



This is the Author's version of the paper published as:

Author: Fleming, Chris; O'Carroll

Email:- c.fleming@uws.edu.au

jocarroll@csu.edu.au

Year:- 2007

Title: What is the human? Eric Gans and the structure of the hypothesis

Book Title: The originary hypothesis: A minimal proposal for humanistic inquiry

City: Aurora (Colorado)

Publisher: The Davies Group

Pages: 271-98

ISBN: 9781888570366

Abstract This chapter identifies and then analyses the key dimensions of the originary hypothesis proposed by Eric Gans and the writers of generative anthropology. In the course of this analysis, it argues that some are weighted more heavily than others, and indeed, that one group of ideas follows from the initial claim about the origin of language per se and especially, the reasons for the genesis of language in appropriative and competitive mimetic behaviours. The article concludes by addressing potential objections to the originary hypothesis.

WHAT IS THE HUMAN? ERIC GANS AND THE STRUCTURE OF THE HYPOTHESIS

by Chris Fleming and John O'Carroll

Language is the house of Being. In its home man dwells – Martin Heidegger (217).

No-one really *knows* anything about the origin of language – Anthony Kenny (91).

Generative Anthropology, the Humanities, and the Human

If Heidegger was correct in his identification of language as the “house of Being” – and few have contested it – then how are we to reconcile this with Anthony Kenny’s claim – that we know nothing of its origin?ⁱ Despite the analytic tension, the pairing of these claims is not atypical. Indeed, in some instances, the emphasis on the centrality of language to human being is *combined* with the assertion that not only do we know nothing of language’s origin, but also, such knowledge is, in principle, unattainable. Jacques Lacan, for instance, told us that “the unconscious is structured like a language” (220), even as he also assured us that speculation on the origin of language was “absolutely impossible” (5). Regardless of the force of such proscriptions – and we have good reasons to doubt them (cf. Fleming 71-2) – Lacan’s caution concerns a domain of inquiry which offers no shortage of cautionary tales.ⁱⁱ In some ways, little appears to have changed since the Linguistic Society of Paris published an edict in 1866 banning the topic from discussion at their meetings. It is difficult to know, therefore, if thinkers like Eric Gans who injudiciously wade into these fraught theoretical waters are to be commended for their bravery or chastised for their naïveté. So unaccustomed are we to the kind of thinking typified by his work on language and culture that we need to do more than reach preemptory assessments of its merit – we need, first, to look at what kind of theoretical activity his “generative anthropology” actually *is*.

First things first: let us look at the name, generative anthropology. It is *anthropology* because it concerns, above all, human being. But why a *generative* anthropology? The word “generative” implies both the question of generation (processes and orders of generation) and of genesis (the origin of things). In this respect, we say, Gans deploys an

approach that uses the resources of the present to generate hypotheses about the origin of ethics, language, and ultimately of the human as such. He does this by surveying the present and generating an *a posteriori* reconstruction of its origin. Unlike Foucault's version of the "history of the present," Gans' work is not empirically historical in the straightforward sense of the term, seeking instead to work analytically with as small an empirical footprint as possible.

It is our contention – and the contention, no doubt, of other thinkers in this volume – that his work offers profound new insights into what it means to be a humanities scholar, especially in how it furthers the horizons of what such scholarship can legitimately claim as its terrain. In this chapter, we explore aspects of the single most important innovation Gans has developed: the constitution of a new form of hypothetical inquiry in the humanities, affording for the first time, a variety of knowledge that goes beyond traditional notions of critique and interpretation.

GA: A Brief Orientation to a Mode of Thought

It has certainly been a remarkable journey from his earliest works on literature, through his *Origin of Language* (1981), *End of Culture* (1985), *Originary Thinking* (1993), and *Signs of Paradox* (1997). Early in the first of the above works, Gans wrote, "*Humanity is the species for which the central problem of survival is posed by the relations within the species itself rather than those with the external world.* Humanity is the species that is its own chief problem" (Gans 1993: 2). To humanities scholars, such a claim appears stark and uncompromising. Surely, they might protest, we are faced with far greater dangers. What, after all, could be supplied as evidence for such a claim? And if it were upheld, would it be so in a way that fitted humanities-type studies, rather than some other discipline (say statistics or meteorology)? Put simply, the humanities scholar can ask, with some reason in the first instance, what does such a claim say about us as *humans*?

The last of the above questions supplies a route to understanding: all round us is the evidence to support Gans' claim. Humanity alone, with its elaborate laws and taboos, its signs and languages, its self-awareness of its self-awareness, is not just unique for these

things, but their very existence is evidence of what culture does, what language, by its deferral of conflict, actively and actually maintains. The evidence is, as we shall see, abundant, but it is not evidence of the usual historico-empirical kind. It is, on the contrary, enmeshed in the work of a powerful variety of hypothesizing. This work leads Gans to argue that the humanities can and should entail reflection on the human condition, and that indeed, the very act of reflection is *itself* a definable part of what it means to be human.

Part of the challenge of Gans's work lies in the fact it is often extremely abstract. Very few other authors demand that the reader follow him from the poetics of the French novel to the intricacies of set-theoretic paradoxes and speech-act theory. The material is difficult, no doubt, but Gans shows little interest in stylistic pyrotechnics or neo-baroque affectation; if anything, his writing is almost forensic in its dissections and its propositional advances emphatically parsimonious. So part of the difficulty in coming to terms with his work relates to the intellectual demands he places on his reader in terms of the matter of fact statement of his argument. The reader wonders: Is it philosophy? (Well, yes, but it tries to think conceptuality itself by situating it in the context of a hypothetical event.) Is it physical anthropology? (Not quite; it operates in ways cognizant of this discipline, but sees its analytical brief as lying elsewhere.) A new type of science, perhaps? (Maybe, but the empiricism is slight and the appeal to explanatory economy is equally ethically as epistemologically predicated.) Then it's cultural anthropology? (To a certain extent, but it isn't simply content to allow structurality itself to be thought as a metaphysical absolute.) Well then, it must be poetry. (At least, that is clear: no.)

So, what is it then? Let us make a few orienting remarks. First, his form of the hypothesis is striking for the fact that it is concrete. Second, it is based on evidence around us today. The Gansian hypothesis is ventured as a form of heuristic speculation. If this seems to fly in the face of usual intellectual practice, his hypothesizing leads gradually to definitional clarity. In this way, he develops hypotheses of origin based on signal aspects (ethics, language, aesthetics etc.) of the human that are observable today. Third, like Girard, Gans argues a mimetic view of the world which has an always

potentially appropriative quality. This inflects his argument concerning the foundation of the human (in the deferral of violence by the rise of the sign) as well as in his ideas about exchange and modernity. Fourth (unlike Girard who has no originary scene since his theory is predicated on a mechanism), for Gans, the origin of language, and the human, has an *event character*.

So when – to return to the lines we cited earlier – Gans says that humanity is the species that “is its own chief problem,” he does so in a sense that is quasi-definitional. That is, at stake in the observation are two distinct senses, the first and obvious one being biological survival. That is what appears to most people when reading the claim. But surely there is another sense too: it is existential / intellectual perplexity and *ennui*. In both respects, the greatest danger to our existence is intra-specific conflict or problems attendant upon human sociality. Even so-called “environmental” problems are largely human-generated; and even here, “the human” doesn’t threaten “nature” (which is able to go on without human horizons). We have no desire to deride the force of objects; presumably, an ethical relation to others will not avert the probable heat-death of the universe; such a heat-death would be as much about meaning as it is about molecules. It raises questions regarding human finitude and (perhaps) the “meaning” of human existence.

The Gansian inquiry into the human calls attention both to the character of the hypothesis and the mode of hypothesizing itself. In fact, as we explore the hypothesis further, we find the method and the findings inseparable. We have so far been commenting on the hypothesis as if it were a single and simple entity. But the Gansian hypothesis is not monumental in character, and is describable in parts, and this is precisely how we mean to conduct our analysis of Gans’ work in this chapter. The parts we have identified fall into two groups, one of which concerns the content of what is postulated, the other concerns how the hypotheses are developed. We do not elaborate all of them the same way (the last two are, for instance, explored in more detail than the others), but we list them and then make systematic observations on all of them so that our analysis afterwards can proceed from the clearest possible basis.

In an earlier essay on this aspect of Gans' work published in *Anthropoetics*, we offered a detailed sketch of the appurtenances of Gans' work with other approaches—the work of Girard of course, but also of Levi-Strauss in anthropology, the critique of this by Jacques Derrida, the work of Edmund Husserl on the transcendental reduction in phenomenology (Fleming & O'Carroll 2002/2003). We do not intend to duplicate that inquiry. Neither can we analyse the relationship between Gans' ideas and the works of René Girard. In brief, we would argue that Girard's crucial insight into the operations of mimesis and sacrifice in all human societies *allowed* Gans to develop his ideas beyond the field of literary culture in the direction of a general anthropology that is broadly compatible with, but distinct from, Girard's fundamental anthropology.ⁱⁱⁱ Instead of writing about the relationship of Gans' work to other writers, we wish to place the Gansian hypothesis itself in the broader context of thought about varieties of hypothesis, to situate it as precisely as we can so as to better understand its value. In saying this, we find that his variety of *a posteriori* reasoning demands a new place in the humanities, and indeed in terms of thought about hypotheses themselves.

A Synopsis of the Gansian Hypothesis

In our view, the hypothesis, as deployed by Gans, can be described by a number of its aspects. These fall into two related groups. The first group treats the nature of the world to be explained (1-4). It is logically prior to the second group, which concerns the formal properties of the hypothesis (5-10).

- 1) The human world is, and was at the point of its origin, actively and appropriatively mimetic.
- 2) The origin is characterized by an event structure. The human must have come into being as event; human self-consciousness (of consciousness) cannot emerge other than in an event.
- 3) If the world came into human being as an event of origin, then it was also scenic, in that there must have been at least two appropriative players, and by implication a third pluralizing circle of onlookers, *somewhere*.
- 4) Because language and the human arose in this way, and because origins of all formations arise in this way, they are tellable (knowledge has, in this sense at

- least, a narrative structure).
- 5) Given all four of the above, we can work *a posteriori* from evidence derived from the nature of the human today to tell us about the origin of the human horizon.
 - 6) The hypothesis will have a number of levels of originariness, all derived as above. This explains the paradox that some levels are more originary than others, with the founding of language and the human the most originary of all.
 - 7) The hypothesis is concrete and positive (without being positivistic).
 - 8) The hypothesis is provisional.
 - 9) The hypothesis should take a form of minimal expression. That is, a) it entails a communicational ethics akin to Ockam's Razor in which the most parsimonious explanation is the best and b) it should leave the smallest empirical footprint possible, to support the claim of the rise of the human
 - 10) The hypothesis should be minimal in another sense too: it should work by treating *aporiae* not on their own terms, but by finding the minimal common ground to both.

We trace these aspects of the hypothesis in a way that reflects the decisive contribution of Gans' approach. We do this, first by elaborating the hypotheses themselves. After this, we look at four fields: 1) looking at the power of minimality; 2) looking at how Gans supplants the traditional TV-white-lab-coat explanations of the origin of language that have taken hold in the 150 year absence of the humanities from the field of inquiry; 3) how the Gansian hypothesis can be considered in the history of hypothesizing since the time of Bayes' Theorem; 4) how the work promises to reinvigorate studies in the humanities by looking at his treatment of language itself.

Mimesis and Narration: the First Group

We begin with the first group of aspects of the hypothesis. We have outlined these separately, and will to an extent respect our conceptual map, but we regard this group of aspects as interlinkable in useful ways too. The first group of aspects of the hypothesis reveals Gans' ingenuity in his handling of the issue of human genesis. They remind us of the potential profundity of the humanities, especially in its derivation and analysis of deep intuitions about the origins of humanity, language, and culture. Even on their own

terms, they stand as valuable and distinguishable co-hypotheses, able to be assessed and used in the analysis of culture. Not least of their strength lies in the way the ground for conceiving them has been developed (here we invoke the second six, which allows the first to exist cogently as after-the-fact observations on the origin): the first four are *observable today, and speak to culture today*. Let us begin with them, in a logical order.

1. The hypothesis of the origin of the human concerns the mimetic nature of human behaviour. This is a Girardian claim. For Girard, mimesis is active, not just a matter of representation. In the *Origin of Language*, Gans offers one of the few really important critiques of Girard, after a careful summary of the philosophical basis of his argument, phrased in philosophical terms (11-13) contends that Girard has not paid enough attention to the fact that the corpse of the murdered scapegoat is *already significant* (19-20). Of a moment of human crisis, he writes in *Originary Thinking*,
the strength of the appetitive drive has been increased by appetitive mimesis, the propensity to imitate one's fellows in their choice of an object of appropriation, to such a point that the ["natural" or "animal"] dominance hierarchy can no longer counteract the symmetry of the situation. Mimesis is the fundamental means of learning at every level of the animal kingdom...Mimesis is the basis of higher intelligence. (8)

For Gans, as for Girard, mimesis is essential to any understanding of the point of origin.

2. As soon, as talk of a point of origin, however, we are hypothesizing an *event*. This origin is "empirically" necessary (1993: 4), and there *are* things we can say about it. Arguing from the evidence about us of the human in everyday purposiveness, Gans remarks at one point that the rival quasi-hypothesis, the "always already" so dominant since the time of Heidegger, to the extent that it proposes a view at all would have it that an origin somehow did not occur because of paradoxes inherent to action, language and representation. But for Gans, this work actually *helps to identify* what he calls the "founding paradox" of the original scene of representation itself (1997: 7-8). We might put it like this: Gans is not an enemy of paradox *per se*; on the contrary, they often reveal deeper originary dimensions. In this case, Gans sees the origin of representation in terms

of the deferral of violence. The repeated discovery (especially by Jacques Derrida) of deferral as an ineliminable aspect of representation (*différance*, and aspects of deconstruction too) far from undoing Gans' version of origins, actually provides evidential support for it. In this respect, the scholarship of Girard is also foundational. Gans puts it like this:

We owe to René Girard the insight that only the construction of what I shall here call a “transcendental hypothesis” can provide a meaningful ontology—which is at the same time a meaningful epistemology—for the social sciences...The social or human sciences have the peculiarity of dealing with material that is of the same representational form as the discourse of the sciences themselves. (1981: 4)

Of course, Girard *never put it this way himself*. What is essentially Gansian in this is the process and protocol of formulation of the (up until this point) Girardian project of anthropological inquiry. So the first feature is that the content of the hypothesis concerns the origin of representation, an origin seen as part and parcel of the human itself.

3. Representation is scenic. This aspect arises from the three previous aspects and can be derived from them: the scene is to be construed, if the event itself happens as part of something in which there are players, and it will be retold. The example of mimetic appropriative desire is often given:

We may conceive the originary event as follows: a circle of protohumans, possibly after a successful hunt, surround an appetitively attractive object, for example, the body of a large animal...But at the moment of crisis, the strength of the appetitive drive has been increased by appetitive mimesis, the propensity to imitate one's fellows in their choice of an object of appropriation...in violation of the dominance hierarchy, all hands reach out for the object, but at the same time, each is deterred from appropriating it by the sight of all the others reaching in the same direction....The centre of the circle appears to possess a repellent, sacred force that prevents its occupation by the members of the group, that converts appropriation into a gesture of designation, that is, into an ostensive sign. (Gans 1993: 7-9)

In this passage, part of which we cited earlier, Gans *recreates* the essential scene on which the originary event is staged.

4. Because the hypothesis postulates the event-character of the origin of representation, it summons a *narrative* form (1993: 10). This is not narrative in quite the sense proposed by Lyotard (1977)—the notion that science is reduced to mere story—but rather, the eventness of the origin means it has to be re-narrated, since that is how events have traditionally been construed (and represented). (It is not a meta-narrative in Lyotard’s sense primarily because it is only tangentially meta-theoretical. Lyotard’s “meta” signifies a level of explanation not merely the “size” of a story (theoretical or otherwise): a meta-narrative is necessarily a metadiscourse which concerns itself primarily with a first-level discourse – usually theoretical – and not “the world.” Like Girard’s fundamental anthropology, Gans’s originary anthropology is certainly a *meganarrative*, minimally expressed, but it is not primarily metanarrative, as it theorizes theory only in the context of its theorization of representation and the evolution of linguistic forms.)

The Second (Formal Properties) Group of Aspects of the Hypothesis

The aspects of the hypothesis that we have looked at so far could not function as formal knowledge were it not for some justification of the possibility of working with a shared horizon of the human. The most important support for this overt claim lies in the idea that we can deploy *a posteriori* reasoning in this field. We now turn to the formal features of the hypothesis, starting with this, the most important of the six, concerning this kind of evidence.

5. The hypothesis is not to be arrived at in the usual “prior” way characteristic of those sciences which can both repeat and retest. On the contrary, the hypothesis is construed *a posteriori*. In some of its derivative forms, the narrative structures of particular cultures can be an aid to analysis. But for the founding hypothesis, the *a posteriori* reasoning has an almost apodictic quality: first, of course, does the hypothesis accord with what we see today, and what we can structurally determine about what it is to

be human, but then and above all, *what is the chain of events which we can reconstruct with reasonable certainty that must have happened* for us to become us, human.

6. The sixth aspect emerges from the fifth. It concerns the fact that there is a distinction between the originary hypothesis in the case of the human and other hypotheses in the sciences. The originary hypothesis concerns representation in general, and language in particular, but its own resources are also of this kind. The apparent paradox leads Gans to remark repeatedly that (to take one such moment) “its verification can never become an established fact, but only a heuristic probability” (1981: 6). Paradoxically, some of the less originary hypotheses, as for instance are to be found in the discussions of the history of Western civilization in *The Origin of Language*, have stronger empirical support, precisely because corroborating accounts *do* exist of moments of origin. As we will see later, these “secondary hypotheses” are important in their own right.

7. The hypothesis is concrete and positive. That is to say, it is a substantive claim. It is also a first order claim, by which we mean (for instance) that it does not just concern theory (although it does concern that too).

8. The hypothesis is provisional and as we have argued elsewhere, vulnerable. This is precisely because it makes a particular concrete claim about an actual issue (7), but it does so as a heuristic (1981: 6; 1997: 6). Because it addresses itself to a specifiable problem or set of problems, it is also to be distinguished in a formal sense from a hermeneutic (which *could* be a purely theoretical reading of any natural or human situation). Occurring within the field it projects—originary analysis—it allows dialogue to occur. This approach makes of the entire field a collaborative prospect. The hypothesis can be modified in light of subsequent findings, can be regularized with other fields, and is a work in progress. (The hypothesis is also only “his” in the nominal sense; it possesses an objective thought content that can be taken up by others for modification, extension, qualification, or critique.) We note briefly that the merits of this approach far outweigh its prevailing alternative in cultural studies: this is the notion that because

something cannot be said with certainty that somehow *nothing* at all can or should (for it often has a moral aspect) be said.

9. The hypothesis can be formed in a number of ways, but in its forms of statement it shall be parsimonious. Parsimony, in Gans' eyes, has its own merit. It involves stating only that which is essential. This is closely linked to its minimality (10).

10. The hypothesis is not just parsimonious (9), but also, it is minimal. This means it will search for the common ground of apparently opposed positions. We can usefully relate this to the work of Jacques Derrida (see below).

Minimality

We now wish to elaborate further on some of what we have detailed. Anyone who wishes to make sense of Gans' work needs to deal with the issues of minimality (aspect 9) and parsimoniousness (10), which although conceivable separately, make best sense treated together. On the one hand, then, the hypothesis will entail a communicative ethics of parsimonious expression. On the other, it will seek to minimize differences between positions in order to understand what is essential to them. These two orders of minimality are linked, but we can usefully make sense of them by establishing philosophical provenance for both.

From the very outset of philosophical inquiry, we can point to the value ascribed to felicitous and parsimonious expression of philosophical ideas. For Plato, to be sure, such expression had to do with the fact that he was trying to describe an ideal world of perfect, mystically Pythagorean, forms. But Aristotle, in his practice, was also minimal (witness his *Logic*), and by the time this tradition had been absorbed into Western thought, we find from the tradition of William of Ockham onwards, a value ascribed to minimal expression of philosophical positions. Is there anything to justify this?

Gans certainly thinks so. He argues it in philosophical terms, and we will look at that in a moment. But it has an obvious communicational dimension too. For instance, Gans

recognizes, but minimizes the gap between positions that entail belief and those that don't. That is he bridges "religious" and "secular" positions. It is not just a matter of seeing them as nonpertinent to the discussion. For instance, to the question does God invent the human (religion) or did the human invent God (secular) he will see only common ground in the question, not a diametrically opposed view of reality. Indeed, to Gans it is not more—or less (as we will see soon)—of a question than whether he "invented" or "discovered" the origin of language.

Gans seems to see parsimony and minimality as having intrinsic philosophical value (for instance, 1993: 2; 1997: 6). In *Signs of Paradox*, he sees the fact that it has a small empirical footprint as providing the maximum space for a dialogue about the genesis of the human: all we need to agree on is that there *was*, indeed, an origin (6). It establishes, indeed, for any field the possibility of "universal" dialogue (6). This gives the clue as to why, for instance, he criticizes Freud's *Totem and Taboo* not for being wrong or implausible, but for displaying "naturalism...incompatible with minimalist rigor" (1997: 18). Psychology claims to describe all humanity, but because it mixes naturalistic detail into its grounding, it slides into particularity and ethno-specificity.

Gans' attack on psychoanalysis mirrors an earlier attack on the discipline for precisely the same reason. Edmund Husserl saw it as a highly derivative field, precisely because it had not done the work of clarifying and distilling its claims. In fact, both Husserl and Derrida have written critiques of psychology, though from different points of view (Derrida was more interested in the attempt by Freud to "legate" and control the field). And the links between the reduction in Husserl and Derrida's language of the "most irreducible" are obvious, though not well known. Deconstruction, it is true, does at times turn the methods of Husserlian reduction onto phenomenology itself, but this seems to have blinded commentators to the fact that of all the approaches and methods Derrida analysed, only the Husserlian reduction is discernible everywhere in his work. Gans has never himself commented on this aspect of minimality, although Girard has noted its importance in his work when he wrote of his ambition for a "transcendental anthropology" that he meant this word in the Husserlian sense (15).

Derrida is cited by Gans, often in apparent frustration, as he—very correctly—points out that a project in the vein of his *Of Grammatology* does not require the abandonment of inquiry into the origin of the human, but a restatement of the status of such inquiry. Derrida's approach to deconstruction also highlights what both he and Gans gained from Husserl: an ability and a value in finding in apparently opposed positions, a profounder shared ground. In Derrida, deconstruction at this point tends towards a pragmatics: find the shared ground, reverse the field, and displace the hierarchy of subordination (*Positions* 1981, *Margins of Philosophy*). But the approach holds validity in other forms too: the very act of revelation of a shared ground takes us to a more originary position. The working practice of Derrida and Husserl, are in this respect, almost identical. Girard and Gans, in identifying the power of such an approach, have in their very different ways, established an entire field of inquiry. And as for those who think that all inquiry into origins is proscribed, Gans remarks of them that “When they have deconstructed the categories of human thought down to their founding paradox, they think they have found our thinking's fatal weakness, when in fact they have arrived at the source of its strength” (1997: 7-8).

At this point, we come very close to what characterizes Gans' work alone. For Gans, it seems that minimality has a “truth” of its own. Less is, indeed, more for Gans, and in a number of ways. In one this regard, communicative efficacy has an ethical value of its own, in furnishing the conditions of a universal dialogue for the grounding of the human. It provides also an economy of expression arising from superior expression of the ground and nature of the human. But above and beyond all, it leads to a special kind of accuracy of statement. Now one might imagine that in saying this that Gans risks an enlarged empirical requirement: a date, for instance for the origin of the world. But generative anthropology is not like that; it straddles science and the humanities, but does so in a way that minimizes the risk of empirical falsification. Let us look at this footprint.

First, the minimal kernel is, as Gans says of the origin of language, is that there *was* one (1997: 6). This is a *historical* precept. Gans postulates a first event in order to

understand human culture—the species that lives in events, in memories, in history, in signs, and so on. Second, in some ways, generative anthropology offers a minimal definition of the human, a *structural* characterization. In this regard, one cannot “show” (empirically at least) that it isn’t “like this.” Instead, what is at stake is an attempt to capture ethical and cultural values—and if the inquiry does not take account of these, it is not in this regard at least, even examining the human. Finally—perhaps most obviously given that we discuss minimality—generative anthropology defends itself by seeking not to postulate things that are not necessary. In other words, those things not seen as basic are simply omitted from the originary scene. And—traveling the other way—because the phenomenon we seek to describe is the human, this is unitary in nature, and as a result everything that is essential to that phenomenon must be there.

To be sure, it is hard for Gans—or for us—to give a meta-level justification for his approach or for minimality because generative anthropology itself seeks to explain the emergence of thought (and later indeed, of philosophy). In this respect, generative anthropology might employ philosophical modes of argument, but it is also empirical in that the human is precisely the site where these things (like philosophy) are to be found. We might, at risk of being simplistic put it like this—logic is in a sense independent of human beings, but the animal which would invent logic is what requires understanding and analysis.

Situating the Hypothesis

We now wish to sketch something we think a very important area of research. That is, we now seek to *situate* the Gansian hypothesis in relation to other models of argument and hypothesizing. While there are many ways of characterizing the hypothesis in general—and the way we hypothesize on the human in particular—we wish to characterize Gans’ work by schematically examining varieties of hypothesis in two groups. On the one hand, there is a longstanding tradition that hypotheses can be assigned reasonably accurate weights, on the basis of probability—whether in terms of hypothesis-preference in the work of Thomas Bayes or in terms of the covering law model proposed by Carl Hempel; on the other, there is the quite discontinuous (but in our

view ultimately preferable) tradition that devises a more socially grounded modeling of hypotheses (ranging from the critiques of Thomas Kuhn to the work of Imre Lakatos).

Bayes proceeds by assigning probabilities to the hypotheses themselves. These probabilities are based on evidential support for them. His model is called a “theorem” because it promises the logical formulation consisting of the hypotheses to be compared, the evidence being weighed, and the belief pattern of the investigator: all this gives rise to an answer about the probability of the hypothesis being correct.

In the same tradition, but seeking to address the issue of complexity in the scene of the event itself, Hempel’s process of subsuming comparable patterns gives rise to the covering law model. This works by subsuming events in groups under a covering law that explains them all in terms of a set of initial conditions. In Hempel’s work, we see the reach for an adequate description of broader conditions which correlate (rather than necessarily causing) events (cf. Von Wright 27-28). Equally, one would expect, as in the physical sciences, that true hypotheses of this kind should have predictive explanatory capacity, rather than merely interpretative understanding. Yet even in some domains of the sciences themselves, few would seek to require this test of the hypotheses generated (in the case of theoretical mathematicisations of space for instance, a hypothesis can be interesting just because of internal consistence and non-refutation by physical evidence). Gans himself rules out the possibility of demonstration of this kind (1993: viii).

So how does Gans sustain the claim that the things he proposes are indeed hypotheses?

At the very outset, he offers a pattern of reasoning that looks like this:

The hypothesis as such must remain in transcendental relation with the body of the theory, because its verification can never become an established fact, but only a heuristic probability. Its role is that of a transcendental signified to which the representations studied are made to refer through more or less complex sets of mediations. The theory can then be shown to itself refer back to the hypothetical origin, to constitute, in other words, merely the latest and presumably the most truthful of the representations that fall under its purview. (1981: 6)

This means that there is a kind of “testing”—not in terms of verification, but rather one in terms of probabilism (as in the first group of course), *and heuristics*. A to-and-from movement akin to a hermeneutic circle seems to be implied—the hypothesis is part of the explanatory structure, but so too is the evidence adduced from it.

This might look closer to the work of Thomas Kuhn. In a certain sense this is true, but Kuhn’s work has more critical than explanatory usefulness—that is, Kuhn is only a path to another stronger variety of hypothesizing that takes account not just of the internal logic of research programs, but also, of the historical horizons of the research itself. To Kuhn, though, we can concede this insight: all knowledges, including scientific knowledges, have an ineliminable historical dimension. In his *Structure of Scientific Revolutions* (1962), he advanced the now-common thesis that there are no theory-independent “facts”; more significantly, Kuhn suggested that normative claims that take the shape of putative prerequisites for rational scientific work and change – like empirical fruitfulness and/or predictive power, internal coherence, elegance or minimality, conceptual generative capacity, and so on – are neither *necessary* nor *necessarily sufficient* to predict previously successful theories (and so, by implication, furnish criteria which would be able to direct current selection among rival scientific theories) (*RP* 92-116, esp. 99-100). But if we take his most tenable definitions of the paradigm seriously, Kuhn’s account of the hypothesis is—despite his denials in afterwords and subsequent accounts—a variety of relativism. In our view, though, the problem lies less with the prospects for the hypothesis than with the way Kuhn frames his analysis. In other words, the force of his highly elastic notion of the paradigm lay less in it being an acceptable alternative to Bayes’ theorem or Hempel’s covering law, than in pointing out the problems and limits to these models of the hypothesis and of explanation in general.

If we consider Gans’ work as a case in point, we can legitimately ask what, if anything, Kuhn’s notion of the paradigm could tell us about it. This is especially true in the “social” sense of orthodoxy implied for what counts as knowledge. After all, in Kuhn’s terms, Gans lies outside the mainstream of humanities’ preoccupations and theories, where talk of origins of this kind is anathema. It is not that we could not adapt Kuhn’s

ideas, rather, it is that his model does not capture adequately the complexity of the very social world he sought to invoke in his own criticisms of the alternative models of knowledge.

In this respect, the work of Lakatos is highly suggestive. Lakatos was able to see that the critiques offered, first (more tentatively) by Popper, and then more decisively by Kuhn, had hit their intended targets and forced on the philosophical community the soundness of many of their shared conclusions. But how successful, Lakatos wondered, had Popper's and Kuhn's *reconstructive* efforts been? Lakatos takes as his task a serious reflection on a host of epistemological *aporiae* which emerged in epistemology subsequent to the fall from favor the philosophies of positivism and neo-positivism. From Karl Popper's "critical philosophy" to Thomas Kuhn's work on "paradigms" and "scientific revolutions", chinks in the armor of everything from Carnap and the Vienna Circle's [*Wienerkreis*] criterion of meaningfulness to Hempel's hypothetico-deductive account of scientific change began to appear more like gaping holes. Lakatos was in no doubt that the critical salvos of both Popper and Kuhn has been probative against the so-called "justificationists" (*RP* 94-5).¹

In response to this situation, Lakatos offered a "solution" that, at first sight, seems untidy, but which when examined closely affords a reasonably accurate map of the process of knowledge itself. According to Lakatos, a research program can be broken up into two main components:

1. A research program has a *hard core* – that part of the program that furnishes an overall ontology. That is, at its broadest, the core theory specifies the (putative) nature or character of the entities under investigation (*RP* 133-4).
2. A research program has—around the core—a series of *auxiliary hypotheses*. Lakatos described these as constituting something approaching a "protective belt" – a series of lower-level theories which are both seen to support and specify the core

¹ For Lakatos, "justificationist" was a category that included both logical positivists / empiricists like Moritz Schlick and Otto Neurath, as well as "classical rationalists" like Kant. For a characteristic statement of Popper's against foundationalism, see his *Logic* (111).

theory. Such auxiliary hypotheses may, for instance, include theories of observation or instrumentation (*RP* 134-8).

A research program, in this sense, can be seen as (being sustained by a) history of inquiry *itself* constituted by a series of theories whose core remains relatively constant while the protective belt of auxiliary hypotheses are intermittently either: (a) extended in response to corroborative data or (b) reformulated or replaced in lieu of incongruous data. For instance, at the level of the “protective belt,” explanations are amenable to multiplication in response to seemingly anomalous observations.

Now as we noted, such explanatory multiplications may *seem* to show a weakness in a research program, this may not necessarily be the case. Indeed, Lakatos argues that part of the ingenuity of (so-called) “great scientists” has often shown itself *precisely* in such explanatory maneuvers – not merely to re-interpret experimental results in light of theoretical improvisation, but to challenge experimental outcomes *themselves* and even have them reversed. One means by which this might be achieved may be by refiguring the theory such that the anomaly can be subsumed under a law; the putative anomaly here becomes not an exception, but a *consequence* of the theory.

Given what we have said, it should be clear that Lakatos is arguing that the project of attempting to supply necessary and sufficient conditions for the practice of “rational inquiry” lies vanquished; yet he does not see this conclusion as somehow sufficient in itself. Indeed, such a conclusion would suffice only if one were to impute to science an ahistorical aura – to think of it in terms of simple (and singular) “theories” or “conjectures,” each amenable to instant assessment. “One can understand very little of the growth of science,” Lakatos suggests, “when our paradigm of a chunk of scientific knowledge is an isolated theory... standing aloof, without being embedded in a major research programme” (*RP* 175). Well in advance of later thought which admits the mutual imbrication of epistemology and axiology – the ineliminably normative element of rational activity – Lakatos does not himself give up on normativity itself, merely some of its more dubious formulations. Additionally, one of Lakatos’s signal contributions to the debate is that he effectively dispenses with a temporal notion of science – common to

philosophies as seemingly disparate as Carnap's, Hempel's, Popper's, and Kuhn's – as constituted by of a series of *successive* theoretical matrices or problematics. Rather, he argues, the theatre of scientific reason is better characterized as being populated by *contemporaneous, competing* research programs.

This is when we get to the heart of Lakatos' insights into the way a research program (such as generative anthropology for instance) should be evaluated. This is his distinction between *progressive* and *degenerating* research programs (RP 116-38). According to Lakatos, the latter is such that its core is rescued from critical demolition by the *ad hoc* piling on of a seeming surfeit of theoretical entities – what Lakatos occasionally refers to as bare “face-saving” devices, “empty prevarications,” or semantic “tricks” (RP 117). To simplify Lakatos's account somewhat, a progressive research program, on the other hand, is characterized by the following three features:

- 1) Each novel incarnation of the theory – core and auxiliaries – preserves the content of its predecessor.
- 2) Each novel incarnation of the theory possesses excess empirical content over its precursor – it is able to predict novel facts.
- 3) At least some of these (predictions) are corroborated.

When (1) and (2) are met, a theory is said to be *theoretically* progressive; when (1), (2), and (3) are fulfilled, a theory is then said to be both theoretically progressive and empirically progressive (RP 116).

How does Gans' hypothesizing fit into this schema? Working backwards, we see that his is a progressive rather than degenerating program. This evident not by some rule of succession or time, but rather, because of what his theory is able to explain. Put bluntly, his work *does* preserve the content of preceding theories (as we saw in the case of poststructuralism, for instance, but also, more importantly, of Girard's work on mimesis and sacrifice). Crucially, it does this in a way adequate to the original theories, and yet also on its own terms (self-corroboration and the probably best explanation). Gans' approach to the human can be assessed not against an empirically irretrievable past, but against what we are continually learning about the human *today*.

But more important there is a strange symmetry between Gans' work and that of Lakatos itself—and it has relevance to both. We have noted in *both* the self-referential and historical coherence of the two pieces of work. In the case of Lakatos, we might put it like this: the theory *itself fits very well with his own account of scientific research programs*. This at least confounds the criticism that most twentieth-century philosophy of science has not been self-referentially coherent, but it is also indicative of the possibility that in working for itself, it goes far beyond what many other model-makers have managed to do (notably Kuhn—for how can he, *on his own terms*, claim to be “right” rather than merely, say, “popular” as behooves a paradigm itself? Then, if this applies to his own model, how can his model be applied to *anything* else?). Gans' work too has an internal consistency that is impressive: a posteriori reasoning allows him to throw out the always-open question: you offer a better explanation, *or this one stands*.

Gans' work on consistency, clarity, and positive statement of the hypothesis all justify seeing the work in terms of the broad theatre of hypothesizing. These are the formal features we detailed earlier in the chapter. But as we have been seeing, the actual programme of research that is implied in the first five aspects of the Gansian hypothesis is progressive rather than regressive in nature. Were we to ask, therefore, whether it would be possible to draw a diagram of Gans' work using Lakatos, our answer would be affirmative. It would look a little like this: Gans' work gives form to a wider tradition that includes Girard and Girardian scholarship concerning at least the following precepts: the hard core notions are (to use Lakatos' terms) a) the idea that humanity should be explored as *Homo imitans*; b) the function of culture is to avert mimetic conflict and c) there *was* an origin to the human. The last feature is not argued by Girard, but is, in our view, an implicit feature of most of his work, especially his work on founding myths.

The value of this work lies in two areas: on the one hand, it is likely that the actual content of the hypothesis is correct, in which case the work is a decisive contribution to studies of the origin of human culture, and of language. On the other hand, even if the hypotheses needed to be modified, it might be that Gans has modeled an entirely new

way for the humanities to do its work. The claim for the latter is even stronger than the former. But there are a range of possible objections. We wish to consider a few of these.

Objectors in White-Coats

We have argued that Gans has made a contribution to the question of the origin of language that is rare in the humanities, but not unusual in the field of the sciences. In seeking to venture back into terrain that the humanities has long vacated, one could be forgiven for wondering about the value of the contribution. Let us, briefly, outline how Gans' work looks in relation to extant versions of the origin of language as proposed by dominant models in the sciences.

To start with, like Girard, Gans posits an origin not because of some *a priori* commitment to a punctual origin of the human, but because such a retroductive postulate makes sense of the present more adequately than thinking of an (metaphysically restrictive) "originless" humanity, humanity as an divinely instantiated "immaculate conception," or merely the epiphenomenal smoke produced by random variation and natural selection.

This takes us into the terrain of what might best be called physical anthropology. In this field, Steven Pinker's *The Language Instinct* is a well known landmark. Pinker's book is well-written and his analyses of the necessary bio-physical architecture that humans require for language acquisition is both meticulously catalogued and deftly synthesized. But empirical fastidiousness is a poor substitute for conceptual acuity, and it is precisely in his analyses revolving around the title of his book that the weave of Pinker's begins to unravel. In an attempted riposte of Noam Chomsky's theory of LAD (the so-called "language acquisition device" of universal grammar) Pinker's will to exaggerate the differences between himself and psycholinguistics perhaps forces him to advance a claim both unwarranted by empirical study and evidentially unsupported by his preceding arguments: "Language is not a cultural artifact that we learn the way we learn to tell time or how the federal government works. Instead, it is a distinct piece of the biological makeup of our brains." Language "develops in the child spontaneously, without conscious effort or formal instruction." Despite the psychologistic bias of cognitive

science and psychology, Pinker admits that here “prefer[s] the admittedly quaint term “instinct.” It conveys,” he tells us “the idea that people know how to talk in more or less the same sense that spiders know how to spin webs” (Pinker 18).

There is much that could be questioned in Pinker’s claims. Most obviously, the claim that language is a “distinct piece of the biological makeup of our brains” requires no scientific training to judge: language is not a “piece” of anything, least of all a weigh-able slice of our central nervous system. This is an instance of what A.N. Whitehead called “misplaced concreteness.” Surely, we may choose to weigh up Pinker’s claims, but the metaphor of critical examination should not lead us to believe that we’ll need to purchase a scale to equip us for the task. Language may require a certain physical architecture – it may supervene on a finely calibrated electro-chemical operations of the occipital lobe, the angular gyrus, and the visual cortex – but holding up a cross-section of Wernicke’s area and proclaiming it “language” fails to convince. But the more important claim is the second one – that language is an “instinct.” Pinker refines this claim by furnishing an analogy: that “people know how to talk in more or less the same sense that spiders know how to spin webs.”

We contend, in this regard (with Gans), that once again, “less is more.” The term “instinct” has a complex history in behavioural science, but its meanings are only relatively flexible. Usually the term points to a supposed “internal” control mechanism which regulates complex behavior, operative even without “external” inputs like imitation or instruction. At its most ectoplasmic, the term may refer to any functionally integrated behavioural system – which would render it vacuous to the extent that it would appear to fit any human behaviour indifferently. Pinker’s choice of term here is, at least, brave; current ethology has, for the most part, asserted the invalidity of the concept as applied to human behavioural control systems, both at the developmental level and at the level of mature behaviour (Hinde, *Ethology*). But we can make a very simple point: human language acquisition is precisely *not* instinctually isomorphic to arachnoid home-making for the simple reason that no baby-spider ever requires mumma-spider to show her the “tricks of the trade.” But human speech requires – in addition to neural

architecture – a speaker’s familiarization and integration into a speech community. No doubt, he recognizes this at some level (Pinker 292), but his Darwinian religiosity forces him to generate a further aporia that we can state as a question: If language is an “instinct” begotten by a fortuitous reshuffling of DNA (or what Pinker, at one point, calls “new-fangled circuitry” (365), who might have the poor genetic mutant confided in? In his legitimate desire to refute the notion of homo sapiens as tabula rasa, Pinker has produced the impossible: an orator without other language-users.)^{iv}

Hypothetical Objectors

There are a number of objections one can—and should—raise when looking at Gans’ work on the origin of the human, and of culture. These fall into two groups. The first is that one should not hypothesize about such things. The second is that some of the actual contentions are wrong, or mis-stated, or mis-construed.

Let us be clear about what we seek to establish concerning the right of the humanities hypothesis: all we seek to show is that it deserves consideration. Many scholars believe the only paths to knowledge are those we now have. Broadly, for them (even if they would never write it this way), there is the mathematical or logical proof, circular, but of potential application; there is empiricism in the narrow sense of testable and repeatable knowledge; and then there is hermeneutics, the field of humanities, in which knowledge can only be a matter of discourse and argument. We have no objections to any of these practices—but neither do we see any reason to limit modes of knowing simply on the basis that this is all we do nowadays. The Gansian hypothesis, is as we have seen by looking at Lakatos, able to be posited, and explored.

Let us consider some of the hypotheses from the point of view of alternatives. There are two in particular that need examining: these are the co-foundational aspects that on the one hand, there was indeed an origin, and on the other, that this origin was characterized by mimetic impulses. Let us contend—for illustrative purposes—to the contrary that there was no origin, and then separately from that, let us contend that even if there was an origin, it was otherwise than Gans or Girard claim.

1. *There was no origin.* Stated like this, we see problems straight away. If there was no origin, then two further choices impose themselves on us. We could argue that we have always somehow been already here. Or—second—we could propose a gradualist hypothesis, that is to say, that gradually the human shaded into being out of the non or proto-human. The first hypothesis is patently unacceptable, entailing an eschatology at complete odds with everything from the fossil record to common sense. Needless to say, it is the apparent default position of the contemporary humanities, but no one else. In this regard, it is an interesting case in which there is convergence between religious and non-religious positions: almost all agree that there was an origin. About the first counter-hypothesis, we need say nothing at all—it is ridiculous. The human has not been here forever be it as a species or as culture-in-general; there *was* a time when there was no human horizon. The second counter-hypothesis is more difficult. It corresponds to one version of evolutionary biology: genetic mutation, followed by more adaptation, followed by more mutation, followed by more adaptation etc. Squawks become signs, shrieks of pleasure become words. Implicit, but inessential to the model is the idea that somehow language is itself somehow advantageous to propagation of a species. Rather more essential—but rarely explored—is *when, why, and how* a squawk would become a sign. This is Gans’ aperture of critique, which begins by him seeking first of all to clarify *what it is* to be human. This allows him to postulate the originary thesis in very clear terms

Because the origin of language must be justified, not merely posited, the minimal act of humanity is best described not as “human using language” but as a prehuman creature *becoming* human by using language in a situations where this use is inevitable—that is, one to which the creature can adapt only by means of the acquisition of language. (1993: 2)

What Gans offers—and the competing commonsense model certainly does not offer—is an explanation of what the human is, what language is, and under which circumstances—using current evidence—it came about.

2. *The origin happened but it was not primarily mimetic.* Now this is the kind of

hypothesis that engages squarely with generative anthropology—in its own terrain, and on its own terms. It retains the structure of hypothesizing, as well as key tenets (the eventness of the origin, the narrative nature of knowing, *a posteriori* reasoning). But it offers instead another kind of origin.

- a. *Preservation*. Territorial borderlines between two proto-human groups maintained at first by a kind of instinct-grunt, at a point of crisis, suddenly undergo an explosion of signage which becomes in routinization something like Erving Goffman's "facework."
- b. *Grief*. A scene of death in which—unlike Girard's murder—the situation is one in which a shared bewilderment arises at the demise of a protector—giving rise to something like grief held in common, again crossing the line from the dog loyal to its owner howling outside the door into something else, into *signing*.
- c. *Love*. Parent-offspring communication passes from instinct to something closer, as sharing develops more than a pecking order, but a language.

About all these—and other—hypotheses, Gans has simply replied, let's see the *argument*. But before we consider this, let us first see what adoption of a counter-position suggests: at the very least it involves accepting the validity of this sort of inquiry, of building within it a scholarly discourse that proposes and challenges views about the origin of the human itself, and that does so with the view that that is such a thing as the human that can and should be studied in this way. In this respect, we should note that despite both Gans and Girard proposing mimetic theories of human origin, these differ profoundly in orientation. Gans, who sees mimesis as appropriative in the first instance, posits the origin as happening around something—or someone—held in common as an appetitively desirable object. As both hands reach out to appropriate, violence is deferred by the emergence of the sign. Girard, on the other hand, posits the origin as occurring around the corpse of a victim, which as sign comes to stand to everyone for what will thereafter be a feature of human society—the scapegoat.

The power of the mimetic hypothesis as against its rivals is that it is one of the most powerful and demonstratively constant tendencies in human culture *today*. Self-

preservation, grief and love are also observable today (and that is how we generated the hypotheses—*a posteriori*, like Gans). Arguably, the second pair are already derivative of something else (an animal, arguably, cannot feel either unless it is already human). For those who see an almost Hobbesian pessimism about human nature pervading both Gans' and Girard's versions of human genesis, we would remind them that imitation is not cause for despair—but rather, an insight into how and why we know, and if our form of its is unique, yet there is a unity in all higher order lifeforms modes of learning and skill-acquisition.

Coda on Language

If, as we have argued, Gans' approach is even *potentially* foundational of a renewal of inquiry into the human in the way Gans has imagined, then many of the orthodox protocols of the last fifty years in the humanities can simply be set aside as the equivalent of a debate on how many ghosts could fit into a medium-sized helium balloon. In place of such closed and defensive horizons, we have argued for the value of generative anthropology as a field in which the human can be studied in terms of the genesis of particular cultural formations, as well as of the human *itself*.

Gans' originary hypothesis is looking increasingly tenable not just as support for other fields of humanities research, but also, as a new way of making sense of the question concerning the origin of language itself. Perhaps the most powerful evidence of the relevance of this sort of inquiry lies in precisely this field. Many today see it as a variety of inquiry that is best conducted by biologists and archaeologists. Yet it has long preoccupied the best analysts of the human condition. From the time of Herodotus, there have been attempts to recreate the originary scene of language, to see if children can spontaneously acquire language. Despite the failure of all such attempts, almost no-one dares to conclude that no human could ever have learned language without some sort of originary event to trigger it. Not only is there no seeming point to talking if no-one comprehends such talk, there is likely no possibility of talking if no-one comprehends, as there is no-one to affirm or contest one's usage.

But if so, who spoke first – and why? Few have put the matter better than Lucretius during the first century BC:

To suppose that someone on some particular occasion allotted names to objects, and that by this means men learnt their first words, is stark madness. Why should we suppose that one man had this power of indicating everything by vocal utterances and emitting the various sounds of speech when others could not do it? Besides, if others had not used such utterances among themselves, from what source was the mental image of its use implanted in him? Whence did this one man derive the power in the first instance of seeing with his mind what he wanted to do? One man could not subdue a greater number and induce them by force to learn his names for things. (Lucretius, *On the Nature of the Universe* 155)

Lucretius is not attacking a straw-man here, then or now. Yet the Epicureans' own solution to the problem generated its own conundrums. They argued that speech began as natural sounds and gestures, and that cultural specificity and historical circumstance engendered all the different languages. One obvious criticism here is that the specificity of human language is that the links between sign and referent are arbitrary, that much language possesses no clear referent, and that some of those that do, don't actually exist. Another obvious criticism is that for all the power of natural noises as an explanation, there is no reason given for its actual development beyond that of the other animals.

Gans and Girard, in their different ways, suggest another way forward from either of these two alternatives: to Lucretius' question, they reply, yes, something *did* happen – and we can, on the evidence before us about human behaviour today, generate strong hypotheses about what *sort of thing* it was. To the idea that speech evolved out of natural sounds, they point to the fact that the very human horizon comes into being only with speech. Gans himself explicitly addresses the modern equivalent of the gradualist position. This is the notion that the human is “always already” constituted (see especially *Signs of Paradox* 5-8). We cannot, it is true, go back to check. But neither in that circumstance, is it incumbent on Gans to “prove” the other position “wrong”: on the contrary, it is sufficient to offer the most plausible explanation. In this respect, the *a posteriori* approach he brings to this aspect of the problem is extremely powerful and

suggestive.

Moreover, the work on mimesis supports *both* kinds of work: be it on contemporary culture, or be it work on the origin of the human horizon in general. By augmenting and making use of Girard's work in this area, Gans has laid the basis for a new kind of inquiry in the humanities as a whole. This is true in the substantive claims he makes about the human we see a new set of possibilities for the humanities as a field of the widest scope. It is also true in the specific forms of thinking in which he engages: an attempt to think the human and its origin within the disciplinary matrix of the humanities actually lends renewed promise to many of those individual fields of pursuit. For all these reasons we believe the Gansian theoretical endeavor *is* foundational – or *should* be. The humanities “zero degree” *does* involve reflection on the human. Above all, it is Gans who has so repeatedly shown us that the very act of reflection is *itself* a definable part of what it is to be human – and that is part of what could make the humanities a field that justifies its name.

References:

- Amico, Robert P. *The Problem of the Criterion* (Lanham, Md.: Rowman & Littlefield, 1993).
- Cassirer, Ernst. *An Essay on Man: An Introduction to a Philosophy of Human Culture* (New Haven & London: Yale University Press, 1944).
- Chisholm, Roderick. *The Problem of the Criterion* (Milwaukee, Wisconsin: Marquette UP, 1973).
- Darwin, Charles. *The Origin of Species and The Descent of Man*. New York: Modern Library, 1948.
- Deacon, Terrence. *The Symbolic Species: The Co-Evolution of Language and the Human Brain* (London: Penguin, 1997).
- Donald, Merlin. *Origins of the Modern Mind* (Cambridge, Mass.: Harvard University Press, 1991).
- Fleming, Chris. *René Girard: Violence and Mimesis*. Cambridge: Polity, 2004.
- Fleming, Chris, and John O'Carroll. "Notes on Generative Anthropology: Towards an Ethics of the Hypothesis." *Anthropoetics* 8, no. 2 (Fall 2002 / Winter 2003) <<http://www.anthropoetics.ucla.edu/ap0802/fleming.htm>>
- Glidden, David K. "Parrots, Pyrrhonists and Native Speakers." In Stephen Everson (ed.) *Language* (Cambridge: Cambridge University Press, 1994). 129-48.
- Haeckel, Ernst. *The History of Creation* (New York: Appleton, 1868).
- Hanson, Norwood, R. *Patterns of Discovery* (Cambridge: Cambridge UP, 1958).
- Heidegger, Martin. "Letter on Humanism." Trans. Frank A. Capuzzi & J. Glenn Gray, in *Martin Heidegger, Basic Writings*, 2nd rev. edn., ed. David Farrell Krell, Routledge, London: 1993 pp. 217-65).
- Herodotus, *The History of Herodotus* (written 440 BCE). Trans. George Rawlinson <<http://classics.mit.edu/Herodotus/history.2.ii.html>> Accessed 20/4/06
- Hinde, Robert A. *Ethology: Its Nature and Relations with other Sciences* (Glasgow: Fontana, 1982).
- Kenny, A.J.P. "The Origin of Language." In A.J.P. Kenny, H.C. Lounguet-Higgins, J.R. Lucas and C.H. Waddington, *The Development of Mind* (Edinburgh: Edinburgh University Press, 1973). 91-107.

- Khan, Amir. "Cultural Studies and Anthropology." *Anthropoetics* 12.1 (Spring/Summer 2006) <<http://www.anthropoetics.ucla.edu/ap1201/khan>>
- Kirwan, Christopher. "Augustine on the Nature of Speech." In Stephen Everson (ed.) *Language* (Cambridge: Cambridge University Press, 1994). 188-211.
- Lacan, Jacques. *The Seminar. Book II. The Ego is Freud's Theory and in the Technique of Psychoanalysis, 1954-55*. Trans. Sylvana Tomaselli, notes by John Forrester. New York: Norton, 1988.
- , *The Seminar. Book XI. The Four Fundamental Concepts of Psychoanalysis, 1964*. Trans. Alan Sheridan. London: Hogarth, 1977.
- Lakatos, Imre. "Falsification and the Methodology of Scientific Research Programmes." In Imre Lakatos & Alan Musgrave (eds.) *Criticism and the Growth of Knowledge*. Proceedings of the International Colloquium in the Philosophy of Science, London, 1965, volume 4 (Cambridge: Cambridge University Press, 1970). 91-196.
- , "Introduction: Science and Pseudoscience." In J. Worrall and G. Currie (eds.) *Imre Lakatos: Philosophical Papers, Volume 1* (Cambridge: Cambridge UP, 1978)
- Lipton, Peter. *Inference to Best Explanation*.
- Lucretius. *On the Nature of the Universe*. Trans. R.E. Latham and revised and introduced by John Godwin (London: Penguin, 1994).
- McNally, David. *Bodies of Meaning: Studies on Language, Labour, and Liberation* (Albany: State University of New York Press, 2001).
- Mithen, Steven. *The Prehistory of the Mind: A Search for the Origins of Art, Religion, and Science* (London: Thames and Hudson, 1996).
- Pinker, Steven. *The Language Instinct: The New Science of Language and the Mind* (New York: Harper Collins, 1994).
- Popper, Karl. *The Logic of Scientific Discovery*. Routledge & Kegan Paul, 1963.
- Quine, W.V. *From a Logical Point of View* (Harvard UP, 1953).

ⁱ Another notable thinker here is Ernst Cassirer and his notion of the human as the "symbolic animal." Recent, more scientifically oriented, corroborations of this notion can be found in the work of thinkers such as Merlin Donald, Terrence Deacon, and Steven Mithen.

ⁱⁱ For another, see David McNally, *Bodies of Meaning: Studies on Language, Labour, and Liberation* (Albany: State University of New York Press, 2001), esp. pp. 85-105. A good discussion of this text – from a thinker sensitive to generative anthropology – can be found in Amir Khan, “Cultural Studies and Anthropology.” *Anthropoetics* 12.1 (Spring/Summer 2006) <<http://www.anthropoetics.ucla.edu/ap1201/khan>>

ⁱⁱⁱ We can make this comment too: where with Girard, there is an indeterminacy of discipline (he is perhaps best seen as an anthropologist of Judaeo-Christian society who brings a number of “scientific” characteristics, such as sustained observation practices to bear on his materials), with Gans there is an actual framing work concerning the humanities, and the place of his work in relation to it.

^{iv} To be fair to Pinker, Darwin himself had no real answer to the same question; although the latter hedges his bets somewhat (calling language a “half-art, half-instinct”), his solution to its origin is largely isomorphic to Pinker’s solution and the aporia it generates identical (*The Descent of Man* 463. Cf. 463-72). Slightly different but equally question-begging accounts have bridged *The Descent of Man* and *The Language Instinct*. Examples would have to include nineteenth-century biologist Ernst Haeckel (299, 360-4) and twentieth-century physical anthropologist Elliot Smith (152). Where Haeckel sees language as an outgrowth of, first, bipedalism, and then the “perfection” of the larynx (Haeckel 299. Cf. 293-300 & 360-4), Smith begins his “explanation” at the other end, concentrating on encephalization (the development of the brain) (Smith 152).