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Widening the context for interdisciplinary social research: SFL as a method for
sociology, anthropology, and communication research

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Abstract

In this paper, I show clear links between the theoretical underpinnings of SFL and those of specific sociological, anthropological, and communication research traditions. My purpose in doing so is to argue that SFL is an excellent interdisciplinary research method for the social sciences, especially considering the emergent form of political economy being touted by new media enthusiasts: the so-called knowledge (or information) economy.

To demonstrate the flexibility and salience of SFL in diverse traditions of social research, and as evidence of its ability to be deployed as a flexible research method across formerly impermeable disciplinary and social boundaries, I use analyses from my doctoral research, relating these - theoretically speaking - to specific research traditions in sociology, communication, and anthropology.

Introduction

The purpose of this paper is to explain why Systemic Functional Linguistics (SFL) is eminently suitable as a primary primary research method for the social sciences. To do so, I will show its theoretical relevance to, and compatability with, established sociological, anthropological, and communication research traditions. SFL is a sociologically grounded discipline. In this respects, it differs from other sociolinguistic traditions, which may be described as linguistics that have altered over time to take sociological concerns into account. SFL has developed in precisely the opposite direction. Halliday (1978) poses the critical question upon which my rationale also rests: since language is primarily an inter-organismic, or social phenomenon, '[h]ow else can one look at language *except* in a social context?' (p. 10). While SFL takes a social-systemic perspective on language, it does not treat the system as something that exists outside what people actually *do* (Halliday, 1978, pp. 10-13). This is an important distinction to make, both for the study of language, and for the study of social systems in general, from whichever perspective (Hearn, 1999). Because my research is concerned with an emergent form of political economy which is, as I have explained it, 'a political economy of language, thought, and technology' (Graham, 1999a), and because language is the primary mode of production and means of exchange within this system, a social-systemic linguistic method is most apposite for analysing the object of such an investigation (1999a, p. 503).

The recurrent problems for social research, of anthropology, sociology, and communication, can be divided into four broad species: problems of social classification in human society, or the problem of defining social classes; problems of class relations, or the problems concerning relations of power; problems of socio-epistemology concerning the research of these problems, or paradigmatic problems; and the problems inherent in using language to describe sociolinguistic practices in a system of political economy in which language is the primary mode of production and means of exchange. Indeed most, if not all, of these problems can be attributed, at least to some large degree, to language and its slipperiness, both in the social sciences, and in everyday use

The historical meaning of social ruptures: From media content to social relations

New communication technologies have had historically persistent effects: the preservation of certain kinds of knowledge, the creation of knowledge monopolies specific to these knowledges, increased centralisation of power using new technologies as media of social control, and the eventual demise of these effects (Innis, 1950, 1951). In short, social ruptures are upheavals in various fields of power. Thus, social ruptures are the very empowerment of certain groups of people - usually the upper middle-class at any given time - and the disenfranchising of others. These "others" are almost always the *economically* poorest of people.¹ Recent research in the United States [US], the world's

¹ One can find myriad assertions regarding gender, ethnicity, and so on, as being the deciding factors in social repression, empowerment, diempowerment, social class, and so on. This is patently false, misleading, and culturally myopic. The only common factor that can be *consistently* identified with social repression throughout human history is *economic* inequality. That this coincides, in most cases, with

most wealthy and powerful country, confirms this, at least in respect to the emergent “information economy” (US Department of Commerce [USDC], 1999). This historically recurrent pattern remains unchanged in the current, world-wide set of ruptures (cf. Graham, 1999a,c; Castells, 1998; Robins & Webster, 1999; Schiller, 1999). What *has* changed is the nature of economic, or social, value (Graham, 1999a,c,d).

Thus, investigating changing relations of power, or rather their social impacts, is an exercise in measuring how relative ‘values’ attributed to specific, exchangeable, *and therefore changeable*, forms of ‘symbolic power’ are developed, exercised, and propagated (cf. Bourdieu, 1991). The current set of ruptures is often characterised in terms of the ‘information haves and have-nots’ (USDC, 1999, p. 14), or, in the crude, protofascist eugenics of today’s international economics, the ‘winners and losers’ apparently created by ‘globalisation’ (cf. Department of Foreign Affairs and Trade [DFAT], 1997; Slaughter & Swagel, 1997).² From this standpoint, I argue that the SFL’s metaphors of language as an ‘exchange of goods and services’, and even moreso, the emergent work on appraisal (Martin, 1998), or evaluative (Lemke, 1998), systems in language are invaluable in understanding and analysing the social effects of the current ruptures.

Changing social relations of power implies the preeminence of new sources of value within society. These sources are the products of specific fields, most notably (and predictably) those occupied by the economic upper-middle class, who are also, generally speaking, the most educated (USDC, 1999, p. 14). It would be a mistake to extrapolate the trends indicated in the USDC report to infer the whole world is moving in the same direction as the US, but upper middle-class US ideas about how the world is - and how it should be - are having profound effects on the way many societies now operate (Castells, 1998; Saul, 1997a,b). The global entertainment industry, the most socially influential sector of the so-called “information economy”, is propagating a worldview which is having many confusing and violent effects on societies throughout the world, including many within the US itself (Graham, 1999a,d). This is not a direct function of media “content” as such, nor is it a direct function of the extreme concentrations of wealth and influence that this field of production - the culture industry (Adorno, 1991; Horkheimer & Adorno, 1947/1998) - now commands. It is, I argue, the effect of a number of invisible “convergences” that the culture industry is facilitating, including its values, its ideologies, and the form its associated technologies are taking.

My main point here is that, while content analyses of media products are necessary, they often miss the point in terms of sociological impact. For instance, the plot of Homer’s *Iliad* is, for all intents and purposes, interchangeable with that of the latest *Star Wars* episode. The form in which these narratives were and are delivered may also give us an idea of how certain knowledge and values were and are propagated by these two media products separated by thousands of years. Homeric and Ovidian epics

specific physical characteristics is not surprising: these are the most obvious physical, “thingly symptoms” by which people who are socially excluded are identified. In short, I see it as an easy way out of the problem of class.

² In the policy literature, globalisation is construed as a creative force, among many other other “things”. See my other paper from this conference proceedings.

required years of training on the part of the orator in the complex rhythmic form of the verse and its contents (Innis, 1951, chapt. 2); epic film, today as always, requires extremely expensive equipment and thousands of people to produce it. These facts are somewhat more revealing than a diachronic analysis of epic content. But, if we really want to know about the social meaning of the medium, we must listen to what people say about it, and about how new media affect them. But, of course, this is not enough on its own, otherwise it becomes merely another interpretive account. A sociological analysis, to be valid and fruitful, must take into account:

1. The history of the discourse community, class, or field under investigation;
2. The symbolic, physical, cultural, and economic stakes within the field (in other words, what constitutes the field of power within a given field);
3. The language people use within the field (this may seem self-evident, but many people have attempted analyses with little or no knowledge of local language use), and;
4. The linguistic traditions of the field of power within any field: its sacred texts, intertexts, heteroglossic resources, and their traditional modes of deployment.

In my own field of study, which is concerned with the effects of language in multilateral policy as it concerns information technology, I assume that, today,

[l]anguage is no longer just a mode of social control; it is also the mode of control over physical systems and processes.

The immediate impact here is the technologising of language itself. Here we have a direct line of evolution from the printing press to the computer, via the telephone, typewriter and tape recorder. (Halliday, 1993, p. 68).

I would add to this Innis's (1950, 1951) insight that sees a direct line - historical overlays of technologies, one on top of the other - from oral traditions and writing, to the original mixing of these in ancient Greece. Of course, we must include boats, trains, the telegraph, radio, and television - anything that has affected modes of social communication, organisation, and control, especially modes of communication distribution (Innis, 1950, 1951). A history of communication technologies is also a history of knowledge monopolies, a history of social control, and a history of social change. Taking such a view by no means entails a linear, deterministic view of communication technologies; it merely sees the operationalising of particular expedient choices, a series of historical accidents if you like: 'But the pattern is a helical one ... Mixed modes engender mixed genres' (Halliday, 1993, p. 68). Which, I might add, are the direct result of mixed social effects within historically specific social domains. Quite clearly,

the language of the information age will be different, both ideationally and interpersonally: ideationally because it participates in new techniques of production [and distribution PG], interpersonally because it participates in new relationships of power, or at least new manifestations of the power structure (p. 70).

Indeed, for Halliday (1978), any instance of meaning-making is 'a sociological event, ... through which the meanings that constitute the social system are *exchanged*' (p. 139). Language is very much constitutive of the "social mind" - what I have called

the sociocognitive metabolism (Graham, 1999a) - at any given time. Any instance of language is part of

a continuous process. There is a constantly shifting relationship between the text and its environment, both paradigmatic and syntagmatic: the syntagmatic environment, the “context of the situation” (which includes the semantic context –and which for this reason we interpret as a semiotic construct), can be treated as a constant for the text as a whole, but is in fact constantly changing, each part serving in turn as the environment for the next (Halliday, 1978, p. 139).

Here we see the relationship between SFL and social class: it emphasises the relationship between participants, processes, and structures. It sees that these are inseparable from each other, none pre-existing any of the others. Each serves as a constitutive environment, and a constituting element, for the other at any given time. They are dynamically interdependent upon each other, and are firstly processual and relational; they are firstly social.

The term “class” also implies a hierarchy – a social taxonomy, if you like. Taxonomies are, clearly, well-entrenched in language, and are quite probably an innate feature of human rationality (Halliday, 1993, p. 10). Whether this is the case or not, distinctions in language - ways of saying - are attributed with specific values:

So the immediate picture of language ... is one of variation in which some variables have social value; they are certified, so to speak, as social indices, and are attended to in careful speech. If we take the simplest case, that of a variable having just two forms, or ‘variants’, then the variants form a contrasting pair of one ‘high’ and one ‘low’.
(Halliday, 1978, p. 156)

And this is just ‘the tip of the iceberg’ because, viewed from a particular perspective, ‘the whole linguistic system is value-charged’ (p. 156). Social hierarchies exist within classes as well as between them (p. 184). These hierarchies are not objective; they fall within the processual, dialectical rules I have outlined above. Thus,

[i]t would be a mistake to think of social structure in terms of some particular index of social class. The essential characteristic of social structure as we know it is that it is hierarchical; and linguistic variation is what expresses its hierarchical character (p. 184).

Nevertheless, certain classes - everywhere - enjoy privileges, resources, and opportunities that others do not. It would be remiss, to put it mildly, to ignore such concrete social inequalities. Here, Bourdieu’s (1991) conception of ‘symbolic power’ becomes invaluable.

Social class, symbolic power, and language

Without assuming an objective, homogenous ‘principle of difference’, a universal and fixed source of socially sanctioned power within and between social classes, we can say that

all societies appear as social spaces, that is, as structures of difference that can only be understood by constructing the generative principle which objectively grounds those differences. This principle is none other than the structure of the distribution of the

forms of power or the kinds of capital which are effective in the social universe under consideration – and which vary according to the specific place and moment at hand.

This structure is not immutable, and the topology that describes a state of the social positions permits a dynamic analysis of the conservation and transformation of the structure of the active properties' distribution and thus of the social space itself. That is what I mean when I describe the global social space as a field, that is, both as a field of forces, whose necessity is imposed on agents who are engaged in it, and as a field of struggles within which agents confront each other, with differentiated means and ends according to their position in the structure of the field of forces, thus contributing to conserving or transforming its structure. (Bourdieu, 1998, p. 32)

The principle of social spaces and power that Bourdieu describes here immediately threatens to negate itself and collapse into a “thingly” conception, precisely because of the abstractions upon which it rests, one of which is the word “capital”. The term ‘capital’ lends itself to a ‘substantialist reading’, which is anathema to Bourdieu’s intention: various “capitals” need to be seen as relationally constituted and contested, whilst being constituted *in* such contestations (1998, p. 3). The danger of substantialism is offset by Bourdieu’s notion of a dynamic social topology, specific to particular social contexts. With this in mind, it is instructive to add a qualifying, or at least to some degree, clarifying distinction; a description of a particular kind of field that further highlights the degree of abstraction at which Bourdieu is operating here, and which elucidates the nature of social power:

The field of power (which should not be confused with the political field) is not a field like the others. It is the space of relations of force between the different kinds of capital or, more precisely, between the agents who possess a sufficient amount of one of the different types of capital to be in a position *to dominate the corresponding field*, whose struggles intensify whenever the relative value of different kinds of capital is questioned (for example, the exchange rate between cultural capital and economic capital) that is, especially when the established equilibrium in the field of instances specifically charged with the reproduction of the field of power is threatened (in the French case, the field of the Grand Écoles). (1998, p. 34, emphasis added)

The field of power is one amongst a network of dynamically interwoven, interdependent social fields, each of which have different forms of symbolic capital at stake. Each of these field are, for sociology, anthropology, and communication, merely perspectives that are realised only when people are doing things that reproduce these fields, and the kinds of capital specific to them. These kinds of capital, which are only valid for the fields in which they are reproduced in the tensions shaping the field at any given time, is ‘the very thing the struggles seek to conserve or transform’ (p. 34). Thus, although these fields, or classes, have their objective basis in the realities of what people do, they are, nevertheless, ‘a well-founded fiction’, as are the kinds of capital at stake within them (p. 66):

This is the basis of the specific ontology of social categories: being rooted both in the objectivity of social structures and in the subjectivity of objectively orchestrated mental structures, they present themselves to experience with the opacity and resistance of *things*, although they are the products of acts of constitution which ... apparently relegate themselves to the nonexistence of pure figments of thought.

... The near-perfect match that is then set up between the subjective and objective categories provides the foundation for an experience of the world as self-evident, taken for granted. (1998, p. 67, emphasis added).

In other words, the “imperfect” relationship between the subjective and objective realities constituted by people in the *practice* of social spaces generates the “thinginess” of human social categories: once seen in their alienated form as objective “things” - families, weddings, businesses, schools, and so on - these “things” become invisible, accepted, and thus taken for granted as objective *things*. Here, we see the link between a dynamic perspective on social spaces - including the social spaces within which power is defined, produced, exercised, and reproduced - and subjectivity, *which is itself an objectively constituted process* that takes place, historically and socially, within the constraints and tensions of multiple social fields.

The perceptual “gap” between objective actions and subjective experiences of these actions creates a generative dialectical tension that can only exist for languaging social creatures - humans - and which can only be created and bridged in language, another form of socially constituted and constrained action. This is the dialectical logic of consensual social domains, of fields, and of classes, all of which are the same “thing”. This same dialectical property is also the generative principle of ‘the most ruinous divide’ within the social sciences: the artificially contrived split between subjectivity and objectivity (Bourdieu, 1990, p. 25).

Power, for instance, only becomes power when it is recognised as objective authority of one sort or another, usually in the form of an officially delegated spokesperson (Bourdieu, 1991, p. 107). That is why Bourdieu suggests that recognition of objective social forms is *misrecognition*: it is recognition in its alienated form; it is a recognition of a dynamic process as a static, objective “thing”, as if it existed externally to what we actually *do*. This dialectical system of dynamic social tensions is further exacerbated when the field of social science begins to investigate the social sphere in which it is totally immersed, and in which it powerfully exerts itself:

When scientific discourse is dragged into the the very struggles over classification that it is attempting to objectify (and, unless the disclosure of scientific discourse is forbidden, it is difficult to see how this usage could be prevented), it begins once again to function in the reality of struggles over classification. (Bourdieu, 1991, p. 225)

Such is the circularity of social science. Formal and subjective schemes of classification, which are necessarily manifested in language, enter into the study of what language also creates as an objective social reality.

Here, too, SFL, which assumes these contradictory, dialectical relationships and trajectories as its theoretical basis, is an invaluable, flexible research method for the social sciences. An SFL perspective on language assumes that

[l]anguage is not a superstructure on a base; it is a product of the *conscious* and the *material* impacting on each other - of the contradiction between our material being and our conscious being, as antithetic realms of experience. Hence language has the power to shape our consciousness; and it does so for each human child, by providing the theory that he or she uses to interpret and to manipulate their environment.

But, by the same token, since language evolves out of the impact between the material and conscious modes of being, it follows that as material conditions change the forms given to language also change. Grammar construes reality according to the prevailing means and relations of production - or what we wrongly call 'production'. But these are not constant; they have evolved through different forms at different times and places. (Halliday, 1993, p. 8)

That is why 'language *is* practical consciousness' (Marx & Engels, 1846/1972, p. 122, original emphasis). Thus, language practices, which are always socio-historically specific ways of doing,

cannot be understood *outside of* their historical contexts; but neither can they be *derived* from these contexts by any simple relation ... language is at the same time a part of reality, a shaper of reality, and a metaphor for reality. (Halliday, 1993, p. 8)

The problem of social classification: Class and class action

The problem of defining social class, even by taking the narrowest of economic perspectives, pervades sociological and anthropological theorising (cf. Cheater, 1999; Donham, 1999; Marx, 1981, p. 1026; Wright et. al., 1989). Marx (1981) asks the question explicitly: 'What makes a class?' (p. 1025). Unfortunately, he died before answering it explicitly (p. 1026). The problem has never gone away since. And, of course, the answer cannot be clearly defined, at least in any static, structural, or objective sense. That is because, even at its most well-developed, 'class articulation does not emerge in pure form' (p. 1025). The central difficulty in objectively defining class is the 'infinite' sub-classifications into which any particular class or classes can be divided:

From this point of view ... doctors and government officials would also form two classes, as they belong to two distinct social groups ... The same would hold true for the *infinite fragmentation of interests and positions* into which the division of social labour splits (p. 1026, emphasis added).

Further problems emerge for objective structural analyses or definitions of class when one considers that people move around within and among the 'infinite fragmentation of interests and positions' that Marx identifies. But class, like capital, is not a "thing"; it is the dynamic result of things people *do*. Social classes are constituted by specific people *doing* specific things. These *doings* are constrained by the *doings* of other people who are engaged in the pursuit of similar or opposing interests and positions (cf. Adorno, 1991, chapt. 1; Bourdieu, 1998; Hearn, 1999). Conversely, classes are constrained, defined, and enabled by the *doings* of people engaged in the pursuit of interests and positions precisely inimical to those that define a specific class. In short, class is an *identifiable, emergent property of collective and inherently antagonistic social practices*. These practices are counterposed, interdependent, and historically specific phenomena. Thus, like Thompson (1980), I understand class as

a historical phenomenon, unifying a number of disparate and seemingly unconnected events, both in the raw material of experience and in consciousness. I emphasize that it is a *historical* phenomenon. I do not see class as a 'structure', nor even as a 'category', but as something which in fact happens (and can be shown to have happened) in human relationships. (p. 8)

So when I speak about “the Australian working class”; “the unemployed”; “the labour movement”; “the Ford organisation”; or “the family next door”, I am speaking about specific individuals living in specific relationships to each other at specific times and places, according to specific and definitive social criteria. These criteria - because they are socially recognised - are necessarily delineated in language. Conversely, when I speak of classes, I am also speaking of these relationships of *doings* in a ‘negative dialectical’ sense (Adorno, 1973). That is, I also define classes of *doings* in terms of what they are *not* - most specifically, in relation to the constellation of *doings* to which the *doings* of any given class stand in opposition - in the social contexts in which these *doings* are embedded.

Many of these *doings* are also *sayings*: they are socially specific language practices. These relate to, and in many ways define, social classes. My own approach focuses on ways of defining that are specific to particular social groups, or classes, but I do not claim that this is the only way in which one can use linguistic analyses for the purposes of defining social categories.

“Sedimentary, my dear Watson”: Processes, Things, Attributes, and Class

Language tends towards reification and alienation, or ‘thinginess’ as Halliday puts it (1993, p. 11). In the main, social processes, once named, get treated as “things” that have an independent existence: they get nominalised and hurled about in the transit system of social processes (Martin, 1999). That tendency makes for considerable confusion because, instead of remaining part of a flexible system of thought, nominalised social processes tend to become perceived as “things” that stand in relation only to one or more established systems of reified concepts, such as in the fields of maths, astronomy, philosophy, econometrics, and so on. Often, these nominalised concepts - via legislative coercion - are given power over people (Graham, 1999a). Thus, they take their place as active participants in the social order, much like conceptions of God that, once given sufficient definition and social sanction in language, become the basis of institutional and bureaucratic regulatory bodies (Graham, 1999a, 1999c).

This tendency is especially troubling for the social sciences. It leads to a confusion between “things” that people do, “things” that people think and say, “things” that people have, and the myriad other “things” that exist external to people (including other people and other classes of people!). For sociology, this becomes a problem when people carelessly collapse consensual domains. A consensual domain is a ‘specific system of communicative descriptions’ that are used to orient people to themes about particular aspects of “the world” (Maturana & Varela 1980, pp. 30-31). For instance, a description of a particular “something” in the world that is produced within the consensual domain of astronomy will differ from one produced by, for instance, a poet. Consensual domains are thus also socially and historically constituted domains, and they refer to different aspects of the world of what people do, even if they are referring to the same “things”. For example, an astronomer might describe the moon in terms of its gravity, mass, distance from the earth, velocity, and so on, whereas a poet might ‘chide the changeful moon/ Now rising late, and now /Because she set too soon’ (Bridges, in

Jones, 1940, p. 11).³ Neither the poet nor the astronomer has any reason to claim that their description of the moon is better or more valid than the other's. And, indeed, each might well enjoy *both* descriptions. Further, being an astronomer does not disqualify one from being a poet. The point is that both ways of describing the moon have different social functions: they operate in different consensual domains –these consensual domains are produced and reproduced in different social domains or classes, or, in the language of Bourdieu, different ‘fields’ (cf. Bourdieu, 1990; 1991; 1998; Bourdieu & Wacquant, 1992). Multiple consensual domains are also an intrinsic property of human existence (Maturana & Varela, 1980, 1987). When astronomers describe the moon as astronomers, social conventions - historically derived traditions - in the field of astronomy delineate the linguistic boundaries within which the moon may be validly described, astronomically speaking.

But there are broader, more universalised differences in human consensual domains. I will divide these into three, merely for the sake of convenience (because there are many more subdivisions of these): the consensual domain of physical descriptions (descriptions of Things external to people, and the Processes that pertain specifically to these); the consensual domain of social descriptions (descriptions of social Circumstances, Participants, and Processes); and the consensual domains of descriptions (descriptions of Descriptions), or the domain of human self-consciousness. Conceptual self-reflexivity emerges in this domain. Thus it is also the domain within which the ‘division of mental labour’ (Adorno, 1973) becomes possible, and in which social exchanges of meaning are negotiated. This domain entails different “orderings of orderings” in language, which in turn depend on the social circumstances in which these orderings develop historically, or more specifically, the social contexts in which they are produced according to their social functions.

The messiness that naturally confronts people when attempting to describe people in terms of social class is further complicated by the way language tends towards Halliday's “thinginess”. That is because the Attributes that are produced in different descriptive domains also tend to become reified (Martin, 1999). This type of thinginess often manifests itself in “identity politics” descriptions of social class. At the risk of offending any number of people committed to such ways of classifying human beings, which are no doubt scientific to some degree, I argue that this is a mistaken approach for sociology precisely because of its “thingly” basis. I argue that social classification based on race or gender, for instance, are fallacious and misleading. They refer to physical attributes that do not necessarily shed any light on what particular groups of people historically and specifically *do together*, which is really what defines social class. Rather, they attempt to adduce a persons' social class by referring to what people *are* in terms of specific physical attributes. If these attributes coincide with what people do, then they may be useful analytical categories. But to base a sociology on arbitrarily pre-defined physical attributes is tantamount to phrenology. Whether used in a negative or a positive sense, such ways of describing social class do not, at least from the perspective I present here, properly belong in the social sciences.

³ *I Will Not Let Thee Go*, Robert Bridges (1844-1930)

Other “thing”-based social typologies are also unhelpful in understanding human action and social class. The “thinginess” of language can cause two kinds of fundamental damage to social research. The first is a kind of feigned objectivity that attempts “the formal understanding” of *doing*, namely that in surveying the whole, it [sociology PG] stands above the individual existence it is talking about, that is, it does not see it all but only labels it’ (Adorno, 1950/1991, p. 37, italics added). Second, and this is entailed by the first, thingly arrangements of concepts tend towards methodological rigidity. Thus, a research method can, with sufficient rigidity, become a methodology, ‘something to be applied to an object in a fixed unvarying manner’ (Adorno, 1999, p. 2). We can avoid these by emphasising the *processes* by which classes become classes, and by which they maintain themselves as such. In such a processually focused approach, method, as opposed to methodology, can ‘adapt itself to its object and legitimate itself by the light it sheds on it’ (p. 2).

And we cannot get beyond linguistic mediations in describing social phenomena, if only because ‘those are the historical mediations in which the whole society is sedimented’ (Adorno, 1958/1991, p. 11). Charts and numbers can augment such distinctions, but they cannot replace them, and must, in any case, be explained in language –in words. However, when doing social science, we can and should remain, as much as possible, aware of the sedimentary tendency of language; its tendency to turn processes, attributes, and categories into static, objectified “things” and breathe life into abstract concoctions of the social mind. Here, at the very root of social science, SFL, which has developed to specifically address these problems, can most certainly assist the researcher (Halliday, 1978, pp. 202-203).

Specific problems of class: Class, class relations, and relations of power

In recent years, the central dialectic driving the debate about class and class relations in sociology and anthropology has been the tension between the microsociological assumptions of vulgar postmodernism and poststructuralism, and the macrosociological assumptions of vulgar Marxist structuralism. In the latter accounts, we find, on the one hand, a ‘relations of domination’ approach to defining relationships between classes and, on the other, a ‘relations of exploitation’ approach (Wright, 1984, p. 5). Postmodernism and poststructuralism also have their vulgarists, and the emergence of extraordinary concentrations of economic power indicates intractable inadequacies in such approaches. For simplicity, this dialectic can be described in terms of polar extremes. On the one hand, vulgar Marxism sees socially dominant power and its ideology being imposed upon the great mass of people from a centralised source; on the other hand, vulgar “postism” sees power everywhere, with a mass of “decentred subjects” exercising power over each other in all social situations. I do not have the time to engage the theoretical nuances of these debates and so will move beyond them to identify what I see as the most pressing problems facing the social sciences in terms of defining relations of power. These relations are intrinsically bound up in defining class itself, and thus they are of a more specific and concrete nature than the general concept of social class. But social class, as a useful concept, cannot properly exist without class relations, which are also relations of power between classes. Thus, class relations are intrinsic to defining class itself, because without class relations, social classes would not exist.

In the first instance, at least for sociology and anthropology, class is an economic category. Class assumes the existence of different groups of people doing particular things at particular times. These relational doings produce regular, contradictory, and unpredictable effects, regardless of whether these effects manifest themselves in physical “goods and services”, or in specific social conditions, including socially specific *ways* of doing: ways of perceiving, saying, thinking, describing, acting, and so on. Usually, perhaps inevitably, they will produce both simultaneously. Thus, an economic definition of class need not be construed as a narrow “economism”. Such approaches only see a “formal” economy filled with universal classes of “things”: money, management, labour, machines, firms, regulatory bodies, and so on. The kind of economy I am talking about here refers to what people do - intentionally or otherwise⁴ - to produce and reproduce society as a dynamic whole. Its categories, therefore, must be flexible and adaptable to social context and history. It concerns itself with describing how social conditions are produced by actions within and between classes. These classes are abstract. They can only be construed in terms of what the people in them *do* at any particular time to constitute themselves as a class, and what these doings stand opposed to. SFL has these assumptions built in at its foundations.

Socio-epistemology: Paradigm and praxis in social science

As I have shown above, where the social sciences are concerned, the nature of social being is inherently bound up in the nature of social knowledge which, in turn, is bound up in language practices, a systematic set of socio-historically specific *doings* with specific (but not immutable) social functions (Graham, 1999c; Graham & McKenna, forthcoming; Halliday, 1993; Hearn, 1999).

Here, I must clarify my position on two recurring issues in the relationship between linguistics and social science. The first is the charge that linguistics necessarily reduces everything to language and is thus a form of idealism (cf. Bourdieu, 1991, pp. 105-109; Gal, 1989, p. 345). This is quite necessarily the case from a certain structuralist perspective:

As soon as one treats language as an autonomous object, accepting the radical separation which Saussure made between internal and external linguistics, between the science of language and the science of the social uses of language, one is condemned to look within words for the power of words, that is, looking for it where it is not to be found ... The power of words is nothing other than the *delegated power* of the spokesperson and his [*sic*] speech – that is, the substance of his discourse and, inseparably, his way of speaking. (Bourdieu, 1991, p. 107)

Within SFL, the term ‘social semiotics’ (cf. Halliday, 1978, 1993, p. 3; Hodge & Kress, 1988; Lemke, 1995; Martin, 1998) has developed as a remedy to such perceptions of itself. To my mind, this is unnecessary because the fundamental principles of SFL, when taken fully into account, dispel the structuralist-formalist problems that Bourdieu identifies above. While the “social semiotics” perspective is largely a matter of

⁴ The phrase ‘consciously or unconsciously’ might be substituted here, but this would obscure what I want to say later.

terminological choice, and Halliday makes this point himself,⁵ I argue that the risk of collapsing consensual domains is much higher once the unnecessary concept of the “sign” or “code” is inserted as the universal mediator of meaningful human experience (cf. Graham, 1999e; Graham & McKenna, forthcoming; Halliday, 1993, p. 10).

Another recurring issue for linguistics is the false language/concept split on which cognitive linguistics bases many of its claims, and which also regularly appears in arguments about functionalism and formalism in sociolinguistics (cf. Gal, 1989; Graham, 1999e; Halliday, 1993, p. 3; Martin, 1998; Pinker, 1994). This false dichotomy is a residue of rationalism, meant here in its philosophical sense, and it ignores Wittgenstein’s axiomatic conclusion: ‘What we cannot speak about, we must pass over in silence’ (1921/1961, p. 74). Language and depth-psychological categories (e.g. Jung 1968; Fromm, 1951) are undoubtably related, but they are related in such a way that these categories can only be accessed through metaphorical use of language. To put it bluntly, ‘nonconceptual’ “thought” - which is the product of instinct and emotion, among other “things” - can only be socially expressed in language, however tangentially (Bermúdez & Macpherson, 1998). The point at which this expression happens is the (necessarily strenuous) movement of non-conceptual content into pre-existing, socially constituted and accessible categories of concepts: the language of social life. The mechanics and necessity of this movement is an entirely different discussion which need not detain us here. Suffice it to say that concepts and language are the same “thing” for social science if, and only if, the social context and function of language use is considered in its relationship with an historically specific whole, through which the whole of social action is mediated.

The paradigm of paradigms

Kuhn’s (1962) argument that successive scientific paradigms emerge from historical accidents, from something ‘first going wrong with normal research’ (p. 310), has given voice and validity to all sorts of ‘scientific revolutions’ (p. 311) over the last 30 years, but the lines of most of these can be traced back to ancient Greece (Graham, 1999c).⁶ But the ‘choices’ Kuhn asserts are false, the questionable concept of “normal” research notwithstanding:

Like the choice between competing political institutions, that between competing paradigms proves to be *a choice between incompatible modes of community life*. Because it has that character, the choice is not and cannot be determined merely by the evaluative procedures characteristic of normal science, for these depend in part upon a particular paradigm, and that paradigm is at issue. When paradigms enter, as they must, into a debate about paradigm choice, their role is necessarily circular. Each group uses its own paradigm to argue in that paradigm’s defence.

⁵ ‘I myself do not accept the implication that the study of meaning must be grounded in some theory of the sign’ (1993, p. 3).

⁶ For more than one reason, 1968 is the year that the social sciences began to disintegrate into their current state (Graham, 1999c).

The resulting circularity does not, of course, make the arguments wrong or even ineffectual. The man [*sic*] who premises a paradigm when arguing in its defense can nonetheless provide a clear exhibit of what scientific practice will be like for those who adopt the new view of nature. That exhibit can be immensely persuasive, often compellingly so. Yet, whatever its force, the status of the circular argument is only that of persuasion (p. 311, italics added).

Of course, the status of circular argument is, precisely, its circularity, and thus its lack of validity. Kuhn's formulation of paradigms boils down to "lifestyle choices". If the social sciences are to be developed in such terms, then one opinion is as good as the next, and that is both unsatisfactory and untrue. At its most rigorous, paradigmatic thought assumes a dogmatic adherence to one of the polar extremes that paradigmatic socio-epistemology allows.

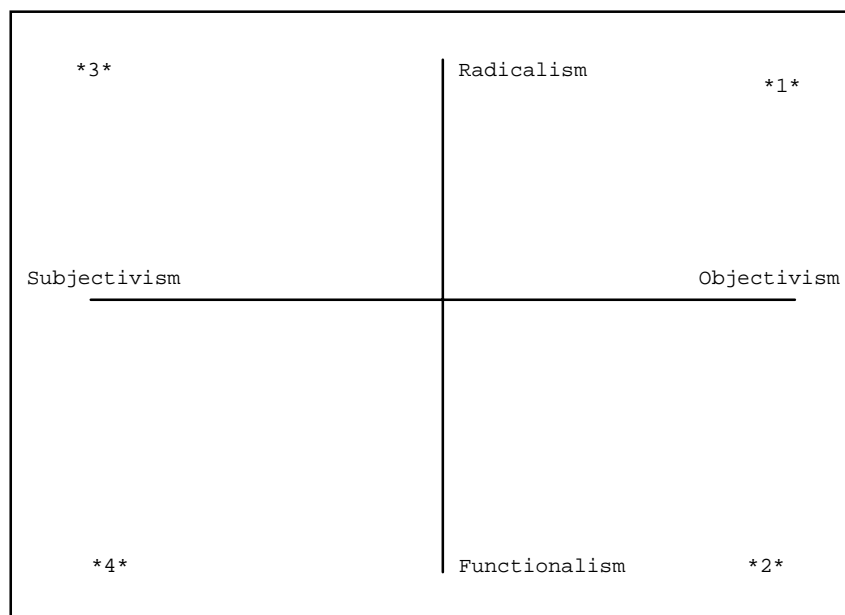


Fig 1. *Paradigmatic polarities*. Adapted from Burrell & Morgan (1979).

Burrell and Morgan's diagram (*Fig. 1*) shows the paradigmatic limits of epistemological assumptions that social scientists can make about the object of their research. Along one dimension is the functional/radical cline. Extreme radicalism assumes constant change and turbulence in society; extreme functionalism assumes constant stability, with different individuals merely filling roles which have the same function regardless of their name. Along the second dimension lies the subjectivism/objectivism cline. Extreme subjectivism assumes that meaning is inside individuals and so cannot be accessed in any general terms; extreme objectivism assumes that meaning can be studied as a concrete thing that exists "out there" in the object of study. The theoretical "schools" corresponding to the poles which I have numbered 1-4 in the diagram here are:

- 1) *High-structuralist Marxism* which assumes that societies are structured and change according to objective laws that are based on the tension between objective classes of people.
- 2) *Parsonian or Hobbesian functionalism* which assumes that society is an enormous, static anthropomorph, like Hobbes's *Leviathan*. Each person plays a role which has a

static function in society that can be appraised according to objective biological criteria (e.g. knowledge workers or bureaucrats as part of the social “brain”; labourers and soldiers are social “muscle”, etc).

- 3) *Radical postmodernism* which assumes that societies are merely collections of fragmented, shallow individuals, each of whom is “schizo”, a mere surface screen, passively reflecting the image of other surfaces transmitted by information systems’ of one sort or another (Tetzlaff, 1991, p. 12).
- 4) *Social action or symbolic interactionism* which assumes that “subjects” are stable but that they live in entirely different phenomenal domains from one another, and thus interpret the world entirely differently from each other. The researcher taking this socio-epistemological extreme must assume that she or he is also in an entirely different phenomenal domain and is thus merely reporting their own interpretation of the world-as-it-seems (Hearn, 1999).

Of course, it is rare that the extremes of Burrell and Morgan’s model are dogmatically occupied, exercised, and defended in social research. And, upon closer inspection, the perceived epistemological tensions between these extremes are largely, if not wholly, synthetic and illusory. Dogmatic adherence to either subjectivism (which is, in any case, constituted in objective social conditions) or objectivism (which is dependent upon subjective observations of research objects) is the result of fundamental confusion about the inseparability of these two perceived extremes. The main point to note here is that objectivism and subjectivism are categories delineated and created in language. Similarly, the radicalist/functionalist divide is also a false matter of socio-ontology that arises by its being broken away from its source, socio-epistemology: one cannot investigate the nature of being without the theoretical constructs of socio-epistemology. Further, the most troubling problems of sociology, anthropology, and communication research are not whether a society changes or remains the same; they are, rather, *how* social systems are produced, reproduced, and transformed, and this *how* cannot be breached in a single step. It requires an understanding of history, culture, and language (Das, 1998).

Knowing and doing: SFL as method

While recent works in the fields of anthropology (Das, 1998), sociology (Silverstein, 1998), communication (Hearn, 1999; Silverstone, 1999), and political economy (Gal, 1989; Graham, 1999a,c,d) have highlighted the need for a language-focused approach to these disciplines, none other than my own have taken up SFL as a method. Further, this trend towards a focus on language is typical of the social sciences, even in “dry” economics (cf. Saviotti, 1998; Engelbrecht, 1998).⁷ This is not surprising, nor is it before time. This is not the place for a full historical discussion of why a focus on language seems increasingly necessary for research in the social sciences; this subject is well-covered elsewhere and so need not detain us here (e.g. Gal, 1989; Halliday, 1978,

⁷ “Dry” economics don’t usually include social realities or people in their framework. The apotheosis of these is “econometrics”, a highly abstract discipline that IMF, OECD, and WTO economists use, as well as those at the state and national levels in Australia.

1993). Indeed, the more puzzling issue may be why the various fields of sociolinguistics have tended to detach themselves from the very disciplines from which they initially emerged, which are precisely the fields that concern us here (cf. Gal, 1989; Halliday, 1978, chapt. 2, 1993, pp. 72-73).⁸ The short explanation as to why language is becoming increasingly crucial to social research is the profound social effects being wrought by the increasingly pervasive and intimate nature of today's media, in whichever form they appear (Graham, 1999a,b,d). What follows, therefore, is an illustration of the method I argue for.

Techno-corporatist discourse: An SFL-based sociology of M3 policy language⁹

In its broadest sense, the function of M3 techno-corporatist discourse (hereafter M3) is identical to that of advertising: it is firstly used to *sell* something. Thus, it is always used to *maximise profits* for somebody. Most often, the people who use this discourse make a virtue of its "profit maximisation" function, and so its profit motive is rarely hidden –in fact, this is its main recommendation. Because people use it to maximise profits for somebody, it *makes somebody more powerful*, and this is its primary function: it is used to sell, create, produce, define, and maintain *power*. In this sense, it is self-valorising: it adds surplus value to itself the more quickly and widely it is circulated. It mixes the language of business - corporate managerialism - with those of theocracy and technocracy, thus providing a potent mixture of historically successful modes of domination. The heteroglossic relations in the discourse are usually structured thus:

1. **client**↔**patron** [*action*: sale/choice - *relationship*: the patron speaks on behalf of the client];
2. **beneficiary**↔**benefactor** [*action*: give gifts/mercy/permission - *relationship*: the benefactor speaks on behalf of the beneficiary];
3. **employee**↔**manager** [*action*: order/organise/control/coordinate/plan - *relationship*: the manager speaks on behalf of the employee];
4. **expert**↔**idea** [*action*: innovate/transform/inform/define/quantify - *relationship*: the expert speaks on behalf of the idea. Examples include legal expert↔law; engineer↔technology; bureaucrat↔policy, etc];
5. **priest**↔**god** [*action*: dispense salvation/justice/fate/predictions/divine law/power/received wisdom - *relationship*: the priest speaks on behalf of an omnipresent, extrajudicial god].

These voices are most often mixed in M3; they rarely appear alone. These relations need not imply 'projection' (Halliday, 1994, p. 219). Rather, they are the heteroglossic social

⁸ I am thinking especially of Bernstein and Labov, and before them, Firth, Gramsci, and Kenneth Burke.

⁹ M3=Millenium three, or third millenium, policy language. I use this term because the language is unerringly futuristic. I like the sound of "M3" because it sounds like the nasty virus that the language is.

voices embedded within M3. They have been historically overlaid, as techniques of social control, one upon the other. The form of language that the convergence of these three modes of social domination takes - corporate managerialism, technocracy, and technocracy - is neither pre-modern, modern, nor postmodern: it is *totalitarian*. M3 is characteristically shot through with blatant contradictions, closest to that which Orwell (1949/1981) termed *doublethink*. It attempts to grasp huge, abstract social trajectories in neologisms and euphemisms. Those are its main features. I will point out these and other regularities in the following analyses, at the same time showing how SFL can inform sociological and anthropological analyses of the political field, a specific class of socially significant, well-defined *doings*.

Text: Miller, R., Michalski, W., & Stevens, B. (1998). *The promises and Perils of 21st Century technology: An overview of the issues* (pp. 7-32). In Organisation for Economic Cooperation and Development [OECD] (1998).

The book from which this passage is cited - *21st Century Technologies: Promises and Perils of a Dynamic Future* - is concerned with predictions, as its title indicates (OECD, 1998). The predictive purpose of the text forces the authors into a series of unrealistic proposals and propositions. The whole book sells a 'vision' of 'socio-technical dynamism' for the future of OECD countries (e.g. pp.7, 26, 32). The complexity of the language is well-evidenced in the strenuous nature of its verbal groups, and the extremely compressed nature of its nominalisations. I have gone about analysing these texts by firstly identifying central processes in major clauses, focusing on 'role structures' (Halliday, 1978, p. 143), to see what kinds of hierarchies the authors construe: I ask a simple "who or what gets to do what to what or whom?" question. For the most part, I have ignored marking circumstantial elements here, except where they become central to the textual metafunction. For the most part, circumstantial elements are concerned with situating the reader in an imagined future, which is usually construed as if it had already happened. Because of the high level of abstraction in these texts, and because of the nature of my theoretical framework, the analysis is mostly confined to ideational aspects of the discourse. I have used minimal bracketing to focus on central processes. Once the grammatical metaphors are translated, I then investigate the logical relations. In doing so, I partially follow the process set out by Halliday for dealing with ideational metaphors (1994, p. 343).

Text 1: Central processes are marked in bold. Actors are underlined, [range is marked in square brackets in this typeface]. Carrier ^ Attribute and Token ^ Value relations are identified in bold inside triangular brackets, e.g. <carrier>, and the relational processes in these constructions are bolded and marked in [square brackets].

Twenty-five years from now, after more than five decades of development, the microprocessor, information technologies in general, and networks **will probably have penetrated** [every aspect of human activity]. Many parts of the world <carrier> [**will be**] wired, responsive and interactive <attribute>. Beyond simply accelerating the pace of change or reducing the cost of many current activities, the use of these high-performance digital tools **opens up** [the possibility of profound transformations]. (p. 10)

1) **will probably have penetrated**: Here we see a mild example of the complex tense structures demanded by the priestly predictions of M3. We have past [have

penetrated] in future [will], partially modalised by *probably*. The past-in-future construction construes the likelihood of the future state of affairs as “a done deal”, regardless of the modalisation. The choice of a material process [penetrated] sets up the Range function for the nominal group Actor in this clause [Actor: the microprocessor, information technologies in general, and networks]. The range specifies the scope of the process (Halliday, 1994, p. 146). In this case, the range is *every aspect of human activity*. Clearly, the authors are making some ambitious predictions. As far as we humans are concerned, technology is a profoundly transformative, all-encompassing, *exogenously acting* phenomenon that will affect everything we do (seemingly regardless of *what* we do!).

- 2) **will be:** The intensive-attributive function is typical of M3 predictions and descriptions (cf. Graham, 1999a; McKenna & Graham, 1999). In this vision, *Many parts of the world* is the carrier of some rather vague attributes. It is as if, today, many parts of the world were not already *wired, responsive and interactive*. The act of predicting what already exists is an intrinsically sacramental form of *renaming* (Bourdieu, 1991, p. 120).
- 3) **opens up:** The abstract-material process again functions to define a range *beyond* that of *simply accelerating the pace of change or reducing the cost of many current activities*. *The use of these high-performance digital tools* is an abstract, process-like Actor that exceeds mere change by opening up the *possibility of* further change. But these further changes are *profound*. The circularity of M3 is evident here. The abstract Actor creates, not merely the speed of change, but the *profound* nature of change itself: it changes the nature of change from simplistic to profound. That the use of these technologies will speed up change and lower costs is given, no other possibility is entertained.

These few sentences are fairly simple examples of M3 that highlight some of its basic features: its intention to sell (the benefits of technology, or of “socio-technical dynamism” in this case); its prophetic, priestly, and visionary nature (the world will be thus; such and such phenomena *will be*); its affinity with technology; its circularity (using technology will change *change*); its dependence on grammatical metaphor of an extremely abstract and ambitiously grasping nature (*all areas of human activity; Many parts of the world; the use of these high-performance digital tools*); and, especially, its reliance on authority. This is the key aspect of M3. An “unauthorised” person could not make such claims with much credibility, and these are mild in terms of the rest of the text.

The strenuous demands of authoritative, unrealistic descriptions of an inevitable future state upon Processes is best exemplified by the central verbal group in the following 62-word sentence:

Virtual robots with fairly narrowly defined tasks, a type of expert software, will have reached the point of being able to track and respond to [many human needs, from the banal capacity of a networked toaster to identify users and recall their preferences to the more advanced functionality of e-mail screening, comparison shopping and assembling/tracking a person’s customised learning “adventures”]. (p. 11)

The effect of the central verbal group in this sentence is to set the tense system spiralling back and forth in a helical manner, from future to past to present and back again, to construe an imaginary phenomenon as if it had already happened in some bygone future. The historical heteroglot of authoritarian voices can also be identified here. This is a comfortably consistent heteroglossic stew of authoritative statements: there are priestly predictions; experts expressing ideas and explaining them; the benefactor's voice speaks condescendingly about the *needs* of people that will be catered to by *virtual robots*, a kind of mechanical knowledge slave; and the homey familiarity of a household appliance sales pitch are overlaid and embedded within each other, thus collapsing the authoritative voices of the whole of human history within a single sentence. And, this is without mentioning the poverty of the OECD's 'vision' of what might constitute *human needs*. But these words are mere padding for the hard sell.

The text proceeds in a very similar manner to explain the benefits of genetic engineering: 'By 2005, after fifteen years of intense activity, scientists **should know** [the full DNA sequence of a *typical* man or woman]' (p. 12)¹⁰; its uses: 'Biotechnology applications **are likely to pervade** [most areas of activity] in the next quarter-century' (p. 13); and the risks of new technologies: 'They <carrier/Actor> **could pose threats that will be** [both powerful and difficult to control] <attribute/Range>' (p. 14). This last sentence is an interesting construction because the verbal group highlights two evenly mixed functions. It conflates an abstract material [*could pose threats: i.e. could threaten*] with a future intensive-attributive [*that will be*]. Thus, it actually projects a threat on behalf of technology's potential by attributing the *possibility* of material consequences as Range, although the "who gets done to?" question is left unanswered. Another choice for this sentence could have been: *They could pose powerful threats that will be difficult to control [for ... ?] OR They could threaten to be powerful and difficult to control [for ... ?]*. Whichever way this is translated, technology is construed, as is usual in M3 texts, as an exogenous, determinative force of nature that *someone or something* needs to tame and/or nurture, usually the policy unit putting the M3 together.

The hard sell comes after the authors describe several models of what future global governance might look like, especially as they relate to facilitating 'socio-technical dynamism' (pp. 15-26). The authors highlight a clear imperative here: 'Reaping the rewards and reducing the dangers generated by technological advances **depend on** [a complex interaction with underlying economic, social and political conditions]' (p. 15). The abstract-material phrasal verb (Halliday, 1994, pp. 207-210), *depend on*, which functions as a circumstantial-relational process here, allows the nominal/verbal group Head (Act), which functions here as a nominal group Thing, to take up centre stage, as it were, whilst concealing the passivity of the sentence and its authoritarian imperative. A slightly more concrete translation of this thinly veiled imperative might be: *A complex interaction [by someone or something] with underlying economic, social and political conditions [somewhere] will allow [someone or something] to reap the rewards and reduce the dangers of technological advances*. This "someone or something" who wishes to interact, reap rewards, and reduce danger must read on to see what such *complex interaction* might entail, and what the qualifying *economic, social and political*

¹⁰ I have highlighted "typical" here to show the assumptions that the authors tend to make about people. Other such epithets include 'prototypical' and so on.

conditions might be. This extremely compressed sentence is a well-disguised authoritarian proposal: “If you want to benefit you must engage”. It leads, inevitably, to the self-valorising purpose that inheres in the language and logic of the political field:

The political field is thus the site of a competition for power which is carried out by means of a competition for control of non-professionals or, more precisely, for the monopoly of the the right to speak and act in the name of some or all of the non-professionals. (Bourdieu, 1991, p. 190)

This monopolistic purpose is revealed in the imperative for a ‘global framework’ for managing technology (pp. 26-32). The Hyper-theme of a ‘global framework’ is introduced in the form of a hypothetical ‘question’ embedded within a nominal group. The question appears from nowhere, and is asked by nobody in particular, we are merely told that ‘it is important to examine the more general question of the of the relationship of global-level frameworks to socio-technical dynamism and resistance’ (Miller et. al., 1998, p. 26). *Resistance* is set off here in binary opposition to *socio-technical dynamism*, the latter being desirable and the former undesirable.

The shibboleth of ‘environmental sustainability’ is then pounded to produce a familiar tone:

Environmental sustainability <token> [offers] one of the best examples of the divergent implications of realising (or not) global frameworks conducive to socio-technical transformation <value>. The first reason is that socio-technical progress <token> [is probably] an indispensable part of improving ecological outcomes without facing unacceptable trade-offs in terms of wealth or individual liberty <value>. Secondly, environmental sustainability <token> [is] the foremost example of two sets of externalities <value>: the cross-jurisdictional nature of pollution, and the probability that the overall social rates of return on investments in socio-technical change aimed at improving the environment are greater at a global level than at the country level <elaborated value>. (p. 27)

We are told here why socio-technical transformation/progress is not only desirable but also necessary: because it is probably an indispensable part of improving *ecological outcomes without facing unacceptable trade-offs in terms of wealth or individual liberty*. Also, the prelude to a global governance imperative is laid out in the *cross-jurisdictional nature of pollution and the overall social rates of return on investments in socio-technical change aimed at improving the environment*. In short, pollution is suddenly behaving like a transnational firm, and its technical solutions, because they are not so profitable, must be coordinated at an international level.

We hear the mixed voices of corporate managerialism, neo-liberal politics, neo-classical economics, and technocracy speaking here. The message is simple: “Unless we deploy new technologies at a global level to fix the environmental problems created by older technologies, wealth capacity and freedom will suffer, and this is unacceptable”. The key words here are *outcomes*, *wealth*, and *individual liberty*. Ecology - supposedly the “natural” environment - is viewed in terms of business *outcomes*. This reflects the attitudes of M3 towards the environment: it is merely another by-product of the free and rational individual’s “natural right” and natural freedom to pursue profit. “Managing for outcomes” is an increasingly familiar term, at least where the public sector is concerned. It is an historical extension of ‘management by objectives’ (cf. Dixon, 1996, chapt. 5).

MBO, the scientific administrator, and the technocrat: An historical aside

The emergence of ‘scientific management’ and later, ‘management by objectives’ (MBO), as overarching approaches to doing business marks the point in human history at which the discourses of the military, science, and managerialism merged into a coherent, “visionary” framework. F.W. Taylor (1856-1915) saw that the route to higher productivity in business was through ‘systematic soldiering’ on the part of workers led by rational, efficiency-focused managers (Dixon, 1996, p. 36). He saw that management ought to be conducted on the basis of ‘fact, on research and experimentation’ (p. 36). Alfred P. Sloan and Henry Ford extended his ‘vision’. Their efforts in car manufacturing manifested themselves in MBO (1996, chapt. 5). Obedience, strategic planning, quantifiable objectives, and a single-minded dedication to purpose became the way to a rosy future. These *outcomes* have, in recent history, become ends in themselves:

The simple techniques of cocreation of meaning, of common obedience to the endorsed purpose, such techniques underlie performance and achievement ... As we near the end of the 20th century, we are incrementally approaching this ideal. (Dixon, 1996, p. 10)

Chester Barnard, a 1930s management “guru” from the Bell Telephone Company, outlined the technocratic imperatives of ‘administrative management’ to the Whitehouse. He was sure that government could be run along the same lines as business. His vision struck a chord for obvious reasons:

canons of efficiency require the establishment of a responsible and effective chief executive as the center of energy, direction and administrative management; the systematic organization of all activities in the hands of qualified personnel...and appropriate staff agencies. There must also be provision for planning, a complete fiscal system and means for holding the executive accountable for his program. (Barnard, 1937)

Of course, combining “cocreation of meaning” - a purposive obedience to ideology - with imperatives for economic performance, “canons of efficiency”, technological advances, and objective political outcomes, like those expressed in the OECD text that I analyse here, has proven to be an historically disastrous mix. A little less than two years later, another outstanding administrator of the day, Josef Goebbels, praises the benefits of communication technologies, expressing similar values to those contained in Barnard’s ‘communicative’ imperatives for management:

We live in an age that is both romantic and steel-like. While bourgeois reaction was alien and hostile to technology and modern sceptics believed the deepest roots of the collapse of European culture lay in it, National Socialism has understood how to take the soul-less framework of technology and fill it with the rhythm and hot impulses of our time. (Goebbels, 1939, in Bullock, 1991, p. 440)

Friedman (1999) expresses a more realistic view of how these historically conflated discourses - rational managerialism, technocracy, militarism, and corporatism - relate to one another in today’s “global” context:

The hidden hand of the market will never work without a hidden fist – McDonald’s cannot flourish without McDonnell Douglas, the builder of the F-15. And the hidden fist that keeps the world safe for Silicon Valley’s technologies is called the United States

Army, Air Force, Navy and Marine Corps. “Good ideas and technologies need a strong power that promotes those ideas by example and protects those ideas by winning on the battlefield,” says the foreign policy historian Robert Kagan. “If a lesser power were promoting our ideas and technologies, they would not have the global currency that they have. And when a strong power, the Soviet Union, promoted its bad ideas, they had a lot of currency for more than half a century.”(p. 84)

Predictably, Friedman’s “pragmatic” view of global imperatives quickly gives way to the priestly pronouncements associated with globalisation (Graham, 1999a):

I believe globalization did us all a favor by melting down the economies of Thailand, Korea, Malaysia, Indonesia, Mexico, Russia and Brazil in the 1990’s because it laid bare a lot of rotten practices in the countries that had prematurely globalized. People keep referring to what happened in countries like Indonesia as an economic “crisis”. Well, excuse me, but I don’t consider the downfall of the most corrupt, venal, greedy, ruling family in the world – the Suhartos – a crisis. (p. 61)

Apart from expressing the orthodox belief that “globalisation” is an active, virtuous, perhaps even *conscious* agent, Friedman reduces the sudden and violent deprivations of literally billions of people down to a “goodies versus baddies” *Disney* plot, the outcome of which can be shown to be a “good thing” because of its effect on a single despot and his family, however unfortunate its side-effects for the many ‘honest, hard-working folks who played by the rules’ may be (p. 61).

But Speer (1970) best captures the trajectory of an expert, technological system dedicated solely to totalitarian social control:

[I]n Hitler’s system, as in every totalitarian regime, when a man’s position rises, his isolation increases and he is therefore more sheltered from harsh reality: that with the application of technology to the process of murder the number of murderers is reduced and therefore the possibility of ignorance grows; that the craze for secrecy built into the system creates degrees of awareness, so it is easy to escape observing inhuman cruelties. (p. 170)

This is the trajectory of techno-totalitarianism.

The OECD’s global imperative: Analysis continued

Miller et. al. (1998) state the inevitability of global government - management as they call it - a supranational monopoly of power, under the dual rubrics of effectiveness and efficiency:

Ultimately, in light of increasing international interdependence, global as opposed to national-level approaches <token> [look set to become] the most effective way of addressing macro-level problems <value> [such as ensuring that stocks and bonds can be traded seamlessly worldwide, or that producers of intellectual property are compensated fairly and efficiently when someone uses their output] <elaborated value>. Indeed, one of the main macro-level obstacles to socio-technical dynamism <token> [is] the fact that available institutions are national or inter-nation(al) while many emerging challenges appear to require more holistic, global thinking <value>. As many analysts have pointed out, particularly with respect to future environmental sustainability, the shift towards more integrated, planet-wide initiatives **will probably**

accelerate as people come to recognise the enhanced benefits - both private and social - of action at a global level.

Finally, converging economic, social and technological forces **seem poised to create** [a leap in both the importance and feasibility of global management]. (1998, pp. 28-29)

What the authors are proposing here is an autonomous, global system of governance. In this section, the circumstantial elements become more important, mostly for rhetorical purposes. The circumstantial elements in this passage are treated as Given, even though, they are highly contestable. I have highlighted them here:

Ultimately, in light of increasing international interdependence, global as opposed to national-level approaches look set to become the most effective way of addressing macro-level problems such as ensuring that stocks and bonds can be traded seamlessly worldwide, or that producers of intellectual property are compensated fairly and efficiently when someone uses their output. Indeed, one of the main macro-level obstacles to socio-technical dynamism is **the fact that available institutions are national or inter-nation(al) while many emerging challenges appear to require more holistic, global thinking**. As *many analysts have pointed out*, particularly with respect to future environmental sustainability, the shift towards more integrated, planet-wide initiatives will probably accelerate **as people come to recognise the enhanced benefits - both private and social - of action at a global level**.

Finally, **converging economic, social and technological forces** seem poised to create a leap in both the importance and feasibility of global management. (1998, pp. 28-29)

The circumstantial elements are as abstract as the contents of the message, but in this section of the text they become premisses, whereas previously, they are concerned with positioning the reader in the authors' imagined future. Here, in the monopolising propositions, the circumstances are construed as actual and existing, whether or not that is the case:

- *Ultimately, in light of increasing international interdependence;*

This sets the reader up as being "in the know" [we all *know* that nations are increasingly dependent on one another because of globalisation]. Notably, in this chapter, the authors do not use the word *globalisation*. Instead, they use terms like *global framework; global economic system; global basis; global information transparency; global cooperation; planet-wide issues; tomorrow's ever-"smaller" planet* (e.g. pp. 26-27). Nevertheless, the circumstantial element, *increasing international interdependence*, intertextually refers the reader to globalisation. The terminological shift from "globalness" to "planetariness" is gradual but emphatic as the text moves to focus on environmental sustainability. In terms of ideational metaphor, we could say that "planet" is more easily associated with "environment" than is the more geometric epithet, "global".

- *the fact that available institutions are national or inter-nation(al) while many emerging challenges appear to require more holistic, global thinking;*

This existing, factual circumstance is *one of the main macro-level obstacles to socio-technical dynamism*. For that reason, in terms of appraisal (cf. Lemke, 1998; Martin, 1998), it is judged to be an Undesirable circumstance [t: - desirability]. A

modulated proposal is contained within the circumstance: *many emerging challenges appear to require more holistic, global thinking*. This proposal frames the available institutions as being incapable of thinking or acting “holistically” or “globally”. The strenuous and seemingly unnecessary work in punctuating *inter-nation(al)* sets up a “conflict of interest” relationship between the global and national fora, emphasising the *national* agenda of such fora. Thus, it provides a metaphorically construed proposition: a forum that is set up among or between nations cannot separate its interests from *national* interests, competing or otherwise. Therefore, such a forum cannot think in an “authentically” *holistic* or *global* way. This requires specialised, autonomous global decision-making –impartial, disinterested; everybody benefits. This highly contentious proposition is explicitly construed as an incontrovertible *fact*.

- as people **come to recognise the enhanced benefits** - both private and social - of action at a global level;

Again, this future circumstance is construed as inevitable: people *will* recognise *the enhanced benefits*. This positions *people* as ignorant. In the current state of affairs, *people* don't know what's good for them. They need *action at a global level*, but they just don't know it yet.

- Finally, *converging economic, social and technological forces*

Here, the authors conflate a priestly appeal to the God of neo-classical/neo-liberal ideology, “globalisation”, with a technocratically nominalised appeal to the “big ideas” that inhere in the expert realms of multilateral policy centres, a description of every force at work in the human macro-social environment (*converging economic, social and technological forces*) as the final arbiter of a seemingly immutable fate for global governance. Never mind that economy, society, and technology have been inextricably interwoven throughout history, inseparably. According to the authors, that is not the case. It is for them, rather, a recent phenomenon. These forces are now *converging*, as they say in the current jargon, and thus we must stand aside for the global *Übermenschen*, the only people qualified to act in such circumstances. This is most clearly evidenced when they make the claim that “[t]he current base of the pyramid upon which global frameworks rest **could begin to crumble** [as socio-technical dynamism disrupts existing patterns of assuring global cohesion] (p. 27). The Platonic, authoritarian assumptions and imperatives are obvious here: if populations are not kept in line, international fora (the peak of the global social pyramid) could cease to exist.

Tangential observations about M3 texts

Tangent 1: M3's evaluative lexis

The genre of multilateral policy statements is dependent on technical expertise for its authority (Lemke, 1995; McKenna & Graham, forthcoming). Consequently its evaluative lexis is usually limited, or at least must be inferred. During this analysis, it occurred to me that much of the overt evaluative lexis occurred in the processes. Where overt, non-processual appraisals occur, they are usually collocated with nominalisations that attempt to grasp huge social trajectories. Appraisal (Martin, in press) in M3 is

mostly concerned with construing Importance and Desirability (Lemke, 1998). Here are some examples of the non-Processual appraisal lexis used in Miller et. al. (1998):

- many **profound** technological, economic and social transformations [t: importance];
- the path of such **prodigious** change [t: importance];
- the risks to **cherished** traditions [t: desirability];
- The exploration and manipulation of these two building blocks [digital and genetic information] ... are likely to unlock **vast treasures** [t: desirability];
- a strong **virtuous circle** between **better** information and **higher performance** tools [t: desirability];
- the information transformed into zeros and ones are allowing **rapid advances** to be made [t: desirability/importance];
- **Faster, cheaper, smaller** are more than slogans for the **highly competitive** information technology sector [t: desirability];
- the prospects for the key component of computing technology - the microprocessor - look very **promising** [t: desirability];
- the production process is **less wasteful** [t: desirability].

Processes as evaluative resources in M3

As the text progresses, the authors begin to use Processes that are heavily weighted in terms of their appraisal value (Martin, 1998). It appears that the authors do this once they feel they have established the “technological progress is an unmitigated good” message. These value-weighted processes appear, firstly, with a slight polar spin, but as the text progresses, they reach polar extremes that are entirely concerned with construing [+ -] Desirability or Importance. In the following examples, Processual evaluations resources are marked in ***bold and italic***, other evaluative resources are marked in *italics*:

- There is no one best formula for ***encouraging socio-technical dynamism*** [t: + desirability];
- ... those [framework conditions] that are more linear and ***remain entrenched in existing patterns*** [t: - desirability];
- The search for solutions to social problems also ***succumbed to the production methods and product design methods of the automotive era*** [t:- desirability];
- a *transformative* paradigm that ***propelled*** productivity forward and ***inspired*** major technological advances [t: + desirability];
- the Internet ***could pioneer a significantly different vision*** of work and society [t: + desirability];
- the Internet ***has eclipsed*** most proprietary EDI systems [t: + importance];
- a *powerful* economic imperative ***is unleashed*** by the Internet’s technology [t: + importance];
- an overall increase in the exclusivity of intellectual property ***might end up crippling*** both *the development and the diffusion of new technologies*, and generate *seriously negative consequences* at the macro level [t: - desirability];
- *Protectionism, social strife, intolerance and even hatred or open conflict* ***might be inflamed*** by *have-nots* within and between countries [t: - desirability];

- This [impeded socio-technical dynamism] in turn **might provoke** the kind of *vicious* as opposed to *virtuous* spiral that ends up further **exacerbating** problems such as *inequality, environmental degradation and global tension* [t: - desirability];
- differences **might be exacerbated** and the *crucially important* global agreements **could** either **disintegrate** or **fail to emerge** [t: - desirability];
- Many people **welcome** the prospect of technological innovation offering *such bountiful possibilities* for the twenty-first century [t: + desirability];

Tangent: Metaform in M3

I will introduce a term here: *Metaform*. I define this as the overall structure of the text as it moves towards its rhetorical purpose [e.g. “socio-technical dynamism is good for you, therefore you need us to run the world to make sure it happens”]. I have no data to support the existence of such forms in spoken language, but in the written data I have analysed, M3 policy statements appears to take a specific *Metaform* [examples from Miller et. al. are marked in square brackets with page (p.#) and sentence (S:#) numbers where necessary]:

- **Context:** statement of historical importance of the text [Over the past century there have been many profound technological, economic and social transformations (p. 7, S:1)];
- **Production process:** the manner and context in which the statements/solutions/objectives were reached. This is roughly equivalent to the methodology section in an academic thesis, and may be explicitly such for M3 internal documents [working papers, internal reports, conference proceedings, etc], although an explicit statement of “methodology” is rare in documents designed for external consumption [The OECD Forum for the Future Conference on 21st Century Technologies was no exception; all of these perspectives were analysed and discussed (p. 7)]¹¹;
- **Overview:** overview of the message structure [This introductory chapter is divided into three sections ... (p. 8)];
- **Elemental descriptions:** broad descriptions of Participants, Processes, and Circumstances that are central to the stated purpose of the text. These are, typically, the most abstract and ambitious types of descriptions, if one can make such a comparison in terms of degrees [Imagining possible applications of technology two or three decades from now calls for a better understanding of the ways in which performance trends interact with societies’ readiness to embrace economic, social and technical change (p. 8)];
- **Detailed descriptions of elements:** The majority of M3 texts are concerned with defining and/or describing the Participants, Processes, and Circumstances that are most abstractly defined in the **Elemental description** stage, which is usually fairly short. This best evidenced by the headings in section 1 of the Miller et. al. text: [**Information technologies - Performance** (p. 9); **Uses** (p. 10); **Biotechnologies - Performance** (p. 11); **Uses** (p. 13); **Risks associated with advances in new technologies** (p. 14)];
- **Problematising Circumstances (Utopia ^ Dystopia):** M3 is mainly concerned with, and premised upon, broad, fuzzy global circumstantial trajectories (eg

¹¹ We are, of course, not told how or by whom these issues - ‘preservation versus dynamism, incrementalism versus radicalism’ (p. 7) - were discussed. We are told, though, that the conference is sponsored by ‘Expo 2000 and four German banks’ (p. 3).

- “globalisation”; “socio-technical dynamism”, etc). The ineffability of these objects places great stains on M3 authors who must give reasons for making their extraordinarily vague and ambitious claims. Thus, the authors generally spend some effort defining at least one “big” benefit and one “big” disadvantage in terms of the Circumstantial outcomes of policy decisions [If the risks can be managed, it is plausible that over the next twenty five years a panoply of technological advances **will vastly improve** human welfare as well as help set the world’s development on a sustainable course (p. 15)]. This big advantage is set off against the ‘risks’ of not realising it: [Micro, macro and global framework conditions can thus be seen as either favouring or impeding technological dynamism (p. 16)]. Thus, if *technological advances can vastly improve human welfare*, and so on, anything that impedes this circumstance is obviously a problem;
- **Solution:** The “solution”, like the one I have exemplified above calling for autonomous global governance, is usually more about maintaining the field of power within which the text is produced than solving any substantive question of social, political, or economic importance. In this respect, the problematising circumstances section of the text is almost always presented as a threat that only the specific field of power can solve: [As Luc Soete points out in his contribution to this volume, establishing effective global framework conditions will probably play a decisive role in the development and diffusion of many technological breakthroughs over the next twenty-five years]. As I have shown above, this *probably* becomes *inevitably* as the “solution” plays itself out;
 - **Conclusion:** In M3 policy statements, the conclusion is a policy strategy, a way to reach specific outcomes defined in the course of solving defined problems. The conclusion of the Miller et. al. text, like those of M3 in general, is thus to increase the importance of the field in which the text is produced.

Conclusion

In the text I have analysed here, Miller et. al. (1998) announce a new direction for the OECD and, perhaps, other established multilateral fora, in terms of their self-defined mandate: they construe the *necessity and inevitability* of autonomous global governance. Their claims are premised on the effects technology, financial markets, and globalisation - the holy trinity of the globalist ideology - on national governments (Graham, 1998). The goal of ‘socio-technical dynamism’, a state of permanent technologically determined change, is construed as an end in itself.

In terms of how SFL shapes up as a method for social analyses - sociology, anthropology, and communication - this analysis highlights SFL’s inbuilt theoretical ability to cope with a particular field, the field of power, and relate it to social trajectories, as well as provide insight into the assumptions, traditions, structure, and trajectory, both in the field in which the text is produced, and in terms of the text’s representations of the global social milieu to which it refers. The analysis highlights an anomaly in the very existence and function of M3 discourse and, for that matter, policy statements in general: *they are themselves a form of sociology*. They comment on society; they produce a ‘theory effect’ (Bourdieu, 1991) within society; they reflect a particular view of society, and thus “membership” of a particular discourse community; and they present a certain view of society. They engage in definitions and classifications. *They define the meaning of power from a powerful position*. In this respect, such policy statements - like any languagings - are part of reality, shapers of reality, and metaphors for reality (cf. Halliday, 1978, 1994).

M3 looks likely to burn out as a genre, or as an epidemic, depending on how you views it. I say this because of its bloated appearance and outrageous intent. Having largely defined the policy agendas of world governments since the early 1960s, the field in which these texts are produced now seems intent on breaking away from its international roots in a bid for complete autonomy. The very real negative circumstances that are becoming increasingly prominent and pervasive throughout the world - war, human atrocities, terrorism, slavery, and social inequality, to name just a few - are increasing as a result of the multilateral, "one-system-to-fit-all" approach that is characteristic of M3 (Castells, 1998; Graham, 1998, 1999a; Saul, 1992, 1997).

Social science and SFL need each other. In many respects, they *are* each other. I say this knowing that it is a contentious and sweeping statement. But if social science is not dynamic, systemic, functional, and self-aware in terms of the language it uses, it risks descending into a narrow, positivist, formalism of decontextualised descriptions which, at least from a linguistic perspective, is described succinctly by Martin (1998). Of course, such formalisms are not confined to linguistics. They can be identified in all areas of social science and they are a function of flawed socio-epistemology, which is also a function of language. These, too, are found throughout the social sciences and threaten to be at the root of its impending implosion.

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