Originary Science, Originary Memory Frankenstein and the Problem of Modern Science (Part 1 of 3)

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I. Frankenstein as Modern Myth and the Need for an Idea of "Originary Science"

1 In Originary Thinking: Elements of Generative Anthropology (1993),(1) Eric Gans proposes that the minimal judgment concerning any cultural artifact, a judgment that may be conferred only by the "verdict of history," is that the artifact counts-as the referent of the first sign on the originary scene did-as significant in the long run (OT 130). That the verdict of history has testified to the significance of Frankenstein (1818) is undeniable. Mary Shelley's first novel contains the set of kernels for a basic "story" (2) that almost every cultural consumer in the Western world sooner or later learns. The story tells of a hubristic modern scientist, atheist and materialist, who attempts to create human beings, therefore playing God and bringing upon himself, upon the not-quite-human creature, and upon unsuspecting human bystanders, disastrous violent conflict and irredeemable suffering. From this primary model there descends an impressive line of imitations: enduring modernist specimens such as H. G. Wells' The Island of Dr. Moreau (1896) and Karel Capek's R.U.R. (Rossum's Universal Robots) (1922); acclaimed postmodern fictions such as Craig Nova's Wetware (2002) and Margaret Atwood's Oryx and Crake (2003); contemporary pop fiction such as Tom Hyman's Jupiter's Daughter (1994), John Darnton's The Experiment (1999), and F. Paul Wilson's Sims (2003); Hollywood blockbusters such as Ridley Scott's Blade Runner (1982), Steven Spielberg's AI: Artificial Intelligence (2001) and Michael Bay's cloning-horror thriller, *The Island* (2005). Indeed, it is difficult to imagine any narrative of the human robot, android, cyborg, or clone in which scientist and "product" confront each other that would not be doomed to create its differential effects in the long shadow of Mary Shelley's founding model.

2 The founding model conveys in parabolic form the difference between an action's intended results and its unintended consequences, a difference significant to any cultural agent whose project involves unavoidable risk to the uninvolved public. It suggests the ethical risk entailed in many a technological innovation or commercial venture or thesis proposal in market society. It is no accident that the "Frankenstein" accusation is deployed in public discourse concerning nuclear bombs, human genetic engineering, and ecological disaster-making of all sorts (Mulkay; Turney). The core story, as we all know, has become, more significantly, a lasting modern myth. (3) It is revealing to classify Mary Shelley's first novel not only with its descendants, the literary imitations of it, but also with other modern works that have similarly proven themselves to possess the peculiar power to inspire numerous variable re-tellings, to generate cultural icons people use without knowing their "original" historical sources. The canon of modern myths would include the Faust story (as told in Marlowe's play), Defoe's Robinson Crusoe, Bram Stoker's Dracula. It might include others; my aim here is only to assert the curious presence among us of the category of modern myth and to make the uncontroversial move to include Frankenstein in it. The modern myth constitutes, on its face, a paradoxical class of cultural productions. Why do we have them? The expression "modern myth" cannot be a self-abolishing contradiction in terms, because we do in fact have them; but given that the enlightenment project aims at the expulsion of delusional, superstitious "myth" and the enthronement instead of verifiable, "scientific" truth, why does myth persist as modern myth? Is it not the goal of modernity to shake off the illegitimate authority of legend, fancy, religion-and to put in its place the scientifically creditable? Of our four examples, only the sober Robinson Crusoe seems less than hostile to the scientific cast of modernity: Faust, Frankenstein, and Dracula remain dream-soaked and suspicious of the authority of reason, addicted to the closed satisfactions of ritual violence. Nor is it accidental that Robinson Crusoe alone in the set shows no open hostility to what Gans has illuminated as the minimal model of market society, and that the other myths (by contrast) exude a nostalgia for the good shows made possible by the staging of a fantasized decadent aristocracy that refuses to learn the pragmatic wisdom to be gained from witnessing the revolutionary purifications of the American and French revolutions.(4)

3 This curious persistence of the anti-scientific, anti-democratic and anti-modern in modern myth itself may be the sign of modernity's *failure* to get science to appropriate the authority to be derived from its anthropological roots in religious practice. (5) Modern myth, in its turning away from enlightenment directives, creates a high-stakes market of esthetic traditions ("modern tradition," another oxymoron) not only to supplant "Religion" but also to save us from an allegedly anesthetic, amoral "Science." The Frankenstein myth takes pride of place here, more resonant than Faust or Dracula in its power to crystallize popular resentment of real-world science. (6) Roslynn Haynes' authoritative *From Faust to Strangelove: Representations of the Scientist in Western Literature* (1994) demonstrates beyond any doubt that throughout modern Western history, the scientist both in high literary art and in popular culture almost always gets cast in a "negative" role. She also

documents the way this deep resentment of the scientist figure has grown especially acute in the wake of Auschwitz and Hiroshima. (7) And the deluded scientist who aspires to playing God the creator of the human cuts the most disturbing figure. What anthropological truth about science and modern culture, in the minimal terms of originary analysis, is revealed and preserved in the Frankenstein myth?

4 Once we begin to ask these questions, we are forced to confront some interestingly blurry lines in generative anthropology itself. For when we turn to the key texts of originary thinking, we find that "originary science" has not yet been explicitly thematized, although the materials for such a thematization seem to be scattered here and there. This study, the first in a three-part originary analysis of the problem of modern science as it is revealed by Mary Shelley's *Frankenstein*, will take up the challenge of inquiring into "science" in the discourse of generative anthropology, of attempting to formulate a notion of "originary science."

II. First Step Toward Finding "Originary Science": Uniqueness of the Human

5 Anyone acquainted with the oeuvre of Eric Gans will have noticed the range of fundamental components of the human for which he has found a place in the originary event. With a searching rigor, Gans has elaborated a fascinating, but deliberately selective, inventory of anthropological categories fundamental to an understanding of the human. The inventory includes mimetic paradox, symbolic language, representation, originary linguistic exchange; originary mimesis, rivalry, resentment, desire, guilt; the experience of the communal sacred, originary significance, the minimal esthetic effect; the minimal model of sacrificial ritual in the originary sparagmos; the inauguration of economic value in exchange of the first personal property in the sparagmos; originary irony, narrative, personhood; the anthropological idea of God in the originary signified that subsists in the absence of the consumed sacrificial object; the establishment of the rhythms of ethical social life ("independent" productivity) as opposed to moral communal life (ritual duty).

6 We might ask about one more feature: technology and science as fundamental components of the human. The most cursory examination of the differences between our species and others surely must include the wonders wrought by the technological implementation of the discoveries of natural science, especially in the last two hundred years. In response to skeptics who discount or deny the uniqueness of the human by pointing out the existence of so-called animal languages or animal culture, Gans often points to the fact that no animal species has anything like human religion. If we do remain open to noticing the close identity between the universality of human religion and the massive evidence pointing toward the origins of language in communal experiences of the sacred, he suggests, our openness might inspire us to shed some of our false humility in the name of intellectual self-respect. Yet in a gesture the intended objects of which are far more

spectacular, one could direct the attention of the deniers of human uniqueness to the differences of scale between the sticks that chimpanzees use to fetch insect foods and the technological achievements of humans: fire, the axe, the plough, the wheel, the boat, the flying kite, pyramids, cathedrals, skyscrapers, bicycles, tractors, planes, heart transplants and brain surgery, books and movies and electronic journals. The root of the technological achievements of our species, results of knowledge systematized by those forms of symbolic representation known as "science," may well be felt to deserve inclusion in the originary event. Indeed, science separates us from the animals more decisively and spectacularly than does religion. Where would we locate science in the originary event?

7 If one begins to restudy Gans's oeuvre with an eye to the guestion, one notices an intriguing pattern: phrases such as "natural science" and "empirical science" and "scientific method" appear most frequently in the context of discursively self-reflexive moments where the scope and object of generative anthropology itself are being delimited. For example, we read: "But the scope of generative anthropology is not all-inclusive. Only the categories of human culture may usefully be subjected to originary analysis, not those [categories] by means of which we seek to understand the natural universe" (OT 10). One of the fundamental distinctions in originary thinking, in fact, is the thick line drawn between anthropology and cosmology. Generative anthropology takes "the human" as its object of knowledge; "natural science" or cosmology takes the laws and regularities of the natural world out there as its object. Inasmuch as anthropology is not "hard" natural science, then, the universe of natural objects and the categories used to acquire knowledge about them fall outside of the scope of generative anthropology. It would be absurd to speak of originary gravity, originary salinity, originary genetic mutation. Gravity, salinity, genetic mutation are categories proper to physics, chemistry and biology; they have no relevance to intellectual operations studying the human. Gravity and salinity and genetic mutation preceded the emergence of the human and will outlast the extinction of the human, however much that fact might offend our resentful desire for cosmological centrality. (8) (In this case, a truly absurd resentment. "No fair!" said the people to the rocks, to the spiders.) Anthropological categories will not help us understand these purely natural phenomena. By the same token, however, those of us who wish to pursue the anthropological must combat the imperious attempts of the "hard sciences" to reduce the human to the physical, chemical, or biological. If one does not grasp Gans's unwavering attentiveness both to the uniqueness, specificity and irreducibility of the human as an object of knowledge, and to the autonomy of anthropological thought as the intellectual domain in which that knowledge is organized, one will have difficulty grasping generative anthropology itself. In any case, my point now is that "science" may still be waiting to be located on the originary scene partly as a consequence of this need to keep the materialist bulldogs at bay and to insist on the relative autonomy of the human.

8 The biological perhaps deserves some special treatment here because it is, in the triad of hard natural sciences, closest to the anthropological. Especially inasmuch as Darwinian

evolutionary theory impinges on the major question of human origins, there is an interface between generative anthropology and human biology. Gans is unique among scholars whose intellectual operations have their roots in the humanities' traditional practice of text-based reflection. Generative anthropology is unusual in the way that it pays due respect to developments in evolutionary neurobiology, evolutionary psychology, sociobiology, cognitive science and related disciplines. One thinks, for example, of Gans's marked interest in Terence Deacon's work on the origins of symbolic reference in human evolution. Meanwhile, inasmuch as biology moves in a materialist direction and seeks an understanding of the human through models that were created simply to explain the animate as opposed to the inanimate, Gans takes a step away from its methods: "The emergence of the human cannot be explained by the theory of biological evolution alone, not because Darwinism isn't good science, but because the defining human trait of symbolic representation is not a biological phenomenon" ("Science and Faith in Kansas").(9) Generative anthropology is a way of thinking that permits us to theorize our intuitive sense of the obvious inadequacy of such notions as the "selfish gene" and the impossibility of reducing the human mental experience of (self-) representation to "just" neurological functions of the brain or "just" computational models beloved of the cyberneticists. (10) It is not that Gans rejects the hypothesis that all of nature is in some final ultimate sense material, that he waxes mystical about the mind and injects "soul" into it somewhere, as did Descartes with his speculations about the lodging of invisible spirit in the pineal gland. (11) On the great ontological question of what is, cosmologically, as we have seen, generative anthropology picks no schoolvard guarrel with that big fellow, physics. However, generative anthropology does have a fight with those who believe human representation can be understood by way of the models of explanation constructed to explain the physical, chemical, sociobiological or neurological: "The interventions of the transcendent in the immanent, whether as freedom or as divinity, are ungraspable by physical models that cannot account for the effect of our knowledge of the model on the behavior we are studying" ("Free Will" [emphasis added]). A model must be sufficient to explain its object (Baier 390).(12) The unorthodox claim of generative anthropology is only that a minimal hypothesis of the *origin* of human representation in terrestrial history can explain human representation. Otherwise, one must shrug and say "language . . . just evolved, didn't it?", an evasive query which is certainly not an explanation, let alone an hypothesis. Our study of the human is inefficient at best and selfdefeating at worst as long as it refuses to propose and to test one or another hypothetical model of human language origin. Gans's core thesis about the origin of human representation itself as opposed to the mere necessity of proposing one, is, perhaps surprisingly, detachable from all his descriptions of the originary event. That core thesis is: "the sign can not arise unconsciously, since its use implies consciousness"; "we could not have begun to use language unawares" ("Is GA Falsifiable?"). We notice in passing that the ascetic biologism which refuses to make room for the originary status of ostensive language in any fundamental reflection on human origin marks the precise point where Eric Gans, wearing his philosopher-of-language hat (only one of many hats he may anytime put on), parts company with Jacques Derrida. (13)

9 It follows perhaps as no surprise, given these remarks on the originary hypothesis' position with respect to cosmology and the "hard sciences," that generative anthropology has consistently distanced itself from the "social sciences," as well. But it distances itself only inasmuch as those "social" sciences aspire, as biology sometimes does-in a rather perversely self-defeating downward direction, limiting their explanatory models to ones borrowed from the "harder" sciences-to the search for quantifiable, predictable, law-like structures in the various forms of human behavior (mental, familial, social, political, economic). The prestige alone of physics is no reason to mimic its models when they will not do to explain the object of one's study. In the pursuit of knowledge of the human, generative anthropology suggests that the endless sorting and storing of data, the accumulation of case studies, statistical inquiries, diagnostic tests, content analyses and the like, will never substitute for a minimal hypothesis of the human itself, what it is and how it emerged from its evolutionary forbears.(14) Nor are the humanities free of this tendency toward a mystical faith in the cumulative results of interpretations piled up without an organizing hypothesis or set of competing hypothetical models. The humanities, we expect, will take the human for their object. Yet on the whole, the very question what is the human? has become in most literary critical circles an embarrassing one to ask (let alone dare to "answer"). The prohibition against asking the question is probably the result of the domination system in the soft-sciences academy of victimary thinkers who believe that its merely being asked will inevitably "exclude" and therefore victimize certain parties. Ironically, the victimary prophecy fulfills itself in that when all of us refuse to theorize the human even in the most minimal fashion, all of us indeed are universally self-excluded from knowing who we are, where we came from, what our creaturely status is. (We note in passing that we agree such victimization should be avoided: but witness the ethical motive which accompanies the scientific in Gans's prioritizing of minimality in the originary hypothesis. The more minimal the hypothesis of human origin, the more maximal is its openness to historical human diversity.) It is not the case that Gans despises or dismisses the testing of falsifiable hypotheses and the collection and sharing of empirical data in the human sciences. On the contrary, as with his attention to work in the neurobiology of language and the paleontology of human origins, and with his respect for Marvin Harris' program (along with similar examples of respect for empirically verifiable information), Gans believes in the "scientific method" under certain flexible qualifications as the best way to get at the truth about the human. But if generative anthropology therefore positions itself as a way of thinking that leads to "scientific truth" (and I think it does), then we seem to have reached a quandary. We are now contradicting its self-differentiation from "cosmology," its taking the human as its exclusive object. There, as we noted above, generative anthropology seemed to reject "science" for another way of thinking. So if we are to locate "originary science" in the originary event, we need to detail a little more thoroughly generative anthropology's interaction with the hard sciences, the social sciences, and the humanities.

10 Audaciously but not arrogantly, generative anthropology does not reject the findings of these research domains so much as accept them under the sign of a minimal inclusive

containment-as forms of human representation which, although directed sometimes even at non-human objects, are objects of anthropology itself insofar as they depend upon forms of human representation itself. Gans writes: "...only a self-knowing creature could have created natural science. The objective scene of scientific knowledge is in the first place not the scene of nature but the scene of human origin" (OT 12); "It is human origin that provides the model for the origin of natural phenomena, which are understood to arise as if already existing in the context of human culture" (OT 5). Scientific representation must remain human representation, not in the objects it takes up but in the practices it enacts. However strange it might seem, even the hard sciences that take the cosmological as their object, the hard sciences that deal with what the philosopher of science Ian Hacking calls "indifferent kinds," categories of natural phenomena that are not affected by our knowledge of them (Hacking 103-108), come in this way into contact with some fundamental notions in originary thinking. The cautious move I am making here is (again) to assert that scientific representation of the natural world is still a form of *human* representation; the origins of scientific representation, therefore, are one with the origins of human language generally. This should give us courage to begin to delimit "originary science."

III. Scientific Representation is Human Representation: Implications

11 I have made the claim that we do well to remember that scientific representation is, in terms of the originary hypothesis, a form of human language. Two comments on this claim need spelling out. The first: it does *not* follow that cosmological thinking permits our intellectual operations thus to indulge in the acrobatics proposed by the advocates of Intelligent Design theory. Gans has rejected Intelligent Design and the more mystical but related "anthropic principle" as category errors.(15) He has rejected even more forcefully the bibliolatry of the oxymoronic "creation science" inasmuch as it demeans the foundations of modern biology in Darwin's evolutionary model, and does this demeaning while failing to recognize the pertinent valuable notion Biblical tradition does have to offer: the necessity of thinking of human origin as an event ("Science and Faith in Kansas"). Gans's maxim, "theology is often good anthropology but it is nearly always bad cosmology," often appears in this context of the revisited cosmological-anthropological divide.(16)

12 A mystery does enter our scene of attention here in the aspirations of the "argument from design," however, and I have no wish to expel it in blind subservience to the doctrines of scientific naturalism, which can match, in their obstinate self-confidence, the obstinacy of fundamentalist bibliolatry. Reflection on this mystery will meanwhile permit us to further our delimitation of originary science. Originary science: the scientific knowledge that would be externalized by scientific representation must be knowledge of the object itself, the "object" that for generative anthropology first appears on the originary scene that generated the human being itself as a cosmological phenomenon: "The miracle of the concept, like that of the loaves and fishes, is its embodiment of the trace of the originary scene, where the shared ostensive sign defers mimetic violence. The sign does not create

the physical thing, but it creates the meaningful things that can be represented by a sign" ("Programming"). The quest for "objective" knowledge is one with the quest for the object of the first sign, the object transfigured at the origin of the human by our ancestors' abortive gestures of appropriation. But we do not want the sign in itself, the sign simply as that which is exchanged on the periphery (we are not postmodern solipsists meditating on the text indifferent to the world of objects, deluded by under-thought notions of language as an independent force).(17) We want the sign as that which intends the object, meaning we want the appropriation and consumption and knowledge of the object. I will expand on these starting remarks later. For now, my point is that the great drama of human history includes the great drama of the expansion and partitioning of that minimal object to include all the objects in the whole universe, and the "universe" itself as object. It is human desire as a function of paradoxical representation that has given us human knowledge of the objectworld "out there": "In the original scene, desire is pure paradox: appropriation of the central object is precisely what is prevented by the significance accorded it in the scene itself" (EC 159). Just as our first ancestors desired to know that object, modern humans with a scientific education want to know about all of nature, from its most microscopically minute incarnations to its most cosmologically expansive. The historical drama which shows human desire (human desire, although in originary terms always prior to cognition, impels and sustains cognition), shows us ourselves moving in curious hunger and hungry curiosity from the abortive gesture of appropriation toward the one minimal food object on the originary scene, moving toward, today, our abortive gestures of appropriation that aim to know and to touch upon all of the planet earth and the vast reaches of (think Star Trek) space. Certainly this drama of the pluralization into infinite multiplicity of the objects of knowledge is aweinspiring. Only a boor would deny its inherent mysteriousness.

13 However, it does not follow that our mindful intuition of this awe-inspiring *collective* achievement of all human minds co-operating (notice that "communal achievement" would not have been accurate) is in any way confirmatory or corroborative evidence of the mind of a great Designer, a mind other than ours. Perhaps our minds are met somewhere and some way by the mind of God; generative anthropology remains in the long run skeptical rather than dogmatically atheistic at this juncture, preferring to limit its hypotheses to a firm foundation in the minds we certainly know we do have (our own) and choosing to set aside the unverifiable existence of the mind of an independent-of-the-human cosmic Designer (not our own). If such skepticism commits us to "materialism" (and it is not clear that it does),(18) then generative anthropology must be characterized as "materialist." Meanwhile there persists a difference between scientism itself, and faith in the scientific method as linked to a respect for human being; generative anthropology takes up that latter faith and respect, while it explicitly rejects both the epistemology and the ontology of scientism.(19)

14 The second implication of the claim in question (that is, we ought always to recall that scientific representation descends from ostensive, originary language) takes us into the ethical. The results of reflection here become somewhat paradoxical. Gans has made the

assertion: "Natural science has advanced by expelling ethical considerations from its intellectual operations" ("Ethical Mission"). The phrase "ethical considerations" is, I believe, an echo of remarks in certain chapters in Bernard Williams' Ethics and the Limits of Philosophy (1985).(20) What this remark entails, I suspect, is that the hard natural sciences learned at a certain point in their history that the cosmological world was indeed ontologically separate from the human, precisely in the sense that text-based systems of representation limited our powers of understanding and explanation. Religious reverence for the sacred myths and texts provides only limited openings into the truths of physics, chemistry, and biology. That limitedness of religion as a mode of inquiry should be selfevident to the modern person, believer or non-believer. We have collectively realized from time to time that we needed new languages, new sets of presuppositions, new modes of calculation, and new models of prediction. Thanks to the offerings of scientific innovators, we tried some and found them working, and a new human fearlessness respecting the phenomena studied by physics, chemistry, and biology liberated inquiry from magical thinking and superstitious prohibitions that had until then restricted the free flourishing of the movement toward explanatory models not rooted in religious ritual and myth. Therefore, in noting that natural science makes progress by "expelling" the ethical, Gans is making a descriptive claim about the epistemological efficiency of the hard sciences rather than a moral claim absolving them of any and all ethical responsibility to the human community.

15 This suggestion that the expulsion of ethical considerations from natural science is a descriptive operation, rather than an endorsement of the idea that the pursuit of scientific truth can turn its back without penalty on the human, returns us to Gans's neat formula, theology is often good anthropology, but nearly always bad cosmology. I will focus this time on the first clause, theology is good anthropology, but I will also venture to suggest the reason for the *nearly always* at the limit. Theology as the philosophical guardian of religious intuition ought to have a restraining influence not on our questions about the cosmos as object, not even on scientific representation as the human praxis that attempts to discover and organize knowledge about that object, but on the technological implementations of such material possession and appropriation as science makes possible in the real world. Our fear of the mad scientist to this extent is not irrational, but itself scientific and ethical at once. New knowledge of a weapon or a medicine or a technique necessarily entails new ethical consequences disturbing to established moral traditions. Theology is good anthropology in another way: the goal of religion conceived in its minimal form is, we recall, the goal of binding human beings together to remember the originary experience of the communal peace that was made possible by the sign. A minimally "religious" way of thinking respects the moment of transcendence that allowed us to represent and defer our violence not only towards each other but also toward the immanent "object" itself at the origin of the human (our origin). The hard sciences (physics, chemistry, biology) take the natural world as their object of study; cosmology, even though it may take as its object one of "indifferent kind" other than the human and thus not do anthropology, nonetheless ought, as human praxis, to preserve a minimal link to the communal responsibility at the origin of the human if it is to

remain "human" in the ethical sense. This obligation to preserve a knowing link to the *event* of a unique human origin identifies the debt that science, as expressed by and embodied in technology, must forever be paying to religion. (21) But the same debt also begins to mark out the originary ground for the historicity of the seeming irreconcilability of science and religion: the object as sacred object must remain in principle forbidden to appropriation, but as object of science must be accessible to experimentation, handling, some technological "violence."

16 So as to that irreconcilability, the object of sacred experience is not permitted to be known in itself as the object of scientific knowledge is taken to be known. The object of scientific knowledge is ultimately desired in order that it may be appropriated, divided, not only desired but also consumed in satisfaction, completely signified and made into an image in significant memory, and so forth. What follows from this tension between the object of sacred experience and the object of scientific knowledge, however, is a binding of human scientists to the origins of their desire for knowledge in the experience of the sacred. Originary science is the result of signification in the mode of desacralization, but the maximally ethical science is that which minimizes the necessary desacralization. The object must be sacred before it can be grasped by a human being as object; if it is not grasped in a narrative that includes that originary sacred moment, that narrative has excluded the human-it is not quite a human being who is doing the grasping. This formula goes some way toward providing an originary model for the much-celebrated awe that scientists themselves profess to feel when inquiring into the mysteries of nature: that awe is a moral experience generated by the scientist's experience not of the object as a thing detached from human mimesis, but, on the contrary, the scientist's sense that he or she is *first* in the community to experience the difference that scientific signification makes in tension with the originary sacred.(22) But at the same time, the implicit prohibition against mad science or evil science may also now be articulated: "mad science" is the human sign in the mode of maximal desacralization of the object, including the maximal desacralization of the "object" we wish to know as the (secret behind the) human person. Those scientists who take the natural world as their special object of desire and knowledge are humans who risk losing their own human-ness if and when they forget the (religious) truth, a truth paradoxically at once cosmological and anthropological, that humans are unique in the cosmos because only they can best be known by minimal anthropological thinking, which is itself ethical thinking. To respect that risk of losing one's humanity and to assume that minimal responsibility toward other humans is part of what "human being" means, not only morally but also cosmologically. Our emergence as a species in terrestrial and cosmological history was inseparable from an originary experience of the sacrality of the object; but that object is nothing alone, alone the object is neither sacred nor significant, neither capable of desacralization nor condemned to insignificance. If we are to be human, we ought to remind one another that the cosmos signifies or does not signify only because humans (we) are in competition to appropriate it, and remind one another that it will only signify so long as we agree to attribute to it at least a minimal degree of sacred inaccessibility and resistance to

appropriation. This is a form of "nature worship" that does no violence to human being, because it prioritizes mimetic respect for the humans who do the worshiping, themselves the most "interesting thing," to us, in nature anyway. (23) For originary thinking, the cosmos as an object of *human* knowledge is inseparable from its being an object intended by the *ethical* self-restraint inherent in originary paradoxical representation.

17 Understanding this move should help us grasp the radical human-centrist morality at the root of originary thinking as a discipline. For Gans, the ontological principle of the uniqueness of the human is indistinguishably epistemological and ethical. (24) The principle is epistemological in the ways we have already touched upon: anthropology itself must separate the objects of its knowledge, which do not include gravity or salinity or genetic mutation, but do include the sacred, desire, the esthetic, violence, irony and the like (those features which distinguish humans from all other living and inanimate things). The principle is ethical in the sense that our very being as humans is one, at its originary core, with the deferral of violence through (symbolic) representation. But this means that to the extent that the practitioners of the natural sciences deny the uniqueness of the human by reducing it to an "object" in the cosmological sense (think of the "science" of Auschwitz and Hiroshima), they have already destroyed the human by forgetting their own belonging to the human community. The results of their indifference to the human are not, in this sense, the unintended ("objective") consequences of an epistemological miscalculation but rather the inevitable, perhaps predictable results-predictable at least in the context of the intellectual operations governed by originary thinking-of the originary error produced by their denial of the originary unity and uniqueness of the human. The preservation of our "human being" as cosmological object of knowledge is ontologically dependent on the preservation of our being human as the ontological subject "free," via the sign and the deferral of violence through representation, of cosmological necessity. Anthropology here comes to include cosmology, because cosmology becomes impossible without anthropology. Of course the cosmos exists apart from us, but it does not exist as significant to us apart from us. The ontology of generative anthropology-which itself is unique, as its object, the human, is unique(25)-is paradoxical in this sense, that the cosmos is indistinguishably intended by the originary human sign as an object of knowledge and indifferent to the human sign as an object of desire. Originary science both discovers and thematizes that indifference of the sacred or scientific object, and it is therefore always moving in the direction of the desacralization and exchangeability of the object. Culture is one: the cosmological is not the anthropological, but the only cosmos we are free to desire and to know is the cosmos we know by way of paradoxical representation (including scientific representation). That is what "cultural universality" means: not that the universe "out there" does not exist and is not objectively real, but simply that the universe "out there" is available to us as humans only as an object of representation; as humans, we are the only species of life known in the universe to be capable of symbolic representation. (26)

IV. The Originary Sign as Paradoxical, not Instrumental

18 At this point in our investigation, it seems timely to give more detail about the operation of the sign in the originary scene. "Symbolic reference" and "language" and "the sign" have worked for us at a certain level of generality so far, but if we return the sign to its paradoxical function in the originary event, we might be able better to delimit the uniqueness of the intellectual operations Gans calls generative anthropology. Generative anthropology, he has asserted more than once, can be named only as a "way of thinking."(27) It is not a social science.(28) It is not a form of "normal science," as in Thomas Kuhn's phrase, which could be institutionalized as a professional discipline. It is not a cultural theory.(29) It is not a form of inquiry belonging exclusively to the "humanities" or given to linguistic fetishism. It is not religion. (30) It does, however, require, as all selfreflective intellectual work requires, a minimal leap of faith (31) in the adequacy of our signs to the ever inaccessible object. It does not eschew the notion of spiritual experience. (32) It is not philosophy. (33) It is a way of thinking that returns over and over again to the question of the minimal components of the human and their emergence on the originary scene. Central to the originary hypothesis is the claim that it explains the origin of human language. But there are different descriptions of human language itself. So we pause here, to ask what the sign does. What the originary sign does is also what scientific representation must do. Generative anthropology celebrates and reveals the paradoxicality of the originary sign. The reason that generative anthropology has had to call itself only a "way of thinking" and none of the other things above is not the result of any perverse selfaggrandizing hubris or sloppy arrogance on Gans's part. It is, on the contrary, the result of a strangely self-effacing attempt to formulate a genuinely new mode of inquiry that serves the uniqueness of the human rather than remaining servile to other forms of scientific and linguistic representation, which tend inevitably to deny or diminish or downplay or denigrate this uniqueness.

19 With respect to all the sciences and even philosophy itself, Gans suggests that religion has always gotten right the one thing they have gotten wrong, cut adrift as they were from the beginning by the evacuation of the ostensive in Plato's formulation of the concept: originary representation is paradoxical, so representation and even truth must be paradoxical. The originary sign does not merely point out the object as an object of appetite. Human language is not merely instrumental, and so "scientific representation" that pretends to a purely instrumental knowledge of the whole truth will never be able to account for the human, whether as the object of anthropology or as the object of cosmology, the "hard" sciences.

20 Indexical pointing out is instrumental language, motivated by hunger, or by fear of danger, or by sexual appetite or the like. Animals point objects out to each other; animals know things about their environment; they learn and teach one another such things. But just as animal appetite is not human desire, the instrumental indexicality of animal sign systems

is not the mimetic paradoxicality of human symbolic reference, not least because it is incapable of generating that level of being we call the *human*, that level of being defined by our self-awareness as language users. Let us return to the minimal originary event. A group of proto-human animals, equipped with sophisticated perceptual systems and memory systems, with the physical apparatus either to make hand gestures or vocal cries or both, with a capacity for mutual imitation, with an intensity in that capacity such that it is conducive to intraspecific conflict in situations of appropriative competition, converges on an object of appetite, let us say a food object. We can picture these protohumans in a circle around this object, equidistant from it. The circle is about to become the first human community, the object is about to become the first object of symbolic reference and nascent sacralizing attention. Now we hypothesize the event. In reaching for this object, their gestures at first *only* indexical, the animals recognize one another's gestures toward it as a threat to one another, indicative of the danger each represents to the other. Each has a "natural" appetite for the object, but each also has a "natural" appetite to stay alive, not to get hurt by the others who are as hungry and as excited, as "worked up," as they are. Now as they recognize each other's gestures of appropriation pointing toward and pointing out the object, they pause, they abort these gestures, and they study these gestures, fleetingly, briefly, *minimally*, as things in themselves, seemingly apart from the object, as what we now call signs; but of course the gestures are not apart from the object, they are all about the object, and the protohumans return to focus on the object, which now appears different, appears itself transfigured, more desirable, somehow different than before because it has been pointed out in a new way by the abortive gestures of each, my own, the other's, the other's, my own. (I describe this in slow motion; it must have happened very guickly the first time.) This pointing out, this singling out, reinforced by the proto-humans' mimetic rivalry and their mutually reinforcing imitation each of the other, makes the object itself seem to exude a repellent force (a force which in reality is the result of the paradoxical increased tension and decreased competition occasioned by the pause that the abortive gesture of appropriation brings into existence); the object now seems to have a life of its own. It does: it has the "life" of the transfigured object of the first human sign.

21 At last the animals converge on this object, divide it, consume it (this is the sparagmos), with great ferocity; but they consume it in a manner more peacefully (and this supplement of peacefulness is minimal too) than that in which they would have consumed it if the pause conferred by the sign had not happened, as an event, had not created a minimal decrease in scenic tension. Now the sign has, yes, we concede, had an "instrumental" function: the sign does not lose its practical indexical function. It was pointing to a real world object all along. But such pointing is not merely an indexical pointing, given the event that has happened. The pointing has-by an "accident" that exceeds natural accident in paradoxically creating originary human purpose-created the first community of specifically human language users. In the context of originary mimetic interaction, the protoparadox of imitation and rivalry, the sign points to the thing in the real world and transfigures that thing into something that exists on a new level of being, the level of being created by its having become an object of

human representation, a symbol. The primary characteristic of the paradoxical mimetic symbol, this special sign, is that it creates a new level of being; and the being on that level is human being. After the consumption, something remains in the minimally emergent human minds: they remember the gestures they made, they remember the object as the pause changed it, and they remember the decrease in tension conferred by this tiny little event. That remaining something is enough: it is the trace of the little bang of language, the birth of the human.

22 In this scenario, the sign is *not generated simply to point out the object*. The originary sign is not a tool simply for describing "the thing out there." It is not instrumental with respect to the external reality of the object. On the contrary, the uniquely human sign points out the object only in the context of the paradox of rivalry and imitation. The uniquely human sign points out that, points it out so that, all humans desire it; but all can not have ("appropriate") the object if all desire it all to themselves; but because they can not have it, they each want it all the more. The originary sign defers the violence inherent in this pragmatic paradox. Because we are the only species to have experienced, to have endured and to have enjoyed, this event, we are the only species that uses symbolic reference. The sign transfigures the cosmological, material object into a mental and spiritual "object" held in the mind of human beings. The ontological status of this object, as represented by humans, is therefore irreversibly different from what it was before it was represented by humans. What generative anthropology calls "the originary protoparadox of mimesis, the antinomy of imitation and rivalry" (SP 63) consists therefore in the process of that qualitatively unique event, irreducible to any material calculus or deterministic model of quantitative computation or molecular, neurological interaction: the event is that the protohumans who imitate each other in gesturing toward the object become rivals because that very mutuality increases the intensity of movement toward the object. That which binds together and makes the same (originary experience of the sacred: imitation of gestures intending to appropriate the resented inaccessible object) is at the same time that which threatens self-annihilation and thus heightens self-consciousness (originary desire: rivalry between those who make the gestures intending to possess the object, increasing awareness of the object as its own "living" sacred thing). Generative anthropology takes as its object all of human and cosmological reality "out there" in so far as the sign impinges upon such reality. But human being is a paradoxical reality, because it is never able to rest between being the one doing the representing and being the one being represented, between process and substance: human being is neither absolute and objective nor relative and subjective, but paradoxical, restlessly between, dynamically open.

23 Given all of these considerations, it should be no wonder that Gans quietly affirms his position that "a new ontology must be allowed the chance to generate its own methodology" (OT 7). Philosophy, including natural philosophy, is not yet prepared to believe that such an evenemential model can have any value in producing knowledge about the human. But Gans's decision to place not just indexical or instrumental representation, but paradoxical

representation at the origin of the human, leaves him no choice but to model this level of being in the form of *an event*, however minimally. Thus his thought is not willful iconoclasm toward worldly objects so much as it is a submissively quizzical interrogation of the scene. Representation is not representation of the object alone. The "object alone" is immaterial, inaccessible to and un-representable by the human subject. Genuinely human representation is representation that, in both its communal and collective modes, oscillates: it oscillates between the cosmological as the "scientific" object of the minimally anthropological, and the minimally anthropological as the "scientific" representation of the cosmological that contains (without reducing) the anthropological. Only the originary hypothesis enables us to describe such a paradoxical mode of representing Being and Being represented.

24 The material, concrete "object alone" is necessarily not an object for humanity alone until it has become an object represented in and by the minimally transcendent mode of originary symbolic reference. This relocation of everything concrete, sensual, "out there" in the natural universe to the other side of the "invisible barrier" of human scenicity is a new way of thinking.(34) That scenicity places our intraspecific violence as the transformative prerequisite to having "access" to the concrete thing out there. The priority of signifying community to significant object remains the most difficult aspect of generative anthropology to grasp for the relentlessly "objective" or empirical scientist who wants a direct, unmediated line to the real-a line imaginable in the terms of the classical subject/object dichotomy of modern philosophy. But the line needs to be refigured as a paradoxical oscillation.

25 We have thus far in our pursuit of a notion of originary science begun to define it. The task remains to specify the exact "moment" of its emergence in or close to the originary event and, just as importantly, to distinguish originary science from other forms of cognition that precede but do not constitute it. The aim of such distinguishing will take us through four stages of examination: the experience of the sacred; the experience of the esthetic; the sparagmos; the ritual repetition of the originary event. Our focus will be on the different forms of cognition and thematization that are made possible in each successive stage, as the originary human community comes increasingly closer to the material reality of the central object, and increasingly aware of the tension between the experience of the sacred, which contains the necessary evil of sparagmatic violence, and the pattern of free excursion and ritual return, the rhythms of which provide the way to originary signification in the mode of desacralization and exchangeability.

V. Experience of the Sacred: "Revelation" without Cognition

26 The cognitive productivity of the "moral" moment of the originary event, that first moment of sacred experience, must be described as a pure revelation which may not even merit the name of cognition. Something is "learned" in originary revelation, but what is

learned about the object is (paradoxically) the prohibition against knowing anything about it other than its omnipotent resistance to being known, its inaccessibility to appropriation. The originary sign governs "science" just as its governs any other form of human signifying practice; but science extends that governance into a mode that permits physical contact with the object, sensual knowledge of it, maximal exchangeability of it, its literal deconstruction and reconstruction. The analogy of taking apart and putting back together a mechanical or electronic device may help here: staring at the engine or the television in desiring contemplation, or commanding it to appear in the mode of the magical imperative, will never be the same as naming it in the mode of taking it apart. According to Gans, knowledge is knowledge of the center, by and in the center. A measure of the distance between scientific experience and the experience of the sacred may be taken when we reflect on this claim: "the originary category of the sacred cannot differentiate between the central object and the being of the locus it occupies; [even] religion proper begins when the feast is over, the object has disappeared, and the sign remains in the memory along with the image of its referent" (SP 140) [emphasis added]. This claim implies that although properly human memory is not yet quite operative in originary sacred experience, even such human memory as will "later" be permitted in ritual repetitions of the sacred event will minimize (as much as possible) the individual accessibility of the central object to the whole community, and thus minimize its knowability under forms of scientific representation. In the experience of the sacred, dominated by the de-individualizing force of communally equalizing resentment, we experience the center as "a locus of dispossession" to such an extreme extent that our awareness of our gestures as themselves signs has not even yet undergone the oscillation of the esthetic; originary desire is drowned out and cut off, so to speak, by originary resentment. And again, the success of the ritual repetition of the originary event as a process re-creating a religious experience depends on the strict prohibition of experiences of the privately imagined desirability of the sacred center as a locus open to my occupation ("imaginary possession" as the sine qua non of esthetic oscillation). Fantasies on the periphery of individual appropriation must be sacrificed to an equalization and homogenization of the mental experiences of those on the periphery: if they desire the center, they must desire it equally, which means they must resent the center equally and not begin resenting each other. (The first one to begin showing such desire will be the first to arouse resentment internal to the periphery and thus to question religious truth by betraying a certain preference for "esthetic" experience.)(35)

27 Therefore, we may claim that the prohibitive, repellent force of the central object experienced as sacred object appears so powerful as to rule out the public expression of even the mere possibility of the *imaginary* possession of the object. Noteworthy here is the strange fact that originary sacred experience did not even include (yet) the experience of the name of God, because God had not yet been named in our memories as the Being that occupied the center; that naming would be attached to that memory only after the object had been destroyed in the sparagmos and the subsistent *Being of the center* been separated from the originary experience of the sacred, the memorability of the image fueled by

esthetic experience. The experience of the sacred has a stability impossible in that of the esthetic: in the "stable imaginary structure of resentment" we feel ourselves each as only a "self on the periphery [that] is definitively alienated from the desired object" (OT 119). The "force" of the sacred object is conceived as "independent of representation" (OT 118): "Although the sacrality of the center is coeval with the sign that designates it (as the 'name of God'), it is experienced ('revealed') as ontologically prior to the sign, and is therefore independent of the esthetic effect that operates between the sign and the referent" (OT 124).

28 Now, I do not wish to downplay the world-creating irreversible power of this experience of originary prohibition-as-revelation: it "effects a radical transformation-in fact, a reversal in attitude toward the object, from appetitivity to reverence" (OT 68). Unless we believe in the apocalyptic history-ending fantasies of the most extreme believers in scientism (whose fantasies not coincidentally resemble in their fanaticism those of the most world-denying millennial prophetic cults and the most utopian political extremists), that originary experience of the sacred object remains with us and keeps us human as we were at the origin: "Since we will never know 'everything,' there will always be enough mystery in the world to remind us that the representational freedom with which our species began was dependent on sacred certitude" (Gans, "Intelligent Design?") [emphasis added]. All human freedom is measured against this originary unfreedom, which was at the same time the freedom to become human in the first place by letting the transfigured object become sacred and (eventually) become the first Person. Scientism, given its contempt for mimetic paradox and its faith restricted to de-contextualized experiment and language removed from any scene which would include the memory of originary sacrality, argues for the possibility and desirability of knowing everything about everything. By contrast, the originary experience of the sacred knows only one thing, which opens the possibility of knowing other things one by one, but never "everything"-as long as humans are mimetic and live in communities (where "sharing" and conflict are the facts of life). The originary experience of the sacred knows nothing but resentment of the object, the object as absolute other, not even open to imaginary appropriation. But that knowledge will entail knowledge of other humans and of the sign and (at last) of the object as it has been transformed by others and the sign, made into an object of human desire and human manipulation.

29 Because of the minimality of this originary knowledge of the sacred, Gans writes of our difficulty of putting ourselves in the place of our first ancestors in this first moment: "We need to be able in principle to discuss the origin of language with its originators, for if no such dialogue were possible, we would face this origin as a natural rather than a human phenomenon. But when we thematize language and equate the origin of the human with that of the object of this thematization, we find it difficult to speak with those whose only theme is the sacred referent" (OT 16; emphasis added). The sacred referent, however much we might thematize it, is not the referent of a scientific investigation. It is untouchable, unknowable, not even able to be thematized beyond its naming and the ineffable experience

that accompanies that naming. There is something fundamentally irrational and fundamentally human, at once, about the sacred object when contrasted to the significancedrained "object alone." Bring into your memory the image of a sacred place you love: the Manhattan skyline, St. Paul's Cathedral in London, the ruins of the Parthenon, the Mayan ruins at Chichen Itza, the city of Jerusalem, whatever you please. (36) Viewed from the outside-by another human not attached to the place by religious tradition or communal identification-the place is not worth fighting about, it is nothing but a physical structure, interesting perhaps architecturally (the esthetic) or economically (the tourist), but not to be worshipped or protected by violence. Viewed from the communal "inside," the objectively neutral place is everything, infinitely valuable and worthy of preservation as it is and worth defending to the death if need be from those who would reduce its sacred value to its esthetic value. On a different scale, it is the private sacred as mediated by the erotic that makes a personal daily diary into a sacred text to be kept under lock and key, transforms a brick-and-mortar house into a home, and changes the body of a cohabiting spouse into the incarnation of a loved one. We are unable to explain these experiences in the same way our first ancestors were unable to explain their originary experience of the sacred. None of these phenomena are rationally explicable under any merely physical, chemical, biological, or neurological model. (37) They are explicable only by an anthropological way of thinking that makes space for the category of the sacred; and generative anthropology offers a minimal scientific formulation of that (irrational) category.

VI. Originary Cognition in Esthetic Experience: The Object Imagined as Separable

30 Cognition begins with esthetic experience: "But the central locus is where all cognition takes place, and the esthetic is the sine qua non of originary cognition" (OT 125); "Only through the esthetic experience of the center can the object be known in its specificity. This knowledge is not a return to the practical appetitive awareness of the object prior to the scene; the communal context [enforced by the sacred] is constantly reestablished" (OT 126). As we established above in our discussion of the non-instrumentality and non-indexicality of the originary human sign, its mimetic paradoxicality, the sign does not point to the mere object of appetite; it points to the desirable object, its desirability mediated by a group of humans becoming aware of their signifying gestures and their increased awareness of those gestures in themselves. Esthetic experience permits the human self-consciousness of the desirability of the object to come into extended play. Esthetic experience sets up an oscillation between "imaginary possession" and "recognized inviolability": we imagine possessing the object, which takes us toward a material knowledge of it-the desire to consume it now for its communally mediated significance and (on top of) its appetitive value, not merely for the latter alone. But we also recognize the inaccessibility of the object, the result of its seemingly autonomous sacred force. The signs we use when designating the object as uniquely central make us want to possess the object, but once we focus exclusively on the object and lose sight of our signifying gestures themselves, the object alone without

the gesture signifying it becomes in-significant, and that returns us to the sign, and so the process continues. Nevertheless, the minimal internalization in individual minds of the imagined object, the pole of the oscillation named by "imaginary possession," permits, promotes, produces, the very thing that the resentment-governed experience of the sacred prohibited: contemplation of the object itself as separate from its central locus on the communal scene. This model of cognition is anthropological without being scientific, in that it reproduces the fundamental human (mental) experience of crisis and deferral.

31 I must quote Eric Gans at some length here.

But the knowledge provided by this examination [of the object in esthetic experience] cannot *thematize* the distinction between locus and object. Esthetic knowledge concerns the object not as a member of a category, to be understood according to the Aristotelian formula of species and difference, but as the knowable reality of the center-as-such. The esthetic object cannot be a model in the scientific sense because it can . . . be known [only] insofar as it is revealed in its individuality as an object of desire; in this [not being a model in the scientific sense], it [the "known" esthetic object] is like the idea of God. . . . The esthetic is an anthropological discovery procedure; it permits us to perceive the fundamental principles of human interaction beneath the empirical trappings of social experience.

(OT 127) [emphasis added] There are many consequences to the principle that "originary cognition" is esthetic cognition, consequences for the ethical question of humanly responsible scientific praxis. (38) What I would stress now is that the esthetic prolongs the originary experience of the sign. It is this prolongation of the sign that makes language itself possible; the sacred alone would not have generated human language. The esthetic experience, because it supplements originary resentment with a desire satisfiable only by imaginary possession, is private, internal, and therefore portable. That portable privacy (now only imaginary) is the minimal form of the knowledge-seeking activity that "later," when linked in memory to the private consumption of individual portions of the divided object in the sparagmos, will drive individual members of the community out into the profane world seeking new beautiful objects to substitute for the originary object of prohibitively sacred desire. Yes, the esthetic effect may well be supported by the sacred even as it supports the sacralization of the object: "the communal context [of morally equalizing, totally resentful center-periphery difference] is constantly reestablished" (OT 126). But the esthetic will later become detachable from the sacred because of its imaginary separation of object from locus. In market society, the mediating power of the experience of secular artworks, themselves portable and exchangeable in a way that ritual commemorations of the communal sacred obviously can not be, will supplant the mediating power of communal sacred experience. Not being bound to ritual repetition is part of what it means to live in modern society, where the freedom of individuals to produce artworks and the freedom to pursue scientific projects tend to be either permitted or restricted as one.(39) The censorship of art usually accompanies the censorship of "science," because

both are modes primarily of peripheral, free, private exchange rather than modes of ritual re-consolidation of the center's authority. (40)

32 In the "distinction between locus and object," then, we have a move toward scientific knowledge of the object that is, nevertheless, not yet science. What is missing is the selfconscious thematization of the substitutability of a different object, the possibility that another object could do just as well, be just as beautiful or desirable: that substitutability is essential to scientific cognition, but not even permitted in the esthetic. Adorers of literature are therefore scared of criticism. This is the anthropological root of the notion that the scientist is "cold" and "heartless" toward his objects, whereas the artist is "warm" and "overflowing with feelings" by contrast: privileging the individuality of the object increases its victimary (sacred) centrality, whereas insisting on its exchangeability decreases its inviolable, precious significance. In esthetic cognition, the object can be revealed "only in its individuality as an object of desire"-meaning its uniqueness is not exchangeable, reproducible, or reducible to its material or analytically detached components. In scientific experimentation and verifiability, on the contrary, the repeatability of the experience of the (sacred) object is the source of the value of the scientific truth: we know something about the object because it appears sufficiently analogous to other objects, "according to the Aristotelian formula of species and difference." We can put these other analogous objects in the place of the alleged sacred object, and submit them to tests, to get perhaps the same results and find out perhaps something about the original object itself, apart from those who would have "protected" it from our "profane" hands. When we enjoy a meal cooked by a friend during an evening of dinner and conversation, our esthetic knowledge of the meal's satisfying quality (whether imagined or real) is entirely different from the knowledge we might get from the friend who gives us the recipe, the information we need to cook "the same" dinner at home. It will probably not be the "same dinner," even if just as "good," because of what Gans calls "the institutional refractoriness of the esthetic"-the esthetic, unlike the sacred, is an effect that cannot be coerced. The example, nonetheless, illustrates the intimacy of the scientific and the esthetic: that the scientific can make the esthetic available to everybody through economic exchange. First-time esthetic experience cannot be reproduced just as it cannot be coerced. But as, for example, every individual who has escaped and recovered from the illiberal restrictions of a religious fundamentalist upbringing can attest, personal experience of the sacred certainly may be "coerced" by ritual repetition. (41)

VII. The Sparagmos: "Immediate" Knowledge and Originary Irresponsibility

33 It should come as no surprise that Gans's description of the sparagmos, especially the most fully articulated one in the chapter "Originary Violence," brings us close to what seems like originary science. We have given originary science the description *the sign in the mode of originary desacralization*. The violence of the sparagmos, with all its reverberations and

echoes of resentment and hatred of the central object, with its violent movement toward dissolution of the tensions between word and thing, sign and object, desire and satisfaction, innocent "contemplation" and guilty "appropriation" of the object, seems to invite description as desacralizing. But to let such a description stand would be a big mistake. The originary sparagmos is *not* a desacralization of the object. On the contrary, it is the sparagmos alone that makes it possible for the community to grasp the object that was once merely a material thing as now an ideal thing, transcendent. The sparagmos is the site of the originary production of the concrete-thing-as-ideal-object. Why is this so? Because only as an effect of sparagmatic violence does the idea and memory of the object detach itself from the concrete, real-world thing and enter the individual minds of individual participants of the scene as the signified. The originary event as posited by the originary hypothesis generates transcendence from immanence, reverence from appetitivity, paradoxical mind from instrumental matter, the anthropological from the cosmological, the level of ideal being that inheres in representation from the level of material being that necessarily escapes representation. The event is not complete until the object has disappeared; the signified is not the referent, but rather is being born only thanks to the sacrificial death of the referent.

34 Nevertheless, it is with the sparagmos that things begin to happen "in the real world"; and in its pragmatic, appetitive, getting-hands-dirty aspect, the sparagmos permits a form of cognition quite impossible in either the sacred or the esthetic "moments" of the originary event. We know the sacred center as the one Person at the origin; we imagine possessing such Personhood in the experience of the esthetic. But the sparagmos makes that imaginary possession real; the sparagmos permits the category of originary *individual* personhood: "The personhood of the center as acknowledged by the sign is mimetically reproduced in those who resentfully destroy it. The sparagmos is in the first place an act among persons, the destruction of the originary person by the collectivity of its imitators" (SP 147). The selfconsciousness of the sacred is the self-consciousness of the community as one, without individualization. The self-consciousness of the esthetic is that of the imaginary individual of fantasy in tension with the real formal closure made necessary by a human community uniting in the designation of a significant object of desire, an object the real possession of which remains formally (communally) forbidden. But the human individual "comes into his (her) own" (resonant phrase) in the sparagmos: private space is created; the individual will henceforth always be a human individual, bound to the community; but the selfconsciousness of the sparagmos is that of real individual possession, the private person's imagination testing what it wanted against the real, the pragmatic self at last satisfying its "natural" appetites. This self-consciousness, it must never be forgotten, is selfconsciousness made possible only by the human sign. No animal experiences this selfconsciousness because no animal can represent it to his or her animal self. Appetitive satisfaction of the human kind is not "animal" satisfaction; it is satisfaction inseparable from religious, esthetic, and economic mediation; the object for the human, whether represented in the religious mode or the scientific, is the object transfigured absolutely. Market-hating

utopianism aside, it is only the third of these moments-the economic-that completes an originary event that is able to open up the human historical project. It is no surprise that Gans has repeatedly remarked that the discipline of economics, among the social sciences, is the closest to the "hard" natural sciences. (42)

35 To say that the economic completes the religious and the esthetic is simply to confess to the corporeal, embodied, concrete, appetitive nature of human beings, their famous "animality," itself a quality of the human about which we never relax, alternately owning and denying, privileging and despising, assimilating it to and evacuating it from our self-definitions. The acquisition of paradoxical representation did not supernaturally vault us from the sphere of the beastly physical into the sphere of the angelic cerebral. The human is both and neither of these at once, not a contradiction-in-terms but an endless borrowing and re-creating, the angelic infusing the beastly and the beastly refusing the angelic and viceversa. The animality of the human is essential in the sense that an originary signification that did not return us to the cosmological "real world" of objects better equipped to compete in ecological terms with other species and to flourish among our own would have offered no advantage in evolutionary terms, would not have been "selected" for.

36 To put the economic in third place and seemingly the conclusive narrative position is not, in any case, to suggest that the human can ever fully leave the religious or esthetic behind: any wished-for evacuation of respect for sacrality and beauty from the quest for "truth" could only be a wish of the scientistic mind at its most detached from human community. When humanity loses all contact with its roots in religion, it is no longer humanity-no matter what the recent polemics of Sam Harris (The End of Faith) and Richard Dawkins (Root of all Evil?), understandably upset by the apparent linkages between religious faith-based fundamentalism, terrorism and war, might wish to lead us to believe. For the good of the human community, an at-least-virtual sacrality of the center *must persist* even in the most "secular" modes of free market exchange, or the consequences are disastrous. A quick digression on the colloquial sense of "economic" helps here. To imagine the threat of an economic world cut off from its anthropological roots in the religious, we may call to mind images of the anti-economic: the financial apocalypse of stock-markets crashing, the scene of street mobs smashing store windows, the total deregulation of the market as its selfdestruction: such a vision is, no less than ecological or nuclear catastrophe, a possibility we are reasonable to fear and to wish to defer. It remains the case, however, that reflection on the concreteness of the "economic" helps us get at the *latent* form of the not-yet-scientific in the sparagmos. The possession and consumption of the value-laden object may count as knowledge of the object, but they do not yet qualify as desacralization and therefore not quite scientific knowledge.

37 Many things happen in the sparagmos. For one thing, originary economic exchange of valuable things happens. The category of economic value emerges. Under the regime of the purely sacred and esthetic, we had been exchanging signs alone, looking but not touching;

in the sparagmos, we exchange real things, real portions of the object itself: "The [accepted] equivalence of portions extends the equivalence of signs into the real, appetitive world and so transforms it. The establishment of formal equivalence between real objects, as opposed to signs, inaugurates the category of value" (OT 52; emphasis added). For another thing, originary "sacrifice" occurs, a collective action of tremendous violence and fury which almost tears the community apart in the tearing-apart of the object. This originary sacrifice is only minimally different from "red in tooth and claw" animal consumption of the object, in that the human sign is associated in the minds of the participants with the portions of the object distributed: a form of *minimal* rationality appears: "in the sparagmos, the rational appetitive operation of dividing the object is supplemented by the violent discharge of this tension [between center and periphery] in what is also a defiguration, a destruction of the very formal-esthetic closure that was imitated in the transformation of the appropriate gesture of the sign" (SP 135). For another thing, the separation and absence that is the source of the idea of God (not yet the idea itself) appears: "But, upon its division, the central object loses its unbreakable attachment to the center and becomes in its separate parts subject to valuation. At the same time, the division of the object reveals the independence of the permanent center-as-such from its temporary material occupant . . . this [separation] is the source of the idea of God, as opposed to the undifferentiated concept of the sacred" (OT 53). This opening between centrality-as-such and the material occupant of the center as preserved in "significant memory" will prove crucial in our locating the emergence of originary science. There can be no (eventual) "real"-that is, communally witnessed-desacralization of central Being except as a possibility opened up by this originary "imaginary" separation of Being and beings. We learn in the sparagmos the difference between the Being of the sacred center as such and the mere material occupant of the center: "Being becomes beings in the sparagmos . . . the inextricably appetitive-cumresentful division of the central object among its participants . . . sends originary humanity back to its worldly concerns from the otherworldly unity obtained during their deferral" (SP 95). I note in passing the link between "worldly concerns" and scientific representation. All of these happenings bring us far closer to knowledge of the object itself than we were with the prohibitively unfree experience of the sacred object or the oscillatory and purely imaginary experience of the esthetic object.

38 The link between this originary evil violence and the religious myth of the "fall of man," the separation of Divine from human, is also a step toward originary science. Let me describe these points of contact. The *one* body of the sacred victim-object is the "literal" model for moral unity, the sacred one Other of the originary human community. Gans explicitly links the fury of the sparagmos to the numberless myths of the "fall" of humankind: "But if the origin of the ethical is only minimally moral, then it is maximally immoral. The violence of the sparagmos makes it the origin of evil; the first collective act is the 'fall of man'" (SP 142). We have noted the tremendous violence of the sparagmos, the fury of the literal deconstruction of the body of the object-victim, the minimality of the "cooperation" the "distribution" enacts-which would, let us frankly confess, in our violence-

sensitive postmodern ethic, look to us from the outside more like chaotic animal savagery than human social order. The minimal "difference" from animal savagery is, we see again, only and no more than the minimal difference made possible by the originary sign. (43) The first material knowledge of the object, although only knowledge of a piece of the object-experienced-as-sacred and esthetic, is a knowledge in which the unified communal sacred resentment is almost totally "forgotten."

The sparagmos offers to the violent imaginings of originary resentment a partial but real fulfillment. The individual participates in the de-figuration, the destruction of the formal wholeness of the worshiped object. In so doing, he loses himself in the collectivity, where his violent action is "irresponsible," not observed and judged by his fellows. But at the same time, while in this "invisible" condition, the participant acquires a portion of the victim, from which he obtains not only appetitive satisfaction but also the originary notion of personal property. The sparagmos creates the private individual by effacing the public visibility of his action and its results, in contrast to that of the original (aborted) gesture of appropriation. (SP 145) The sacred moment maximizes the public visibility of each individual's signifying gesture, but the sign is then without material value; by contrast, the sparagmatic moment minimizes the public visibility of each individual's signifying gestures, but the "thing" or portion of the object now becomes economically valuable, and its concreteness threatens to substitute altogether for its quality as the thing-sacred-and-significant. Thus the "animality" of the sparagmos is not coincidentally linked to its "evil," in that the return to immanence of appetite threatens to destroy the verticality of signification achieved by the originary sign. The sparagmos is the act of originary evil; human irresponsibility and evil are linked: "The sparagmos, in which the exercise of violence toward the sacred center is accompanied by the denial of individual responsibility for this violence, is the model for all acts of evil, both collective and individual" (SP 145). I pause to distinguish collective from individual responsibility. The "collective" failure of responsibility consists in the threat of our forgetting the experience of the object as sacred, permitting the whole community to destroy the whole object, one humanity opposed to one Divine Being. The "individual" irresponsibility consists in the threat of one individual person's forgetting the esthetic experience mediated by others' and one's own signifying gestures. The memory of the experience of the object as desirable-but-inaccessible is potentially overwhelmed by the distracting physiological satisfaction of consumption.

39 Originary resentment, in both its sacralizing the object and its giving rise to the object's esthetic desirability-in-inaccessibility, allows in the sign "the alienation of his freedom to the center" by means of which the "individual participant *begins to become responsible* for his act toward the community" (SP 146) [emphasis added]. Our signifying the object-as-sacred creates the possibility of communal moral responsibility, but only *begins* it: the individual "begins to become responsible." This beginning with the signification of the object-as-sacred finds its completion only in the sparagmos, with the experience of the object-as-known-inconsumption, the object of economic value. The human signifying of otherworldly absolute

Good has become the human production of worldly "good," relative, exchangeable, measurable. The private experience of the object as economic threatens to obliterate the memory of the communal experience of the object as sacred. The relative loss of the memory of the sacred object, however, is supplemented by the minimal fiction of nascent self-understanding, the little awareness that sacrality is perhaps not inherent in the central object alone: "The alienation of responsibility to the center that gives rise to evil is at the same time a movement toward self-understanding. The evil of originary resentment is the price man pays for a first glimmer of lucidity, for eating of the tree of knowledge" (SP 146) [emphasis added]. The knowledge of the otherworldly "good" object-as-transcendent could not have come about without our this-worldly knowledge of our own "evil" mimetic resentment of it, in its immanent concreteness. The knowledge of the transcendent could not have come about without the self-consciousness of a *newly significant*, *valuable* immanence. At the sacred "moment" the object of desire and knowledge is truly "beyond" us. In the context of the event as a whole, which (thank God) includes the economic, we come to know ourselves even if at the "price" of knowing the victimary status of the central Being (because we have torn it apart).

40 Knowledge of the one whom we later come to call "God" means that we incur eternal guilt. That "price"-our debt to God-is why God seems all "good" and we as wildly distracted humans seem all "evil" at the origin, why the fall is the fall and not the ascension, why an unrestrained dream of human perfection without a memory of God is not "realistic" and must end in despair, why attempting to really be God is a logical, theological, and anthropological perversity. At the same time, any despair we might suffer at the cold truth of our eternally necessary moral imperfection permits hope in that, although it will always be impossible for us to be "good" in the sense of maximally moral and absolutely communal beings (only God can be so, only God is Not us), (44) it will certainly be possible for us to be "good" in the sense of minimally moral and relatively ethical beings. The "beastly" economic world, the real world of everyday human interaction, always undercuts the angelic aspirations of those devoted to the ritually-compact religious world, where an artificial human "sacred" equality can be punctually re-produced. (45) The moral is the realm of the communal, of the center-oriented gathering of public individuals who are determined primarily to defer appropriation of the object, to agree together on respecting that which is already held or known as valuable, elevating its significance by leaving it alone, contemplating it. By contrast, the ethical is the realm of the collective, of the centerforgetting loosely peripheral gathering of private individuals who wish to engage in economic exchange of the already-appropriated object, and who agree on the value not of the object as whole and untouchable but rather on the value of the object as open to consumption, and subject to the "concrete" knowledge that alone makes it consumable: the knowledge of it as not-sacred, not-beyond, not untouchable, but here and now and exchangeable, (minimally) desacralized. (It always hurts to exchange something sacred: taking the sentimentally valued family jewelry to the pawn shop is a small tragedy.)

41 What follows from this, a fact with important implications for our attempt to locate originary science, is that there is a certain *danger to the community* in the originary sparagmos. The violent intensity of unleashed resentment, mixing with animal appetite, appears to threaten a return to pre-human appetitive animality: "In ending the deferral initiated by the sign, in lifting the moral inhibition on the aim of the originary appropriative gesture, the sparagmos opens the space of the ethical. In this collective rather than communal action, the symmetrical concern for one's fellows that characterized the moment of signification has been replaced by a violent concentration on the object in *an undifferentiated context of resentment and appetite*" (SP 150–51) [emphasis added]. The indifferentiation must meet with a minimal limit, however, or we do in fact return to animality and lose our humanity.

42 What is that limit? It is the *memory* of the whole scene, which includes the experiences of the sacred and the esthetic, those experiences which preceded the economic and which the economic almost obliterated. Here we may quote Gans at length on the originary usurper, who must be the model for the originary "scientist":

The criminal's isolation is that of the individual usurper of the center. The origin of social differentiation is the act of such a usurper . . . and this breach of originary equality, socialist utopias to the contrary, can never be healed. The human usurpation of the center-and the "mature" form of resentment that follows it-had already been anticipated in the unconsciously controlled anarchy of the sparagmos.

(SP 151) [emphasis added]

I would suggest that the curious phrase "unconsciously controlled anarchy" constitutes a site for some originary thinking about originary thinking. There is first the paradoxical notion that the essential "control" which preserves the human community from a chaos of self-destroying usurpers is unconscious. "Control" presumably connotes an operation that includes deliberation, is not deliberate but "unconscious." Now given generative anthropology's faith in science, I do not expect that we can attribute the "control" to the God of the creationists or the God of the proponents of Intelligent design. Who or what is doing the controlling, then, and in what sense this control is "unconscious," require specification. Further, there is the paradoxical union of "controlled anarchy" as such, regardless of the end characterization as "unconscious." "Unconsciously controlled anarchy": is anarchy itself not that which is *not* controllable? If a form of anarchy can be controlled, does it still qualify as "anarchy"? If control is "unconscious," is it still "control"? The phrase is loaded, overloaded, but still strangely evocative. I would add in passing that we might think of this "unconsciously controlled anarchy" as the point where Eric Gans gets as close as he ever will to a similar point in Rene Girard's thought. It is the point at which Girard disavows the priority of the human sign and grounds human significance in gestures toward interventions of a fideistic theological cast. (46) This is the point of maximal "indifferentiation" not expressible in or by human language, sound and fury signifying

(almost) nothing, the point out of which "the human" must emerge, or into which it will disappear, consumed by its own significance-abolishing mimetic violence.

43 For originary thinking, however, what comes to ground significance in general, and the significance of generative anthropology itself, is nothing more mysterious than our mysterious possession of human language on the scene of origin-not the sign alone, not the signified alone, not the referent alone-rather, human language as a paradoxical and scenic phenomenon. I will venture to re-name this "unconscious control" as "originary memory," that first *human* memory which we all share with one another as beings capable of using the uniquely human sign. It is the unconsciously held memory of the configuration of the scene, the minimal memory of mimetic interactivity, that functions as an equivalent to the "unconscious control." Again, this formulation stands on a cliff looking out to the ocean of the theological, but stands there. We know what we know, but may never be certain that God gave this knowledge to us. Gans's originary hypothesis is there to suggest to us that that the scenicity of human language certainly exists in our minds, so we need not invoke the cosmological correlate of what seemingly exists on the scene-the mind of God-to guarantee for us what we know, with a little introspection and faith in one another's language, know already to be an infinitely valuable truth. The "materiality" of the central object having now been destroyed in the sparagmos, and the communal effect of religious and esthetic experience having all but disappeared in the violence of originary consumption, what remains is originary memory: it is originary memory that we take out into the "profane" world from which scientific representation will emerge; it is originary memory that survives and recalls the "unconsciously controlled anarchy" of the sparagmos.

VIII. From Originary Memory to Originary Desacralization

44 My exposition of all these moments, perhaps more detailed than it needs to be for those intimate with Gans's oeuvre, has been presented in order to bring out certain tensions between the status of the "object" in the originary event according to which "moment" in the originary event we are reflecting on. Originary science can not have emerged in the originary event itself, although the latent possibility of it was there in the sparagmos most clearly. So far, I have been attempting to draw out, by means of slow-motion distinctions, the way in which the possibility of the scientific representation of the object is impossible in the "sacred" moment's union of object and central locus, opened up as a possibility in the "esthetic" moment's imaginary (but only imaginary) separation of object from locus, and all but fulfilled in the richly concrete, properly individualizing, contact-heavy moment of the sparagmos. But I propose that it is only with history, with the ritual re-enactment of the originary event, that we can speak of originary science. "Science" must nourish and sustain the movement outward and away from the restrictive effects of sacred prohibition against object knowledge. "Science" itself can begin only with the community's return to the scene of ritual, and the concrete replacement of the originary object with another object, and the tensions implicit in that substitution. Perhaps science is not, then, strictly speaking,

originary; perhaps the "scientific" as an anthropological category must be contained by the "economic." What happens to the originary event if, to complete it, we must return to it as if it were incomplete the first time? Our principle of minimality would not then be respected. I defer these questions to the reader, as matters for "future research." Regardless, another set of elaborations will help us.

45 There are possibilities for tension in the substitutionary re-incarnation of the sacred object in ritual repetitions of the originary event. But first, I wish to avoid the error of supposing that the object in itself is sacred or significant. It is not, apart from the scene. That mysterious thing which mediates the "unconsciously controlled anarchy" of the sparagmos is not the memory of a particular object alone, or a particular image alone, or a particular signifier or signified alone, but all of these together. It must be the memory of the form of the paradoxical center-periphery oscillation or, in other words, the scene as evoked by the sign in significant memory. What I have called "originary memory" is that which not only mediates the "unconsciously controlled anarchy" of the sparagmos, but also mediates the passage between the originary event and its first historical repetitions in ritual. "Science" belongs to the realm of our historicity rather than belonging to the necessity of that one cosmological event which made all the difference in creating the possibility of our historicity: it is in the difference between those forms of belonging that the eternal tension between "science" and "religion," or scientific representations of the scene of origin and religious representations of the scene of origin, uneasily persists, driving us out into the world of indifferent objects and back into the ethical realm of human exchange, out and back, out and back.

46 Originary memory, in keeping with the individualizing effect of the sparagmos, belongs primarily to the memory of individual participants on the scene. There is no vaporously invisible collective unconscious for generative anthropology, but there is the reality of collective human memory conceived as the sum-total of the mutually respectful memories of individual participants whose recall of the event is mediated by the perceptible human sign: "Attachment to the subsistent center of the scene is reinforced by the collective action of ritual, but the primary locus of this subsistence is the internal scene of representation of the individual participants, where the post-sparagmatic signified remains as the ultimate correlate of the sign" (SP 137). I believe that we remain faithful to this formulation if we name as "originary memory" that remaining of the "post-sparagmatic signified" on the "internal scene of representation" in the interval between the event and its first ritual repetitions. Indeed, let me emphasize again, this memory is the post-event equivalent of that minimal subsisting anarchy-controlling "unconscious" memory which accompanied the "forgetting" during the sparagmos of the sacred force of the object: "The participants who approach and dismember the object act as a community only in the minimal sense that they are bound together by the memory of the sign; this minimum of virtual solidarity, consonant with the parsimony of our hypothesis of origin, is just sufficient to permit them to survive the sparagmos" (SP 142) [emphasis added]. I note in passing the echo of "re-ligio" in "bound

together": collective memory is doing the work of religious ritual in the absence of any individual consciousness, significant thematization or mythic elaboration of the almosttotally-forgotten sacred experience. Another formulation of originary memory reads thus: "The participants in the sparagmos, in seeking to destroy the center itself, attain only its material occupant; their intent is frustrated by the persistence of the sign and the significant memory that quarantees it" (SP 149) [emphasis added]. Note again how-curiously-the sign "persists" as if such persistence were something almost against the will of the consuming selves in the sparagmos. Elsewhere, Gans writes that it is the "crucial function of *maintaining in memory the imageless sign*" that belongs to religion rather than to the esthetic. The esthetic insists on the image as accompaniment to memory: "religion proper begins when . . . the object has disappeared, and the sign remains in memory along with the image of its referent" (SP 140) [emphasis added]. I would point out in this formulation the distinction implied by detachment of the image from the sign. There is the memory of the signifying *gesture* as itself an object of attention, the memory of the signthat-evokes-the-object; then there is the mental *image*, as that which, contained in "significant memory," recalls a perceptual trace of the transfigured real-world object (as distinct from the signifying gesture). The remembered mental image recalled by the sign recalls the object-as-referent; the memory of the signifying gesture as itself an object of attention recalls the "whole" scene.

47 Also during the human community's long evolution through the generative unfolding of speech acts of increasing complexity and freedom, originary memory plays an essential role. There would be no opening to the imperative, interrogative, or declarative forms of human language were it not for originary memory. The emergence of the imperative as a thematization of the inappropriate ostensive (the presence-in-memory of the object that is absent-in-reality) relies on originary memory. Human memory is paradoxical here again, like the sign: "not merely the presence of the referent, but its perceived absence provokes the sign as an expression of desire" (SP 145). Such an oxymoronic "perceived absence" can only be a function of the originary memory of the sign-provoked image itself, the sign recalling the mental image of the object. The imperative form moves us away from the "real world" in which the object is absent and toward that "fictional world" of the declarative which can make the object endlessly present (as in fictional narrative). More explicitly, in the "paradoxical oscillation between the falsity and the truth of the inappropriate ostensive" there occurs the pragmatic paradox that "forces the thematization of the distinction between absence and presence" (SP 55). That is a thematization which itself must depend on originary memory prior to the emergence of declarative language.

48 With the emergence of the declarative and the possibilities of predication and conceptualization that accompany the declarative (without which "natural philosophy" and *modern* science could never have come to be), originary memory can become, so to speak, a world unto itself: the postsparagmatic signified as a subject of predicative sentences can become the Divine Creator God who is the subject of narratives, of mythical elaboration. But

the declarative is from another perspective only the full realization of the possibilities implicit in the originary memory of the context. It is only the context of the whole scene as that which contains the sacred object while opening up the possibility of sparagmatic and hence "scientific" knowledge of it, that permits the "virtual" reality of an imagination independent-of-ritual: "The sign can only signify in context; but the taking into memory of the context along with the sign makes the sign potentially independent of the context. Similarly, the originary community to whom the sign is addressed has existed only under these specific circumstances, but it retains its virtual existence in their absence" (OT 17) [emphasis added]. Originary memory is that which permits the "virtual" community to continue to exist after the "specific circumstances" of real-world conditions and physically present objects have vanished. Originary memory sustains us between the originary event and its first historical re-enactments in religious ritual, for which we find new objects to replace the originary object. The "potential" of the sign's being "potentially independent of the context" is fully liberated only when the declarative permits for the individual minds "out there" in the profane world (out there in an area free of ritual prohibition), the staging of their own fictional worlds: "This potentiality is . . . realized [only] with the emergence of the declarative utterance-form, where language becomes the source of context-free models of reality" (OT 17). In short, I am suggesting that the "taking into memory of the context along with the sign" under the elementary ostensive and imperative forms evolves into the construction of "context-free models of reality" with the declarative's emergence. With the world-changing declarative utterance, the human being is freed to make hypotheses about reality that may be understood without one's being required to verify them-the world of meaningful but non-verifiable fictions emerges as the precursor of the world of verifiable scientific truths. This universe-altering liberation from the pressure for immediate confirmation of the presence of the signified or remembered object in the proximate environment, a pressure which must have been a severe constraint on the imagination itself (for us, an almost unthinkable constraint), is a momentous liberation indeed. It was, however, latent in originary memory even under the rule of ostensive and imperative signification.

49 For we do not have to wait for the declarative to have science. Originary science must be present in, or near, the originary event of ostensive signifying, millennia before "sentences" are formed. In *The Origin of Language* (1981), Gans described the substitutionary replacement of the originary object under the heading of the "lowering of the threshold of significance." The chapter "The Origin of Signification" in *Signs of Paradox* (1997) treated roughly the same process of the opening up of language to lexical diversification and the opening up of the human world to the world of natural objects, to consumption of them and knowledge about them. It would, I admit, be unfair to attribute to Gans himself any explicit description of post-originary signification as desacralization or as an activity the primary function of which is to produce "information" about the real-world object. On the contrary, all the emphasis by Gans is thrown-appropriately-on the power of the ritual context to minimize any destabilizing effects that the bringing of new objects onto the scene of

representation might entail. Thus we read this in *The Origin of Language*, a description, I remind the reader, not of the originary event but of its first historical repetitions in nascent ritual:

The placing of a new object at the center of attention attributes to it a situational equivalent of the "power" of the [originary] sacred object to compel the attention of the interlocutor. It is this analogous attribution of "power" to the object that differentiates the ostensive from the mere signal expressing instinctual interest. The *verifiability* of the ostensive covers not only the presence of the object but this power, which is to say, its significance. Because we may assume that instinctive signals have a predetermined physiological threshold of activation, the obvious point of insertion of ostensives is just below this threshold, where the referent is perceived and judged to be potentially significant. Evocation of the presence of the community in the absence of a sufficiently "powerful" object being in effect the equivalent of a return to a state of unreconciled mimetic crisis, with the locutor in the asymmetric and therefore vulnerable role of the victim, we must assume that the instinctual threshold was lowered only very gradually. (OL 77; emphasis added)I have italicized "verifiability" and "analogous" to suggest spaces in which there is tension between originary object and new object, tension that will have to be mediated by the space of elasticity or freedom provided by originary memory. Gans has in fact more than hinted at such tension. One space of tension, as we have seen, is that between the originary "usurper" whose proximity to the *new*possibly-sacred substitute object and to the object itself risks his being victimized by the community (the usurper as metonym of the new object he introduces). The other space of tension is the yes or no of the "analogy" the members of the community may or may not be prepared to draw-relying on originary memory of the imageof-the-object as I have outlined it above-between the new and the original object. Inasmuch as originary memory reproduces a memory of the whole scene and the whole event, all forces tend toward the community's peaceful acceptance of the new object: the usurper wishes to minimize the risk of violence to himself, and the community wishes to minimize the risk to itself. An object as close in "image" as possible to the original object must be the most appropriate object, because an object as close in "image" as possible to the original object would risk the least disassociation between originary event and ritual repetition, between the "image" in originary memory and its possible re-presentation in a new object of economic value. What I contend, however, is that the "conservative" minimalization of the difference between objects is not a guarantee of the absolute preservation of the sacrality of the original object, but rather a measure of the minimality of originary desacralization: the minimality of "originary science." That originary science is the sign in the mode of a minimal desacralization is precisely what we should expect. The other imperative, however, is maximal exchangeability: and the new object, to be exchangeable, must be permitted to be different, to have differential significance. Originary science pays intense, almost total respect to religious imperatives. It is no one other than the originary scientific "usurper" who asks the community to exchange this new, "real" object for the old, remembered, now less "real" object, which risks losing some of its sacred power as the necessary consequence

of the differential information being created. The *new* object will not be the same object; therefore, it must present a minimal threat to communal solidarity. Therefore, when Gans writes of the original sign being "applied to a referent other than the original one" he includes the notion of a "diminution of intensity" in the sign itself. The scientific, I suggest, has there with that "diminution" taken a little bit away from the sacred. Nor should we be surprised that the originary meeting of the sacred and profane occurs with the usurper's production of differential information: "This first differentiation would create a two-place hierarchy of signs constitutive of the opposition between sacred and profane representations" (79). The first "profane" representation may be considered the first "scientific" representation.

50 It is well worth comparing these passages from *The Origin of Language* (1981) to topically related passages from "The Origin of Signification," a chapter in Signs of Paradox (1997). I repeat that the sacred force of the object is *in fact* the result of scenic interaction: "The central object is remembered through the image, but the image masks the real source of significance, which is not the object but the total configuration of the scene, held together by mimetic tension between center and periphery" (SP 141) [emphasis added]. Only from the "total configuration of the scene" does the object get its sacred power. I am not proposing a new mysticism of context-free "real objects" that we can smuggle onto the originary scene. What I am attempting to underline is the tension between, at one moment, what is in "conservative" memory the *image* of the originary sacred central object, and, at the same moment of deliberate repetition, the potentially disturbing and destabilizing differential information conveyed by the non-identical new object presented to the ritual participants by the originary "scientist." Originary memory must have wrestled with such distinctions. The "mimetic tension" above is not only "holding together" the scene but threatening to push it apart, from the point of view of the usurper bringing something new to the community and from the point of view of the community. It is the priority of desire over cognition, understood as communal desire for stability over individual cognition of potential difference, which makes for the reciprocal vulnerability of center and periphery whenever the usurper imports via scientific representation potentially valuable new knowledge of the natural world onto the sacred scene. The potential difference makes the "religious" community vulnerable to the usurper's production; but equally, it makes the "scientific" usurper vulnerable to the reprisals of the image-attached religious community.

51 In this formulation, then, we must acknowledge that religion and the esthetic remain in different ways bound to the figure and the image as pre-established and cognitively conservative forces. It is one thing to emphasize the indispensable power of religion to restore an awareness of our spiritual interdependence with other human beings and our universalizing communal "duty" to humanity as such. It is another thing to admit, as one must, that religion and the esthetic *both* are tied to a fixation on the *already-established* sacred or beautiful object or image. Religion and the esthetic *both* get in the way of the "scientific" usurper's legitimate, indeed often quite necessary (especially in times of

hardship and economic stasis), desire for knowledge of the new object, the object not-yet-assimilated to the sacred or the beautiful. It is religion in this role as violent defender of the institutional resistance to the "arbitrariness of the sign" and religion in its insistence that the "materiality" of the sign is tied to its "referent" that thinking must struggle against (SP 96; and see just below). As itself a descendant of originary science, generative anthropology conceived as the organized collective results of originary thinking stretches itself to the limit of its tie to merely religious intuition and allies itself with scientific representation inasmuch as it thinks "beyond" sacred and esthetic significations to "Being" on its own,(47) reconstructing and deconstructing Being to beings and back again. Scientific representation in this mode is the thinking that attempts to grasp the paradoxical interactivity of the scene without a pre-ordained allegiance to any one image or figure of sacred, esthetic, or economic value.

52 Originary thinking, like originary science, itself is willing, like the usurper whose new object produces "differential information," to leave sacralizing figural representation behind-when necessary-to move toward and to include the minimal hypothetical results of valuable new information. Originary thinking stands strangely outside the scene it hypothesizes, in the role of the first usurper of divine knowledge. Here is Gans in the chapter "Originary Being, Originary Thinking" describing the activity of those who would attempt to practice generative anthropology. The terms of that activity can not readily be translated into an intellectual operation under the model of "cultural" practice, but fit rather better with a model of scientific representation, which offers to the marketplace of ideas an hypothesis that might make a difference on the scene of culture. The scene of culture itself needs to get paradoxically beyond "culture" into a new way of thinking that produces a genuinely new object of knowledge, the human as event:

Thinking reduces "outward" to "inward" form, visible to invisible; it struggles to maintain the fundamental arbitrariness of the sign in opposition to the cultural institutions, ritual and esthetic, that would take advantage of the sign's materiality in order to motivate its relationship with its referent. Where the sign minimally re-presents the formal closure of the object, thinking prolongs representation into analysis. Originary signification defers the sparagmos, but thinking is the antisparagmos that reunites the object's scattered remains, recomposing Being from beings. (SP 96) [emphasis added] In its detachment from, nay, struggle against, any tendency to "take advantage of the sign's materiality" and thereby make of the image, the figure, the referent, the sacred or beautiful already-established thing an obstacle to originary analysis, those who do originary analysis take as their model the first historical and scientific usurper who had the risk-bearing courage to bring a new object onto the scene of representation. Originary thinking knows better than to dream of destroying the scene of representation. It has no desire to usurp the center for itself. On the contrary, the effect of originary thinking is to create and sustain our collective human awareness of the scene of representation. It aims to make the scenic event of human origin infinitely exchangeable as a sign, accessible to everybody as an object of knowledge and

desire.(48) Inasmuch as the purpose of originary "science" here converges with the purpose of originary "religion"-the human acquisition of secular differential knowledge making its peace with the sacred necessity of the human deferral of violence through representation-the scene contains its own self-generation.

53 It is possible for us to grasp originary science now, only because science in the postmodern era has become the detested object of such near-universal resentment. Auschwitz and Hiroshima made us aware as never before of the power of scientific representation to destroy human significance on two fronts. The "medicine" of Auschwitz presents the model of what happens when, for the scientist, human beings bearing their own bodies are submitted to a sacrificial violence which attempts to exceed itself by being not sacrificial at all, exceeding the scenic commemoration that had inhered in all sacrifices prior to it: "the horror of the camps is their scenelessness. . . . This destruction was not intended to be exemplary, to play out a sacrificial drama in which the executioner is in complicity with his victim, but simply to be effective, to remove a certain figure from the scene" (SP 164). Hiroshima and Nagasaki, their human victims no less to be mourned, present the model of what happens when, for the scientist, the forces of the natural world may be turned perversely against that world in a mode of ecological annihilation that entails greatly increased risks of human self-annihilation: "Its intent [evil's intent] is to destroy the scene of culture [evil] depends on what it seeks to annihilate, but its failure in reality is the result not of internal logic but of insufficient means. The postmodern era begins at the moment in which we realize that the means are indeed available" (SP 163 [emphasis added]). Following up on these remarks, we may notice that it is only because we have become aware of modern science in its fearsome mode of a maximal desacralization and minimal exchangeability ("mad" science), (49) that we can now venture the hypothetical model of a "good" originary science as the sign in the mode of a minimal desacralization and a maximal exchangeability. (50) To sacrifice science altogether to the apprehensions of our postmodern "sense" of its terrifying dangerousness would be, however, to waste it-to waste the very knowledge these horrors of Auschwitz and Hiroshima have produced. Just as the denunciation of violence is not its overcoming, the resentment of science is not its overcoming. That we know how in-human science may become should inspire us only to be more vigilant about making scientific practice remain human, making it remain respectful of our shared ethical unity in the scientifically-knowable originary event. Any return to irrational fundamentalism, whether of the neo-primitive environmentalist, bibliolatryinclined religious, or doctrinaire scientistic variety, would be an unfortunate turning away-a turning away from the minimal faith in that opening to the continuation of omnicentric human history that generative anthropology, itself an originary science, recommends.

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Notes

- 1. See *Originary Thinking* (1993), 130. I will be referring to Gans's major works usually with the following parenthetical abbreviations: OL for *The Origin of Language* (1981); EC for *The End of Culture*(1985); SF for *Science and Faith* (1990); OT for *Originary Thinking* (1993); SP for *Signs of Paradox* (1997). *Chron.* will be used as the abbreviation for Chronicles of Love and Resentment. (back)
- 2. In Seymour Chatman's narratological sense of "story" as opposed to "discourse." See Chatman (1978). (back)
- 3. In this context, I am using the word "myth" as Chris Baldick does: "In myths, the essential 'story'-corresponding to Aristotle's *mythos*, or basic action-is a more economical and malleable thing that the elaborately plotted and sub-plotted narrative which we expect to find in a novel. Most myths, in literate societies at least, prolong their lives not by being retold at great length, but by being alluded to, thereby finding fresh contexts and applications" (3). It will eventually become obvious that I concur with Baldick's claim that the Frankenstein myth "explores the godless world of specifically modern freedoms and responsibilities. The myth . . . turns repeatedly upon [the] new problems of an age in which humanity seizes responsibility for re-creating the world, for violently reshaping its natural environment and its inherited social and political forms, for remaking itself" (5). I disagree, however, with Baldick's decision to follow the herd in arguing that "The relationship between Frankenstein and his monster is modelled ultimately upon that between parent and child" (8). George Levine's use of "myth" (1979) is also close to the use of the term here. (back)
- 4. For the anthropological opposition between market exchange and "good shows," between the omnicentric pragmatism of market exchange itself and the more limited pragmatic value of the esthetic catharsis in "good shows," see the *Chronicle of Love and Resentment* titled "Culture against the Market." (back)

- 5. I make the assumption here that cultural stability in modern societies depends on a general respect for the scientific method and its revelatory institutions. (back)
- 6. In the words of Roslynn Haynes: "Frankenstein has become an archetype in his own right, universally referred to and providing the dominant image of the scientist in twentieth-century fiction and film . . . his name . . . synonymous with any experiment out of control" (From Faust to Strangelove 92) [emphasis added]. (back)
- 7. "After the bombing of Hiroshima and Nagasaki, it became increasingly difficult to portray scientists as necessarily having both the power and the morality to become world saviors and lead humanity to a glorious future. In America, moreover, there was the morally awkward fact that former German scientists, some of whom had been prominent Nazis, were welcomed into the national pantheon of missiles-research scientists to boost the U.S. cold war effort" (Haynes 176). (back)
- 8. Richard Van Oort: "The object existed before and continues to exist after the sign has been created. Language originates as the transcendence of material reality, but it does not abolish it. The symbolic representation of the appetitive object leads to the reality of its eventual material distribution." From "Science and Culture," Chron. 45 (1 June 1996). (back)
- 9. From "A GA Conversation": "A sociobiologist might protest that our common values are the result of evolutionary adaptation. This is certainly true; it is even a truism. But what is missing in the biological approach to culture is... culture itself. If we had "instincts" to enforce morality, why would we need language and rules to do so?" ("A GA Conversation [III].") Thus Richard Van Oort, in the same column: "Since our claim is that the human world is irreducible to the empirical world of biology, the burden of the argument lies with us-indeed with all those in the humanities to agree on a set of minimal principles that defines this anthropological content." *Chron. 76* (18 January 1997). Richard Van Oort again: "Culture-humanity-begins where biology ends. In the moment where the urge for biological satisfaction-the desire to eat-endangers the social configuration of the group, this configuration must itself be represented. Imposed on the biological scene between subject and (appetitive) object is the minimal linguistic triangle between self, other, and world. This is the formal basis of all culture." From *Chron. 45*, "Reflections on the Sokal Debate" (1 June 1996). (back)
- 10. In *The End of Culture*, Gans addresses the subject of artificial intelligence as a challenge to the ontological uniqueness of the human, pointing out for A. I. theorists the problem with their side-stepping the question of "what occurs prior to the manipulation [of representations] . . . the *creation* of the representations themselves": "Given the metaphysical bias of contemporary science, it is not surprising that discussion of this subject has never . . . taken an anthropological perspective" (*EC* 59). (back)

- 11. "Although natural scientists from Newton to Hawking have referred liberally to God, there is no place in science for the more-than-verbal association of the sacred with the phenomena of nature. It is all very well to affirm that 'God does not play dice with the universe,' or that his 'mind' may be described in such and such equations, but the subject of these and similar assertions is merely the metaphysical Cartesian idea of God as a guarantee of the correspondence in kind between man's general understanding of the world and its reality" (OT 13). We shall see below that for generative anthropology there is a "guarantee" but it subsists only in human minds collectively working together, in "originary memory." Once God dies to give us this memory, we are on our own-never to be separated from our memory of God, but certainly separated from any notion that the discipline of our not forgetting might be replaced by a Divine coercion of such memory (which coercion of memory could in fact only function as a violation of what theologian Ted Peters calls our "future freedom"). (back)
- 12. One related passage in Kurt Baier's vigourously compact exposition of atheistic materialist cosmology reads: "Explaining something to someone is making him understand it. This involves bringing together in his mind two things, a model which is accepted as already simple and clear, and that which is to be explained, the explicandum, which is not so. Understanding the explicandum is seeing that it belongs to a range of things which could legitimately have been expected by anyone familiar with the model and with certain facts" (Baier 390). (back)
- 13. "Yet Derrida can conceive of no act that could institute language because he denies the essential difference between human language and the 'language of life,' the genetic code as the (truly originary) institution of the trace. [. . . .] For the sign of language to constitute itself as a trace of a different (or differant) kind from those of previous life-forms, including their 'language,' the recuperation of the 'trace' by unconscious mimesis must be revealed to be inadequate. This revelation, the matter of the originary hypothesis, is entirely lacking in Derrida's ontology. What is missing from this philosophical exposition is the very notion of the human. This is the ultimate demonstration of metaphysics' incapacity to generate an anthropology" (SP 149). At a certain point, Derrida's skepticism forces him to take refuge in biologistic mysticism, seeming to deny the manifest reality that between Francois Jacob's "language of life" and human language there is a difference in kind. The language that lets ants build anthills and birds build nests is different in kind from the language that lets humans build pyramids, cathedrals and skyscrapers. (back)
- 14. "Why, in order to study cultural phenomena 'objectively,' do we need a 'theory' at all beyond the basic principles of scientific method? Hypothesis, in this [resistant-to-generative- anthropology] view, should be local, formulated only after the study of a particular set of data. Whether we call it 'mimetic theory,' 'fundamental anthropology,' or 'Generative Anthropology,' [however,] Girardian thinking asks us to accept an *a priori* understanding of human behavior rather than trust to empirical observation and its

- extensions in the cautious generalizations of the social sciences." From "COV&R Story," Chron. 170 (12 June 1999). (back)
- 15. For the rejection of Intelligent Design theory, see the Chronicle titled "Intelligent Design?" (2005). (back)
- 16. The maxim, in context, reads: "Theology is often good anthropology, but nearly always bad cosmology. What people say about God in relation to human interaction deserves our most serious attention. What they say about God in relation to natural phenomena may interest anthropologists, but not geologists or biologists" ("Science and Faith in Kansas"). (back)
- 17. "Deconstruction, and post-structuralist theory in general, puts language at the center of all things. So does GA, except that for this child of Rene Girard's deviant, extra-Parisian brand of 'French theory,' *language* is not an independent force but a distinctively human activity" [emphasis added]. From "Postmodern GA," Chron. 180 (4 Sept. 1999). (back)
- 18. I am thinking here of the intriguing openness of the process theology of John F. Haught as formulated in his *Is Nature Enough? Meaning and Truth in the Age of Science* (2006). Anybody interested in the "common boundaries" shared by generative anthropology and theology will find Haught's work of interest. Its description of the human condition, especially the irreducibility of the human to the explanatory models of the natural sciences, echoes the formulations of Eric Gans again and again. Furthermore, Haught avoids the philosophical awkwardnesses of "intelligent design" theory, as far as I can tell, completely. (back)
- 19. Here is Gans speaking of the scientistic delusion that a description merely of brain activity, merely of "empirical" goings-on in the organic brain, will someday be able to explain the human, human language, or human representation: "But despite the vast scientific progress since the Enlightenment, this *scientism* suffers from a materialist fallacy that-on the specific point of language origin, and therefore on that of the essence of the human as such-recalls Descartes' location of the soul's action on the body in the pineal gland, or Gall's proposal, mocked by Hegel, to divine our mental abilities from the shape of our skulls" [emphasis added]. From "We are all Generative Anthropologists Now," Chron. 229 (3 March 2001). (back)
- 20. "It might well turn out that there will be a convergence in ethical outlook, at least among human beings. The point of the contrast is that, even if this happens, it will not be correct to think it has come about because convergence has been guided by how things really are, whereas convergence in the sciences might be explained that way if it does happen" (Williams 136). But compare: "The project of giving to ethical life an objective and determinate grounding in considerations about human nature is not, in my view, very likely to succeed. But it is at any rate a comprehensible project, and I believe it represents the

only intelligible form to ethical objectivity at the reflective level" (Williams 153). (back)

- 21. I am thinking here of the paradox in originary thinking by which its "secular" stance never abandons its faith in a "communal guarantee": "Since humans may be shown to exist and God or gods cannot, a secular hypothesis of origin might seem 'more minimal' than a religious one. But the hypothesis of human origin is not a question that may be posed outside the human experience; and within that experience, the transcendent Being personified in the Judeo-Christian tradition as God is not detachable from the communal guarantee that makes language and other representational forms possible." From Gans, "We Are All Generative Anthropologists Now," Chron. 229 (3 March 2001). (back)
- 22. My allusion to the "first one" deliberately invokes the valuable, now well-integrated "amendment" to the originary hypothesis proposed by Adam Katz in "Remembering Amalek" (2004-2005). The amendment illuminates the differentiating status of "firstness" among the originary users of the sign, and the concomitant opposition between the "sign of renunciation" and the "sign of contagion." I will anticipate here certain notions that will become clear only by the end of the essay. On this model of the "first" one to discover valuable scientific knowledge, the connotations are favorable. Danger ensues, as we shall see, when the scientist as "first" is the one to risk peripheral resentment of the "religious" community attached to the originary object-image. (back)
- 23. To the ecosophic reader offended by this, I would note that I am making a "cosmological" point. The human uninterested in other humans is not going to last very long in the natural world. It is a "scientific" or "natural" fact that humans are a social species (like bonobos and chimpanzees)-we go mad in isolation. The originary event takes this evolutionary fact about the mimetic sociality of our animality as one of its prerequisites. The level of being that is "generated" by paradoxical symbolic reference, language-astranscendent, only adds even more "evidence" to support the claim that humans are, because they must be in order to survive, the most religiously, esthetically, and economically "interesting" thing in nature to other humans. It is perverse to disown this truth, at once anthropological and cosmological, in self-punishing victimary obeisance to a cosmos that would (we delude ourselves) be "hurt" by our relative lack of "interest." This obeisance may be in fashion because of the pervasiveness of apocalyptic discourse pointing to our global ecological crisis, but it should, in my opinion, be resisted nevertheless. A house is not a home; the cosmos alone is only a house; it becomes a "home" to us only when we are sufficiently interested in each other as humans to transfigure that cosmos into something significant. That transfiguration begins with the revelation of the sacred humandivine scene in the originary event. (back)
- 24. From "Is GA Impossible?": "GA, in contrast with those modes [religion and the ethics of the foxhole], proposes no ethic other than the end of crisis, the deferral of violence. Its aim is to express the objective truth of the human, but by an analogy to Heisenberg's

uncertainty principle, objective truth and ethical functioning are mutually limiting: like the position and momentum of a particle, beyond a certain point the truth and ethical value of an idea become inversely dependent on each other." Chron. 44 (25 May 1996). Consider as well this passage from Signs of Paradox, in which a certain cosmological imagination entails a certain ethical attitude: "Only when the human is [mistakenly] accepted as a given of nature rather than a cultural self-production can the forces of good and evil be seen as symmetrical. Manicheism is oblivious to the initial triumph of good over evil without which humanity could never have come into being. The Manichean . . . exemplifies . . . the structure of resentment" (136). (back)

- 25. From *Originary Thinking*: "But there are many in the scientific camp who refuse to entertain an originary hypothesis, not because human origin is in principle beyond comprehension, but because such a 'speculative' hypothesis cannot be falsified by the evidence. This is a methodological objection grounded on the principle that, for the scientific method, ontology has no reality independent of methodology. But to take this position is to forget that every methodology is founded, implicitly or explicitly, on an ontology. *A new ontology must be allowed the chance to generate its own methodology*" (7) [emphasis added]. (back)
- 26. Human representation of the human being as situated in the cosmos is paradoxical because the cosmos must both exclude and include us (the representers) at the same time: the human condition must include something of our cosmological status, setting, belonging, and the like. But "... all models of the human condition are paradoxical because they both must and cannot include themselves within the system they model" ("George Soros," [Chron. 82]). Or to put it more elegantly, here is Gans describing "the radical form of fictionality we call paradox": "The deferral of empirical verification risks being usurped by a form that transforms the fictional hesitation between truth and falsity into an oscillation in which understanding itself, made to depend on this verification, is indefinitely deferred" (63). (back)
- 27. "The difference between anthropology as I understand it and natural science is that at its core [anthropology] depends on a *mentalistic* intuition of the human as understanding and creating meaning. Its faithfulness to this intuition makes GA not a new doctrine of positive anthropology, but a new way of thinking, neither social science nor humanistic interpretation, [a way] grounded on the minimal defining condition of humanity, the use of representations." From "Is GA Falsifiable?" Chron. 36 (30 March 1996). And again: "GA is not a Popperian-falsifiable theory, but a Kuhnian paradigm, a way of thinking about the human." From "A GA Conversation (III)," Chron. 76 (18 Jan. 1997). (back)
- 28. "Fetishizing language as a function independent of such [human mimetic] interaction, for example as a 'tool for knowing the natural world,' gives us instrumental analyses of human thought that deny the paradoxical generation of the transcendent realm-that is,

[deny] precisely what uniquely characterizes humanity. This is a social-science deformation, pedestrian but 'objectively' reasonable." From "The Problem of the Subject," Chron. 117 (15 Nov. 1997). (back)

- 29. "But GA is not a 'cultural' theory any more than it is a theory of natural science. Originary thinking is irreducible to the subject-object dichotomy of classical metaphysics, either in its positive mode as the basis of the natural and human sciences or in its paradoxical mode as the unthinkable foundation of cultural self-analysis; it offers an explanation for the emergence of both." From "The Origin of Language II: Scientific Perspectives," Chron. 167 (1 May 1999). (back)
- 30. "The tension inherent in the dual conception of the central locus, spatio-temporally particular but ontologically concrete, is not resolvable within religion itself. It is reproduced in our era in the tension between physical anthropologists' search for concrete paleontological evidence of human origin and the deconstructors' insistence that the representational phenomena that define the species have 'always already' existed: two antithetical evacuations of the originary event" (SP 141) [emphasis added]. (back)
- 31. "Once the originary hypothesis is considered, however minimally, as the potential object of such a contract [an esthetic contract], it becomes easy to explain its lack of wide acceptance. Its very minimality makes it incapable of competing esthetically with either the historical particularity of religious discourse or the textual mystique of deconstruction, *yet it nonetheless requires a contract of participation* that the hypotheses of social science do not." From "Postmodern GA," Chron. 180 (4. Sept 1999). (back)
- 32. One among many examples: "On the contrary, to dare to think the fundamental question of the human as *already solved*, and as solvable only under the condition of believing it thus, with a faith limited to this proposition alone, is to express a credo that one can neither simply advise others to reproduce nor claim as a unique 'artistic' gesture. The steadfastness of this conviction makes me spiritually ready for death yet prepared to pursue indefinitely the cognitive task of elucidating the implications of this minimalist conception of the human" [emphasis added]. From "Anthropology and Mortality," Chron. 264 (29 June 2002). (back)
- 33. Gans, drawing one of many distinctions between originary thinking and "philosophy" in its primal propositional form, metaphysics: "thought is metaphysical when it denies the anthropological historicity of the scene of representation, whether it accepts (nominalism) or denies (realism) that [historicity] of the representations that appear on it" (EC 68). (back)
- 34. This "invisible barrier" is closely related to the obstacle generative anthropology faces because Popperians, stuck on the demand for empirical falsifiability, can never get beyond their obsession with it so as to begin to grasp what originary thinking might have to offer in the way of "scientific" intellectual operations. One might say that the falsifiability that

Popperians demand makes a certain fetish of empirical visibility. Gans writes: "Theories of the human that take representation into account not simply as a 'behavior' but as a fundamental constituent of desire cannot be falsified in the normal sense of the term. To say, when A desires B, that A's desire is mediated by representation of B, is not testable in any simple manner. There is no way to remove all representation of B in order to test the hypothesis, since precisely representation is not limited to some formal procedure of designation but can be accompanied by any sigh that the desiring subject encounters on his scene of representation." From "Is GA Empirical?" Chron. 164 (3 April 1999). (back)

- 35. I am thinking again of the Katz amendment concerning "firstness" in "Remembering Amalek." The paradox demanding further reflection is that the originary violence of the scientist seems to dis-respect the originary sacred object by substituting for it a different one and destabilizing sacred value, thus performing a "sign of contagion." But from another perspective, we might say that the scientist is performing a "sign of renunciation" in that he or she risks his or her own self-destruction (communal resentment) in the very gesture of seeming to de-value the originary object. One's "firstness" as scientist, inasmuch as it is grounded in a *disregard* for individual self-preservation, sacrifices any guarantee of self-centralizing usurpatory privilege to a much more probable self-endangering significant (secondary) difference. Scientific innovation that appears to be violence *against* the sacred object is actually violence against the security of the individual scientific self. One might even begin to wonder whether the originary Christian sacrifice, Jesus' willingness to give up desire (he loved life here) to the cause of knowledge or "revelation" (knowledge *he* already possessed, but we others certainly did not) does not-paradoxically, for Jesus' abyssal self-giving figures as the very *opposite* of sparagmatic violence-follow this model. (back)
- 36. "The religious remains bound to a specific locus, just as the esthetic is bound to an image; the religious locus is a place of sacrifice, just as the esthetic image is the figure of a victim" (SP 141).(back)
- 37. "The nature of human action is distorted by any perspective that seeks to reduce [human action] to a set of predictable models-within which the model-maker's own activity both must and cannot escape accounting." From "Beyond 'Generative Anthropology' 2: Resistance to Mimetic Theory." Chron. 145 (25 July 1998). (back)
- 38. Beauty may have something to do with goodness after all. The beautiful has contact with the morally good, in that the (material, concrete) economic category of value mediates between sacred equality and esthetic pleasure. That which is utterly ugly and undesirable will be without economic value; the valueless is the unexchangeable; and the person with nothing to exchange will be subject to involuntary economic deprivation, a victim of human evil. This truth is revealed by Mary Shelley's *Frankenstein*: the ineradicable "ugliness" of the Monster externalizes the amorality of the "pure" science that his physiological being represents as technological product. (More on this is parts 2 and 3 of this study.) It also

explains our freedom not to feel guilt when we kill off hideously ugly alien species in science fiction horror movies such as *Independence Day, The Terminator*, and *Alien*. (back)

- 39. Richard Van Oort: "Throughout this dialogue, the suggestion has been that minimal thinking is not simply a reflection of an unquestioned faith in a scientific principle, but at once also a reflection of a certain historical narrative, namely, the rise of the international exchange system. Anthropologically speaking, minimality also means decentralization of the exchange process. It is the movement away from 'maximal' ritual acts of exchange to 'minimal' secular acts of exchange. This is an ethical development. It designates the point where ethical control becomes truly self-regulating, where the social order is seen as anthropologically motivated, not as somehow imposed from without the process of exchange in which the community is created." From "A GA Conversation (III)," Chron. 76 (18 Jan. 1997). (back)
- 40. "No doubt such [dogmatic] belief [in the infallibility] of the market is unfounded; but it should be made clear that the dogmatism of the market is not merely more benign but on a different plane than the dogmatism that rejects the market. Where the latter [rejection] poses the infallibility of a doctrine, which is really that of its omnipotent interpreters, market-worship emphasizes precisely the fallibility of human self-knowledge that Popper makes the foundation of the open society: since no once can know a priori the best allocation of resources, we must rely on the market to provide it." From "George Soros and the Open Society," Chron. 82 (1 March 1997). (back)
- 41. It may even be the case that experience of the sacred *must be* coerced, which would entail the notion that we are free really to believe in God only on the condition that we understand we are freenot to believe in God; but such latter understanding, under this paradox, would require that God be always in some sense an object not merely known by means of sacred communal "revelation" but also by way of esthetic experience. Perhaps one must desire to "possess" knowledge of God all to oneself-and be disappointed (into disbelief) by the impossibility of satisfying that desire of "imaginary possession"-before one can learn to share knowledge of him with others. The sharing presupposes a minimal faith in the exchangeability of the human sign as something that guarantees the real, including the reality of God. Shareable knowledge of God-as opposed to wholly private "mystical" experience, by definition inexpressible--would, according to this description, have to be post-sparagmatic knowledge of God. Likewise for the Christian (in particular), to know Jesus as "the Christ," as Gans suggests in Science and Faith, is to know that one has persecuted him-participated in the sparagmos that "destroyed" his worldly body. One who owns such knowledge can only be grateful for the wholly originary memory the living Christ inspires. (back)
- 42. See, for example, "Postmodern GA" (Chron. 180). (back)

- 43. "Hence although the sparagmos, like the emission of the sign, concentrates all difference in the center, it carries out in the most literal sense the deconstruction of the moral model" (SP 50). (back)
- 44. Compare these remarks on the philosophical equivalent: "Our reading of Heidegger's question in anthropological terms rather than cosmological terms should not induce us to interpret 'Being' as 'human being.' The Being that the philosopher seeks is external to the human and can be exemplified by humanity only at the horizon of [humanity's] historical trajectory" (SP 96). (back)
- 45. "The market presupposes an accumulation of property and consequent differences of wealth, just as the political process presupposes the accumulation of influence and consequent differences of power." From "On Political Economy," Chron. 123 (24 Jan 1998). (back)
- 46. The gesture would be one made toward the Mind of God that *pre-exists* the human mind, a Mind in which we must have "faith" in the sense that we will never be able to explain (indeed, "faith" need not explain) its origin in cosmological-evolutionary history: God simply always Was (and is and will be) before and outside the human. This gesture absolves us of the "secular" requirement to propose a "scientific" hypothetical model of the origin of human language. Somehow, human language "just evolved" as a "gradual" effect of human scapegoating in a manner that nobody (Girard included) has yet ventured to describe in detail. Meanwhile, the kinship of originary thinking and "Girardian thinking" is undeniable; and the possibilities for more *active dialogue* are far from being exhausted-indeed, unfortunately in my opinion, they have hardly begun. I would not wish to foreclose the much-to-be-desired possibility that from within "Girardian" circles alternative or competing hypotheses of the origin of human language, or amendments to the originary hypothesis made in the spirit of Girard and formulated in explicit dialogue with generative anthropology, might appear.(back)
- 47. Both the sacred and the esthetic are "bound" in a way that originary thinking itself strives not to be: "The religious remains bound to a specific locus, just as the esthetic is bound to an image; the religious locus is a place of sacrifice, just as the esthetic image is the figure of a victim" (SP 141). (back)
- 48. From "The 'Jewish Question'": "In a world that has drawn back from the esthetic politics of modernism, that is beginning at last to understand that the socialist and fascist utopias are cut from the same poisoned cloth, no millennial image of the good society can have any but harmful effects. The only figure we need is the figure of the origin, the only scene absolutely necessary for the constitution of a single human race. This scene is not utopian; it is the locus of an interminable agon" (SP 167). (back)
- 49. I allude to the familiar acronym "MAD," which designates Mutually Assured Destruction

as the indistinguishably sacred-and-secular *limit* regulating exchangeability of the "means" for species self-annihilation now made available by modern science. "Minimal exchangeability" is intended to carry the not insignificant connotation of the minimal exchangeability of nuclear weapons. See Bartlett (2004) for more on that question, specifically in regard to movies exploring the threat of nuclear warfare. (back)

50. The interplay between the maximal exchangeability/minimal desacralization of originary science, and its dangerous, dehumanizing inversion in the *worst applications* of modern science–in the minimal exchangeability/maximal desacralization of modern science–will be explored at length in parts 2 and 3 of this study, scheduled to appear in the next and following issues of *Anthropoetics*.(back)

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