"No end to the mystery":

Scientist-as-prince, scientist-as-scientist, and what one has to do with the other in *Cosmos*Kyle Matthew Oliver, Virginia Theological Seminary

Introduction

Walker Percy's *Lost in the Cosmos*¹ is a strange book. Part theoretical essay, part collection of short stories and sketches of contemporary society, it is organized primarily as a series of quizzes that comprise a mock self-help book—the "last" one, according to one of its many alternative subtitles.² Though it's possible to understand this structural decision in terms merely of a general opportunity for novelty and satire (why not mock late-twentieth-century culture by way of the very genre it so prodigiously produces?³), Percy seems actually to have a more pointed message in mind. *Cosmos* is the "*last* self-help book" because it attempts to put to rest the very possibility of self help. And so he skewers representatives of the various modern movements who apparently believe, following Pelagius, that we have "power in ourselves to help ourselves."⁴ These representatives include the mindless, "beer-drinking" consumer;⁵ the "savvy," "autonomous" self-actualizer;⁶ "the artist," who is "the suffering servant of the age",⁷ and the scientist, the age's "prince and sovereign."⁸

The subject of this paper is Percy's portrayal of and conversation with that final character. What I hope to show is that neither is as monolithic as we might expect. Indeed, even as he presents a strong critique of the prince's reign, Percy sketches and engages a more subtle and ambiguous scientist. To be sure, he is chiefly concerned with the troubling ways the princes behave toward their subjects, and vice versa (that is, with the interaction of scientists and society). But he also devotes considerable attention to the princes' work among themselves, i.e., to the scientific enterprise on its own terms, to the scientist-as-scientist, as it were. This paper

will examine Percy's conversation with and with*in* science by exploring his treatment of these two figures, scientist-as-prince and scientist-as-scientist. I argue that Percy advocates a sort of well-surveyed redistricting of the prince's territory. He wants the prince's subjects to understand clearly the boundaries of that territory, but he does not oppose a slow and legitimate expansion after the proper royal claim is reestablished. Setting aside the conceit, we might say that Percy's fierce anti-scientism polemic should not be allowed to obscure his surprising optimism about the power of science to probe the mysteries of the human self.

Welt vs. Umwelt: Dyadic machinery loose in a triadic world

Crucial to understanding Percy's strange mix of optimism and borderline despair is a whole class of related observations about the scientific enterprise and the way modern Americans bandy it about. For lack of more concise terminology, I will call this the *Welt* vs. *Umwelt* problem, the tendency to overlook the distinction between a world and an environment. It is worth examining this idea in some depth before we begin. Central to Percy's argument is Charles Peirce's distinction "between the 'dyadic' behavior of stimulus-response sequences and the 'triadic' character of symbol-use." Dyadic behavior, represented schematically as $A \rightleftharpoons B$, is the stuff of "particles hitting particles, chemical reactions, energy exchanges, gravity attractions between masses, field forces" and also of chimpanzees, pigeons, and—tellingly—Pavlov's dog "respond[ing] to a signal in an appropriate manner." It is an organism interacting with its environment, its *Umwelt*. Triadic activity, on the other hand, emerges "in that event in which sign A is understood by organism B, not as a signal to flee or approach [see above], but as 'meaning' or referring to another perceived segment of the environment [call it C]." Percy wrote on multiple occasions about how this triadic breakthrough was especially instructive (and dramatic)

in the well-recorded life of Helen Keller. Helen Keller. The scene, of course, is that famous moment at the water pump. Percy draws a triangular diagram of the signifying moment in question. In this triad, the elements are the Subject, Helen Keller; the Signifier (signifiant), "W-A-T-E-R spelled in [Helen's] hand by Miss Sullivan"; and the Referent (signifié), "perceived liquid flowing over [her] other hand." As the caption to this diagram notes, "Relations AB, BC, and AC cannot be explained as dyadic interactions. This is a triadic event." Helen no longer responds to the signing of the letters in cake as a signal pointing to the nearby presence of same. She now realizes that cake, water, etc., are names of things—signs for them—and in so doing she is born into a world, a Welt. For Percy, language in the world, as distinct from mere signal communication in an environment, is the human activity par excellence.

Percy attributes much of contemporary society's social confusion and scientific reductionism¹⁶ to the failure to apprehend the importance and uniqueness of humanity's triadic activities and especially to the attempt to explain them with respect to dyadic mechanisms.¹⁷ At the heart of the problem, he claims, is one singularly troublesome referent: "of all the objects in the entire Cosmos which the sign-user can apprehend through the conjoining of the signifier and signified ... there is one which forever escapes his comprehension—and that is the sign-user himself." To signify one's self is impossible, because "once the self locates itself at the dead center of its world, there is no signified to which a signifier can be joined to make a sign." At the heart of Percy's understanding of the role of science in modern American society, then, are two related claims. First, the use of dyadic theoretical machinery will always be insufficient for studying triadic phenomena like human language, ²⁰ in the same way that Newtonian mechanics will always be insufficient for studying relativistic phenomena.²¹ Second, even triadic theory, to

say nothing of dyadic, is intrinsically limited (though it is not powerless) in what it can say about the human self. If we understand these two claims, we can begin to make some sense of Percy's dual portrayal of prince/scientist and that character's rule/role.

Overextended, irresponsible, and self-serving: The reign of the scientist-as-prince

Percy's most important critique of the rule of the scientist-as-prince is that it is overextended. Scientists too often claim authority to make pronouncements outside their areas of understanding. According to Percy, both the prince and the subjects play a part in this confused state of affairs. A hubris emerges from the scientist's track record of real and perceived success, granting the prince "transcendence by the exaltation of the triumphant spirit of science." The sovereign prince can "stand[] in a posture of objectivity over against the world," can send Voyager 19 to Titania "three seconds off schedule and a hundred yards off course after a flight of six years," can explain how "the works of God can be understood in terms of a mechanism without giving God a second thought." He is an invited expert on daytime TV²⁶ and a celebrity entertainer in late night, simultaneously "astronomer, starship designer, [and] TV personality." Notice how different is Percy's dominant portrayal from the popular picture of the awkward, anti-social, and obscure scientist, *The Onion*'s "Actual Expert Too Boring For TV." No, Percy's prince stands awash in rosy footlights because the adoring public has "assign[ed] omniscence" to scientists, assuming that the ability to know all is "a property of scientific transcendence."

This "magical aura of science" becomes authoritative "for all sectors of reality" because scientists have hoodwinked both the public and themselves. For Percy—whose overall project in *Cosmos* is to catalog the misguided ways the wounded, "unformulable" self seeks definition and redemption in a "post-religious technological society" —the public plays into this troubling

dynamic of scientific deification because they have turned from God to science and technology for all manner of healing: "'They' [scientists] not only know about the Cosmos, they know about me, my aches and pains, my brain functions, even my neuroses ... 'They' could cure [me] if they wanted to, took the time, did their research."³²

And what of the scientist's role in this unwarranted deification? While Percy acknowledges that the "genuine scientist is generally amazed at the meagerness of knowledge in his own field," plenty among the scientific ranks lose track of this truth. It may be that the oversight can be attributed to the passing of the modern age: "The theories of man of the former age no longer work and the theories of the new age are not yet known."33 As the age matures, Percy seems to hope that the bloated princes will come to understand how they have extended their authority without warrant. In the meantime, he believes that because these scientists, most especially social scientists of the American behaviorist school, have discovered that the Cosmos is an environment,³⁴ they have forgotten or chosen to ignore that it is also a world. And so they treat the world like an environment and the human self as a mere organism within it: The psychotherapists reduce the person to a "locus of needs and drives"; 35 the Sagans and Oppenheimers hold court on the talk shows and at cultural events, credentialed to engage in triumphant pop anthropology disguised as learned scientific discourse;³⁶ and the Rumbaughs and Skinners stubbornly declare that language is the mere dyadic swapping of stimulus and response and that even educated birds do it.³⁷ So we see that, for Percy, the results of the prince's overextension of authority are sometimes bad science and sometimes no science at all.

Percy levels two other critiques at the scientist-as-prince that I will also mention here but not elaborate. The first is that the prince's rule is potentially irresponsible, unethical, dangerous.

Percy laments that "the zeal and excitement of a scientific community" can run "counter to the interests of the world community." Such was certainly the case with the "elite group of scientists at Los Alamos" who changed "the entire course of human history" and had such disturbing quantities of fun in the process. 40 We shall see below that part of what tips Percy's hand and clues us in to his scientific optimism is his obvious understanding of the authentic joys of the scientific process. It is therefore sobering to take note here of his insistence that these pleasures are also a serious danger to the world. The scientist-as-prince may come to treat the innocent subjects of the realm like so many chess pieces or foxes for the hunt, Percy warns.

The second lesser critique is that the prince's rule is self-serving, manipulative. In the light of the wider *Lost in the Cosmos* project, we begin to suspect that the scientist engages in the scientific enterprise primarily as a means of transcending the world.⁴¹ Its authentic and not-intrinsically-unhealthy pleasures notwithstanding, science in the book's final analysis comes across mostly as a glorified coping mechanism. It has become such in response to the demise of the notion that we derive our identity in relation to God and to others, what Percy calls the theistic-historical self.⁴² Like television, fashion, sex, artistic expression, inter-personal sharing, etc., engagement in science has become, ultimately, just another doomed attempt at self-help, a recreational drug of choice for the princes in the intellectual elite.

These three critiques, connected by the image of scientist-as-prince, paint a fairly grim picture of a discipline in which Percy read widely and had no small bit of training himself. But for the purposes of this paper and by way of transition to the next section, notice that much of the nasty polemic is directed at how science has come to function—and malfunction—in a modern world for which science is only partly responsible and in which other pursuits are just as

misguided. Amid and against the critique of this motif labors a second scientist who bears little resemblance to his bloated relative.

Mysterious and generative: The promise of the scientist-as-scientist

The scientist-as-scientist is a minor character in *Cosmos* and Percy's other essays, but a surprisingly persistent and powerful one. The key to spotting this character is to take serious account of the rather strikingly positive portrayals of some scientists in *Cosmos* and elsewhere in Percy's work. These occasional portrayals nevertheless begin early in *Cosmos* and are marked by a rare quality; the authentic scientist is one of the only characters not self-absorbed to the point of self-destruction. Percy breaks with his princely celebrity image for the scientist in acknowledging the "modern caricature" of the "absentminded professor" who is "absent' from the usual concerns of the self about itself in the world. E.g., Karl von Frisch and his bees."

Here, finally, are working scientists simply going about their craft rather than lording their exalted status over the plebeian audiences on the talk shows. They are the minority of scientists who do their work with legitimate "wonder[] [at] the Cosmos,"

who with the artists can "recover the inexhaustible mystery of the signified from the mundane closed-off simulacrum of the world-sign."

This sense of wonder, of *mysterion* almost, is key to Percy's portrayals of the scientist-as-scientist:

[Most people] see[] a line of ants crossing the sidewalk and see[] it as—ants crossing the sidewalk. Fabre saw ants crossing the sidewalk and stopped to wonder where they came from, where they were going, how they knew how to get there, and why. Then, like von Frisch and his bees, he discovered there is no end to the mystery of ants. 46

Unlike the princely scientist, who misuses his sovereignty to make pronouncements that explain away wonder and reduce mystery to mechanism, the genuine scientist's work is almost

generative of mystery, hence the quotation cited above about his "amaze[ment] at the meagerness of knowledge in his own field." A far cry from the careless prince, these scientists know well the modest borders of the territory over which their authority extends.

But what is most striking about Percy's conversation with science as this paper understands it is the extent to which it is also a conversation *within* science. Percy doesn't just fend off the incursions of the scientist-as-prince into territory that rightly belongs to the humanities; at times he practically dons the lab coat himself to not just praise the von Frisches and Fabres but to actually become the scientist-as-scientist. For instance, his commentary on neo-Darwinian theory in Quiz 15⁴⁷ shows him to be plenty conversant in—and indeed to have an opinion about—the issues at hand in the great evolution debates. But of even greater interest to us is the way he embodies his critique:

Scientists should be less worried about overt intrusions by religion upon science, which never succeed, and more worried about covert scientific dogma, e.g., that we triadic scientists [emphasis added] require that only dyadic events be admissible to scientific theory. For example, scientists have never seriously addressed themselves to the phenomenon of language, considered as a natural phenomenon and not as a formal structure [emphasis original], that salient triadic property of man. It is only when science is willing to focus on what Sebeok calls "the intersection of nature and culture" that the full import of man's emergence in the evolutionary scheme can be calculated.⁴⁸

Indeed, readers of Percy's *The Message in the Bottle* will recognize that such an introductory treatment of "the phenomenon of language" is exactly what he had set out to provide in "Toward a Triadic Theory of Meaning," originally published in *Psychiatry: Journal for the Study of Interpersonal Processes* in 1972.⁴⁹ The phrase "we triadic scientists" can in one way be taken at face value; in the matter of developing a "semiotic of the self," Percy considers himself one of them, albeit an amateur one engaged in "very tentative investigation." ⁵¹

Even nine years later with the publishing of *Cosmos*, Percy is surprisingly optimistic that scientific inquiry with a well-constructed, triadic semiotic can shed substantial light on the natural phenomenon of language and on the peculiar predicament of the self in modern American life. In both of his replies to the "foes" of his semiotic, Percy holds out hope that the human self might indeed be an accessible subject of scientific inquiry. To succeed, semioticists must

underwrite the reality of the self without getting trapped in the isolated autonomous consciousness of Descartes and Chomsky ... by showing that the self becomes itself only through a transaction of signs with other selves—and does so, moreover, without succumbing to the mindless mechanism of the behaviorists.⁵²

In other words, the scientist-as-scientist who avoids the princely excesses of the celebrity reductionists and who understands the doctrinal and methodological issues at stake may indeed undertake to study the human self with some hope of both success—as a matter of scientific achievement—and also redemption, inasmuch as the effort might finally dispel the modern American myth of self-help.

OK, so what are we to make of all this? Well, the observation that Percy apparently *did* believe that scientific approaches might exist for the proper study of the human self should encourage us to revisit the monolithic way we typically characterize Percy's anti-scientism project. For instance, John Desmond's equating of "the magical aura of science" to "scientism's reductive-behaviorist view of reality" in Percy seems to overstate the case. We have seen that there is for Percy something about the mysterious "aura of science" that is in fact genuinely commendable and appropriately open to a spirit of discovery. My hope is that in examining the two ways in which Percy portrays scientists in *Cosmos*, his qualified but sincere and optimistic stance on science can come into sharper relief against the less subtle backdrop of polemic against

the "mindless mechanism of the behaviorists." Properly understood, both by society and by the scientists themselves, science for Percy can both remind us that there is "no end to the mystery" of our humanity and also help us explore that mystery properly as "sel[ves] with [other selves] under God."⁵⁴

- 1 Walker Percy, Lost in the Cosmos: The Last Self-Help Book (New York: Picador, 1983).
- 2 *Cosmos*, 1.
- 3 Notice another of the work's alternative subtitles: "How you can survive in the Cosmos about which you know more and more while knowing less and less about yourself, this despite 10,000 self-help books, 100,000 psychotherapists, and 100 million fundamentalist Christians." Cosmos, 1, emphasis added.
- 4 The Book of Common Prayer (New York: Seabury, 1979): 218.
- 5 Cosmos, 113.
- 6 Cosmos, 113.
- 7 Cosmos, 119.
- 8 Cosmos, 115.
- 9 Cosmos, 86.
- 10 Cosmos, 85.
- 11 Cosmos, 85-86.
- 12 Cosmos, 91-92.
- 13 Cosmos, 95.
- 14 See also his essay "The Delta Factor" in *The Message in the Bottle: How Queer Man Is, How Queer Language Is, And What One Has to Do with the Other* (New York: Picador, 1975): 3-45.
- 15 Cosmos, 95.
- 16 I think Percy would have resonated with Charles Taylor's appropriation of Weber's term "disenchantment" to describe this aspect of our modern situation. Charles Taylor, *A Secular Age* (Cambridge, MA: Belknap, 2007): 25.
- 17 Hence his naming of the American behaviorist school among the "foes" of his "semiotic of the self." Cosmos, 86.
- 18 Cosmos, 106.
- 19 Cosmos, 107.
- 20 Percy elsewhere calls language "A Nonlinear Nonenergic Natural Phenomenon (that is ... a natural phenomenon in which energy exchanges account for some but not all of what happens)." *Message*, 39.
- 21 Message, 162.
- 22 Cosmos, 141.
- 23 Cosmos, 115.
- 24 Cosmos, 1-2.
- 25 Cosmos, 89.
- 26 Cosmos, 45-56.
- 27 Cosmos, 66-68.
- 28 "Actual Expert Too Boring For TV," *The Onion* 41, no. 18 (May 4, 2005): http://www.theonion.com/articles/actual-expert-too-boring-for-tv,1764/ (accessed May 24, 2011).
- 29 Cosmos, 119.
- 30 Cosmos, 34.
- 31 Cosmos 113.
- 32 Cosmos, 119.
- 33 Message, 7.
- 34 To be fair, this is no mean feat, as David Foster Wallace points out in *This Is Water: Some Thoughts, Delivered on a Significant Occasion, about Living a Compassionate Life* (New York: Little, Brown and Company, 2009).
- 35 *Cosmos*, 81. You can spot the behaviorists in *Cosmos* by their naïve empiricism, e.g., the relentless chorus of "Studies have shown..." from Dr. Joyce Friday on "The Last Donahue Show." See *Cosmos* 48.
- 36 See *Cosmos* 66f for pseudo-Sagan and 127f for obviously-Oppenheimer. Perhaps, then, the physicists themselves contribute to the "lay misperception of the physicist's quest for establishing a molecular or energic basis for all interactions." See *Cosmos* 43.
- 37 See Cosmos 91-94.
- 38 Cosmos, 117.
- 39 Cosmos, 128. Changed it so thoroughly, in fact, that Percy treats the world's complete or near-complete destruction via nuclear-armed conflict as an inevitability, as if "the only unknown quantity is the magnitude of the final war." Cosmos, 238. See also Message, 5; Cosmos, 216 and especially "Notes for a Novel About The End of the World" (Message, 101-118).
- 40 Cosmos, 117.
- 41 How much more so the avocational lay appreciator, who is without the benefit of a stable orbit. See Cosmos, 117-119.
- 42 See Cosmos, 110-116.
- 43 Cosmos, 13, cf. the discussion above of The Onion's scientific caricature.
- 44 Cosmos, 89.
- 45 Cosmos, 105.

- 46 Cosmos, 105.
- 47 Cosmos, 160-167.
- 48 Cosmos, 163.
- 49 Message, 159-188; Walker Percy, "Toward a triadic theory of meaning," Psychiatry: Journal for the Study of Interpersonal Processes 35, no. 1 (1972): 1-19.
- 50 Cosmos, 86.
- 51 Message, 160.
- 52 Cosmos, 87.
- 53 John F. Desmond, "Cosmos Revisited: Belief and the 'Future' of Walker Percy," Renascence 62, no. 1 (2009): 66.
- 54 Cosmos, 112.