Meta-semiotics and Practical Epistemology

Roy Williams
University of Portsmouth

Abstract. This paper is a response to debates on Foucault’s articulations of power and regimes of truth, particularly in the recent work of Derek Hook. It is also a response to the specific issue of Latour’s ‘crisis of objectivity’. It deals with the issues of objectivity, subjectivity, subjects, discourses and communities of practice, and develops the concept of ‘meta-semiotics’ to help explore and analyse some of the articulations of power and knowledge, particularly in modernism. This should help us to achieve the goals of Latour’s ‘political ecology’, or what we call a ‘practical epistemology’, which allows us to escape from being trapped in the reification of objectivity that characterized modernism, without rejecting the considerable advances that modernism has made.

Key Words: ecologies of practice, epistemology, Internet, meta-semiotics, money, objectivity, power, science, subjectivity

Derek Hook (2001) has written a superb piece on the material and discursive aspects of Foucault’s notions of discourse, power, and truth in this journal. This takes us back to the fundamentals of discourse, and to the basic configurations of discourse analysis.

Within a clear and insightful exposition of Foucault (against the backdrop of Parker, 1992, and Potter & Wetherell, 1987), Hook (2001) succeeds in unpacking just how it is that Foucault restores ‘materiality and power to what, in the Anglo-American tradition, has remained the largely linguistic concept of discourse’ (pp. 522–523). This is a very helpful and sophisticated methodological framework within which to explore discourse.

According to Hook, an emphasis on the ‘material conditions of discourse’ is key to a conception of discourse as practice—i.e. social-political-linguistic practice—and to situating discourse within discourse communities which govern material and semiotic resources. I would put it slightly differently—a discourse is a system of signs and alliances that orders texts and bodies, animate and inanimate, within a discourse community—but the gist of it is the same (Williams, 1993, 2003/4).
Hook (2001) emphasizes that ‘truth is a function of discourse’, and writes that what ‘counts as knowledge’ must be ‘traced back far enough to the material conditions of possibility . . . underlying the production of truth’ (p. 525). He advocates ‘a methodology (like genealogy) that does not prioritize textual forms of data at the cost of material forms’ (p. 526). This is the nub of his analysis: the distinction between the material and the textual, and the need for a notion of discourse that incorporates them both. One of the central questions that arises from this is how the material conditions of discourse ‘give rise to subjects . . . with privileged positions’ (p. 527).

However, I think we need to go back further, to the fundamental articulations of language and semiotics. There are interesting links between rather disparate theorists, all in their roles as semioticians: Eco, Barthes, Marx and Rossi-Landi. Eco (1978) says simply that the sign is that which ‘can be used to lie’. Barthes (1972) talks of the way the sign is ‘lifted off’ from materiality. Marx (1992) and Rossi-Landi (1975) talk of the ‘necessary alienation’ of various articulations of signs. For me, the ‘alienation’ of the sign, or the ‘double articulation’ of linguistics, is about much the same thing—the abstraction and contingency of semiotics—which enables us not only to ‘name’ things, but also to hypothesize new things and new relations between things. It also, importantly, allows us to project power—in the simple act of naming and, further, in interpolating, instructing, commanding, disciplining, and so on, on a continuous spectrum from language to laser-guided missiles. This is the semiotics of power as well as the semiotics of group cohesion and identity.

Latour (1988) offers us a powerful notion of ‘transcription’, which he uses to analyse the ways in which different discourse ‘frames’ provide support for each other: for example, the way in which I bring in ‘Latour’ from the ‘frame’ of his article on Einstein’s theory of relativity to the ‘frame’ of this discussion. This includes not only writing ‘across’ but also writing ‘between’: that is, the process of trans-cription inevitably also includes a process of trans-formation. And if we go back to Marx-as-semiotician, and his insistence that although use value and exchange value are in some senses derivative, they are also disjunct and discrete (see Marx, 1992), we can see that there is what we might call a ‘quantum theory of semiotics’ at play here.

What this means, quite simply, is that some transcriptions, which are the very foundations of semiotics, are very profound, and the transcription of use value into exchange value (commodification) is one of those profound transcriptions. We might usefully make a distinction between semiotics and meta-semiotics: ‘meta-semiotics’ would be distinguished by a substantial degree of commodification.

How does this relate to Hook’s project of restoring materiality and power to discourse? Quite fundamentally: it adds a third layer, which could be the synthesis to the antithesis of the ‘material’ and the ‘textual’: the meta-
semiotic. The meta-semiotic includes various forms of commodification—money is the most obvious, followed by science (and democracy and bureaucracy in diminishing degree). For the discursive condition of science is its commodification—it transcends (‘transgresses’?) subjectivity and materiality, although it cannot by definition transcend either subjects or the material world.

What does this add to Hook’s exposition of Foucault? It adds a meta-semiotic which is ‘not either’ material or textual, but both: a Schroedinger’s cat. Marx’s (1992) analysis of commodification is very instructive—both as an example and as a metaphor—for exchange has at one and the same time the ‘appearance’ of materiality and the form and functions of the virtual—the purely transcriptive value of credit. The conditions of exchange discourse are not primarily material, but meta-semiotic. Similarly, the fundamental conditions of scientific exchange are meta-semiotic. Science’s value is constituted, like money, in its exchangeability.

The crux of the argument about ‘meta-semiotics’ is that the most powerful discourses are those that are specifically ‘meta-semiotic’. We will explore this a bit further, in terms of the format and epistemology of commodification and objectification.

First, the format: the format of money and science is entirely semiotic—virtual, you might say. However, the value of both money and science is based on their ability to be operationalized into material forms. It is this play/slippage between the material and the semiotic, and the meta-semiotic and the operational, that is both fascinating and confusing (with deference to Marx’s [1992] analysis of the material ‘appearance’ of money).

The meta-semiotic includes two axes of transcription:

1. The first is lateral trans-cription, which consists of the exchange between and across contexts, which is not much more than a literal transcription—a writing across—from one place (and time) to another.
2. There is a further dimension of differance—a writing between—but not between different items this time; rather, between different modes. To be more specific, there is a de-contextual trans-formation, which consists of a change in the format and nature of discourse, from use value into exchange value, or from the subjective to the objective, or the contextual to the trans-contextual. This creates a meta-semiotic which in turn constitutes a discourse which (in both science and commerce) is ‘objective’—although not in the sense that it is ‘free’ of subjects and subjectivity, but rather in the sense that it is ‘stripped’ of subjectivity and context in order to produce capital: financial and intellectual.

The violence of the term ‘stripped’ is deliberate and instructive. It emphasizes:
1. The disjunct nature of the transformation

2. The paradox that the authors and creators of meta-semiotic discourse and value are ‘subjects’ who end up creating ‘objects’ which ‘leave’ their control, and which take on a life of their own within exchange. Having created these meta-semiotic discourses and objects, these ‘subjects’ can then engage in meta-semiotic discourse to use, manipulate and further develop these meta-semiotic objects—or, to put it another way, they can engage with, and within, the ‘transcriptive regimes’ of meta-semiotics, notably science and money.


**Practical Epistemology**

The ‘meta-semiotic’ is a form which is ‘objective’ in the sense that it has been taken out of the subjective and removed from its context—spatial and temporal—via a particular semiotic transformation: objectification or commodification. The ‘meta-semiotic’ includes both science and money, because the ‘practical epistemology’ of science (its exchangeability and operationalizability) is the same as the ‘practical epistemology’ of commerce (its exchangeability and operationalizability). The difference, of course, is that the operationalization of money from credit to purchasing is less stable than its scientific counterpart because it is subject to several other semiotics: for example, business confidence, as well the second-order meta-semiotics of financial futures exchanges and fiscal and monetary policies. In addition, money is to a far greater extent a hyper-semiotic: that is, radically and contingently based in relationships in (and between) subjects in discourse communities, as changes in sentiment can rapidly effect orders of magnitude changes in the value of money, as happened on more than one occasion in the 20th century.

Objective knowledge consists of algorithms which are, by definition, distinct from particular subjects. Take, for example, the geometric and trigonometric algorithms for measuring distance at sea, developed in ancient Greece. These were calculations based on algorithms which processed and combined particular empirical observations (angles, distances between points of observation) to yield an estimation of the distance of ships at sea. In what sense were they objective? They were objective in that they were independent of the particular subject or person applying them, and they were independent of the particular context—geography, ships and weather—in which they were applied. One might say that they were subject- and context-striped, and that they were stripped of agency—no particular
person or institution was essential for their application, notwithstanding the need for a certain level of skill, and skills training.

They were also objective in the sense that they could be passed around to others, traded (for money, favours, etc.) and added to the cumulative stock of cultural algorithms (as opposed to cultural artefacts and practices). They were in principle trans-cultural or supra-cultural algorithms, the component objects and the currency of trans-cultural intellectual commerce and communities of practice, the first forms of intellectual capital.

And they were very importantly also objective in the sense that they could be linked to and compared with other algorithms, which might or might not form part of a larger set of algorithms, or a theory, or a whole theoretical discipline, which could in turn, speculatively, generate new algorithms from within the theory, which could then be empirically tested once again.

Where did this objectivity get us to? Much was lost in the war and pillage of succeeding centuries. Then within the Renaissance, objectivity was resurrected, but it had to fight its corner against a particular, privileged form of subjectivity, that is, metaphysics—specifically Catholic metaphysics, which by then had established a dictatorial monopoly position on knowledge, including, for instance, a prohibition on the use of zero in mathematics for many years. Understandably, but regrettably, objectivity was raised by many of its advocates into a new metaphysics—the metaphysics of Reason, which was held up to be the New Truth, so that it could stand its ground against Metaphysical Truth.

The regrettable part is that the project of Reason and Rationality grew quite beyond itself, and forgot its heritage. The heritage it lost was the heritage of an operational system of practical procedures, informed by an increasingly coherent set of algorithms, and produced by a community of scientists, who could mutually benefit from a system in which they created objective knowledge not for the sake of metaphysics, but for practical epistemology—the ability to increase your practical applications, based on a more nuanced model of how things might interact, and yielding no more than a cumulatively better set of approximations and estimates about how you might go about your practical business, based on a set of algorithms which everyone could try out, contribute to and, in principle, apply. This is a business of approximation and estimation, not absolutes. Civil engineers, for instance, calculate the required strength of materials with considerable accuracy and sophistication, but then still double it, just in case.

What, then, is objective knowledge? It is no more or less than a set of algorithms which has been constructed for scientific commerce or exchange—a mutually agreed set of procedures and benefits which can yield a cumulative, more nuanced (and coherent) set of virtual algorithms, which can be tested against, and derived from, a standardized set of application procedures: the operationalization of objectivity, not Truth (which is a rather mysterious notion, best left where it started, in metaphysics).
Commodified Knowledge

The production of knowledge for exchange is also paradoxical. Knowledge is no more produced merely to be passed around than is money. Both science and finance produce capital for application—knowledge via the application of algorithms, and money via the application of credit for employing resources (including, these days, intellectual property/capital). Both produce their value via production for exchange. But this is a transcriptive and interim mechanism, and in both cases the process is in principle reversible: use value/exchange value/use value, and empirical application/science/empirical application.1

Both money and science produce capital within an objective mode, and both produce objective products—which is not to make an ontological point at all, but merely to say that the products can be accumulated and used by anyone (give or take some skills and some technology). And that is part of the problem. We have become seduced by the mechanisms and benefits of the production of commoditized knowledge (and credit). The genie of objectivity, once out of the lamp, has run away with itself, precisely because it is objective: we set it up that way, so no-one is in control of it, and anyone can benefit from its accumulated products.

Objectivity’s reign was also aided and abetted by the metaphysical spin which claimed that objectivity equated with Truth, which is one of Latour’s main concerns (2004). Latour says that objectivity was (mis)used in the reification of Science and Nature, and that it has more recently been (mis)appropriated by a self-elected elite of ‘political’ ecologists who use this reification to render ‘political life impotent’ (p. 10), and to turn all ‘matters of concern’ into (pseudo-)‘matters of fact’ (p. 24). Latour says that the malaise of objectivity and its reification has spread so wide that he proposes that ‘instead of a science of objects and a politics of subjects . . . we should have . . . a political ecology of collectives consisting of [both] humans and nonhumans’ (p. 61).

While I agree with the principles that inform this view, I do not think that we should do away with subjects and objects, because that would limit our ability to understand and critique the fundamental nature of our society, which is built on the (meta-)semiotic mechanisms of objectivity. It is true that we need to rein in Objectivity, to cut it down to size and return it to its proper place as objectivity, but there is no longer any domain outside of its (meta-)semiotics. So while we no longer have to live within it—thanks to postmodernism’s parody and critique of modernist pretensions in general, and Latour’s parody and critique of neo-modernist ‘ecologists’—it is also true that none of us are prepared to live without it—or at least without its spoils—the spoils of modernism.

To return to the mechanisms of the production of knowledge, the formalised development of knowledge is the extrapolation of the inherently
open source nature of language to a meta-semiotic level of objective and formalized algorithms. However, just as language is both open in principle but constrained in practice, it is even more so the case that the meta-semiotics of finance and science is open in principle and heavily constrained in practice, for while the mechanism of meta-semiotics (subject- and context-stripping and reversibility) is plain enough to understand, the use, application, manipulation and management of meta-semiotics such as finance and science is very complex, and is becoming more so.

Finance and science are both, in principle, constituted for unlimited exchange and unlimited accumulation. The run-away accumulation of science and money has expanded globally, and we are now faced with the unenviable task of trying to put a thousand genies back into a thousand lamps, and trying to cap the run-away accumulation of power which seems to have got into the ‘wrong’ hands. The events of 9/11 at the Twin Towers of the World Trade Centre in New York were the definitive wake-up call on the perils of an open and open-ended system of global scientific and financial commerce. Some things, it now seems, are better not globalized, and 9/11 marked a turning point in the management of global finance. International funds transfers are now much more closely monitored and regulated, particularly from charities based in Saudi Arabia and elsewhere in the Middle East. Money laundering and tax avoidance (both of which found their own niches in the financial world) now fall under the same, increased scrutiny, and email and mobile telephony, once the domain of an open-ended and unrestricted expansion of the global village, are now subject to considerable scrutiny.

The Limits of Objectivity

To manage knowledge, we need to understand the nature of knowledge in contemporary society. As we have indicated, much of our procedural knowledge has been generated by a process of objectification, and its products also take the form of objective procedures. In the case of both science and money, the products are produced as products for exchange, or as commodified products—in short, capital: intellectual and financial capital which can be accumulated, exchanged and then deployed at a time and in a context of the owner’s choosing.

There are two other domains in which knowledge and information are produced by a process of objectification: politics and bureaucracy/law. And there is arguably one further domain, virtual communication networks, primarily the Internet, in which communication is produced in a form which is structured primarily for exchange (see Figure 1).

All of these domains (science, money, politics, bureaucracy/law and virtual networks) produce knowledge, procedures and information which are
Objective—that is, produced in a form which is suitable for exchange, and which can in principle be used by anyone. And, increasingly these days, this can happen immediately, and across the globe.

**Politics**

The process of representative politics produces an objective representation of public opinion from a set of subjective opinions, and transcribes that into a set of numbers which can be processed and exchanged within political alliances and bargaining, in the operation of governments. These processes vary greatly in their particular algorithms (compare, for instance, the UK and US), but the nature of those algorithms is the same—the stripping of subjectivity and detailed context to provide an objective estimate and approximation of public opinion which is then fixed, and subject to a moratorium for the term of office of those representatives. These representa-

<table>
<thead>
<tr>
<th>Semiotic domains</th>
<th>Technical</th>
<th>Consumption/Barter</th>
<th>Cultural</th>
<th>Political</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reversibility</strong></td>
<td>↓↑</td>
<td>↓↑</td>
<td>↓↑</td>
<td>↓↑</td>
<td>↓↑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meta-semiotics</th>
<th>Science</th>
<th>Exchange</th>
<th>Bureaucracy/Law</th>
<th>Democracy</th>
<th>Global Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Format</strong></td>
<td>Quantitative, Algorithmic, Programmatic</td>
<td>Quantitative</td>
<td>Quantitative</td>
<td>Quantitative</td>
<td>Digital – Quantitative Signal Sampling</td>
</tr>
<tr>
<td><strong>Content/Capital</strong></td>
<td>Algorithms</td>
<td>Credit</td>
<td>Social Taxonomies &amp; Procedures</td>
<td>Charisma/Leadership</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Stability: Critical Factors</strong></td>
<td>Paradigms</td>
<td>Market Confidence, Second-Order Meta-semiotics</td>
<td>Social Policy</td>
<td>Political &amp; Economic Confidence; External Threats; Coups</td>
<td>Flexible: Formal/Antiformal</td>
</tr>
<tr>
<td><strong>Objectification</strong> (1–5 scale)</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td><strong>Commodification</strong> (1–5 scale)</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second-Order Meta-semiotics</th>
<th>Theory</th>
<th>Capital Markets &amp; Futures; Fiscal &amp; Monetary Policy</th>
<th>International Law</th>
<th>International Law</th>
<th>Global Communities of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Discourse Communities</strong></td>
<td>Scientists</td>
<td>Shareholders, National Governments</td>
<td>Legal Profession, Civil Service, National/International Governments</td>
<td>Politicians, Constitutional Courts</td>
<td>Variable Communities of Practice in the Connected Society</td>
</tr>
</tbody>
</table>

**Figure 1.** Articulations of the semiotic/meta-semiotic
tives can be recalled in exceptional circumstances, but generally speaking only after a fixed period or at least a minimum period, during which there is a ban on revisiting the production of that objective representation of public opinion. It is a mechanism for agreeing to resolve and temporarily freeze the articulation of political power, even though the general contest for public opinion continues alongside the work of such a representative government. It is also a mechanism to transform contests of (collective) subjective power into an objective dispute-resolution mechanism, to try to ensure collective endorsement of political succession and change.

This is similar to the way in which science and finance function. The work of generating potential use value and generating new science runs on in parallel, alongside the operations of objective intellectual and financial capital.

Another way of looking at these processes is to see them as the transformation of *ante-formal knowledge* into *formal knowledge*. That is slightly tautologous, but it does accommodate the emergent properties of complex evolving systems more readily. And it also helps us to avoid the pseudo-ontological debate about whether there is such a thing as tacit knowledge—as opposed to explicit knowledge—and to focus instead on the practical epistemology of formalization, objectification and meta-semiotics.²

There is also an interesting development emerging in the debate about the political systems in the UK since about 2002, namely the style of the Blair government. The most striking accusation is that Blair ran a presidential (i.e. executive-driven) government, to the detriment not only of Parliament and the independence of the Civil Service, but even of the Cabinet. What is perhaps more interesting in the discussion on meta-semiotics is what the Butler Report commented on in June 2004: that Blair had de-formalized his core advisory group, running what the media called ‘sofa government’, both in format (no minutes, no formal meetings) and by changing the membership, consulting with unelected advisors (patronized directly by him), rather than elected Cabinet colleagues (‘patronized’ by the electorate).

Even more interesting is the accusation of ‘spinning’—or manipulating the message to suit the media, for what political ‘spin’ did in the Blair/Alistair Campbell media office was to produce messages for exchange directly for the media, over the heads of Cabinet and Parliament. In other words the production of messages for exchange has, it seems, shifted from exchange-with/in-Parliament to exchange-with/in-the-media. This shifts the discourse of political meta-semiotics radically, and it transforms the MPs in the ruling party in Parliament into an interim stage in the meta-semiotics of politics: Members of Parliament get elected (‘opinion’ gets transformed into ‘seats’), and, having secured these ‘seats’, the executive Prime Minister then ‘discards’ them as subjects, and takes their objective value (the political capital that they represent) out of Parliament to Downing...
Street, where he engages in the production of political messages with non-Parliamentarians (unelected advisors), for circulation and exchange with non-Parliamentarians (the media, and through them the public).

The reciprocal exchange that supports this transformation is the delivery that the Prime Minister promises to his MPs of ‘seats’ (salaries, index-linked pensions), based on the not unrealistic premise that most ‘votes’ are cast for the political party that has a strong and credible national leader rather than for individual members. If this analysis is valid, then the meta-semiotics of transforming the public’s ‘votes’ into ‘seats’ in the legislature has been taken over in a politically hostile ‘merger and acquisition’ by the new executive, which has ‘asset-stripped’ the political capital out of Parliament, and this is accompanied by similar corporate takeover of the previously independent bureaucracy, which can now be given orders by the unelected executive advisors. In British terms, this is the most concentrated form of political power in one ‘sovereign’ for some time, and, moreover, it is not constrained by limitations to two terms, as is the case in the USA.

What is fascinating about these shifts is that there is a simultaneous de-formalizing of the meta-semiotics of decision making (sofa-government, or ‘salon-government’), marginalizing and devaluing traditional political meta-semiotics (the production of messages for exchange primarily in Parliament), and the replacement of traditional meta-semiotics with a new, largely extra-Parliamentary meta-semiotics, produced by the executive office of the Prime Minister: sound-bites for the media. This might be a useful explanatory framework for why—on the Iraq ‘Weapons of Mass Destruction’ issue—the Blair government’s fight with the BBC took precedence over Parliamentary engagement and debate, and why the Downing Street salon’s media dossier on Iraq was the basis for the Parliamentary debate, and not vice versa.

There is one over-arching question: Did Blair get the meta-semiotics right—should successful politicians today produce messages primarily for the media? And if so, did he successfully manage the media, whose patronage is more difficult to control? Time will tell.

Bureaucracy and Law

The codification of law and the formalization of bureaucratic procedures similarly produces objective knowledge: procedures which are produced for exchange across contexts, and for application across contexts—if not regardless of context. The increasing shift to a managerialist approach to public services, and the privatization of previously state-owned and -controlled enterprises, is yet another instance of a response to the crisis of objectivity and modernism. The UK state at the turn of the 21st century declared that it no longer believed in a ‘one-size fits all approach’, and encouraged participation and inclusion of communities in managing their own affairs,
rather than employing experts to find ‘universal’ (i.e. objective) solutions which could be applied to all, willy nilly.

It might be useful to keep in mind that it was precisely the dynamics of objectivity and modernism that was critical in constituting the modern state as an objective manifestation of geographical and linguistic identity, to serve the needs of a new political elite, articulated around a new and politically powerful ontology of nationalism—in its democratic and autocratic varieties, but in both cases a replacement of allegiance to the sovereign with allegiance to the nation, and a tragically unbridled opportunity to accumulate political capital, which played a crucial role in the two world slaughters of the 20th century. Furthermore, Bauman (1991) provides a chilling and instructive argument about the crucial role that the objectivity of German bureaucracy played in the Holocaust.

Virtual Global Communication Networks

The Internet-based media are the last piece of the jigsaw, for while all communication is by definition produced for exchange, it is in principle and primarily produced for exchange between two subjects. How, then, is it part of the development of meta-semiotics and objectivity? Not by its content, but by its form. The form of the Internet, and all the media that can in principle be communicated via the Internet, is digital and objective. Internet communication can occur between highly contextual individuals, but this communication is susceptible to being captured, re-recorded, re-processed and re-used in a variety of ways and a variety of derivations, as academics know only too well in these days of Internet plagiarism of students’ assignments. In other words, Internet communication is produced in a form that is amenable to exchange, and can be used by anyone who can get hold of it, and transmitted entirely by machines—it needs no human subject or agency to store or transmit it, all of which is increasingly useful and problematic: for instance, for credit card fraud, viruses and the international coordination of operations such as the 9/11 events. Like pay-as-you-go mobile telephone accounts, the many available free email accounts are an opportunity for ‘anonymous’ law-abiding citizens and criminals alike.

The Internet is also an opportunity. Much of the communication that takes place over it can now be re-used by the participants in that communication in many ways, and the nature of much of e-learning, as a recorded conversation, makes it a great asset to everyone concerned, beyond the learning activities themselves. The Internet also blurs the boundaries between the subjective, the objective and the virtual, for instance in chat-rooms, web-games and web-logs (‘blogs’), which can be used as personal note pads, and/or publishing media, and/or teaching and learning tools, and/or as the basis for communities of practice. Because of the ease of use and low cost of the Internet (and blogs), it can be used for a wide range of purposes—from
people essentially writing notes to themselves, to (also) providing access to those notes to a specific, known audience, to (also) publishing for the world to look on. Specifying a particular purpose for your communication no longer has to be an issue, nor does the author have to distinguish between personal, inter-personal or global publishing audiences—you can just put it out on the web, wait and see who reads it, and take it from there.

The Internet provides, paradoxically, the medium through which many of the excesses of objectivity and modernism can be challenged, as well as the medium through which modernism’s value (and algorithms) can be spread (from The Anarchist Cookbook onwards).

On a more negative note, the Internet allows the products of scientific meta-semiotics as well as the commodities of the child pornography industry to be distributed across the global public domain. This is substantially different from a few decades ago, where physical rather than virtual media had to capture and distribute knowledge, and its distribution could therefore be controlled to a reasonable extent. Several regimes in the past indulged in book burning with great publicity, and probably great effect too. The Internet equivalent, blocking Internet sites, is far more difficult, if not impossible. What we are dealing with, in an era of (very) powerful knowledge, is a combination of the availability of the commodities of scientific knowledge and transparent and (very) low-cost global media: a double articulation of meta-semiotics, or meta-semiotics squared.

How do these different levels of meta-semiotics affect the broader cultural issues? Huntington, in The Clash of Civilizations? (1997), addresses some of these issues, although in different terms. His argument seems to assume that meta-semiotics can be used across cultures without affecting them—he says the Japanese and Americans do not change by consuming each other’s products. This might be true at the macro level, but at the micro level of an Actor Network Theory analysis, things look a bit different.

Huntington articulates his analysis at the level of civilizations, which in my terms would be something like super-cultures, or meta-cultures. If you look at the capillaries of the interaction between technology, meta-semiotics and culture, it’s quite different. Meta-semiotics sets up new affordances for exchange, for the production of texts and algorithms, for exchange and for use. That process of production is one of objectification, through a process of subject- and context-stripping. That allows anyone and everyone, in principle, to use the products of that process, within any context of their choosing, as well as for virtual, fictional personas. That is radically different from the modes and affordances of cultures outside of meta-semiotics.

For example, mobile phones do not just enable you to walk away from the land-line plug in the wall while you are talking to someone. Much more importantly, they allow you to leave the ‘public’ space of the family, and retreat to any other private space of your choosing (inside or outside of the home) to continue your conversation. This has radical implications, for
instance, for child protection. Several cases of child seduction/abduction have cited extensive mobile phone links between children and their abductors, who have in many cases set up the initial links via the Internet, which, again via the convenience of mobile wi-fi technology and the ubiquity of Internet access, can be used in any private space of the child’s choosing—either at home, at a friend’s house, or, if necessary, at an Internet café.

Similarly, spatial affordances change radically where criminals use mobile phones to co-ordinate robberies: the public space of banks is invaded by the private spaces of mobile telephone conversations, which is why mobile phones are now banned in the public spaces of all banks. And texting is even more of a change, as it affords you the opportunity to participate in a number of shared private/public spaces simultaneously, and to carry on more than one conversation, within more than one shared space at the same time, something which teachers find very frustrating—when teaching a class of pupils who are texting each other beneath their desks. Multi-tasking is here to stay, and it changes the affordances of culture, and thereby the culture too. Culture is defined, quite substantially, by the allocations and regimes of public and private spaces within it, by who can designate space as public or private, and who can create shared public and private spaces for their own purposes.

What is happening now is a radical change in individual agency. Paradoxically, individual agency is enhanced by meta-semiotics, even though it strips subjectivity at one level, for the process of objectification within the meta-semiotics of telematics creates opportunities for individuals to act outside of cultural constraints. Individuals look like they are still inside the space of the old culture, but they are not. They have literally carved out their own new, shared private spaces within the old cultures, spaces which are not subject to old norms and controls, which depended on (largely) locally defined shared cultural space (family, work, school, etc). (Cash, and particularly hot cash, has been used for many years in the same way—to interact within shared private spaces, ostensibly within public culture, but actually outside of, or in parallel to, the public economy in the aptly named ‘black’ markets—markets that function ‘in the dark’—outside of the public gaze.)

In meta-semiotic terms, technologies like mobile telephony radically alter the articulations of culture: mobile phones, SMS and email literally offer new, ubiquitous and flexible points of presence—nodes of articulation—which are affordable, extremely low entry-cost, easy to use and globally instant. Huntington (1997) characterizes Western civilization as individualistic, as opposed to various other cultures which are more collective, cooperative, monolithic, and so on. I agree with this analysis. The implication of my analysis, however, is that if meta-semiotics does radically alter the capillaries, spaces, affordances and articulations of culture, culture not only will change, but has already changed. Soros’s ‘charitable’ interventions in Eastern Europe, funding photostat machines, ostensibly had some political
impact there, as did the use of fax machines to criss-cross the Chinese border in the information flows around the Tiananmen massacre.

These changes might have to percolate up from Foucault’s (1980) capillaries of power to Huntington’s super-cultural (‘civilizational’) levels, but by the time that becomes obvious, the game of civilization will already have changed irrevocably. A meta-semiotics that radically transforms subjectivity, objectivity, individuality and the articulations of public and private space will not leave any of Huntington’s civilizations untouched—and the modernist ‘Western’ civilization least of all—for while it is true that some aspects of Western individualism, such as Protestantism, are uniquely Western, most are fundamentally meta-semiotic, and therefore fundamentally meta-civilizational: the five meta-semiotic modes are all irretrievably ‘at large’ in the world now, and the email coordination of the 9/11 events was a vivid proof of how they can be used and abused.

**Variables with Attitude and Broadband**

Up to this point, we have been discussing scientific algorithms largely with the physical sciences in mind. Now we need to broaden our discussion to the biological and social sciences. We could also usefully keep in mind Latour’s (2004) thesis that the ‘crisis of objectivity’ is about the crisis in our complacent belief that all the ‘objects’ of science (even those of the physical sciences) were ‘risk-free objects, the smooth objects to which we had been accustomed . . . [which are] now giving way to risky attachments, tangled objects’ (p. 22). He cites the example of prions, and we could add Fullerenes, which are apparently the next ‘miracle (nano) materials’, some of which have some disturbing bactericidal effects, as well as as yet unspecified effects on the nervous system.

We live in a world of ‘tangled objects’ which ‘take on the aspect of tangled beings, forming rhizomes and networks . . . [which] can no longer be detached from the unexpected consequences that they may trigger in the very long run, very far away, in an incommensurable world’ (Latour, 2004, p. 24). We also live ‘entangled’ in a world of complex articulations of knowledge within meta-semiotics that has its own dynamics, and from which we are, by and large, quite unwilling to extract ourselves, and which, as it happens, produces many of those ‘tangled objects’. In fact Latour’s extrapolation of biological agency and ontology onto tangled objects could usefully be extended to the products and processes of meta-semiotics, which have probably always been tangled beings rather than a set of tangled objects. (See also Williams, 1983, on the way other semiotic articulations also tend to take on a life of their own.)

We might conclude that our traditional mechanisms of power and control
no longer apply in a world of unexpected and complex consequences. Ironically, the dominant global powers have introduced a ‘new’ term for the problems of power in such a world: ‘asymmetric warfare’—by which they mean problematically asymmetric power relations, from the point of view of the big players, who coined the phrase to describe the new global dynamics since 9/11, conveniently forgetting that their power, and its manifestations in warfare, has always been seen as problematically ‘asymmetric’ from the point of view of the small players. For the latter, ‘asymmetric warfare’ is familiar, and indeed to them the current situation represents a rather comforting balance of asymmetries, a new form of the earlier balance of terror and Mutually Assured Destruction (MAD) of the Cold War. One of the emerging legacies of a meta-semiotic global ecology might be that we have to find ways to live within and manage successive balances of terror. That would be quite different from a War on Terror(ism).

Latour’s (2004) argument is that we need to develop ‘a political ecology of collectives consisting of humans and nonhumans’ (p. 61—see above). This makes sense, not only because the non-humans are ‘tangled beings’, but even more so because the biological (human and nonhuman varieties) players are ‘tangled beings’. And their entanglement comes from their identity, their own meta-data, which they carry around with them in their DNA, which in the human variety doubles up in our subjective, linguistic/social identities. All of which gives us not only ‘tangled beings’ but tangled-beings-with-identity-and-subjectivity—along a spectrum from the rather basic attitude of viruses to the more complex attitude of social and cultural beings, to the even more complex social beings with attitude and potentially global, ubiquitous connectivity, that is, ‘variables with attitude and broad-band’, which, in complex evolving systems terms, is crucial because these systems are defined, substantially, by the nature and extent of the communication between their constituent elements.

*Communities of Practice/Ecologies of Practice*

These doubly or trebly complex and tangled beings are the beings which, because of their power to manipulate meta-semiotics, and thereby use knowledge to fundamentally alter ontologies (via interventions like genetic engineering, nano-materials, nuclear science, global warming), need to exercise an ever-increasing amount of collective restraint. In order to do that, they need to reach some basic consensus on how such an inclusive ‘collective’ (of Latour’s humans and non-humans) would operate—a global community of practice, or a global ecology of practice. Within such a collective, the management of knowledge, and in particular the sciences, might be possible, if Latour is not unjustifiably optimistic.
And What Does This Mean for Hook’s Analysis?

Hook (2001) is correct that Foucault restores ‘materiality and power to . . . the largely linguistic concept of discourse’ (pp. 522–523). And he is correct that we must be mindful of the ‘material conditions of discourse’. But there are some other substantial issues that need to be taken into consideration too.

Hook writes that ‘the effect of discursive practices is to make it virtually impossible to think outside of them . . . and therefore [outside of] reason’ (p. 522), but also emphasizes that ‘discourse is both that which constrains and enables writing, speaking, thinking. . . . These processes of formation and constraint, production and exclusion, are inseparable’ (p. 523). Furthermore, Hook says that:

. . . the will to truth . . . can be shown to be somehow contingent [on] . . . the ‘whole strata of practices’ underlying the production of truth. . . . The ‘will to truth’ (the way in which knowledge is put to work, valorized, distributed) makes for a vital component in the workings of a successful discourse, and as such is a nodal point of analysis. The strongest discourses are those that have attempted to ground themselves on the natural, the sincere, the scientific. . . . The methodological imperative [arising from this] . . . is an unrelenting scepticism towards all those rationales, explanations and statements that would validate themselves on the grounds of their proximity to a supposed truthfulness. (p. 524)

This is a very useful shift in methodology. It deconstructs some of the myths of the production of truth, and achieves the ‘displacement of the will to truth with the will to power’ (pp. 524–525). Truth is then seen, like any other aspect of discourse, to be socially constructed. However, it would also be useful to distinguish between two discourses: on the one hand, Objective discourse in an essentialist and absolute sense; and, on the other hand, objective discourse in an operational, and approximate sense. Or to put it another way, Objectivity as something you cannot challenge, vs. objectivity as something you can reasonably rely on—and probably should challenge from time to time, in order to improve it. Truth almost inevitably tends towards the essentialist and absolute sense—the very strong sense of ‘objectivity’, if you like.

Hook rightly criticized both Parker (1992) and Potter and Wetherell (1987) for paying ‘little, if any, attention to the underlying forms of knowledge in which truth-claims are rooted . . . [which are] the material conditions of possibility . . . underlying the production of truth’ (Hook, 2001, pp. 525–526).

The emphasis on materiality is both necessary and useful. However, there are a number of issues here. First, it is very difficult to put enough distance between truth and essentialism—far better to put truth into an indefinite quarantine, and to use objectivity instead (see above). Second, the material
conditions are not the only conditions that underlie the production of (truth)/objectivity. As I have argued, if one is to understand how objectivity is constructed and produced, one has to add to the material conditions for the production of semiotics in general a whole new set of conditions which are the conditions for the production of meta-semiotics.\footnote{5}

Of course it is true that meta-semiotics requires material conditions for its production, just like any other semiotics. The specific conditions for the production of (truth)objectivity are a set of social relationships which produce objectivity, but then become mediated through, and are in large part constituted by (or one might say entangled in) objectivity. This is echoed in Hook’s (2001) insistence that we see discourse ‘as [an] effect of power’, and ‘as [an] instrument of power’ (p. 539), and even (to paraphrase Hook/Foucault) \textit{as an object of power}. For example, the displacement of the public service discourse in British politics by a much more managerialist discourse towards the end of the 20th century took the form of quantitative targets and ‘league tables’ for education, health and transport. This managerialist meta-semiotics was not just another political ruse and experiment, but was seen by successive Conservative and Labour governments as a fight for the core of what some have called ‘UK plc’: ‘corporate UK’, governed by an executive ‘president’ as a multi-national business.\footnote{6}

Objectivity tends to take on a life of its own, and to incorporate social relations within it, so that what Hook said is true of discourse (‘the effect of discursive practices is to make it virtually impossible to think outside of them . . . and therefore [outside of their] reason’) is even more true of meta-semiotic discourse, which is one more articulation removed from material reality (although of course no less dependent on it). In other words, just as the material world that is necessary for the production of semiotics tends to be seen only through particular discourses, so too the material world (as well as the world of semiotics) tends to be seen only through meta-discourses, or the discourses-of-meta-semiotics.

The material and semiotic worlds tend to become incorporated within meta-semiotics, which then in a significant way starts to constitute the other ‘worlds’, including the material one, or at the least to constitute the affordances for action within the material world. For example, in the contemporary consumer world, all manner of things become devalued and discarded as ‘waste’, which is not only reduced in value to zero, but is actually transformed beyond zero into negative value, as its disposal is often very costly. It is not just seen as pollution, but it functions, materially, as pollution, and can have local or even global toxic effects, for instance on the ozone level.

Hook (2001) also usefully points to the contribution made by Foucault on the relationship between author and discourse, and says that ‘Instead of asking about what is revealed by authors in their texts, Foucault suggests
we ask instead about *what subject positions are made possible within such texts* (p. 527).

We need to extend this, though, beyond Hook and Foucault’s focus on subject positions in texts, for when you ask the question: ‘What subject positions are possible within meta-semiotics?’ (as opposed to semiotics) you get a very different answer. This is because it is the very nature of meta-semiotics texts that they are produced by subject-stripping: removing the subject and author, and either ‘removing’ agency, or shifting agency from the subject to the object—quite literally. Latour’s term ‘actant’ (1988) is very useful here, as actant includes ‘agency’ by both humans and non-humans, and in fact by biological and non-biological entities—whether these are objects, institutions or algorithms. Dawkins’s (1989) ‘selfish gene’ is a classic example of a molecule which functions as an ‘actant’—or what I would call a ‘molecule-with-attitude’, or, even better, an ‘algorithm-with-attitude’, to stress the core of its ontology, i.e. self-replicating information. 7

Similarly we need to extend the notion of the limitations of discourse. Hook (2001) writes that ‘Discourse analysis should hence busy itself not only with the search for the plenitude of meaning, but also with the search for the scarcity of meaning, with *what cannot be said*’ (p. 527). Within meta-semiotics, we need to extrapolate this further too, to who can/not say things. The domain of things that can be said within semiotics is different from the domain of things that can be articulated within meta-semiotics. And the difference is that within semiotics, subjects can say things with ‘individual’ agency (taking into account all the codicils above about discourse), but within meta-semiotics, ‘individual’ agency does not even arise. Scientific statements, for example, do not fall within Habermas’s naïve idealism of the *inter*-subjective; they are, rather, *meta*-subjective in the sense of being *supra*-subjective, or, even better, *extra*-subjective.

The process does not of course end there, as we have said, as objectivity is characterized by subject- and context-stripping, as well as by reversibility. The products of meta-semiotics can be deployed, as meta-semiotic artefacts, by subjects within discourses, although they can be—and often are—also deployed by institutional actants, within an objective discourse—e.g. bureaucracy and law, in which it is the state that acts and the subject who is merely a lieutenant of objectivity—in Latour’s sense of someone acting as a ‘tenant’, in lieu of the state.

However, as Latour reminds us, many of the products of meta-semiotics—prions, nano-technology and genetically modified organisms, for instance—might have far-reaching implications, and might become powerful (and disruptive) actants in their own right, substantially affecting the material conditions and the balance of forces—the ecologies—within which humans and non-humans conduct their affairs.

Paradoxically, the will to predictability (to paraphrase Foucault) which underlies much of the will to objectivity in science can produce a meta-
semiotic which is so powerful that it spawns new organisms and artefacts which are unpredictable and potentially uncontrollable. The emergence of new drug-resistant strains of viruses and bacteria because of the over-development and misuse of drugs is an everyday example of this.

This not only confirms Hook and Foucault’s insistence that we need to attend to the materiality of discourse, but it also alerts us to the material implications and consequences of the development of meta-semiotics: its ability to incorporate large areas of (material and textual) social practice within its gaze and its practices, and its ironic effects in producing uncertainty and a multiplicity of new (and potentially disruptive) actants—capable of impacting fundamentally on ecologies at an ontological level. This supports ‘Foucault’s approach, which seeks precisely to emphasize how enmeshed power is within discourse’ (Hook, 2001, p. 532), to which I would add: ‘and particularly, within meta-semiotic discourse’. This formulation also supports (as does the DNA example) Hook’s insistence that it is ‘dangerous . . . [to underestimate] the discursive effects of the material, and the material effects of the discursive’ (p. 538).

We can avoid these dangers if we refrain from privileging the reified virtual meta-semiotic above the material semiotic. However, if we want to resolve that paradox in the 21st century, we need to:

- acknowledge the immense power of meta-semiotics and the vast domains of culture and everyday life that meta-semiotics has come to incorporate and dominate (virtually and materially) within its gaze and its practices;
- understand the nature of the mechanisms by which meta-semiotics functions: ‘reversible’ objectification across five major domains of our lives;
- understand the particular way in which meta-semiotics articulates the material and the virtual, the semiotic/meta-semiotic and the formal/ante-formal;
- understand the ways in which second-order meta-semiotics functions, e.g. financial futures exchanges and fiscal and monetary policy;
- explore other transcriptive regimes of other domains in which other forms of meta-semiotics produce objects for exchange, such as psychoanalysis.

This is an immense task, but it should enable us to get a grasp on the domain of semiotics and ante-formal knowledge and interaction, which is flexible and open; the domain of meta-semiotics, which is highly formalized; the interaction between the semiotic and meta-semiotic; and the way in which this hinders or facilitates complex evolving systems, or ecologies of practice.

In general terms, this should enable us to start to unpack the varied transcriptive regimes of meta-semiotics. And that should enable us to situate these transcriptive regimes within Foucauldian discourses, and discourse
communities, which often enlist and deploy not only semiotics and meta-semiotics, but also the reification of these meta-semiotics for their own partisan purposes. To paraphrase Latour (2004), we need to complete the project of the ‘secularization’ of knowledge and discourse, so that we can live with meta-semiotics rather than within it.

The Historical Subject

In a more recent paper, Hook (in press) highlights Foucault’s commitment to the ‘insurrection of subjugated knowledges’ against, among others, the ‘super-theorizations of Marxism and psychoanalysis’, the ‘unifying gravity of theory’ and the ‘centralizing power-effects of institutionalized knowledge and scientific discourse’.

The notions of transcriptive regimes and meta-semiotics are, it is to be hoped, not yet another super-theorization, but, rather, in sympathy with Foucault, another set of tools for critique, for what transcriptive regimes do is just to provide a set of transcriptions, no more and no less: from use value to exchange value; from consequences to algorithms; from local custom to state procedures, and from local opinion to political representation and governance. Yes, these are also powerful transformations, and some of them may be called knowledge—particularly the algorithms—but the crucial characteristics of any of these meta-semiotics is that they are not objective ‘truths’, but merely better approximations.

This is why it is preferable to call even the algorithms procedural information rather than knowledge, and why I think it is useful to confine knowledge to the social and commercial rather than the scientific: that is, to delimit knowledge as the fit between procedural information and context (or between algorithms and ecologies). This fit (as in fitness for purpose) of knowledge includes position, community of practice, discipline, discourse and intention, not to mention strategy, and it aligns itself more with intelligence than information. In short, knowledge is a social and commercial practice and not an ‘objective’ science, although it uses the full range of meta-semiotics: science, money, politics and law. Is there, then, no such thing as objective knowledge? No, not in the strict sense of the term. All we have is a range of objective procedures, which produce objectively validated algorithms, and that is something (just, but critically) quite different.

At the end of the phase of modernism, there is a need to recover and reconstitute knowledge, and to reinsert the subject into knowledge. The place to find the resources to do this is in the border zone between knowledge and intelligence, the place where we will find not subjectivity (it is as problematic as objectivity) but, rather, just subjects: communities of practices full of them. Or to put it another way, we have to turn around the answer to the question: ‘What do we know?’ from where objectivity has landed us, which is ‘We know what we can do to the world’, to, instead, ‘We
know what we can do in the world’, or, even more to the genealogical point, ‘We know what we can do in this world’.

God (as meta-physical agency) is not dead; he or she has just been reincarnated in a myriad of forms as no-agency, or objectivity. The spectre of meta-semiotics is that it appears to be autonomous, meta-physical or, even more to the point, meta-social and meta-contextual. Meta-semiotics is, simply, the output of meta-social transcriptive regimes. It is very useful up to a point as it provides the semiotic infrastructure for exchange and commerce (‘social intercourse’, if you like), specifically for the modernist social (literally, for modernist sociogenesis). But it comes with considerable baggage.

The baggage is that agency has been stripped away, rather than shared. Modernist sociogenesis achieved the transition from subjectivity to objectivity, of which post-modernism was the ironical and fundamental deconstruction: not a deconstruction of the outputs, but of the processes and pretensions of modernism. Post-post-modernism (which for me is best captured in what Latour [2004] calls ‘political ecology’) needs to reinsert not subjectivity, but the subjects—as I said above, communities of practices full of them. We need to restrict objectification to the purpose for which it is ‘fit’: to provide a means of production of meta-semiotics for exchange—a useful set of transcription regimes—and no more. The rest is up to the subjects acting together in three-dimensional communities of practice, and not in some idealistic socio-psychological Habermasian space called intersubjectivity.

Foucault speaks of regimes of truth, in which truth is ‘linked in a circular relation with systems of power which produce and sustain it’ (in Hook, in press). Hook (in press) points out that what is crucial to genealogy is that the issues of knowledge are ‘no longer exclusively epistemic, but are rather primarily critical, or political in concern’. This resonates with transcriptive regimes, which I would say are the main tropes of modernist regimes of truth. Hook says that the epistemology that drives genealogy is ‘an epistemology of critique rather than an epistemology of truth’, or, as he quotes Foucault: ‘knowledge is not made for understanding, it is made for cutting’.

There was a time, in the intoxicating days of modernism, when the question ‘Do we know how to . . .?’ was the overriding epistemic and social question, and John Kennedy’s vision to ‘put a man on the moon in ten years’ was the archetype and apogee of this. Be that as it may, we have now (usefully) gone ‘past’ the 20th century with its two world slaughters, and we can now build on the infrastructure of modernist epistemology and its transcriptive regimes, and ask Foucault’s question, which is: ‘Why (and what) do we want to know?’—which is a question of what we might call practical epistemology (see Latour’s ‘political ecology’).
Hook also raises an interesting issue in his discussion of Foucault’s notion of descent, and the relationship between objects and subjects, namely the question of whether ‘the category of the object might thus be said to imply the role of an individual actor’ (in Hook, in press). However, within the notion of discourse as ‘a practice of inscriptions and alliances, which orders texts and bodies, animate and inanimate, within communities of practice’ (Williams, 1993, p. 248), this is not the case. If the semantic unit of analysis is, crucially, discourse rather than text or sign, then semiotics is always already constituted at the level of discourse, and can therefore never be constituted ‘upwards’ from the level of signs or objects. Instead, the social (at discourse level) delves ‘down’ into the powerfully ‘cutting’ articulations of the digital and arbitrary sign, and reconstitutes itself in new relations of power, ‘cut’ not only differently, but with powerfully new ‘instruments for cutting’.9

The violence and objectivity of the digital-and-arbitrary double articulation of linguistics allow discourse new and irresistible levels of articulation and power. What this amounts to is that discourse (already) constitutes sociogenesis, and language only comes afterwards, as a finer granularity—a sharper and more dextrous set of tools—for the articulation of power and the constitution of the social. Language does not ‘constitute’ sociogenesis; rather, the contrary is the case.

This seems to be consistent with what Hook (in press) goes on to say, namely that ‘the “object” that genealogy studies is never more than a catalogue of the set of historical vicissitudes against which it gains coherence’—what in complex adaptive systems terms would be an emergent property or a frozen accident. And as Hook also says, it directs our inquiry to the field of events that ‘sets objects into historical motion’. We might then ask what the field of events looked like—the extant discourses of sociogenesis—that gave rise to the first true phonemes and monemes; our primate relatives might help us out here.

Transcriptive regimes all differ, but they also all have a family resemblance (as Wittgenstein might have said).10 They emerge in historical contexts in which societies expand their modes of exchange, and/or their domain of ‘commerce’ (taken metaphorically across all five tropes of meta-semiotics). There are interesting inter-genealogical questions to explore, for instance on the emergence of science, coinage and fully phonetic writing in Ancient Greece. There are also interesting related questions on co-evolution and ‘de-volution’ (Deacon, 2004) and on the genealogical role of neoteny: that is, times in which species or cultures are prosperous, and in which they can afford to shift from hard-wired to soft-wired options, or even to what might be called ‘free-wired’ options. Hook points to a fascinating discursive ‘event-horizon’ (to merge Foucauldian thinking with Complex Adaptive Systems thinking), which is the point prior to the emergence of the discourse (or particular objects/events within a discourse), that is, the field of events...
prior to the discourse/objects’ emergence, and therefore its genealogical proto-history, the point where it dissipates (back) into genealogical ‘noise’—or the social/ecological gene/meme pool.

Transcriptive regimes could be accused of being a back door to the ‘symbolic field’ in which one analyses ‘relations of meaning [instead of] relations of power’—something Foucault warns against. But I think not. Transcriptive regimes, just like any other semiotics, can always affect how power is exercised, but they can never fully determine the exercise of power. They do, however, function as powerful attractors, which draw the exercise of power towards and into them, and they provide powerful affordances: particular ways of effectively and efficiently articulating power and meaning.

What this points to is a notion of sociogenesis always already constituted in a broad set of *Homo.x* discourses (i.e. the discourses of the genus *Homo* as a whole), where, at some point in genealogy, the genus discovers the granularities of speech, delves down to the level of phonemes and monemes, and constructs the primal double articulations of language, and then the subjects of linguistics. Much later on it delves back in again, strips off subjectivity and constructs the transcriptive regimes of meta-semiotics—a rather paradoxical series of events.

It follows from this that the issue of the ‘representationalist fallacy’ does not arise from the level of lexus and text, but from a series of gambits at the level of discourse, which discovers/uncovers the fine resolution of mon-/phon-/lex-emes, and exploits these by cutting (out) experience in particular, ever more exact ways which consolidate and resonate with these discourses. So far, so good: that opens up the way to many things, including experimental science. But such discourses (including what Latour [2004] calls ‘Science’) then tend to reify these cut/outs in the social by superimposing a representationalist fallacy on them, thereby sacrificing the richness and play of language for the rewards of finely grained power, literally incorporating power into the mouths of the people involved, reaching right down into the voices of the social.11

**Conclusion**

This is not a structuralist analysis, although it may seem so. It is, rather, a systems analysis of some of the key semiotic transcriptions and articulations that form the ecological infrastructure of contemporary society, within which many predictable as well as many unpredictable events happen. To the extent to which these are constrained, complex adaptive systems will not flourish, and to the extent to which the balance between basic systems and flexibility and communication can be achieved, they will flourish. To a large degree the ‘right-sizing’ of modernism from the last quarter of the 20th
century onwards is a process of adjustment from an over-constrained modernist social administration (with unjustified and unhelpful pretensions to Objectivity, predictability and control) to a post-modernist social ecology (or a post-post-modernist one) in which the co-operative management of diverse communities, (Latour’s collective) is more highly valued than the administration of modernist compliance.

However, if we are to manage knowledge and social practice in a complex evolving social ecology, we need to appreciate fully the nature of objective, meta-semiotic systems as well as what Latour (2004) calls the ‘crisis of objectivity’ (p. 22). This is not a contest between subjectivity and objectivity, or even between modernism and post-modernism. As one academic so succinctly put it at a conference discussing these issues: ‘I believe in post-modernism, but I’m not going to give up my mobile phone.’

This means quite simply that we have to build contemporary society on the ‘foundations’ of modernism and Objectivity, even though we have to dismantle and discard their pretensions and their monopoly claims on all aspects of knowledge and rationality. Its not an ‘either/or’ issue, and what we need is some of Deacon’s (2004) ‘de-volution’. We have to ‘loosen the hold’ of objectivity, and reassert (after centuries, or even millennia) that objectivity is just an ordinary procedure for producing better approximations for practical applications, and, it is to be hoped, more nuanced and coherent algorithms and models to generate new algorithms, for further practical applications. Objectivity needs to become part of practical epistemology once more, instead of a teleological and pseudo-metaphysical epistemology, with pretensions to the Truth—which, like the Deity, should be left to the realms of awe and mystery, and is better not named or, God forbid, analysed.

The addition of meta-semiotics to the debate, and to both discourse analysis and genealogy, should enhance our ability to engage with the material and semiotic aspects of discourses and culture. The debate needs to be broadened to include the meta-semiotic as a particularly powerful trope of the instruments of power, and crucially, now, also one of the key objects of power. Whether meta-semiotics will or will not continue its own aggrandisement and its aggressive incorporation of all social practice into its domain, or take its place as one form of discourse among many, is one of the crucial questions of our times.13

Notes

1. And the converse is equally important: if commodification is not seen as an interim phase in a reversible process, that is, if the production of capital (financial or intellectual) is seen as an end in itself, things can go wrong: the dot.com speculation at the end of the 20th century, and the looming threat of ‘dirty’ nuclear terrorism are just two examples, not to mention the discourse of MAD (mutually assured destruction) that has been the basis for the international nuclear ‘balance’ since the Cold War.
2. It also allows us to resolve the issue of the either/or nature of the tacit/explicit distinction. For while formal knowledge or, in its more particular form, metasemiotic knowledge does present us with an additional ontology, which is derivative but yet disjunct from ante-formal knowledge, this is not an either/or affair. For example, to say that Monet’s painting of the blue irises is a ‘beautiful painting’ is a completely different thing from saying that it is ‘a painting that is worth $40 million’. But it is also perfectly acceptable to say that it is a ‘beautiful painting worth $40 million’. In other words, this is to some extent a quantum theory of knowledge, but if so, it is one which follows the Schroedinger’s cat model, which says that although we know that the two states (of the cat, or the painting) in question are disjunct, we need to think of them as existing at one and the same time.

And there is a further interesting iteration of this meta-semiotics, or even a second-order meta-semiotics: in the UK press in June 2004, it was reported that many of the artworks stolen in Ireland in spectacular heists over the past decade are not used for exchange, or display, but instead are used as collateral for international drug-dealing. In other words, the painting has become ‘this object (which cannot be used) is security for $XX million’. The black market has its own special tropes of culture and exchange, and manages to alienate exchange (of exchange) yet another step from use value, but still put it to good ‘use’.

3. To follow this argument through, we need to distinguish between individual agency and the agency of the subject. The person who acts as a subject-within-culture is afforded different modes of agency than the individual-within-meta-semiotics. The subject within ‘semiotic’ culture, as it were, can exercise agency only within the norms and values of that particular culture. This has pros and cons—the constraints of culture are balanced by the advantages of the support and communal risk management that ‘semiotic’ culture offers. Against this, the individual-within-meta-semiotics does not have the same support, because as individual/ists they are literally on their own. This cost, as it were, is in turn balanced by the benefit of expanded agency—as individuals—that persons within meta-semiotics cultures enjoy.

Of course ‘semiotic cultures’ and ‘meta-semiotic cultures’ overlap, and the distinction is one of degree, or weighting/loading. Fundamentalists (Muslim, Christian and presumably others too) are often only too willing to exploit the fruits of certain aspects of meta-semiotics in order to actively oppose other, selected, aspects of a meta-semiotic-based culture. The al-Qaida network, for instance, used many of the sophisticated tools of meta-semiotics in the 9/11 attacks.

4. One of the benefits of doing this is that it avoids certain essentialist tendencies in the language itself in this area. For instance, concerns about truth slip easily into concerns about truthfulness, but (thankfully) one cannot speak of objective-fulness!

5. These conditions are not primarily semiotic, but, rather, new frameworks or scaffolds for the relationships between individuals acting with/in the meta-semiotic articulations of the social.

6. The ‘spin’ value-added of meta-semiotics is that these league tables, these quantitative sound-bites, function as powerful modes of ‘pseudo-transparency’: they seem to allow the reader to see ‘right into the heart of the matter’, but in
fact all they allow you to see is the abstracted index of a complex process which remains totally out of sight, and which is presented as ‘actually a simple fact’—denying that the complexity even exists (Williams, 1993).

7. There are interesting extrapolations of this argument—one could think of DNA as a material/meta-physical semiotic—as an algorithm in which the molecules themselves function entirely as information—a fusing of the material and the semiotic, or a total incorporation of the material by the semiotic. DNA is the most basic reflexive material/semiotic, or the most basic recursive material—a molecular precursor of the arbitrary signs of language.

8. This resonates with the cultural critiques of the 1970s and 1980s of ‘hyper-semiotics’, in which the signifier (the ‘hype’) marginalizes the signified (the substance), which was exemplified by the rise of the culture of the ‘celebrity’—someone who was ‘famous for being famous’.

9. We might say that the ‘digital divide’ has been with us for some millennia—ever since discourses first started using the digital double articulation of language to articulate power. But we must remember (with a prompt from Foucault) that language creates both the first radical digital divide and the illusion of Habermasian inter-subjectivity: that is, language creates digital, reversible, subject positions, which allow for the articulation of powerful subjectivities, and also, paradoxically, for the ubiquitous insertion of power into the capillaries of the articulation of the social—into the mouths of babes, one might say!

10. Transcriptive regimes are also differentiated within language, in that they are articulated in a semiotically different trope—that of quantity, which is a further level of abstraction of the digital semiotics of language. Numbers are at the limit of ‘social differentiation’ of the social calculus (Williams, 1983).

11. And in this light, religion can be seen as a meta-layer of representationalist fallacies, or just metaphysical representationalist hyperbole.

12. It is also not a crisis of rationality or even reason, either, because this critique is a critique of the misuse and reification of ‘Objectivity’ and, by association, a critique of metonymy—the use and reification of one particular component of rationality (essentialist objectivity) to stand for rationality as a whole. We need to hold on to rationality, but to free it from the shackles of an epistemology which confines it to reified commodification.

13. And the ‘civilizational’ question which follows from this is: which of Huntington’s civilizations will most effectively deliver the required ‘devolutionary arabesque’ (to paraphrase Deacon, 2004): a Western post-post-modernist one, or one of the other modernizing/proto-modern/pre-modern ones?

References

ROY WILLIAMS develops and manages e-learning and knowledge management for the University of Portsmouth, and for w.w. associates in Reading, both in the UK. His research includes the practical development of knowledge and learning systems, the theory of knowledge, discourse analysis and semiotics, and the application of discourse analysis and Complex Adaptive Systems theories to management and development issues. He is actively involved in the European Conferences on e-learning and Knowledge Management, and edits the *Electronic Journal of e-Learning*. He has held posts of Visiting Professor of Education, Professor and Chair of Communication and Executive Board Member and CEO of the South African Broadcast Regulator. He has also worked extensively in international development in literacy, distance education, media, HIV/AIDS and national and international policy. ADDRESS: Technology Extended Campus, University of Portsmouth, Mercantile House, Hampshire Terrace, Portsmouth, PO1 2EG, UK. [email: roy.williams@port.ac.uk]