The Ground of Conservative Difference

Andrew J. Harvey Ph.D.

The conservative challenge for election year 2012 is to further establish an authentic conservative legislative branch that can undo as much of Obama's follies as possible. Obama is not likely to lose. He's not Carter in 1980 nor George H.W. Bush in 1992. He's not a one-termer, sad to say. It's not the economy, stupid; it is his killing of bin Laden. In his weakest aspect, in the area of his greatest incompetence—that of Commander-in-Chief—Obama has executed his incontrovertibly most glorious deed. No Republican will touch him in the next election cycle.

Resigning myself to a presidential defeat, I, therefore, wish to speak more broadly about "authentic conservatism" in this essay. The most recent challenge to American conservatism has been and will continue to be its own self-definition. It seems as if every conservative journal, blog, or think tank has pondered various definitions of "conservative" this past year. I am not a political scientist, however. So I would like to start with the question, "What are we supposed to conserve?" The question presumes a tradition, something that has been passed down to us. One ultimate area of concern is our very humanity. Advances in robotics, computer science, and biotechnology have put our very natures as human beings on the agenda of both Bushes' and now Obama's bioethics commissions. Our challenge, therefore and urgently so, is to conserve our very humanity and to articulate an ethical bright line beyond which certain technologies and research cannot go.

A properly conservative vision cannot merely wrangle over policy issues, such as stemcell research or brain-machine interface, but first needs to carve out a vocabulary, a discourse with which to frame any discussion. A responsible public policy needs to be able to understand scientific advancements in light of our religious and ethical traditions. The first problem is one of language, specifically metaphor. And we need to purify our discourse.

Keeping in mind that nothing less than life and death is at stake, consider whether the following commonplaces are metaphors or not: "My computer has a virus"; "The brain is a computer" or "Man is a machine." Whether one usually regards these statements as denotative (albeit reductive) or figural expressions, reveals one's presuppositions about matter in general, human nature, and the nature of language. These commonplaces occur habitually in various kinds of contemporary scientific discourse and demonstrate a fundamental confusion over metaphor. To a Renaissance scholar, however, this kind of confusion over metaphor sounds familiar; it echoes the eucharistic debates of the Reformation. Consider whether these sayings of Jesus are metaphors or not: "I am the bread of life" and "This (bread) is my body which is given for you" (John 6:35 and Luke 22:19, respectively). Much theological debate during the Renaissance hinged on the latter statement: Roman Catholics denied any metaphoric reading and asserted the doctrine of transubstantiation, while Protestants generally interpreted Christ's language metaphorically. The theological discourse that developed around these rival Eucharistic interpretations also reveals their presuppositions about matter, human nature, and the nature of language.

Fascinatingly, in both realms of discourse, the sides who resist a metaphoric reading—certain scientists on the one hand and certain non-Protestants on the other—go on to offer promises of immortality based on their notions of ontology and figural language. I shall elaborate this point below, but to put it briefly, some computer scientists argue that since our consciousness will soon be convertible into electronic data, we will be free of our decaying bodies and possess a kind of immortality. Offering an altogether different mode of eternal life,

one early Christian liturgy calls the eucharist "the medicine of immortality" since it uniquely conveys the antidote to sin and death. Thus, each discourse community develops its own logic—a reductivist logic on the part of the scientists and a sacramental or eucharistic logic by sacramental theologians—that concludes in a promise of immortality.

1. The nihilistic sign

Within scientific discourse in general and the field of artificial intelligence in particular, there is an incontestable habit of discussing things organic in mechanical terms and vice versa. The Harvard biologist Edmund O. Wilson (1996) could not be more clear: "The surest way to grasp complexity in the brain, as in any other biological system, is to think of it as an engineering problem" (p. 102). Thus, the human body is a machine and the brain is a computer. Valid metaphors both—the problem occurs when the fact of their metaphoricity is forgotten. Assuming the human organism is merely a machine and that technological development equals evolution, Hans Moravec (1988) apocalyptically asserts: "What awaits is not oblivion but rather a future which...is best described by the words 'postbiological' or even 'supernatural.' It is a world in which the human race has been swept away by a tide of cultural change, usurped by its own artificial progeny" (p. 125). One should recall that this is a good apocalypse for Moravec, one that leads to a "supercivilization" of pure mind. The oxymoronic "artificial progeny" is reduced to a contradiction in the more dystopian vision of future technology according to Gregory Paul and Earl Cox (1996): "We will find our niche on Earth crowded out by a better and more competitive organism." Note the word organism to denote machines who have outstripped the petty limitations of human DNA. There is no need to multiply examples; my

¹ Both Moravec and Paul and Cox are refuted on ethical grounds and quoted in Rubin (2003, 88).

point is simply that the confusion of things organic and things mechanical exists as a phenomenon.

Concerning the dependence on and limitation of metaphors within scientific discourse, Brown's (2003) general caution concerning ontological description is quite sound—"It does not follow that scientific theories are true descriptions of things as they really are, of entities possessing unobservable as well as observable properties," (p. 186-7)—but unfortunately he addresses neither the man-machine nor brain-computer metaphor directly. Concerning the habitual confusion in scientific discourse between machine and creature, I can suggest two thinkers whose models help explain this phenomenon: Benjamin Whorf, and the father of modern science, Sir Francis Bacon.

First, the Whorfian hypothesis that language usage correlates to a concept of reality or matter can be fruitfully applied to the use of the machine metaphor in scientific discourse. Whorf (1956) connected the verb tenses of Native American languages with their speakers' concepts of time and of reality, and concluded that their habit of thinking about reality reflected itself in their grammar. These habits of thought and of language are best understood as correlative rather than in terms of cause and effect; that is, a classic chicken-egg scenario obtains—a habit of thought evinces itself in a language pattern which further ingrains (and initially may have given rise to) that habit of thought. A similar loop occurs with those who habitually employ mechanistic terms to explain organic phenomena.

The process of mechanical habituation has been identified by Berry (2000, Chapter 3): reduction, abstraction, and identification. The scientific method itself impels researchers to reduce something organic and complex, say the brain, into constituent, simple elements or operations. Thus, we often hear of synapses firing and various electro-chemical explanations of

neurological processes. This mode of explanation is fairly benign, undeniably fruitful in terms of advancing research in the field, and typical of all scientific inquiry in general. When this sort of reduction, however, combines with abstraction, as in the commonplace "the brain is best understood as a computer," problems soon arise. The analogy itself, if consistently perceived as an analogy, may be instructive, but too often (perhaps because analog thinking is inimical to a digital age?) such an analogy is perceived as an equation. At this point the brain actually becomes a computer, is ontologically equated with a computer. Hence, brain = computer. Once the leap from abstraction to equation is made, there is no reason not to assume that a computer cannot equal a brain and is not organic, and so computer = brain. Thus, "brain" and "computer" are perceived as interchangeable terms or surrogational signs for the same phenomenon. One intractable example of this turn: "Viruses" are said to cause our computers to malfunction or shut down on some systemic level. No matter how valid the analogy with respect to transmission, spread, and potential inoculation, the term "virus," though perhaps the best available explanatory model, is still merely a metaphor for a pernicious computer program. Thus, the habit of thinking of organisms in mechanistic terms establishes certain habitual metaphors which, in turn, allow for machines to be thought of in terms of organic metaphors.

However trivial the example of computer viruses might appear, the ontological confusion that enables such a statement proves insidious. Once the brain as the seat of human consciousness has been reduced, abstracted, and identified as a computer, the extrapolation soon follows that a computer can possess all organic qualities such as human consciousness, and of course, language. The Whorfian loop is now complete, and a scientific worldview whose habit of thought encourages the reduction of all reality to material constructs frames a discourse that tends to reduce metaphors to equations. Hard on the heels of this claim comes the now familiar

and quite serious hyperbole of biolinguistics, nanotechnology, molecular engineering, et al.:

Computers that can talk, the promise of artificial life, the cure of mental disorders and neurological disease, etc. According to Bacon, however, the scientific method and any subsequent advancement in unlocking nature's secrets depends on the consistent use of explicitly denotative language, and concomitantly, a rejection of all figural language including metaphor.

The hyperbolic claims of today's researchers, despite their plausibility, to him would be precisely unscientific purely on rhetorical grounds. As a literary scholar trained in rhetoric, I am not prepared to argue the technical merits of these subsequent claims, nor do I wish to embroil myself in the mind/brain debates, though my concern is language. Perhaps these various avenues of research and technology will better humanity by inventing computers that talk, creating artificial life-forms, developing a panacea, but the presuppositions that make such goals possible as well as the ethical dilemmas they raise demand further scrutiny.

To analyze these presuppositions and their rhetoric, I wish to draw on my own area of study—seventeenth-century England—and apply Sir Francis Bacon's concept of intellectual "idols" to the man-machine discourse. Bacon is generally credited with having invented the scientific method as we know it. It is for Bacon the *Novum Organum*, and in his Latin treatise (1620) by that name he sets forth exactly how this "New Tool" will bring about the advancement of learning. He contrasts his new method over against four lazy, unproductive habits of thought, which he called "idols," that impede scientific progress. They are: (1) the preconceived notions one is taught—conventional wisdom or "idols of the tribe"; (2) personal biases or "idols of the cave"; (3) "idols of the marketplace," confusions that arise mainly from vague language and from imprecise definitions, e.g., "soul"; (4) "idols of the theatre," systems of thought that in various ways blur scientific observation with philosophical or theological speculation. Bacon's

religious metaphor should not go unnoticed. These idols are false gods who perpetuate error and obscure the light of wisdom that only pure science can provide. As human beings, moreover, we instinctively worship these false idols consciously or unconsciously, but according to Bacon we can and must deliberately reject them through the proper and constant use of reason and rational language.²

With regard to the man-machine discourse, the latter two idols prove especially helpful. The confusion of metaphor with equation exemplifies Bacon's idol of the marketplace because the significance of particular data are lost in problems of language. That is, the inherent reductionism of the scientific method that tends to see the brain operating like a computer is perfectly descriptive and valid, but the abstraction and confusion that identifies thinking as computing is idolatrous. The "marketplace," i.e. the scientific discourse community, pressures the scientist into communicating and selling his knowledge to the broadest and most universal consumers. In such a case, instead of venerating the complexity of the brain, the scientist profanes the reality of it by oversimplification.

The true scientist according to Bacon always remembers that metaphors are provisional and are only useful as long as they both account for as much data as possible and do not contradict any known data. Mechanical terms, on the other hand, fail to donate much that is relevant for understanding the phenomena of the human brain. Take, for instance, such problematic aspects of mind/brain research as the questions of origin, will, language, or emotion: The machine model only serves to muddy the waters. With respect to origins, the brain is a product of nature while computers are a human artifact; will—<u>homo sapiens</u> decides, while computers are programmed; language—<u>homo loquens</u> makes metaphors and tells stories, while

² Bacon's injunction concerning a purely denotative language would famously be pursued by the Royal Society's quest in the latter-half of the 17th century to invent a universal language.

computers are at best eloquent parrots; emotion—<u>homo ridens</u> laughs, while computers cannot get the joke. Bacon's idol of the marketplace, therefore, concerned as it is with denotation and figural expression, relates directly to the habitual discourse that describes organisms in mechanistic terms; but the next step, to describe machines in organic terms, is to succumb to the lure of his "idols of the theatre."

Bacon divides the idols of the theatre into three kinds, "sophistical," "empirical," and "superstitious," and the man-machine discourse exhibits all three. He calls them idols of the theatre because a scientist presents his system to us as a playwright does a play—a coherent whole that brings together a wide range of particulars. The analogy is particularly apt because, depending on the researcher, the man-machine story can be either a comedy or a tragedy. The comic version typically attributes vague noble motives to the research: Fund my nanotechnology and everything will work out fine for the betterment of humanity (Berne, 2003). The tragic version anticipates a different outcome for similar research, thus, the apocalypses warned of by Moravec as well as by Paul and Cox. This sort of speculation is idolatrous and not properly scientific because both claims presuppose the man-machine equations and presume some ontological interface between humans and machines. The reductive move that perceives humans as machines and machines as "artificial progeny" necessarily leaves something out. In the case of man = machine, these certain somethings, these variables, are precisely what many consider to make us most human, and presumably would prevent a machine from ever being a human. The ineluctable reality is that man is not a machine, nor are machines identifiable as human as the term "progeny" suggests. To deny this reality is to make the weak position seem the strongest exactly the mode of sophist philosophy. So then any extrapolation spun out of such a shaky foundation is bound to be spurious or "sophistical," hence, Bacon's choice of terms.

The "empirical" nature of this idol, the second kind of theatrical idol, stems from the proper use of scientific method in the first place. As I have already stated, the initial reductive move to break things down into constituent elements and processes is valid and necessary. Such work is the very marrow of Bacon's method. But diligent empirical accumulation of particular facts should not, Bacon warns, lead the researcher to draw overhasty generalizations. This empirical idol of the theatre is exactly the case when scientists discuss the brain as a computer. The computer analogy has proven extraordinarily useful in advancing neurological sciences and the disciplines that draw on it—all properly empirical. But to then ignore the metaphorical reality and to identify the brain as only a complex computer (e.g., Wilson, 1996) is to commit idolatry, according to Bacon.

Once the leap to equation is made, all kinds of philosophical and theological speculations can further contaminate any pure science that has taken place, and thus, Bacon calls this kind of idol "superstitious." In the man-machine narratives, as in scientific discourse in general, there are two prevailing superstitions: the utopian optimism of Enlightenment philosophy as best championed by Liebniz but more recently by such works as Wilson (1996); and the many apocalyptic dystopias that warn of bioterror, or bioterror and the end of civilization as we know it (e.g., Moravec, discussed above). The former tend to be lame ethicists, since they place a great deal of faith in the self-correcting mechanism inherent in the scientific method; the latter's dark eschatology can be highly ethical (they are worried), but they are primarily consternated, if at all, by the end (the application of the research), not the means (the pursuit of knowledge for its own sake). Nuclear technology provides a handy example: Many decry the bomb after the fact, but

_

³ Moravec, it should be noted, is not at all bothered by the prospect of postbiological existence; in his neo-gnostic despising of the body, he embraces the prospect of a mechanical body, so to speak. Paul and Cox, likewise, do not despair, but see such a future as evolutionarily inevitable. Rubin (2003) is deeply suspicious of both the means and the end of any such research and rejects it as necessarily inevitable.

far fewer repudiated the validity of splitting the atom in the first place. A salient literary example regarding the quest for artificial life comes from Mary Shelley's novel *Frankenstein* (1818) when Victor Frankenstein, after bringing the monster to life, repudiates his research and sees to it that his advance in knowledge is not disseminated.

But the man-machine narrative involves a more complicated superstitious idol, the explication of which would make their claims appear even more exaggerated. The reference to Frankenstein is even more apt when one considers that computer scientists and bioengineers are currently pressing along Victor Frankenstein's lines of inquiry. Their goal, as was his, is to cure death and offer immortality. The man = machine, machine = man habit of thinking and of saying, combined with the advances of computer technology, has some scientists asserting that soon we will be able to download and upload our thoughts, memories, even emotions. Doing so will enable us to render our consciousness, our very identity as personal beings, to "live" beyond the lifespan of our bodies and to "exist" as long as data storage is retrievable. The promise of nanotechnology and the accelerating technology of artificial intelligence particularly charm technophiles such as Kurzweil (2002, no page): "A lot of concepts we have of the nature of human life—such as longevity—suggest a limited capability as biological, thinking entities. All of these concepts are going to undergo significant change as we basically merge with our technology." Kurzweil's roseate notion of merging with our technology is the same virtual immortality prophesied by Moravec as the postbiological mode of existence. The irony that this virtual immortality requires the actual death of humankind as we now know it does not seem to register. To return to Bacon's terms, the idolatry of technological progress (which in its desire to stave off death indefinitely calls us to embrace death in order to "merge with our technology" and to become "postbiological") actually becomes the idolatry of death itself. Thus, Progress has

become our Molech. The irony registers more clearly when we realize that there are twin and contradictory attitudes towards death at work in this idolatry.

An apparent necrophobia seems to drive much technological research and the necessary faith in scientific progress, but according to Pickstock (1998) this modern habit of thought actually conceals a latent necrophilia. First, Pickstock cites a bevy of historians explaining how the modern view of death has changed: "A former cultural familiarity with death and its integration into life is replaced by a retreat from death in a double gesture of denial and mystification" (p. 101). This denial and mystification stem from two sources: "first, the drift toward immanentism, culminating in the triumph of reason in the Enlightenment, according to which, death is the last remaining scandal which refuses to be mastered; and, secondly, advances in medical science which mean that in the West . . . the synecdochal dream that mastery over diseases presages an eventual triumph over death itself" (p. 102). That accounts for the apparent necrophobia. The latent necrophilia hinges on Pickstock's phrase "the synecdochal dream".

Synecdoche is a rhetorical figure that ascribes to the whole (death in her example) what pertains to a part (disease). Synecdoche, then, is really reductionism in reverse. In the case of medical technology both ways of thinking lead to the same treatment: At some point, to cure your disease, to ward off death, you must "merge with technology" or become "postbiological." Such treatment ultimately depends on the belief that human consciousness and individual identity can be reduced to bits of data. To the faithful, then, if death means this new mode of becoming, then bring it on. To the skeptical, however, this new mode of becoming appears to be mere indications of our death, or more precisely, our deconstruction. If reducing being to bits is understood as indication, then Pickstock's apt quotation of Derrida would apply: "As Derrida says, 'We know now that indication, which thus includes practically the whole surface of

language, is the process of death at work in signs" (Pickstock, 1998, p. 106). Thus, in the case of medical technology, what begins with an impulse from fear of death entails an active embrace of death. This morbid epistemology also depends on a radically secular paradigm, a paradigm that Bacon preceded and that Pickstock wishes to supercede.

Bacon asserted that his new method, science, drawing on reason and examining nature's secrets, enabled one to praise the Creator better, while religion, relying on faith and depending on revelation, offered the only means of direct knowledge of the Creator. For Bacon, the two modes of knowing, the two kinds of truth-seeking were intellectually compatible and followed a hierarchy of epistemology with religion the "queen" and science her "handmaiden." The superstitious worship of "idols of the theatre" blurs the roles of these two. Bacon's signal example is Platonic philosophy and the Ptolemaic scheme of the universe. For Bacon the new Copernican astronomy was not so much a result of improved telescopic lenses as it was a willingness to move beyond a habit of mind that preferred to assert a religious worldview and then search out only the empirical data that supported it. Submitting the application of religion to rational enquiry, and thus, separating faith from reason, was Bacon's means of overcoming this idol. The current discourse that promises immortality via computer technology, therefore, commits Bacon's idolatry in reverse; science is hubristically asserting a religious claim.

The purpose of this proleptic application of Bacon's idol to contemporary scientific discourse has been to help reveal the underlying presuppositions about nature, humanity, and language at work in the man-is-machine equation. How the terms "man" and "machine" or "brain" and "computer" become surrogational signs warrants more scrutiny. Science generally and man-is-machine discourse specifically see the natural world and man strictly in terms of reductive materialism. Thus, if the brains can be mapped as, and reduced to a neural network of

electro-chemical transmissions, and if technology can mimic such a network of transmissions, then it follows that a "computer" and a "brain" signify the same thing. As *verba* they indicate the same *res*, and are, thus, interchangeable.

The reductive move is crucial, for computers and brains, though perhaps ultimately just representing different modes of dust, differ dramatically in material composition as perceived by our senses. These apparent material differences, nevertheless, are ignored, while virtual correspondences are preferred. One can imagine objections to this reductive move from various fronts, but the agrarian philosopher Wendell Berry (*Life*, 2000, p. 48), in his extended refutation of Harvard biologist E.O. Wilson's *Consilience*, vehemently rejects any such reduction that is based on language. For him, language is one element that resists the reduction of mind to machine. But without this reduction "computers" and "brains" are just so many apples and oranges. That is, the reductive materialism that determines or closes the set of attributes in turn translates the one into the other via a reductive semiotics that [over] determines denotation. This imposition of a closed set has been called the "violence of the concept" and is always an abuse of language. The proper use of language in the case of man-is-machine is to perceive it as a limited conceit. "Brain" and "computer" are not surrogational signs of an ontological equation; they are tenor and vehicle of a stale metaphor.

To conclude, the reductive materialism of contemporary scientific discourse leads to a habit of language that converts metaphorical signs into surrogational signs where conditional correspondences are mistaken for ontological equations. And this mistake is precisely the one Protestant Reformers accused Catholics of making with regard to the Eucharist.

⁴ Wendell Berry, *Life is a Miracle* (Washington, DC: Counterpoint, 2000), 48. His alternative to mind = brain = machine is "mind= brain+body+world+local dwelling place+community+history."

2. The eucharistic sign

The controversy concerning the eucharist hinged, in brief, on whether certain of Jesus' phrases from the Gospels were interpreted as figures of speech or not: "I am the bread of life" and "This is my body which is given for you" (John 6:35 and Luke 22:19, respectively). The former was and still is recognized broadly as a rhetorical figure, while the latter is asserted to be similarly figural only by certain Protestant denominations.⁵

The latter statement occurs during the Last Supper narrative where Jesus is alone with his disciples and breaking bread with them, which in the Christian liturgical tradition is regarded as the institution of the sacrament of communion or the Eucharist. Until the Protestant Reformation in the western church, Christian tradition asserted that the bread and wine gestured to by Christ in this passage became his body and blood, so that when the church commemorated this event liturgically every Sunday, the bread and wine at the altar subsequently became Christ's body and blood. The Roman Catholic doctrine of transubstantiation articulated for the medieval West how this sacramental transformation came about. Various Protestant reformers slightly modified their own views, but John Calvin's vehemence is typical in his rejection of the Roman Catholic doctrine of transubstantiation. Calvin argued that Christ's phrase is best understood as a rhetorical trope, since the elements retained the physical features of bread and of wine. By insisting on reading this passage figuratively as a trope, the Roman Catholics dismissed Calvin as a "tropist." He delighted in the title. Calvin's figurative reading is another way of saying that Eucharistic signs are surrogates. When Harris (2003) uses the eucharist as an example of

⁵ Counter-Reformers delighted in pointing out that here they were being the literalists. Ironically, the same Reformers who tended to stress biblical literalism, here insist on a figural reading, specifically referring to this passage as an example of metonymy. The old Protestant saw, "Jesus said 'I am the door'"; does that mean he had hinges and a knob? This a *locus classicus* alluded to by Berry, but goes as far back in English as Dudly Fenner, *The Artes of Logike and Rethorike*. STC 10766. Huntington Library Photostat, 1584. Washington, D.C.: Folger Shakespeare Library.

⁶ Metonymy, to be precise, where one word that usually signifies one thing is used to refer to something else such as "wheels" or "ride" for "car," "heart" for "courage," etc.. Calvin, *Institutes of the Christian Religion*, XVII.21.

surrogation, he has in mind precisely the Protestant notion of the sacrament. That is, body/bread and blood/wine are interchangeable or transvertible signs for the same material objects (p. 143). But this is not at all how the more liturgical strands of Christianity, particularly the Catholic and the Orthodox, perceive the Eucharist.

With its explicit concern for language, undoubtedly the most significant recent explication of Eucharistic theory in English is Pickstock's (1998) *After Writing: The Liturgical Consummation of Philosophy.* Her work is, first and foremost, a systematic refutation of the most influential voice of post-modernism and deconstructionism, Jacques Derrida, and his reading of Plato, but also includes an exhaustive explication of the medieval Roman rite. It is systematic, complex, and provocative on many levels, but for my purposes here I can only highlight a few of her assertions.

First, Pickstock (1998) maintains that the language of the Eucharist itself forces us to entertain a liturgical view of reality, a view that obviates the tendency for closed assertions of reductive materialism. "That Jesus says, 'This is my body' and not something explicit, such as 'the bread has become body,' blurs the distinction between thing and sign by 'leaping over the state of indication or reference" (p. 262). We are forced to "allow things to exceed their appearance" and that there can be "something hidden which we do not know about." She explains that this is so "for things are never here in terms of an enclosed, exhaustive arrival. The indicated is no longer that "other" of language which anchors all signs, but instead is that which folds back into language, for instead of being confirmed by our glance towards the bread, it is confirmed by Jesus' phrase itself." For Pickstock, therefore, "the Eucharist situates us more

_

⁷ Each of the three main branches of Christianity has voices offering theological critiques of post-modernism and Derrida. The "radical orthodox" Pickstock explicitly argues the Roman Catholic doctrine of the Eucharist as the ultimate ground of all meaning. Whereas for Prostestant philosopher Smith (2002) ultimate meaning derives from the Incarnation; alternatively, the Eastern Orthodox Hart (2003) focuses on the act of creation itself.

inside language than ever" (p. 262). So by conflating thing and sign, the eucharist employs not surrogational signs but profoundly reciprocal types—the body is the bread and the bread is his body. A different view of matter is at work here.

The correspondence between signs is not conditional or accidental in the Aristotelian sense but essential; the paradox is sustained by insistence on a Platonic view of reality over against simple materialism. Sherrard (1987) explains, the "sensible form represents both an unfolding and a greater degree of condensation or materialization of its archetype; or, to put this the other way around, the archetype contains and embraces the sensible form in its intelligible or spiritual state" (p. 231). A hierarchical yet reciprocal relation obtains between the forms bread and wine and their archetypes body and blood. Thus, the Eucharist is seen as the medicine of immortality, since "the sacrament presupposes an actual incarnation of divine power and life; and what is communicated to man in the sacrament is this divine power and life" (p. 93). The Eucharist equation of bread = body and wine = blood, unlike the man = machine or brain = computer equation, actually bestows life and fulfills its promise of immortality.

Pickstock (1998) is quick to emphasize the linguistic implication of the always-alreadynot yet reality of the heavenly kingdom. "This is my body"... are the only words which
certainly have meaning, and lend this meaning to all other words" (p. 263). The Eucharist and
language itself have their own hierarchical and reciprocal relation: "Not only is language that
which administers the sacrament to us, but conversely, the Eucharist underlies all language" (p.
262). It would be negligent of me not to point out how irresistible the syntactical figure of
chiasmus—the inversion of parallel phrases—proves to be for Pickstock as for Sherrard when
articulating the Eucharistic Sign and its attendant reciprocal enfoldings, co-inherences, and

⁸ This phrase occurs in the fourth-century Liturgy of St. John Chrysostom, but obviously antedates it in liturgical practice.

exchanges. More importantly and obviously, such a foundational approach to language can and should have as profound a potential to impact the work of literacy criticism as Derrida's deconstructionism has enjoyed; I will outline this potential briefly below.

To conclude this section, in the case of Eucharistic discourse the Protestant surrogational approach reveals a materialistic ontology not unlike that in scientific discourse which compels them to reduce the sacramental identification to a mere figure of speech. On the one hand, the Protestant sacrament can, on its own terms, at best remind the believer of Christ's incarnation, passion, and resurrection, but the celebration of the Eucharist is no longer necessary for salvation. It is in theory only so much liturgical ornament and has turned out in practice to be superfluous. The older view of the Eucharist, on the other hand, draws on a Platonic ontology and sacramental epistemology and embraces the Eucharist as an immanent manifestation of the presence of Christ. This liturgical mode, on its own terms, conveys divine power to the believer.

3. Conclusion

Much of the goals of contemporary scientific research is only vaguely for "our good."

Upon closer examination its focus is primarily extending this life or the "quality" of this life, and as such its positive benefits are severely limited. When it asserts any greater benefit—

immortality or "transhuman" existence—it disingenuously and often unwittingly reduces what it means to be human, or worse and more bizarrely, co-opts the rhetoric of our own religious discourse. What is revealed is often a kind of neo-gnostic attitude towards the body as merely a mortal coil to be discarded. And this is humorlessly asserted by those with a worldview that often resists any notion of unique and individual souls. The Protestant tradition, though it lacks the theological means to oppose this strand of thought, still possesses the moral and ethical

means to oppose the capitulation to scientific "progress." What is required is a more thorough and concerted articulation of a religious humanism to thwart the regnant notion of materialism.

The authentic conservative finds himself in the 21st century in the strangest of positions: having to defend his measured, creaturely existence as a unique and unrepeatable embodied soul. This is a strange and difficult argument to make in a culture and political climate increasingly deaf to the very terms needed to convey it. Let us pray that our unique human ability to persuade, to convince, to move into action, and not to yield proves more powerful than the machinery we have invented and the barbarism it promises.

References

- Aers, David (2004). *Sanctifying signs: Making Christian tradition in late medieval England*. South Bend, IN: University of Notre Dame Press.
- Bacon, Francis (1620). *Novum Organum* (seventh ed). In: G. Logan (Ed.), *The Norton anthology of English literature: The sixteenth and early seventeenth century*: Vol. 1B (pp. 1544-48). New York: W.W. Norton, 2000.
- Berne, Rosalind (Fall, 2003). *The complex ethics of small changes*, Explorations: Research highlights from the University of Virginia. Charlottesville, VA: Office of the Vice President for Research and Graduate Studies.
- Berry, Wendell (2000). Life is a miracle. Washington, DC: Counterpoint.
- Brown, Theodore (2003). *Making truth: Metaphor in science*. Champaign, IL: University of Illinois Press.
- Harris, Roy (2003). The necessity of artspeak: The language of the arts in the Western tradition. London: Continuum.
- Hart, David Bentley (2003). *The beauty of the infinite: The aesthetics of Christian truth.* Grand Rapids, MI: Eerdman.
- Kurzweil, Raymond (2002). After the singularity: A talk with Ray Kurzweil. Interview with John Brockman. www.kurzweilai.net/meme/frame.html?main=/articles/art0451.html.
- Moravec, Hans (1988). *Mind children: The future of human and robot intelligence*. Cambridge, MA: Harvard University Press.
- Paul, Gregory & Cox, Earl (1996). *Beyond humanity: Cyber revolution and future minds*. Boston: Charles River Media.
- Pickstock, Catherine (1998). *After writing: On the liturgical consummation of philosophy*. Oxford, UK: Blackwell.
- Rubin, Charles T. (2003). Artificial intelligence and human nature. *The New Atlantis: A Journal of Technology and Society 1* (Spring), 88-100.
- Sherrard, Phillip (1987). The rape of man and nature: An enquiry into the origins and consequences of modern science. Ipswich, MA: Golgonooza.
- Smith, James (2002). *Speech and theology: Language and the logic of incarnation*. Routledge, New York.

Whorf, Benjamin (1956). In John B. Carroll (Ed.), *Language*, thought, and reality: Selected writings of Benjamin Lee Whorf. Cambridge, MA: MIT.

Wilson, Edmund (1996). Consilence: The unity of knowledge. New York: Knopf.