Arrowsmith, William. 1973. "Aristophanes' Birds: The Fantasy Politics of Eros." *Arion*, New Series, 1.1. 119-167.

Arrowsmith, William, Richard Lattimore, and Douglass Parker. 1994. *Four Plays by Aristophanes.* Meridian.

Atwood, Margaret. 2003. *Oryx and Crake*. Anchor.

Auerbach, Erich. 2003 [1953]. *Mimesis*. Trans. Willard R. Trask. Princeton.

Bakhtin, Mikhail. 1984 [1965]. *Rabelais and His World.* Trans. Helen Iswolsky. Indiana.

Balmford, Andrew, Rhys Green, Ben Phalan. 2015. "Land for Food & Land for Nature?" *Daedalus* 144.4. 57-75.

Baudrillard, Jean. 2005. *The Conspiracy of Art: Manifestos, Interviews, Essays.* Trans. Ames Hodges. Semiotext(e).

Beer, Gillian. 1983. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot and Nineteenth-Century Fiction.* Cambridge.

Beinhocker, Eric D. 2007. *The Origin of Wealth*. Harvard.

Bellanca, Mary Ellen. 2011. "The Monstrosity of Predation in Daphne du Maurier's 'The Birds.' *Interdisciplinary Studies in Literature and Environment* 18.1. 26-46.

Bennett, Jane. 2010. *Vibrant Matter: a political ecology of things*. Duke.

Berry, Wendell. 2015 [1977]. *The Unsettling of America: Culture and Agriculture*. Counterpoint.

Binswanger, Hans. 1986. "Agricultural Mechanization: A Comparative Historical Perspective." *The World Bank Research Observer* 1.1. 27-56.

Blanchot, Maurice. 1955. *L'espace littéraire.* Gallimard.

Bogost, Ian. 2011. *How to do Things with Videogames.* Minnesota.

Bossert, Rex. 1987. "Godzilla in Cloudcuckooland: or, Literary Theory Comes to Utopia." *Utopian Studies* 1. 138-146.

Bowie, A. M. 1993. *Aristophanes: Myth, Ritual and Comedy*. Cambridge.

Bowra, C.M. 1961. *Greek Lyric Poetry: From Alcman to Simonides*. Oxford.

Brewster, Bill and Frank Broughton. 2002. *How to DJ Right: The Art and Science of Playing Records*. Grove.

Bromberg, Jacques A. 2012. “Academic Disciplines in Aristophanes’ *Clouds* (200-3).” *CQ* 62.1. 81-91.

Brooks, Peter. 2005. *Realist Vision*. Yale.

Burkert, Walter. 1985. *Greek Religion.* Trans. John Raffan. Harvard.

Bury, Louis. 2014. *Exercises in Criticism: The Theory & Practice of Literary Constraint*. Dalkey Archive Press.

Butler, Judith. 1987. *Subjects of Desire: Hegelian Reflections in Twentieth-Century France*. Columbia.

Byrne, David. 2012. *How Music Works*. McSweeney’s.

Calame, Claude. 1999 [1992]. *The Poetics of Eros in Ancient Greece*. Trans. Janet Lloyd. Princeton.

Camp, John M. 1986. *The Athenian Agora: Excavations in the Heart of Classical Athens.* Updated Edition. Thames and Hudson.

Carson, Anne. 1986. *Eros the Bittersweet*. Princeton.

—1999. *Economy of the Unlost*. Princeton.

Cassio, Albio Cesare. 1985. “Two Studies of Epicharmus and His Influence.” *HSCP* 89. 37-51.

Card, Orson Scott. 1977. *Ender’s Game.* Tor.

Carson, Anne. 1999. *Economy of the Unlost*. Princeton.

Canavan, Gerry and Kim Stanley Robinson, eds. 2014. *Green Planets: Ecology and Science Fiction.* Wesleyan.

de Certeau, Michel. 1984. *The Practice of Everyday Life.* Trans. Steven F. Rendall. California.

—1988. *The Writing of History*. Trans. Tom Conley. Columbia.

Cohen, David. 1995. *Law, Violence, and Community in Classical Athens.* Cambridge.

Cohen, Jeffrey Jerome, ed. 2012. *Animal, Vegetable, Mineral: Ethics and Objects.* Punctum.

—2015. *Stone: An Ecology of the Inhuman*. Minnesota.

Cole, Thomas. 1990. *Democritus and the Sources of Greek Anthropology*. APA.

Colony, Tracy. 2011. "Epimetheus Bound: Stiegler on Derrida, Life, and the Technological Condition." *Research in Phenomenology* 41, 72-89.

Compton-Engle, Gwendolyn. 1999. "From Country to City: The Persona of Dicaeopolis in Aristophanes' *Acharnians*." *Classical Journal* 94.4, 359-73.

Csicsery-Ronay Jr., Istvan. 2008. *The Seven Beauties of Science Fiction*. Wesleyan.

Cudworth, Erika and Stephen Hobden. 2013. "Complexity, ecologism, and posthuman politics." *Review of International Studies* 39, 643-664.

Culler, Jonathan. 2015. *Theory of the Lyric*. Harvard.

Cuomo, Serafina. 2007. *Technology and Culture in Greek and Roman Antiquity*. Cambridge.

Dalzell, Alexander. 1996. *The Criticism of Didactic Poetry.* Toronto.

D'Angour, Armand. 2011. *The Greeks and the New: Novelty in Greek Imagination and Experience.* Cambridge.

Damisch, Hubert. 2002. *A Theory of /Cloud/.* Trans. Janet Lloyd. Stanford.

Davidson, James. 1998. *Courtesans and Fishcakes: The Consuming Passions of Classical Athens.* St. Martin's Press.

Dawkins, Richard. 1999 [1982]. *The Extended Phenotype.* Revised Edition. Oxford.

—2004. *The Ancestor's Tale*. Mariner.

—2006. [1976]. *The Selfish Gene*. 30th Anniversary Edition. Oxford.

Dayan, Peter and L.F. Abbott. 2001. *Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems.* MIT.

De Boer, Karin. 2009. "The Eternal Irony of the Community: Aristophanian Echoes in Hegel's Phenomenology of Spirit." *Inquiry* 52.4. 311-34.

Delany, Samuel. 1994. *Silent Interviews: On Language, Race, Sex, Science Fiction, and Some Comics*. Indiana.

De Luca, Kenneth M. 2005. *Aristophanes' Male and Female Revolutions*. Lexington.

Dennis, Jerry. 2014. "A History of Captive Birds." *Michigan Quarterly Review* 53.3. 303-22.

Desfray, Suzanne. 1999. "Oracles et animaux dans les Cavaliers d'Aristophane." *L'Antiquité Classique* 68. 35-56.

Delanda, Manuel. 2002. *Intensive Science and Virtual Philosophy*. Bloomsbury.

Deleuze, Gilles. 1990 [1969]. *The Logic of Sense*. Trans. Mark Lester with Charles Stivale. Columbia.

—1994 [1968]. *Difference and Repetition*. Trans. Paul Patton. Columbia.

Deleuze, Gilles and Felix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia.* Trans. Brian Massumi. Minnesota.

De Luca, Kenneth M. 2005. *Aristophanes' male and female revolutions : a reading of Aristophanes' Knights and Assemblywomen.* Lexington Books.

Derrida, Jacques. 1981 [1972]. *Dissemination.* Trans. Barbara Johnson. Chicago.

—1997 [1967]. *Of Grammatology*. Trans. Gayatri Chakravorty Spivak.

Johns Hopkins.

—2004. *Eyes of the University.* Trans. Jan Plug and Others. Stanford.

—2009. *The Beast and the Sovereign: Volume 1.* Trans. Geoffrey Bennington. Chicago.

Detienne, Marcel. 1999 [1967]. *The Masters of Truth in Archaic Greece*. Trans. Janet Lloyd. Zone.

Detienne, Marcel and Jean-Pierre Vernant. 1974. *Les Ruses de l'intelligence: la mètis des Grecs.* Flammarion.

Diamond, Jared. 1997. *Guns, Germs, and Steel: The Fates of Human Societies*. Norton.

Dillon, Matthew. 1987. "Topicality in Aristophanes' Ploutos." *CA* 6.2. 155-183.

Dobrov, Gregory (ed.). 1997. *The City as Comedy: Society and Representation in Athenian Drama.* Chapel Hill.

Dobrov, Gregory. 1997. "Language, Fiction, and Utopia." In Dobrov ed., 1997, 95-134.

Donnelly, Timothy. 2010. *The Cloud Corporation*. Wave Books.

Dover, Kenneth J. 1968. *Aristophanes Clouds*. Oxford.

—1972. *Aristophanic Comedy*. California.

—1978. *Greek Homosexuality*. Harvard.

Dow, Sterling. 1939. "Aristotle, the Kleroteria, and the Courts." *Harvard Studies in Classical Philology* 50. 1-34.

Duckworth, George E. 1952. *The Nature of Roman Comedy: A Study in Popular Entertainment.* Princeton.

Dunbar, Nan. 1995. *Aristophanes' Birds*. Oxford.

Eco, Umberto. 2015. *How to Write a Thesis*. Trans. Caterina Mongiat Farina and Geoff Farina. MIT.

Ehrenberg, Victor. 1947. "Polypragmosyne: A Study in Greek Politics." *JHS* 67. 46-67.

Emmott, Stephen. 2013. *Ten Bill10n*. Vintage.

Espahangizi, Kijan. 2015. "From *Topos* to *Oikos*: The Standardization of Glass Containers as Epistemic Boundaries in Modern Laboratory Research (1850-1900)." *Science in Context* 28.3, 397-425.

Faber, Michel. 2000. *Under the Skin*. Mariner.

Fahr-Becker, Gabriele (ed.). 2006. *The Art of East Asia. h.f.*ullmann.

Farmelo, Graham. 2009. *The Strangest Man: The Hidden Life of Paul Dirac, Mystic of the Atom*. Basic Books.

Farnell, Ross. 2000. "Bodies that Speak Science Fiction: Stelarc—Performance Artist 'Becoming Posthuman'." In Sawyer and Seed eds. 2000, 109-130.

Ferrari, G. R. F. 2005. *City and Soul in Plato's* Republic. University of Chicago.

Ferrari, G. R. F., ed. 2007. *The Cambridge Companion to Plato's Republic*. Cambridge.

Finley, M.I. 1981. *Economy and Society in Ancient Greece*. Penguin.

—1999 [1973]. *The Ancient Economy*. Updated Edition. California.

Foley, Helene P. 1988. "Tragedy and Politics in Aristophanes' Acharnians." *JHS* 108. 33-47.

Ford, Andrew. 2002. *The Origins of Criticism.* Princeton.

Forsyth, Adrian. 2001. *A Natural History of Sex: The Ecology and Evolution of Mating Behavior.* Firefly.

Fortier, Jean-Martin. 2014. *The Market Gardener: A Successful Grower's Handbook for Small-scale Organic Farming.* New Society.

Foucault, Michel. 1994 [1966]. *The Order of Things: An Archaeology of the Human Sciences.* Vintage.

Franzen, Jonathan. 2012. *Farther Away*. Picador.

—2013. *The Kraus Project.* FSG.

Freud, Sigmund. 1961. *Beyond the Pleasure Principle*. The Standard Edition. Trans. and ed. James Strachey. Norton.

Freydberg, Bernard. 2008. *Philosophy & comedy: Aristophanes, logos, and erōs.* Indiana.

—2009. "Hearkening to Thalia: Toward the Rebirth of Comedy in Continental Philosophy." *Research in Phenomenology* 39.3. 401-15.

Gallagher-Ross, Jacob. 2010. "Image Eaters: Big Art Group Brings the Noise." *The Drama Review* 54.4, 54-80.

Garrett, Laurie. 1994. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. Penguin.

Georgiadou, A. and D. H. J. Larmour. 1998. *Lucian's Science Fiction Novel* True Histories. *Interpretation and Commentary.* Brill.

Gibson, William. 2003. *Pattern Recognition*. Berkley.

Given, John. 2009. "When Gods Don't Appear: Divine Absence and Human Agency in Aristophanes." *CW* 102.2. 107-127.

Gram, Margaret Hunt. 2014. "Freedom's Limits: Jonathan Franzen, the Realist Novel, and the Problem of Growth." *American Literary History* 26.2. 295-316.

Graham, Daniel W., ed. 2010. *The Texts of Early Greek Philosophy*. *Part 1*. Cambridge.

Greenblatt, Stephen. 2011. *The Swerve: How the World Became Modern*. Harvard.

Griffith, Mark. 1999. *Sophocles Antigone*. Cambridge.

Griffith, R. Drew. 2012. "The Bird that Became a Cleonymus-Tree: Pindar's Olympian 12.13-6 and Aristophanes' Birds 1473-81." *Mnemosyne* 65.2. 279-85.

Guthrie, W.K.C. 1971. *Socrates*. Cambridge.

Haley, Jennifer. 2015. *The Nether*. Northwestern.

Halliwell, Stephen. 1987. *The Poetics of Aristotle*. Chapel Hill.

- 2002. *The Aesthetics of Mimesis: Ancient Texts and Modern Problems.* Princeton.

—2005. "Greek Laughter and the Problem of the Absurd." *Arion* Third Series, 13.2. 121-146.

- 2008. *Greek Laughter: A Study of Cultural Psychology from Homer to Early Christianity.* Cambridge.

Hansen, Mogens Herman. 1999. *The Athenian Democracy in the Age of Demosthenes.* Trans. J.A. Crook. Oklahoma.

Hanson, Victor Davis. 1999. *The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization.* California.

Harraway, Donna J. 2008. *When Species Meet*. Minnesota.

Harrison, Robert Pogue. 2014. *Juvenescence: A Cultural History of Our Age*. Chicago.

Hart, Mary Louise, ed. 2010. *The Art of Ancient Greek Theater*. Getty.

Hassler, Donald M. 1999. "The Academic Pioneers of Science Fiction Criticism, 1940-1980." *Science Fiction Studies* 26.2. 213-231.

Hayles, N. Katherine. 2008. *Electronic Literature*. Notre Dame.

Hawking, Stephen. 1988. *A Brief History of Time*. Bantam.

Heidegger, Martin. 1977. *The Question Concerning Technology, and Other Essays*. Trans. William Levitt. Harper.

—1996. *Hölderlin's Hymn "The Ister."* Trans. William McNeill and Julia Davis. Indiana.

—2004. *The Phenomonology of Religious Life.* Trans. Matthias Fritsch and Jennifer Anna Gosetti-Ferencei. Indiana.

Heinlein, Robert A. 1966. *The Moon is a Harsh Mistress.* New York.

Henderson, Jeffrey. 1997. "Mass versus Elite and the Comic Heroism of Peisetairos." In Dobrov ed. 1997, 135-48.

Henderson, Jeffrey, ed. 1998. *Aristophanes II: Clouds, Wasps, Peace.* Loeb Classical Library. Harvard.

Holmes, Brooke. 2010. *The Symptom and the Subject*. Princeton.

—2012. *Gender: Antiquity and Its Legacy*. Oxford.

Holmes, Daniel. 2011. "Re-eroticizing the Hoopoe: Tereus in Aristophanes' Birds." *Syllecta Classica* 22. 1-20.

Holzhausen, Jens. 2002. "Pandora und Basileia: Hesiod-Rezeption in Aristophanes' *Vögeln*." *Philologus* 146.1, 34-45.

Hooper, Anthony. 2013. "The Greatest Hope of All: Aristophanes on Human Nature in Plato's Symposium." *CQ* 63.2. 567-79.

Houellebecq, Michel. 1991. *HP Lovecraft : Contre le monde, contre la vie.* Editions du Rocher.

- 1998. *Les particules élémentaires*. Flammarion.

- 2005. *La Possibilité d'une île.* Fayard.

- 2009. *Interventions 2*. Flammarion.

Hubbard, Thomas K. 1997. "Utopianism and the Sophistic City in Aristophanes." In Dobrov (ed.) 1997. 23-50.

Hutchinson, G.O. 2011. "House Politics and City Politics in Aristophanes." *Classical Quarterly* 61.1. 48-70.

Jaanus, Marie. 2013. "Happiness and Madness." *Culture/Clinic* 1. 43-65.

Jakobson, Roman. 1987. *Language in Literature*. Ed. Krystyna Pomorska and Stephen Rudy. Harvard.

James, Edward and Farah Mendlesohn, eds. 2003. *The Cambridge Companion to Science Fiction.* Cambridge.

Jameson, Fredric. 1971. *Marxism and Form*. Princeton.

- 2005. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions.* Verso.

- 2015. *The Ancients and the Postmoderns: On the Historicity of Forms*. Verso.

Janko, Richard. 1984. *Aristotle on Comedy: Towards a Reconstruction of* Poetics II. California.

—1997. "The Physicist as Hierophant: Aristophanes, Socrates and the Authorship of the Derveni Papyrus." *ZPE* 118. 61-94.

Johnston, Adrian. 2008. *Žižek's Ontology: A Transcendental Materialist Theory of Subjectivity*. Northwestern.

Jones, W.H.S. 1923. *Hippocrates: Volume I.* Loeb Classical Library. Harvard.

Jouanna, Jacques. 1999. *Hippocrates*. Trans. M.B. DeBevoise. Johns Hopkins.

Judson, Horace Freeland. 2013 [1996]. *The Eighth Day of Creation: Makers of the Revolution in Biology.* Commemorative Edition. CSH Press.

Jullien, François. 2000. *Detour and Access: Strategies of Meaning in China and Greece*. Trans. Sophie Hawkes. Zone.

Katz, Joshua. 1999. "Homeric Hymn to Hermes 296: τλήμονα γαστρὸς ἔριθον." *CQ* 49.1. 315-19.

Kandel, Eric R., James H. Schwartz, et. al. 2013. *The Principles of Neural Science*. Fifth Edition. McGraw Hill.

Kang, Minsoo. 2011. *Sublime Dreams of Living Machines*. Harvard.

Kayser, John R. 1973. "Noble Lies & Justice: On Reading Plato." *Polity* 5.4. 489-515.

Keen, Antony. 2015. "Mr. Lucian in Suburbia: Links Between the *True History* and *The First Men in the Moon*." In Rogers and Stevens (eds.) 2015, 105-120.

Kiaer, Christina. 2005. *Imagine No Possessions: The Socialist Objects of Russian Constructivism.* MIT.

Kloppenburg, Jack. 2010. "Impeding Dispossession, Enabling Repossession: Biological Open Source and the Recovery of Seed Sovereignty." *Journal of Agrarian Change* 10.3, 367-88.

Kohn, Eduardo. 2013. *How Forests Think: Towards an Anthropology beyond the Human*. California.

Konstan, David. 1997. "The Greek Polis and Its Negations: Versions of Utopia in Aristophanes' Birds." In Dobrov ed. 1997, 3-22.

Kovitz, Rob. 1992. *Pig City Model Farm.* Tryef.

Kozak, Lynn and John Rich (eds.). 2006. *Playing Around Aristophanes: Essays in Honor*

of Alan Sommerstein. Aris & Phillips.

Kozinn, Sarah. 2010. "Discovering What We Don't Know: An Interview with Steve Cosson of the Civilians." *The Drama Review* 24.4, 188-205.

Kidder, Tracy. 1981. *The Soul of a New Machine*. Little, Brown.

Krause, Monika and Michael Guggenheim. 2013. "The Couch as a Laboratory? The Spaces of Psychoanalytic Knowledge-Production Between Research, Diagnosis and Treatment." *European Journal of Sociology* 54.2, 187-210.

Kurzweil, Ray. 2005. *The Singularity is Near: When Humans Transcend Biology*. Penguin.

Lacan, Jacques. 1981 [1973]. *The Four Fundamental Concepts of Psychoanalysis*. Ed. Jacques-Alain Miller. Trans. Alan Sheridan. Norton.

- 2006 [1966]. *Écrits*. Trans. Bruce Fink. Norton.

Lada-Richards, Ismene. 1997. "'Estrangement' or 'Reincarnation'?: Performers and Performance on the Classical Athenian Stage." *Arion* Third Series 5.2. 66-107.

Laird, Andrew. 2001. "Ringing the Changes on Gyges: Philosophy and the Formation of Fiction in Plato's Republic." *JHS* 121. 12-29.

Lamberton, Robert. 1986. *Homer the Theologian : Neoplatonist Allegorical Reading and the Growth of the Epic Tradition*. Princeton.

Latour, Bruno. 2013. *An Inquiry into Modes of Existence: An Anthropology of the Moderns*. Harvard.

Latour, Bruno and Steve Woolgar. 1986 [1979]. *Laboratory Life*. Princeton.

Lear, Jonathan. 1988. *Aristotle: The Desire to Understand*. Cambridge.

Lem, Stanislaw. 1970. *Solaris*. Trans. Joanna Kilmartin and Steve Cox. Harcourt.

- 1984. *Microworlds: Writings on Science Fiction and Fantasy*. Ed. Franz Rottensteiner. Harcourt.

Lemmens, Pieter. 2014. "Bernard Stiegler on Agriculture as a Technical System." *Sustainable Agriculture Research* 3.3. 76-81.

Leonard, Miriam. 2005. *Athens in Paris*. Oxford.

Lesky, A. 1996 [1957]. *A History of Greek Literature*. Hackett.

Lloyd, G.E.R. 1987. *The Revolutions of Wisdom*. California.

- 1992 [1966]. *Polarity and Analogy: Two types of argumentation in early Greek thought.* Hackett.

—1999 [1979]. *Magic, Reason, and Experience.* Hackett.

Lloyd, G.E.R. and Nathan Sivin. 2002. *The Way and the Word: Science and Medicine in Early China and Greece*. Yale.

Lorenz, Konrad. 1966. *On Aggression*. Harcourt.

Lovecraft, H.P. 1999. *The Call of Cthulhu and other Weird Stories*. Ed. S.T. Joshi. Penguin.

Lovelock, James. 2014. *A Rough Ride to the Future*. Overlook.

MacCary, Thomas. 1979. "Philokleon Ithyphallos: Dance, Costume and Character in the Wasps." *TAPA* 109. 137-47.

Machemer, G.A. 1993. "Medicine, Music, and Magic: The Healing Grace of Pindar's Fourth Nemean." *HSCP* 95. 113-141.

Mahoney, Anne. 2007. "Key Terms in 'Birds.'" *CW* 100.3. 267-278.

Martin, John Levi. 2009. *Social Structure.* Princeton.

Marx, Karl. 2006. *The First Writings of Karl Marx*. Ed. Paul M. Schafer. Ig Publishing.

Maxwell, Richard. 2015. *Theater for Beginners*. New York.

McGlew, James. 1997. "After Irony: Aristophanes' Wealth and its Modern Interpreters." *AJP* 118.1. 35-53.

McGonigal, Jane. 2011. *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. Penguin.

McLean, Hugh. 2007. "Claws on the Behind: Tolstoy and Darwin." *Tolstoy Studies Journal* 19, 15-32.

Meier, Heinrich. 2006. *Leo Strauss and the Theologico-Political Problem*. Cambridge.

Meillassoux, Quentin. 2015. *Science Fiction and Extro-Science Fiction*. Trans. Alyosha Edlebi. Univocal.

Milburn, Colin. 2003. "Monsters in Eden: Darwin and Derrida." *MLN* 118.3. 603-21.

—2010. "Modifiable Futures: Science Fiction at the Bench." *Isis* 101.3, 560-9.

Miller, Steven P. 2014. *The Age of Evangelicalism: America's Born-Again Years*. Oxford.

Moodie, Erin K. 2012. "Aristophanes, the Assemblywomen and the audience: The politics of rapport." *Classical Journal* 107.3. 257-281.

Moore, Christopher. 2015. "Socrates and Self-Knowledge in Aristophanes' *Clouds*." *CQ* 65.2. 534-551.

Moretti, Franco. 2013. *Distant Reading*. Verso.

Morrison, J.S. and J.F. Coates. 1986. *The Athenian Trireme: The history and reconstruction of an ancient Greek warship.* Cambridge.

Morton, Timothy. 2007. *Ecology Without Nature: Rethinking Environmental Aesthetics.* Harvard.

- 2010. *The Ecological Thought*. Harvard.

- 2013. *Hyperobjects: Philosophy and Ecology after the End of the World.* Minnesota.

Mundy, Jennifer. *Surrealism: desire unbound.* Princeton.

Murakami, Ineke. 2011. *Moral play and counterpublic: transformations in moral drama, 1465-1599.* Routledge.

Murphy, Charles T. 1938. "Aristophanes and the Art of Rhetoric." *HSCP* 49. 69-113.

Nagy, Gregory. 1990. *Pindar's Homer: The Lyric Possession of an Epic Past*. Johns Hopkins.

—1996. *Poetry as Performance: Homer and beyond*. Cambridge.

—1999 [1979]. *The Best of the Achaeans: Concepts of the Hero in Archaic Greek Poetry*. Revised Edition. Johns Hopkins.

Nayar, Pramod K. 2014. *Posthumanism*. Polity.

Nelson, Diane M. 2003. "A Social Science Fiction of Fevers, Delirium and Discovery: 'The Calcutta Chromosome,' the Colonial Laboratory, and the Postcolonial New Human." *Science Fiction Studies* 30.2, 246-66.

Nelson, Stephanie. 1998. *God and the Land: The Metaphysics of Farming in Hesiod and Vergil.* Oxford.

Netz, Reviel. 2003. *The Shaping of Deduction in Greek Mathematics: A Study in Cognitive History.* Cambridge.

Nicholson, Nigel. 2000. "Pederastic Poets and Adult Patrons in Late Archaic Lyric." *CW* 93.3. 235-59.

Ofri, Danielle. 2013. *What Doctors Feel: How Emotions Affect the Practice of Medicine*.

Boston.

Oleson, John Peter, ed. 2008. *The Oxford Handbook of Engineering and Technology in the Classical World.* Oxford.

Olson, S. Douglas. 1998. *Aristophanes Peace*. Oxford.

—2002. *Aristophanes Acharnians*. Oxford.

Orlando, Francesco. 2006. *Obsolete Objects in the Literary Imagination*. Trans. Gabriel Pihas and Daniel Seidel. Yale.

Orthofer, M. A. 2002. "The Scientist on the Stage: A Survey." *Interdisciplinary Science Reviews* 27.3. 173-83.

Pacey, A. 2001. *Meaning in Technology*. MIT.

Parker, L. P. E. 1997. *The Songs of Aristophanes*. Oxford.

Parker, Robert. 2005. *Polytheism and Society at Athens.* Oxford.

—2011. *On Greek Religion*. Cornell.

Payne, Mark. 2010. *The Animal Part*. Chicago.

Peters, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media.* Chicago.

Petzold, Charles. 2000. *Code: The Hidden Language of Computer Hardware and Software.* Microsoft.

Picot, Jean-Claude. 2013. "L'image du πνιγεύς dans les Nuées. Un Empédocle au charbon." In Laks and Cottone eds. 2013. 113-132.

Pinker, Steven. 1995. *The Language Instinct: How the Mind Creates Language*. Harper.

Pisano, Gary. 2006. *Science Business: The Promise, the Reality, and the Future of Biotech.* Harvard.

Platoni, Kara. 2015. *We Have the Technology: How Biohackers, Foodies, Physicians, and Scientists Are Transforming Human Perception, One Sense at a Time.* Basic.

Platter, Charles. 2007. *Aristophanes and the Carnival of Genres*. Johns Hopkins.

Plotkin, Henry. 1998. *Evolution in Mind: An Introduction to Evolutionary Psychology*. Harvard.

Poe, Edgar Allan. 1992. *The Collected Tales and Poems of Edgar Allan Poe.* Modern Library.

Porter, James I. 2003. "The Materiality of Classical Studies." *Parallax* 9.4, 64-74.

Pozzi, Dora C. 1986. "The Pastoral Ideal in 'The Birds' of Aristophanes." *CJ* 81.2. 119-129.

Pritchard, David M. 2012. "Aristophanes and de Ste. Croix: The Value of Old Comedy as Evidence for Athenian Popular Culture." *Antichthon* 46, 14-51.

Prynne, J.H. 2005. *Poems*. Bloodaxe.

Pusch, Anne Franciska. 2015. "Splices: When Science Catches Up with Science Fiction." *Nanoethics* 9. 55-73.

Quine, W.V. 2004. *Quintessence: Basic Readings from the Philosophy of W.V. Quine.* Ed. Roger F. Gibson, Jr. Harvard.

Rea, Jennifer A. 2010. "From Plato to Philip K. Dick: Teaching Classics Through Science Fiction." *Classical Journal* 105.3. 265-75.

Reckford, Kenneth J. 1987. *Aristophanes' Old-and-New Comedy, Volume 1*. Chapel Hill.

—1991. "Strepsiades as a Comic Ixion." *Illinois Classical Studies* 16.1/2. 125-136.

Rieder, John. 2008. *Colonialism and the Emergence of Science Fiction.* Wesleyan.

—2010. “On Defining SF, or Not: Genre Theory, SF, and History.” *Science Fiction Studies* 11.37, 191-209.

Revermann, Martin. 2006. *Comic Business*. Oxford.

Rheinberger, Hans-Jörg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube.* Stanford.

Rifkin, Jeremy. 1998. *The Biotech Century*. Putnam.

Roberts, Adam. 2005. *The History of Science Fiction*. Palgrave Macmillan.

Robinson, Kim Stanley. 1993. *Red Mars*. Bantam.

Rochelle, Warren. 1996. “The Story, Plato, and Ursula K. Le Guin.” *Extrapolation* 37.4. 316-29.

Rogers, Brett M. and Benjamin Eldon Stevens, eds. 2015. *Classical Traditions in Science Fiction.* Oxford.

Rokem, Freddie. 2008. “The Philosopher and the Two Playwrights: Socrates, Agathon, and Aristophanes in Plato’s Symposium.” *Theater Survey* 49.2. 239-252.

Romer, F.E. 1994. “Atheism, Impiety and the Limos Melios in Aristophanes’ Birds.” *AJP* 115.3. 351-65.

—1997. “Good Intentions and the ὁδὸς ἡ ἐς κόρακας.” In Dobrov ed. 1997, 51-74.

Rose, Peter W. 1992. *Sons of the Gods, Children of Earth: Ideology and Literary From in Ancient Greece*. Cornell.

Rosen, Ralph M. 1988. *Old Comedy and the Iambographic Tradition*. Oxford.

—1997. “Performance and Textuality in Aristophanes’ *Clouds*.” Yale Journal of Criticism, 10.2. 397-421.

—2012. “Efficacy and Meaning in Ancient and Modern Political Satire: Aristophanes, Lenny Bruce, and Jon Stewart.” *Social Research* 79.1. 1-32.

Rosen, Ralph M. and Donald R. Marks. 1999. “Comedies of transgression in gangsta rap and ancient classical poetry.” *New Literary History* 30.4. 897-928.

Roudinesco, Elisabeth. 1997. *Jacques Lacan*. Trans. Barbara Bray. Columbia.

Rousseau, Jean-Jacques. 1993 [1781]. *Essai sur l’origine des langues.* Flammarion.

Ruffell, Ian. 2002. “A total write-off: Aristophanes, Cratinus, and the rhetoric of comic competition.” *CQ* 52.1. 138-163.

—2006. “A little ironic, don’t you think? Utopian criticism and the problem of Aristophanes’ late plays.” In Kozak and Rich (eds.) 2006. 65-104.

—2012. *Politics and Anti-Realism in Athenian Old Comedy: The Art of the Impossible.* Oxford.

Russo, Carlo Fernando. 1994. *Aristophanes: An Author for the Stage.* Trans. Kevin Wren. Routledge.

Rusten, Jeffrey. 2006. “Who ‘Invented’ Comedy? The Ancient Candidates for the Origins of Comedy and the Visual Evidence.” *AJP* 127.1. 37-66.

Rusten, Jeffrey, ed. 2011. *The Birth of Comedy*. Johns Hopkins.

Ryan, Christopher and Cacilda Jethá. 2010. *Sex at Dawn: How We Mate, Why We Stray, and What It Means for Modern Relationships.* Harper.

de Saussure, Ferdinand. 1983 [1972]. *Course in General Linguistics*. Trans. Roy Harris. Open Court.

Sade, Marquis de. 2006. *Philosophy in the Boudoir*. Trans. Joachim Neugroschel. Penguin.

Salatin, Joel. 1998. *You Can Farm: The Entrepreneur's Guide to Start and Succeed in a Farming Enterprise*. Polyface.

Savory, Allan, with Jody Butterfield. 1999. *Holistic Management: A New Framework for Decision Making*. Island Press.

Savran, David. 1988. *The Wooster Group: Breaking The Rules.* Theater Communications Group.

—2005. "The Death of the Avant-Garde." *The Drama Review* 49.3, 10-42.

Sawyer, Andy and David Seed, eds. 2000. *Speaking Science Fiction: Dialogues and Interpretations.* Liverpool.

Seaford, Richard. 2004. *Money and the Early Greek Mind*. Cambridge.

Schelling, F.W.J. 1989 [1859]. *The Philosophy of Art*. Trans. Douglas Stott. Minnesota.

Schmidgen, Henning. 2012. "The materiality of things? Bruno Latour, Charles Péguy and the history of science." *History of the Human Sciences* 26.1. 3-28.

Schofield, Malcolm. 2007. "The Noble Lie." In Ferrari (ed.) 2007. 138-164.

Scott, Michael. 2014. *Delphi: A History of the Center of the Ancient World*. Princeton.

Shanahan, John. 2008. "Ben Johnson's 'Alchemist' and Early Modern Laboratory Space." *Journal for Early Modern Cultural Studies* 8.1. 35-66.

Shapin, Steven and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life.* Princeton.

Sidwell, Keith. 2005. "Some thoughts on the sophist in bed." *Hermathena* No. 179. 67-76.

Sigmund, Karl. 2010. *The Calculus of Selfishness.* Princeton.

Silk, M. S. 2000. *Aristophanes and the Definition of Comedy*. Oxford.

Slavitt, David R. and Palmer Bovie, eds. 1999. *Aristophans 2: Wasps, Lysistrata, Frogs, The Sexual Congress.* Pennsylvania.

Sommerstein, Alan H., ed. 1981. *Aristophanes Knights*. Aris & Phillips.

—1982. *Aristophanes Clouds*. Aris & Phillips.

Sprague, Rosamond Kent. 1972. *The Older Sophists.* South Carolina.

Starobinski, Jean. 2003. *Action and Reaction: The Life and Adventures of a Couple*. Trans. Sophie Hawkes. Zone.

Stehle, Eva. 2002. "The Body and its Representations in Aristophanes' Thesmophoriazousai: Where Does the Costume End?" *AJP* 123.3. 369-406.

Stiegler, Bernard. 1998. *Technics and Time, 1: The Fault of Epimetheus.* Trans. Richard Beardsworth and George Collins. Stanford.

—2013. *Uncontrollable Societies of Disaffected Individuals.* Trans. Daniel Ross. Polity.

Storey, Ian. 1998. "Poets, Politicians, and Perverts: Personal Humor in Aristophanes." *Classics Ireland* 5. 85-134.

Strauss, Leo. 1966. *Socrates and Aristophanes*. Chicago.

Süvern, Johann Wilhelm. 1836. *Two Essays on "The Clouds" and on "The ΓΗΡΑΣ* of Aristophanes." Trans. W.R. Hamilton. London.

Suvin, Darko. 1979. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*. Yale.

Suzuki, Shunryu. 1970. *Zen Mind, Beginner's Mind: Informal talks on Zen meditation and practice.* Weatherhill.

Taylor, C.C.W. 1999. *The Atomists Leucippus and Democritus*. Toronto.

Taylor, Hollis. 2013. “Connecting interdisciplinary dots: Songbirds, ‘white rats’ and human exceptionalism.” *Social Science Information* 52.2. 287-306.

Taylor, Lucy, Charlotte Taylor, Adrian Davis. 2013. “The impact of urbanization on avian species: the inextricable link between people and birds.” *Urban Ecosystem* 16. 481-98.

Telò, Mario. 2010. “Embodying the Tragic Father(s): Autobiography and Intertextuality in Aristophanes.” *Classical Antiquity* 29.2, 278-326.

Thibodeau, Philip. 2011. *Playing the Farmer: Representations of Rural Life in Vergil’s* Georgics. California.

Thiercy, Pascal. 2007. *Aristophane: Fiction et dramaturgie*. Les Belles Lettres.

Tilman, David and Michael Clark. 2015. “Food, Agriculture & the Environment: Can We Feed the World & Save the Earth?” *Daedalus* 144.4. 8-23.

Thomas, Keith. 1971. *Religion and the Decline of Magic*. Penguin.

Todorov, Tzvetan. 1973. *The Fantastic: A Structural Approach to a Literary Genre*. Trans. Richard Howard. Cornell.

Tomberg, Jaak. 2013. “On the “Double Vision” of Realism and SF Estrangement in William Gibson’s Bigend Trilogy.” *Science Fiction Studies* 40.2, 263-85.

Tomkins, Calvin. 2013 [1965]. *The Bride and the Bachelors.* Gagosian.

Tordoff, R.L.S. 2011. “Excrement, Sacrifice, and Commensality: The Osphresiology of Aristophanes’ Peace.” *Arethusa* 44.2, 167-98.

Turner, Fred. 2006. *From Counterculture to Cyberculture.* Chicago.

Turner, James. 2014. *Philology: The Forgotten Origins of the Modern Humanities*. Princeton.

Ussher, R.G. 1986 [1973]. *Aristophanes' Ecclesiazusae*. BCP.

Vallianatos, Evaggelos. 2012. "The democratic and sacred nature of agriculture." *Environment, Development and Sustainability* 14.3. 335-46.

Vernant, Jean-Pierre. 2006. *Myth and Thought among the Greeks.* Trans. Janet Lloyd with Jeff Fort. Zone.

Vickers, Michael. 1995. "Alcibiades at Sparta: Aristophanes' *Birds*." *CQ* 45.2. 339-54.

Vidal-Naquet, Pierre, ed. 1979. *Aristophane, Les femmes et la cité.* Cahiers de Fontenay, no. 17.

Vlastos, Gregory. 1987. "Socratic irony." *CQ* 37.1. 79-96.

Volk, Katharina. 2002. *The Poetics of Latin Didactic*. Oxford.

Wallace, David Foster. 1997. *A Supposedly Fun Thing I'll Never Do Again.* Back Bay Books.

West, Martin L. 1992. *Ancient Greek Music*. Oxford.

Westfahl, Gary. 1999. "The Popular Tradition of Science Fiction Criticism, 1926-1980." *Science Fiction Studies* 26.2. 187-212.

Whitman, Cedric. 1964. *Aristophanes and the Comic Hero*. Harvard.

Whitmarsh, Tim. 2015. *Battling the Gods: Atheism in the Ancient World*. Knopf.

Wilson, Edward O. 2012. *The Social Conquest of Earth.* Liveright.

Winkler, John J. and Froma I. Zeitlin (eds.). 1992. *Nothing to Do with Dionysos? Athenian Drama in its Social Context.* Princeton.

Willi, Andreas. 2003. *The Languages of Aristophanes. Aspects of Linguistic Variation in Classical Attic Greek.* Oxford.

Wolfe, Cary. 2009. *What is Posthumanism?* Minnesota.

Wolfendale, Peter. 2014. *Object-Oriented Philosophy: The Noumenon's New Clothes.* Urbanomic.

Zeitlin, Froma I. 1996. *Playing the Other: Gender and Society in Classical Greek Literature*. Chicago.

Žižek, Slavoj. 2008. *In Defense of Lost Causes*. Verso.

—2014. *Absolute Recoil: Towards a New Foundation of Dialectical Materialism*. Verso.

Zola, Émile. 2006. *Le Roman expérimental.* Flammarion.

Zubrin, Robert, with Richard Wagner. 2011 [1996]. *The Case for Mars: The Plan to Settle the Red Planet and Why We Must.* Free Press.

Zunbrunnen, John. 2006. "Fantasy, Irony, and Economic Justice in Aristophanes' Assemblywomen and Wealth." *The American Political Science Review* 100.3. 319-333.

—2012. *Aristophanic comedy and the challenge of democratic citizenship.* Rochester.