Critical discourse analysis

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Introduction

Critical discourse analysis (CDA) brings the critical tradition of social analysis into language studies and contributes to critical social analysis a particular focus on discourse and on relations between discourse and other social elements (power relations, ideologies, institutions, social identities, and so forth). Critical social analysis can be understood as normative and explanatory critique. It is normative critique in that does not simply describe existing realities but also evaluates them, assesses the extent to which they match up to various values, which are taken (more or less contentiously) to be fundamental for just or decent societies (e.g. certain standards – material but also political and cultural – of human well-being). It is explanatory critique in that it does not simply describe existing realities but seeks to explain them, for instance by showing them to be effects of structures or mechanisms or forces that the analyst postulates and whose reality s/he seeks to test out (e.g. inequalities in wealth, income and access to various social goods might be explained as an effect of mechanisms and forces associated with 'capitalism').

There is a long tradition within critical social analysis, evident for instance in Marx (Marsden, 1999), of viewing social reality as 'conceptually mediated', as we might put it - meaning that there are no social events or practices without representations, construals, conceptualizations or theories of these events and practices; or, to put it in different terms, that social realities have a reflexive character, i.e. the way people see and represent and interpret and conceptualize them is a part of these realities. So the 'objects' of critical social analysis are, we might say, 'material-semiotic' (Jessop, 2004), that is, simultaneously material and semiotic in character, and a central concern is with relations between the material and the semiotic (or 'discourse'), which I would see as dialectical relations (Fairclough, 2006). A consequence is that critical social analysis has an interdisciplinary character, since the nature of its 'objects' requires it to bring together disciplines whose primary concern is with material facets of social realities and disciplines whose primary concern is with semiotic facets. I will argue that it has, more specifically, a 'trans-disciplinary' character, in that dialogue across different disciplines is seen as the source for the theoretical and methodological development of each of them (see Jessop and Sum, 2001 on 'post-disciplinary or 'trans-disciplinary' research as – in a sense – a return to the 'pre-disciplinary' positions of Karl Marx or Adam Smith, for instance; see also Fairclough and Graham, 2002). In these terms, CDA contributes a semiotic emphasis and a 'point of entry' into trans-disciplinary critical social analysis (Fairclough, 2009b).

The chapter will be structured as follows. First I shall elaborate what I have said so far about critical social analysis and I shall further discuss CDA as a part of critical social analysis. Second, I shall present one version of CDA, and, third, a trans-disciplinary research methodology associated with it. Fourth and finally, I shall illustrate CDA through a discussion of aspects of

the current financial and economic crisis. The version of CDA is the one which I have been developing and using in my recent work. It differs in various respects from versions in earlier publications (e.g. Fairclough, 1989, 1992, 2010).

Critical analysis of discourse as a part of critical social analysis

What distinguishes critical social analysis from forms of social analysis that are not critical is its emphasis upon existing social realities as humanly produced constraints, which in certain respects unnecessarily reduce human flourishing or well-being and increase human suffering; upon historical explanation of how and why such social realities have come into being; and upon possibilities for transforming existing realities in ways that enhance well-being and reduce suffering. I suggested above that this critique is normative and explanatory, concerned with both values and causes. Some versions of critique are only normative or moral, but I take the (Marxist) view that changing the world for the better depends upon being able to explain how it has come to be the way it is. It is one thing to critique people's language and practices on the grounds that they are racist, but another thing to explain why and how racism emerges or becomes virulent amongst certain people in certain circumstances. A purely normative or moral critique is not enough if the aim is to change social realities for the better; but values, evaluation and moral critique are a necessary part of critical social science (Sayer, 2003).

I referred above to the tradition in critical social science of viewing social reality as 'conceptually mediated', such that the 'objects' of critical social analysis are simultaneously material and semiotic in character. This means that dialectical relations between the material and the semiotic are a necessary focus in both normative and explanatory critique. The version of CDA which I outline below is well placed to bring a focus on these material—semiotic relations into trans-disciplinary critical social research.

CDA has for instance addressed the ideological character of discourse (Fairclough, 1989). Take for example the commonsensical construal of public finances as being in all essentials analogous to household budgets, a construal beloved by former British Prime Minister Margaret Thatcher and by many other politicians, so that for instance governments have to 'budget and save' just as households do. This is open to normative critique as a false claim, in that the analogy does not stand up to serious economic scrutiny, and as an ideological one, in the sense that it is a discourse that can contribute to sustaining an unjust and inequitable socio-economic order. Currently, in the UK for instance, one finds it in practical reasoning by politicians who are in favour of cutting public expenditure and public services to restore public finances in the aftermath of government use of public money to rescue the banks, which not only threatens to turn the recession into depression but arguably places on the general public most of the burden of paying for the (bankers') crisis. To explain the strategy of off-loading onto the public the costs of rescuing the markets from themselves, of which there are many other historical instances, we need to bring in material-structural factors associated with the character of capitalism, but also semiotic factors including examples of the causal power of common sense and of commonsensical construals in bringing about material effects (particular trajectories within and out of the crisis). Causes can be semiotic as well as material, and CDA can contribute to the project, within critical social science, of showing the relationships between the two.

One version of CDA

In this section I shall briefly present the primary concepts, categories and relations associated with the version of CDA I have recently worked with.

Discourse is commonly used in various senses, including (a) meaning-making as an element of the social process; (b) the language associated with a particular social field or practice (e.g. 'political discourse'); (c) a way of construing aspects of the world associated with a particular social perspective (e.g. a 'neo-liberal discourse of globalization'). It is easy to confuse them, so I prefer to use *semiosis* for the first, most abstract and general sense (Fairclough *et al.*, 2004) – which has the further advantage of suggesting that discourse analysis is concerned with various 'semiotic modalities', of which language is only one (others are visual images and 'body language').

Semiosis is viewed here as an element of the social process, which is dialectically related to others. Relations between elements are dialectical in the sense of being different but not 'discrete', i.e. fully separate; each one 'internalizes' the others without being reducible to them (Harvey, 1996). So social relations, power, institutions, beliefs and cultural values are in part semiotic, i.e. they internalize semiosis without being reducible to it. This means for example that, although we should analyse political institutions or business organizations as partly semiotic objects, it would be a mistake to treat them as purely semiotic, if only because then we couldn't ask the key question: what is the relationship between semiotic and other elements? CDA focuses not just upon semiosis as such, but on relations between semiotic and other social elements. The nature of this relationship varies between institutions and organizations and according to time and place, and it needs to be established through analysis.

The social process can be seen as the interplay between three levels of social reality: social structures, practices and events (Chouliaraki and Fairclough, 1999). Social practices 'mediate' the relationship between general and abstract social structures and particular and concrete social events; social fields, institutions and organizations are constituted as networks of social practices. In this approach to CDA, analysis is focused on two dialectical relations: between structure (especially social practices as an intermediate level of structuring) and events (or: structure and action, structure and strategy); and, within each, between semiotic and other elements. There are three major ways in which semiosis relates to other elements of social practices and of social events: as a facet of action; in the construal (representation) of aspects of the world; and in the constitution of identities. And there are three semiotic (or discourse-analytical) categories corresponding to these: genre, discourse and style.

Genres are semiotic ways of acting and interacting such as news or job interviews, reports or editorials in newspapers, or advertisements on TV or the internet. Part of doing a job, or running a country, is to interact semiotically or communicatively in certain ways, and such activities have distinctive sets of genres associated with them. Discourses are semiotic ways of construing aspects of the world (physical, social or mental) that can generally be identified with different positions or perspectives of different groups of social actors. For instance, the lives of poor people are construed not only through different discourses associated with different social practices (in politics, medicine, social welfare, academic sociology), but through different discourses in each, which correspond to differences of position and perspective. I use 'construe' in preference to 'represent' in order to emphasize an active and often difficult process of 'grasping' the world from a particular perspective (Fairclough, 2009a). Styles are identities, or 'ways of being', in their semiotic aspect – for instance, being a 'manager' in the currently fashionable way, in business or in universities, is partly a matter of developing the right semiotic style.

The semiotic dimension of (networks of) social practices that constitute social fields, institutions, organizations etc. is *orders of discourse* (Fairclough, 1992); the semiotic dimension of events is *texts*. Orders of discourse are particular configurations of different genres, different discourses, and different styles. An order of discourse is a social structuring of semiotic difference, a particular social ordering of relationships between different ways of making meaning – different genres, discourses and styles. So for example the network of social practices that constitutes the field of education, or

a particular educational organization such as a university, is constituted semiotically as an order of discourse. Texts are to be understood in an inclusive sense: they are not only written texts but also e.g. conversations and interviews, as well as the 'multi-modal' texts (mixing language and visual images) of television and the internet. Some events consist almost entirely of texts (e.g. a lecture or an interview), in others texts have a relatively small part (e.g. a game of chess).

Discourses that originate in some particular social field or institution (to anticipate the example, neo-liberal economic discourse, which originated within academic economics and business) may be *recontextualized* in others (e.g. in the political field, or in the wider educational field). Recontextualization has an ambivalent character (Chouliaraki and Fairclough, 1999): it can be seen as 'colonization' of one field or institution by another, but also as 'appropriation' of 'external' discourses, often incorporation of discourses into strategies pursued by particular groups of social agents within the recontextualizing field.

Discourses may under certain conditions be *operationalized*, 'put into practice' – a dialectical process with three aspects: they may be *enacted* as new ways of (inter)acting, they may be *inculcated* as new ways of being (identities), or they may be physically *materialized*, e.g. as new ways of organizing space in architecture. Enactment and inculcation may themselves take semiotic forms: a new management discourse (e.g. the discourse of marketized 'new public management', which has invaded public sector fields like education and health) may be enacted as management procedures, which include new genres of interaction between managers and workers, or it may be inculcated as identities which semiotically include the styles of the new type of managers. The modality is important: I have formulated these processes of operationalization as possibilities ('may'), because they are not necessary but contingent processes, which may or may not take place depending upon a range of factors and conditions, both material and semiotic (Fairclough *et al.*, 2004).

CDA oscillates as I have indicated, between a focus on *structures* (especially the intermediate level of structuring of social practices) and a focus on *strategies*, a focus on shifts in the structuring of semiotic difference (orders of discourse) and a focus on strategies of social agents that manifest themselves in texts. In both perspectives, a central concern is shifting relations between genres, between discourses and between styles: change in social structuring of relations between them that achieves relative permanence and stability in orders of discourse, and the ongoing working of relations between them in texts. The term *interdiscursivity* is reserved for the latter: the interdiscursivity of a text is a part of its intertextuality (Fairclough, 1992) – a question of what genres, discourses and styles it draws upon, and how it works them into particular articulations. Textual analysis also includes linguistic analysis, and analysis – where appropriate – of visual images and 'body language'; and these features of texts can be seen as realizing their interdiscursive features.

A trans-disciplinary research methodology

The focus I have just indicated on relations between semiosis and other elements calls for interdisciplinary research – more exactly, it requires CDA to be integrated within frameworks for *trans-disciplinary* research. An example is the framework I have used in recent publications – 'cultural political economy', which combines elements from three disciplines: a form of economic analysis, a theory of the state, and CDA (Jessop, 2004; Fairclough, 2006). What distinguishes transdisciplinary from other forms of interdisciplinary research is that, in bringing disciplines and theories together to address research issues, it sees 'dialogue' between them as a source for the theoretical and methodological development of each of them. For example, *recontextualization* was introduced as a concept and as a category in CDA through a dialogue with Basil Bernstein's sociology of pedagogy, where it originated (Chouliaraki and Fairclough, 1999).

I refer to a 'methodology' rather than a 'method.' Methodology is to be understood as a transdisciplinary process of theoretically constructing the *object of research* (Bourdieu and Wacquant, 1992) for a research project; particular methods are selected according to how the *object of research* is constructed. So it is not just a matter of 'applying methods' in the usual sense, and we cannot so sharply separate theory and method. This version of CDA is associated with a *general* method, which I briefly indicated in the final paragraph of the last section; but the specific methods used for a particular piece of research arise from the theoretical process of constructing its object.

We can identify 'steps' or 'stages' in the methodology: these are essential parts of the methodology (a matter of its 'theoretical order'), and, while it does make partial sense to proceed from one to the next (a matter of the 'procedural order'), the relationship between them in doing research is not simply that of sequential order. For instance, the 'step' I refer to below, of constructing the 'object of research' (Step 2 of Stage 1), does need to precede subsequent steps, but it also makes sense to 'loop' back to it in the light of subsequent steps, seeing the formulation of the object of research as a preoccupation throughout. It is also helpful to distinguish 'theoretical' and 'procedural' from the 'presentational' order one chooses to follow in writing a paper, for instance — other generally rhetorical factors will affect the order in which one presents one's analysis.

The methodology can be seen as a variant of Bhaskar's 'explanatory critique' (Bhaskar 1986, Chouliaraki and Fairclough, 1999), which can be formulated in four 'stages' that can be further elaborated as 'steps'.

- Stage 1: Focus upon a social wrong, in its semiotic aspects.
- Stage 2: Identify obstacles to addressing the social wrong.
- Stage 3: Consider whether the social order 'needs' the social wrong.
- Stage 4: Identify possible ways past the obstacles.

Stage 1: Focus upon a social wrong, in its semiotic aspect

CDA is a form of critical social science geared to the better understanding of the nature and sources of social wrongs, the obstacles to addressing them, and possible ways of overcoming those obstacles. 'Social wrongs' can be understood in broad terms as aspects of social systems, forms or orders that are detrimental to human well-being and could in principle be ameliorated if not eliminated, though perhaps only through major changes in these systems, forms or orders. Examples might be poverty, forms of inequality, lack of freedom or racism. Of course, what constitutes a 'social wrong' is a controversial matter, and CDA is inevitably involved in debates and arguments about this that go on all the time.

We can elaborate Stage 1 in two steps:

Step 1: Select a research topic that relates to, or points up, a social wrong and that can productively be approached in a trans-disciplinary way, with a particular focus on dialectical relations between semiotic and other 'moments'.

We might for instance conclude that such an approach is potentially 'productive' because there are significant semiotic features of the topic that have not been sufficiently attended to. A topic might attract our interest because it has been prominent in the relevant academic literature, or because it is a focus of practical attention in the domain or field at issue (the current crisis, for instance, is both). Topics are often 'given', and they sometimes virtually select themselves — who could doubt for instance that 'immigration', 'terrorism', 'globalization' or 'security' are important contemporary

topics, with significant implications for human well-being, which researchers should attend to? Selecting such topics has the advantage of ensuring that research is relevant to the issues, problems and wrongs of the day, but it also has the danger that their very obviousness can lead us to take them too much at face value. We cannot assume that such topics are coherent research objects; to 'translate' topics into objects, we need to theorize them:

Step 2: Construct objects of research for initially identified research topics by theorizing them in a trans-disciplinary way.

Let me anticipate the example I shall discuss in the next section: the initially identified research topic is the current financial and economic crisis. This is a huge topic, various aspects of which might productively be approached with a focus on dialectical relations between semiotic and material moments. Constructing objects of research is a trans-disciplinary process, so we would need to decide which relevant bodies of social science and theory to engage with. The 'cultural political economy' framework I mentioned above is a good choice in this case, though one might well want to combine it with other approaches (e.g. on 'moral economy', see Sayer, 2004). Social wrongs we might focus upon include: the largely unquestioned dominance of a 'neo-liberal' economic order that turned out to be deeply flawed, with dire consequences for a great many people; the greed of people like bankers, which contributed to the crisis and to increasing inequalities of wealth and income that have various negative social consequences; the policies of certain governments to make ordinary people bear most of the burden of repairing public finances, depleted as these are as a result of support given to the banks, for instance. Each of these has significant semiotic aspects. One possible construction of an object of research associated with the first of them might be to focus on the neo-liberal 'ideas' (semiotically, discourses) that informed, shaped and were used to legitimize the economic order and on the material effects of these ideas/ discourses

Stage 2: Identify obstacles to addressing the social wrong

Stage 2 approaches the social wrong in a rather indirect way, by asking what it is about the way in which social life is structured and organized that prevents the social wrong from being addressed. This requires bringing in analyses of the social order, and one 'point of entry' into this process can be semiotic, which entails selecting and analysing relevant 'texts' and addressing dialectical relations between semiosis and other social elements.

Steps 1-3 can be formulated as follows:

- Analyse dialectical relations between semiosis and other social elements: between orders of discourse and other elements of social practices, between texts and other elements of events.
- 2. Select texts, and points of focus and categories for their analysis, in the light of, and appropriately to, the constitution of the object of research.
- Carry out analysis of texts both interdiscursive analysis and linguistic/semiotic analysis.

Taken together, these three steps indicate an important feature of this version of CDA: textual analysis is only a part of semiotic analysis (discourse analysis), and the former must be adequately framed within the latter. The aim is to develop a specifically semiotic 'point of entry' into objects of research that are constituted in a trans-disciplinary way, through dialogue between different theories and disciplines. Analysis of texts can effectively contribute to this only in so far as it is located within a wider analysis of the object of research, in terms of dialectical relations between

semiotic and other elements – an analysis that comprehends relations between the level of social practices and the level of events (and between orders of discourse and texts).

Stage 3: Consider whether the social order 'needs' the social wrong

It is not awfully obvious what this means, and I shall try to clarify it by again anticipating the example, with respect to a social wrong I identified above: governments trying to make ordinary people pay for the public costs of the crisis. In what sense might the social order 'need' this? A broad answer might be to show that capitalism has historically not only asserted the supreme worth of markets and, to varying degrees, the need for them to operate with minimal political and social control, but has also claimed that it is the job of the state to bail them out when periodic (but regular and predictable) crises occur. Stage 3 leads us to consider whether the social wrong in focus is inherent to the social order, whether it can be addressed within it, or only by changing it. Stage 3 is a way of linking 'is' to 'ought': if a social order can be shown inherently to give rise to major social wrongs, that is a reason for thinking that perhaps it should be changed. This stage also connects with questions of ideology: discourse is ideological in so far as it contributes to sustaining particular relations of power and domination.

Stage 4: Identify possible ways past the obstacles

Stage 4 moves the analysis from negative to positive critique: identifying, with a focus on dialectical relations between semiosis and other elements, possibilities within the existing social process for overcoming obstacles to addressing the social wrong in question. This includes developing a semiotic 'point of entry' into research on the ways in which these obstacles are actually tested, challenged and resisted, be it within organized political or social groups or movements or, more informally, by people in the course of their ordinary working, social and domestic lives. A specifically semiotic focus would include, in the case of the crisis, ways in which the discourses, narratives, arguments etc. of business and governments are being contested and replaced by others, as part of struggles against mainstream strategies and in support of alternatives.

Illustration – critical research on the financial and economic crisis

The events of the financial and economic crisis are relatively clear, but its causes are more contentious. There are numerous explanatory accounts of it that differ, for instance in the relative weight they give to structural causes (e.g. recurrent economic 'cycles') as opposed to agential or 'subjective' causes (e.g. the failures - greed, incompetence etc - of key agents such as bankers, government ministers or regulators). Most explanatory accounts directly or indirectly recognize that semiosis, or discourse, needs to figure in explanations. For instance Roger Bootle, a respected British economist and consultant, after identifying eight major causal factors, concludes that it is nevertheless possible to identify a single cause that underlies them: the impact of economic *ideas* (Bootle, 2009), most especially the 'efficient market hypothesis' - the idea, in its extreme form, that markets are always right, which in many cases ceased to be treated as a hypothesis and came to be treated as an established fact. What Bootle calls 'ideas' amounts to semiosis or discourse - and, more specifically, we might say a Discourse of (or about) economic (including financial) activities (a 'big' Discourse that subsumes a number of 'small' discourses - Gee, 1999), which (amongst other things) construes 'markets' in certain ways (as 'knowing best', as efficient, as rational, etc). So potent and prestigious was this Discourse that key players in business, government and financial governance failed to see or refused to see what were for some more perceptive commentators the extreme dangers of the levels of debt that were building up, some of the so-called 'innovations' in finance, and so forth. The Discourse, we might say, became dogma. It was also extensively recontextualized, for instance within the International Monetary Fund (IMF)/World Bank 'Washington Consensus', which was internationally promoted, if not imposed, as part of a model for capitalism that informed processes of 'transition' from socialism to capitalism in Central and Eastern Europe. And it was operationalized, enacted in practices (and, semiotically, genres) such as those associated with the 'light-touch' regulation of banks and other financial institutions, and inculcated (though workplace disciplines, the mass media and education) in the identities of economic 'subjects' (producers and consumers) and, semiotically, into their styles.

Analysing, interpreting and explaining these processes might be part of one possible piece of research oriented towards the crisis, which might seek to assess the impact of this Discourse and its operationalizations in the establishment, maintenance and legitimation of the neo-liberal order, but also to address the question of how the Discourse might have contributed to the apparent incapacity of bankers, regulators, governments and so on to understand the dangers of that order and to anticipate its crises. But it follows from what I have said above that the object of such a piece of research should be constructed in a trans-disciplinary way. For instance, from cultural political economy (CPE) one might take a theory of structuration that focuses on dialectical relations between structures and strategies and includes a framework for explaining how, from a variety of strategies, certain ones come to be selected and retained (and, in CDA terms, recontextualized and operationalized). What are the factors and conditions (both semiotic and material/structural) that led to the selection and retention of neo-liberal strategy (from the 1970s onwards) and of its semiotic moments (including the Discourse discussed above) rather than of other strategies (Fairclough *et al.*, 2004)? CPE also includes ways of addressing the processes of systemic and governance failure, which link this historical account of neo-liberalism to the current crisis.

These observations roughly address issues related to Stage 1 of the methodology, identifying a social wrong (the predominance of a flawed economic order, whose failure has caused serious damage to many) with a significant semiotic aspect and construction of research objects for addressing it. If we turn to Stage 2, the primary question is: what obstacles have there been, and are there still, to addressing the social wrong? Let us focus on the current period. Transdisciplinary analysis of the contemporary political-economic situation might suggest that the neoliberal order, and Discourse, have been weakened to the point that the obstacles to surpassing it that one might have identified a few years ago are much less daunting. But this does not mean that any new strategy for replacing neo-liberalism, whatever that may be, would necessarily address in its essentials the central wrong at issue - a new strategy may not overcome the problems of an economic order with unjust effects (e.g. in terms of inequalities of wealth and income) and a liability to devastating crises. Analysis of recent and current texts, for instance from the coverage of, commentary on and debate over the crisis in the political public sphere of countries like Britain and the USA, can be used to identify the range and positioning of discourses (or Discourses), and can be integrated within a trans-disciplinary framework based upon CPE which, amongst other things, maps d/Discourses onto strategies for responding to the crisis and for moving towards an economic order that may facilitate economic recovery. One tendency that might be focused upon, for instance, is for certain governments, including the British one, to pursue a strategy for the restitution of the status quo ante with only relatively minor modifications of regulatory systems.

Here is, for example, a short extract from a speech by British Prime Minister Gordon Brown to the Foreign Press Association in London, January 2009:

We know now that financial institutions are international, that capital flows are global, but their regulators and supervisors have remained so far only national. So we have highly interdependent financial flows which dwarf world GDP, but as yet no effective system for policing them. And as the downturn spreads across the world we are for the first time seeing cross-border flows growing more slowly than domestic flows and we are seeing banks favouring their domestic lending over foreign lending. And this is a trend which must be halted if we are to avoid the risk of a damaging worldwide spiral of deleveraging and then deglobalisation with adverse consequences for all our economies. We can sustain a consensus for an open global economy where countries can draw on their deep capital markets to finance faster development which benefits us all, but only if we can provide also a means of responding when these markets fail.

A short extract can only give a partial impression of the flavor of the whole speech. The 'globalisation' that Brown wishes to defend is what we can reasonably call 'neo-liberal globalisation', and he is effectively defending the neo-liberal capitalism which is in crisis (implicitly therefore construing the crisis as a crisis in rather than of neo-liberalism). The speech incorporates without modification the established legitimizing narrative for this form of globalization, 'globalisation produces growth which produces prosperity for all and reduces poverty', despite the flaws that have been exposed in this model (e.g. long-term tendencies to reduce wages and to increase the gap between rich and poor), which he does not address, and despite its failure and the consequential crisis. He construes features of this model ('financial institutions are international', 'capital flows are global', 'highly interdependent financial flows which dwarf world GDP') as simply the way the world now is, and condemns 'deleveraging', which might be seen (in an appropriate form and within appropriate limits) as a reasonable response to the excessive 'leveraging' which was widely seen as a cause of the financial crisis, as a 'risk' and as a 'damaging spiral', which would have 'adverse consequences for all our economies'. At the same time he implies that 'consensus' for such an 'open global economy' could be at risk. His solution to this danger is international regulation, 'which can provide a means of responding when these markets fail', presupposing that they do and will fail. From this speech and other evidence it seems that the British government is committed to restoring the status quo ante with minor modifications, in some cases drawing upon the d/Discourses and narratives of the more triumphant years of neo-liberalism in the reasons they give for the actions and policies they propose. (See Fairclough and Fairclough, forthcoming, for an approach to the analysis of practical reasoning in political discourse applied to political responses to the crisis.)

Stage 3, addressing the question of whether the social order needs the social wrong, gives rise to the question of whether it is possible within a capitalist system to develop and implement a new strategy, which can overcome the injustices and the dangers of crisis. Although one might argue that these are to an extent endemic in all forms of capitalism, one might also argue that forms of capitalism have differed markedly in the extent to which they have mitigated these tendencies and dangers, which would indicate that it is in principle possible for a new form of capitalism, which mitigates the wrongs of neo-liberalism, to emerge, though that leaves open the question of whether it is practicable in existing conditions. For instance, different forms of capitalism share a commitment to constant 'growth', yet arguably the environmental and resource (oil, water) crises, which co-exist with the current financial and economic crisis, render this commitment deeply problematic and raise the question of whether capitalism as such can provide real solutions to our multiple crises.

Let me turn to Stage 4. The sort of analysis I am suggesting should include strategies and associated D/discourses for transforming the existing financial and economic order in ways that might begin to address the social wrongs at issue, including more radical strategies for a substantive

social control of the functioning of markets (and in some cases permanent nationalization of key parts of the banking system, for instance) and strategies for a 'Green New Deal' that address also the environmental crisis. The aim of trans-disciplinary analysis would include identifying the conditions of possibility and the obstacles to such strategies and D/discourses being selected and retained. Here is a short extract from Neil Lawson and John Harris 'No turning back' (*New Statesman*, March 2009):

The starting point for a better future is the simple recognition that the Good Society is incompatible with market fundamentalism. ... Markets never contain themselves. Instead, they always look for new opportunities to make more profit. This leads to no end of disastrous and dysfunctional outcomes: among them, the commercialisation of the lives of our children and the rise of the kinds of complex financial instruments that have brought the whole house down. To turn society in a different direction, markets will have to be regulated and trammeled by social forces – the state and civil society. We must put in place the institutions that allow society to make the market its servant.

The authors represent, or imagine, a society in which markets are the 'servant' of social aspirations and goals for 'the Good Society', and they are 'regulated and trammeled' by 'the state and civil society'. Ways to achieve this are only indicated in the most general terms ('put in place ... institutions'), but the strategy of mobilizing 'civil society' as well as the state in order to force markets into serving societal rather than just economic (e.g. 'growth') ends is a radical one compared with Brown's and others'. Embedding CDA within CPE allows us to explore both the semiotic and the material conditions of possibility for, and obstacles to, such a strategy and Discourse being selected and retained – the obstacles in this case would seem to be currently very severe.

These comments draw only upon a part of the version of CDA presented earlier. An issue that can be brought into the analysis is the recontextualization of d/Discourses, which is relevant to the resonance and impact that are germane to the selection of certain d/Discourses, but not others. For example, in the summer of 2009 media coverage of the crisis in Britain came to be dominated by 'repairing public finances' and 'reducing government debt' and by the 'cuts' in public spending, which were portrayed as the main necessary means of achieving this. The question of what 'cuts' the competing political parties would make, how deeply and how quickly, came to dominate the front pages of much of the press. There is a good case for arguing that it was Conservative Party agitation on this issue that was extensively recontextualized, not only in the news, but also in the editorial columns of much of the press, and succeeded in focusing the crisis agenda on the willingness to make deep and speedy cuts. When Gordon Brown's speech at the Labour Party conference in October 2009 partially took up this 'cuts' agenda at the expense of his previous construal of public spending during the crisis as an 'investment', these sections of the press were triumphant -'At last Brown uses the c-word!' The issue of operationalization (and the associated questions of how d/Discourses come to be enacted in practices and, semiotically, in genres, inculcated in identities and, semiotically, in styles, and materialized in the physical world) will on the other hand become particularly significant as the process of selecting particular d/Discourses, and achieving a measure of hegemony for them, advances. Thus, since the elections of May 2010 in the UK, a coalition government (Conservatives plus Liberal Democrats) has begun to operationalize the 'cuts' agenda by substantially changing and reducing the provision of welfare and public services. (See Chiapello and Fairclough (2002) for a discussion of the operationalization of discourses in the process of emergence of the 'new capitalism' from the 1970s.)

Conclusion

I have focused here on one version of CDA that differs both from versions I have used myself in earlier work and from versions developed and used by other CDA practitioners (see Fairclough and Wodak, 1997 and Meyer and Wodak, 2009 for a number of these). CDA is a loosely interconnected set of different approaches, which differ for instance in the relative weight given to social as opposed to cognitive issues, or in the relative centrality given to social change (and therefore to concepts and categories such as interdiscursivity and recontextualization).

The version of CDA I have briefly presented here, and its precursors in earlier publications (e.g. Fairclough, 1992; Chouliaraki and Fairclough, 1999), are strongly focused upon shifting articulations of genres, discourses and styles in texts (interdiscursivity) and in orders of discourse. The interdiscursive analysis of texts has been seen to have a crucial mediating role between the linguistic analysis of texts (and, where appropriate, the 'multi-modal' analysis of relations between language, body language, visual images, etc.) and whatever forms of social analysis are germane to the particular piece of research being undertaken. On the one hand, shifts in the articulation of genres, discourses and styles in texts (or: the 'hybridisation' or 'mixing' of different genres, different discourses, different styles) are realized in changes in linguistic (and multi-modal) features of texts; on the other hand, these interdiscursive shifts are the semiotic element or 'moment' of social changes, and they are dialectically interconnected with other, non-semiotic elements or 'moments'. Of course, not every interdiscursive novelty in texts amounts to social change in a substantive sense. There is a huge amount of variation in texts, but which variants come to be selected and retained (Jessop, 2004) depends upon a range of non-semiotic as well as semiotic factors and conditions. Where interdiscursive shifts are selected and retained, we can identify changes in the orders of discourse, i.e. changes in social practices in their semiotic aspect. To put the point in different terms, changes that occur in concrete events (texts) are selectively and contingently retained as changes in structures, changes in semiotic structures (orders of discourse) that are dialectically operationalized in changes in non-semiotic structures.

Further reading

Fairclough, N. (2000) New Labour, New Language? London: Routledge.

An accessible application of CDA to analysis of political discourse, written for a general, non-specialized readership.

Fairclough, N. (2003) Analysing Discourse: Textual Analysis for Social Research. London: Routledge.

Discusses in some detail methods of textual analysis in CDA, which I have not said much about in this paper. It also shows how textual analysis can be selectively used to strengthen social research on a variety of issues. Lemke, J. (1995) *Textual Politics: Discourse and Social Dynamics*. London and Bristol, PA: Taylor and Francis. A powerful presentation of an approach to CDA that differs in various ways from the one I have presented here.

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Systemic functional linguistics

Mary J. Schleppegrell

Discourse analysis seeks patterns in linguistic data. Systemic functional linguistics (SFL) offers a means of exploring meaning in language and of relating language use to social contexts so as to contribute to our understanding of language in social life. This chapter provides an overview of SFL theory and its constructs and describes studies that have used SFL to explore meaning in discourse in a variety of contexts.

What is systemic functional linguistics?

SFL is the linguistic theory developed by Michael Halliday (Halliday, 1978, 1994; Halliday and Matthiessen, 2004). SFL recognizes the powerful role language plays in our lives and sees meaning-making as a process through which language shapes, and is shaped by, the contexts in which it is used. Every language offers its speakers/writers a wealth of options for construing meaning. SFL facilitates exploration of meaning in context through a comprehensive text-based grammar that enables analysts to recognize the choices speakers and writers make from linguistic systems and to explore how those choices are functional for construing meanings of different kinds. SFL describes three abstract functions (metafunctions) that are simultaneously realized in every clause we speak or write, and relates our linguistic choices to the contexts that the language participates in. The three metafunctions are the ideational, interpersonal, and textual, as in every clause our language simultaneously construes some kind of experience (ideational metafunction), enacts a role relationship with a listener or reader (interpersonal metafunction), and relates our messages to the prior and following text and context (textual metafunction). SFL provides constructs and tools for exploring these three kinds of meanings and their interaction in discourse.

For example, in the first sentence of this chapter, *Discourse analysis seeks patterns in linguistic data*, I simultaneously used linguistic resources that present information, construct a particular relationship with the reader, and move the text along. Ideationally, this clause construes *discourse analysis* as an *actor* in the process of *seeking*; what is sought are *patterns in linguistic data*. Interpersonally, this is stated assertively, with no indeterminacy and no negotiation or interaction with the reader (compare, for example, beginning with *What are the goals of discourse analysis?*). Textually, the clause takes *discourse analysis* as its point of departure, connecting this chapter with the topic of the handbook as a whole, and makes *seeks patterns in linguistic data* the point of the clause—the "new" information that the sentence presents. Different choices might have been made in any of these areas of meaning, and SFL offers a comprehensive framework for exploring variation and for relating it to the discourse context.

SFL describes linguistic systems and the functions they enable, revealing the ways social actors construe their experiences and enact relationships. From the *systemic* perspective, language is seen as a network of dynamic and open systems from which speakers and writers are constantly selecting as they use language, thereby maintaining or changing the systems over time through their choices. The system of *transitivity*, for example, offers a range of options for ideational (content) meaning that is comprehensive of the ways language varies in presenting experience: as *doing*, *sensing*, *saying*, or *being*. SFL analysis of transitivity describes the grammatical differences between, for example, a clause with an *actor* in a *doing* process (*Discourse analysis seeks patterns in linguistic data*) and a clause with a *senser* in a *sensing* process (*We can think of discourse analysis as a process of seeking patterns in linguistic data*). This enables the analyst to consider how the choices a speaker/writer has made from the transitivity system construe the experience presented in the text. (For example, analysis of transitivity patterns in literary texts often reveals that authors represent characters' feelings in their actions.)

SFL uses the abstract categories field, tenor, and mode to refer to the relationship between language and context. Ideational resources point to the topic/content (field); interpersonal resources enact relationships and convey attitudes (tenor); and textual resources indicate the role language plays in the context (mode), for example, whether the language constitutes or accompanies activity. Field, tenor, and mode vary as the speaker/writer's lexical and grammatical choices respond to, and at the same time help construct, the context in which language is used. Selections from the transitivity system are one element of field. Every clause also has grammatical features that contribute to the construal of tenor—for example through selection from the mood system (each clause is declarative, interrogative, or imperative) and from other resources for interpersonal meaning. Mode is also simultaneously construed in each clause through, among other systems, selections from the theme/rheme system, as the speaker/writer makes choices about the point of departure of each clause and the new information that it will present. The SFL grammar describes the choices available to speakers/writers in these and other systems of English and other languages, and the analysis can also be extended to other modalities, to enable the discourse analyst to describe the different constellations of meanings that emerge from different choices within each system (choice here means selection, not entailing conscious/ deliberate choice). From this perspective, SFL discourse analysis can answer the question: How does this text mean what it does?

Variation in linguistic choices with respect to context is captured in SFL in the notion of register. Drawing on different systems of language in different combinations realizes different registers, because the particular language choices, and so the meanings we make, vary according to social and cultural context. Language is a vast resource for meaning-making, and speakers/writers draw on this resource in different ways, depending on what is going on, whom we are interacting with, and the role language is playing. Analyzing language choices can reveal important differences in how content, role relationships, and information flow are constructed in different contexts, as these differences realize and reveal different registers. This suggests the second question that SFL analysis can help answer, namely: How does this text contribute to shaping the social context?

Differences in the configurations of meaning that emerge from different choices in the grammar can be compared to recognize differences in register, as the grammatical choices evoke for listeners/readers the social meanings that the language helps instantiate. Each of the linguistic systems described in SFL grammar enables comprehensive analysis of an area of meaning in the language, and analyzing the linguistic choices that realize different meanings tells us something about how the text means what it does and how it participates in social life.

Reasoning with patterns of grammar and meaning

One of Halliday's contributions to SFL discourse analysis has been a description of the evolution of scientific English (Halliday, 1993a). Analyzing texts written by fourteenth through to twentieth century scientists, Halliday shows how science discourse evolved in its grammatical choices, drawing increasingly on nominalization (his *grammatical metaphor*: see below) as new kinds of knowledge and interpersonal relationships developed in science over time. The focus he takes and the insights he presents are a good example of what SFL discourse analysis can illuminate.

Halliday illustrates how, over time, scientists adapted the grammatical resources available in English to create discourse that develops an argument through logical steps—the kind of argumentation needed to share the results of experiments in physical science. He describes how the ideational and textual resources used by scientists changed as they began developing technical taxonomies and theorizing in new ways. At the same time, the tenor of scientific discourse also evolved into the impersonal stance typical of science today. Halliday reports how Newton, for example, wrote in very direct ways about the experiments he conducted, telling what he did, observed, and thought about it: "I held the prism ... observed the length of its refracted Image ... it appears that ...". This is quite different from the discourse of today's experimental report, and Halliday describes how scientists began to exploit the potential of the nominal group (noun phrase) to distill and repackage the processes scientists were writing about so that they could be related to each other. For example:

The rate of crack growth depends not only on the chemical environment but also on the magnitude of the applied stress. The development of a complete model for the kinetics of fracture requires an understanding of how stress accelerates the bond-rupture reaction.

(Michalske and Bunker 1987, p. 81 cited in Halliday, 1993a)

Here the nominal group *The rate of crack growth* distills the process of *cracking slowly/quickly*. The nominal group *the magnitude of the applied stress* repackages information from the process of *applying much/little stress*. These are the experimental processes that the scientist has engaged in, but the process is not reported in the way Newton did (e.g., *how quickly the [glass] cracks depends on how much stress [I] apply*).

It is not only the physical processes, but also the scientists' thinking processes that can be presented in these nominal group structures. The development of a complete model for the kinetics of fracture is a nominal group that repackages the process We want to develop a model. The nominal group an understanding of how stress accelerates the bond-rupture reaction repackages the process We need to understand how. ... These are "internal" processes: processes that the scientists engage in through their thinking (If we want to develop a model ..., we need to understand how ...).

Through analyses of the nominal groups used by scientists over time and of the role the nominal groups play in experimental discourse, Halliday shows how the ideational resources of the grammar have developed to enable a kind of texture in which, as we see in this text, a process (glass cracking) is presented as a thing (the rate of crack growth) that can then participate further in the discourse. Halliday points out that using the nominalization the rate of crack growth at the beginning of the passage is only possible because the text has already talked about the speed at which glass cracks. Halliday calls nominalizations like these grammatical metaphors. He points out that, in the registers of everyday life, we typically express meanings in structures that relate congruently to those meanings. We present meanings about things in nouns; meanings about processes in verbs; meanings about connections in conjunctions, meanings about qualities in adjectives. Grammatical metaphor enables the presentation of meaning in a structure that is not congruent with the grammatical form, and this is one of the ways in which technical and academic discourses have evolved.

Grammatical metaphor enables meanings to be distilled and compacted. Presenting processes as things enabled scientists to create chains of reasoning and argumentation that facilitated the development and presentation of theories, enabling science discourse to evolve in ways that facilitated the presentation of new knowledge.³ For example, a whole argument can be summed up in a few words, which make it possible to examine the argument in relation to other arguments or perspectives; or a new scientific process can be distilled into a few words, so that it can be used as a participant in yet another process. Grammatical metaphor is a key feature of scientific discourse today, but it was not always so, and Halliday shows how this linguistic technology changed the *tenor* and *mode* of science discourse as scientists increasingly drew on interpersonal and textual options that construe more distanced interpersonal relationships, but that enable the text to be organized to efficiently present an explanation or build an argument.

As this discussion exemplifies, the functional grammar is the basis for SFL discourse analysis, and understanding how every clause can be analyzed from the three metafunctional perspectives to reveal the complexity of meanings always construed in each use of language is the foundation of analyzing a text from an SFL perspective.

Approaches to SFL discourse analysis

Halliday and Hasan's (1976) seminal work on cohesion describes non-syntactic relations that make a text hang together (reference, ellipsis, substitution, conjunction, and lexical cohesion) and enable a text to evolve from clause to clause. The description of cohesion in text was an important foundation for further work on the semantics of texts and the development of SFL discourse analysis tools. Today there are two major branches of SFL discourse analysis, generated from the work of Ruqaiya Hasan and J. R. Martin. Each of them has proposed a set of tools and approaches to discourse that have been taken up by analysts in different contexts. "Text" is the unit of SFL discourse analysis; it refers to "any passage, spoken or written, of whatever length, that forms a unified whole" (Halliday and Hasan, 1976: 1). Texts are approached with different analytic tools, depending on the goals of the analysis.

Hasan has developed SFL discourse analysis through the constructs generic structure potential (Hasan, 1996a), cohesive harmony analysis (Hasan, 1984), and semantic networks (Hasan, 1996b). SFL is often associated with an interest in genre, and Hasan's generic structure potential and cohesive harmony analysis are tools for recognizing the moves that may occur within a genre (e.g., Hasan, 1996a). In analyzing generic structure potential, multiple examples of a genre are reviewed in order to identify elements that are obligatory and optional and the ordering possibilities for those elements. Togher et al. (2004), for example, use analysis of generic structure potential to compare "typical" encounters with police with encounters the police have with people with traumatic brain injury, who often do not engage in the genre of this encounter in the same ways as people who are not injured. They show how the structure of the encounters with brain-injured people departs from what police typically expect, and their analysis is contributing to a more effective interaction with brain-injured people. Cohesive harmony analysis (Hasan, 1984) is another approach to recognizing how a discourse evolves, helping an analyst describe connections across a text by "identifying the lexical and referential chains formed in a text and then examining the ways in which these chains interact" (Cloran et al., 2007: 651). Cloran et al. show how analysis of cohesive chains helps identify boundaries within texts, as the appearance and disappearance of chains reveals the text's structure. This is illustrated in Cloran (1999), where she uses an analysis of cohesion to identify how particular moves are embedded in larger discourse units.

Ruqaiya Hasan has also initiated a productive strand of SFL discourse analysis in her study of the discursive practices of mothers interacting with young children in contexts of everyday life (see Hasan et al., 2007 for a history of this work). Drawing on SFL's notion of system networks, Hasan developed the construct semantic network, to show at a very detailed level differences in the meanings speakers construe in what might otherwise be seen as the "same" context; for example in bathing a child (Hasan, 1996b; Hasan et al., 2007). In analyzing semantic networks, transcripts are divided into messages (similar to a clause), and the messages are compared to identify different linguistic realizations. For example, Hasan (1996b) discusses how some utterances from mother to child incorporate the semantic option assumptive. Selecting the option assumptive presents the implication that the speaker has a view of what the situation should have been. This is realized through negation, in clauses such as: Didn't you see me? Why don't you love Rosemary? Or: You didn't eat it? (the child ought to have seen her; should love Rosemary, should have eaten it). A semantic network is an attempt to account for "systematic variation in the meanings people select in similar contexts as a function of their social positioning" (Williams, 2005: 457).

Hasan (2009) reports on how this analysis has enabled exploration of variation in the ways mothers who are positioned in different ways in the social structure ask and answer their children's questions, in the ways they reason with their children, and in the ways gender and class ideologies are construed in everyday talk between parent and child (see also Cloran, 2000). Williams (2005) also analyzes this corpus by using the statistical techniques of principal components and cluster analysis. He shows that mothers vary in the frequency with which they select different options as they read aloud to their children – for example, in how frequently they foreground the expression of individual points of view vs. taking for granted that they know the child's experience or state of knowledge.

J. R. Martin has also developed an approach to the analysis of discourse that builds on the notion of cohesion as discourse structure, analysis of discourse semantics and genre being his point of departure. He has developed analytic tools that provide a framework for "tackling a text" (Martin, 1992; Martin and Rose, 2003), offering those unfamiliar with SFL grammar a set of tools for engaging in analysis through exploration of six discourse-level systems: *appraisal*, *ideation*, *identification*, *conjunction*, *periodicity*, and *negotiation* (Martin and Rose, 2003). The analysis of each system affords different possibilities for exploring meaning in text, the basis for analysis being an understanding that language participates in social life through *genres*.

Martin's approach sees genre as a level of context above and beyond field, tenor, and mode, and makes genre central to describing the role of culture in language use (Martin, 1999a). He defines genre as a staged, goal-directed social process, and his early work in educational contexts developed a description of a range of genres that are typical of and expected in different disciplinary pedagogies (Martin, 1993, 1999b). Martin and his colleagues analyzed more than 2,000 texts in different school subjects, as described in Rothery (1996), developing descriptions of linguistic pathways into disciplinary literacies—descriptions that have been highly influential (see Christie and Martin (1997); Martin (2002) offers an example from history). For more on SFL and genre, see Martin and Rose (2008); Rose (this volume). For a recent application of this approach, see Macken-Horarik *et al.*'s (2006) analysis of the linguistic demands of a pre-service teacher education program.

Two of the discourse semantic systems developed in Martin and Rose (2003) will be described here: *ideation* and *appraisal*. *Ideation* analysis explores the linguistic resources that construe experience and construct the field of discourse. Similar to the analysis of cohesive harmony described above, ideation analysis focuses on the semantics of each clause and tracks meaning across a text to reveal sequences of activities, the people and things involved in them, and their associated places and qualities. This analysis can show how texts of different types, in different contexts, unfold in different ways. For example, Martin (2006: 292) uses ideation analysis to show how agency is construed in a text aimed at reconciling Australian and Japanese war experiences, where he argues

that representing Australians as more agentive "can perhaps be read as balancing the more commonly promulgated (in Australia) 'Japan as aggressor, Australia as victim' motif." Through analysis of lexical relations within the clause and chains of relationships between lexical elements, ideation analysis can reveal the sequences of activity that make up different stages of a genre (see also Martin, 2001).

Appraisal analysis explores how interpersonal meaning permeates a text, enabling exploration of resources for evaluative meaning, "the kinds of attitudes that are negotiated in a text, the strength of the feelings involved and the ways in which values are sourced and readers aligned" (Martin and Rose, 2003: 25). A related development in SFL discourse analysis is the elaboration of the engagement system, a sub-system of appraisal, to identify the sources of attitudes and evaluative meaning (Martin and White, 2005). The appraisal tools are currently informing SFL discourse analyses across a range of contexts (e.g. White, 2003a; Martin, 2004; Arkoudis, 2005; Hood, 2006; and the special issue of Text (2003, Vol. 23 n. 2)). Hood, for example, uses appraisal analysis of research paper introductions to illustrate how different configurations of attitudinal meanings are relevant to accomplishing different purposes: for instance for presenting a rationale, arguing for new knowledge, or presenting one's own work as valuable. Arkoudis (2005) uses appraisal analysis to reveal tensions and power relationships around teachers' collaboration.

Martin's recent work explores how texts about the same event draw on different linguistic systems to instantiate different perspectives (e.g. Martin, 2008a). In analyzing three accounts of events in a novel, he shows how authors present and combine meanings in different ways, the different instantiations of the story affording different readings. Martin draws implications from this for understanding the affordances of translation, the use of different modalities, and summarizing. In a related chapter, Martin (2008b) explores the same texts to show how differences in the dialogism of the texts construct the speakers as more or less authoritative. This and other features of the discourse construe the characters' identities and position them in ways that different readers may align with. These chapters provide detailed examples of how analyses of genre, periodicity, appraisal, conjunction, and ideation offer insights for discourse analysis.

Tools for meaning-based discourse analysis, based on close attention to linguistic realization, have proliferated within SFL. The approaches offer ways to track a range of meanings across texts, as analysts recognize elements of text structure, identify and track participants in the text, recognize and explore the kinds of processes they are engaged in, look at the attitudes and judgments that are infused, and explore differences in the ways texts move from clause to clause. The close focus on the choices speakers and writers make reveals the contexts they are participating in and the ways language contributes to construing those contexts.

Contexts that SFL analysts have explored

SFL analyses have described features of the registers and genres of different disciplines (e.g. Halliday and Martin (1993) on science; O'Halloran (2005) on mathematics; Coffin (2006) on history; Christie (1999) on subject English; Wignell (2007) on social science; see Christie (2007) for analysis of the role of disciplinary differences in the recontextualization of knowledge for education). Education has been an especially important and fruitful area of SFL discourse analysis (Christie and Unsworth (2005) provide a history), and Frances Christie has been an important contributor, informing educational theory and practice in significant ways. Christie (2002) provides a methodology for the analysis of classroom discourse that shows how instructional content and regulation of students are simultaneously managed by teachers. She illustrates how to distinguish the content or instructional register from the regulative or pedagogical register that projects the content, and analyzes these registers in interaction with each other to explore the knowledge

being made available to students through classroom discourse as well as the ways students are positioned as learners. Christie shows how, in the early grades, the regulative register is foregrounded, but, as students move into the higher grades, it becomes more implicit. For example, teachers use fewer direct imperatives and more modality in directing behavior (e.g., "So you're probably best to sit next to somebody that you will work with" (p. 165)), and abstractions take the place of overt expressions of authority (e.g., "The main requirement is...") (p. 166)). The regulative register in this sense "appropriates" the instructional register, which is projected through it. Christie also illustrates how learning occurs at different phases of a lesson and how students' language develops as they work with new ideas and technical language. She shows that, where teaching is successful, students are enabled to reason in particular ways that reflect the values of the disciplines they are studying.

In recent work, Christie and Derewianka (2008) draw on a database of 2,000 texts from studies over the past 20 years to offer extensive and detailed descriptions of the developmental trajectories through which children gain control of written language in English, history, and science. This discourse analysis of children's written development across the school years in different subject areas shows the importance of grammatical metaphor to academic achievement and describes the linguistic resources through which abstraction, generalization, value judgment and opinion come to be expressed as students' writing matures.

Schleppegrell (2004) offers an analysis of the register features of the texts encountered in schooling in order to highlight the linguistic challenges of different genres and disciplines, describing the "language of schooling" as a register that enables students to display knowledge authoritatively in texts that have certain expectations for their structuring. Oteíza and Pinto (2008) use analyses of transitivity and appraisal to show how the dictatorships and subsequent transitions to democracy are portrayed in pedagogical texts used in Chile and Spain, illustrating how the authors silence some social actors while giving prominence to others as they present historical explanations to students. Achugar and Schleppegrell (2005) analyze very different ways in which causality is construed in history textbooks, showing how implicit causality puts in the background information important for critical reading of history texts. In an investigation of expository school history writing and teachers' expectations for this type of writing, de Oliveira (2010) explores thematic development, evaluation, and elaboration in secondary students' writing. Morgan's (2005) analysis of mathematics texts uses an analysis of transitivity to reveal how they represent the nature of mathematics and how they construe power and authority in particular ways. She shows, for example, that pedagogical texts obscure agency in mathematics far more than professional mathematicians do. Macken-Horarik (2006) analyzes exemplars of students' performance on high-stakes examinations to show what really matters to evaluators, highlighting linguistic aspects of high-scoring essays that are seldom acknowledged or explicitly taught.

Other SFL analyses have explored spoken discourse in science (Lemke, 1990) and mathematics (Chapman, 1995) classrooms, to show how teachers and students are often construing knowledge in different ways, revealing that students may not understand certain concepts. O'Halloran (2004) demonstrates how analysis of mood and modality can shed light on interpersonal relationships in the mathematics classroom and reveal how students are positioned as learners. Gibbons (2006) analyzes spoken interaction and students' written texts to illustrate how teachers can support the development of language and content learning in classrooms with diverse students, including some who are learning English as a second language. She argues that teachers need to understand language from a functional perspective in order to move students along a "mode continuum," from everyday into more specialized ways of construing knowledge. Zolkower and Shreyer (2007) use analysis of mood and speech function, supplemented by comments on modality, to analyze the ways a teacher "commands" her students in a sixth grade algebra lesson to "think

verbally," showing how "thinking" is constructed in language as the teacher organizes and scaffolds instruction.

SFL has enabled advanced second and foreign language instruction to develop pathways into the kinds of discourse and language use that is needed for engagement in academic and professional contexts (see special issue of *Linguistics and Education* (Byrnes, 2009, Vol. 20 n. 1)). Byrnes (2009), for example, analyzes the writing development of 14 students of German as a foreign language over three curricular levels, providing quantitative and qualitative measures of the development of grammatical metaphor in second language writing, and suggests how such analyses can contribute to a deeper understanding of contrastive rhetoric and of the relationship between first and second language writing development (see also Ryshina-Pankova, 2010). Hood (2010) analyzes how published researchers and second language writers draw on the resources of English to introduce their own research and to critique the research of others, and provides an elaboration of the networks within the appraisal system to account for differences in the evaluation strategies of writers along several dimensions. Lee (2010) analyzes what she calls the "commanding strategies of 'shouldness'" in undergraduate second language writers' texts, focusing on metaphors of mood and modulation. SFL analysis has also been extended to languages other than English (e.g. Colombi, 2002; Oteiza, 2006; see Martin, 2009, for other references), and is used by researchers around the world. Children's language development has been a foundational area of focus in SFL discourse analysis, with important work presented in Halliday (1975, 1993b) and Painter (1999).

Clinical contexts have also been frequent sites for SFL discourse analysis, which is used in studying and treating language disorders such as aphasia, traumatic brain injury, dementia, and developmental disorders (Armstrong, 2005; Armstrong et al., 2005). Bartlett et al. (2005) describe studies that have used cohesion analysis to understand autism, where this kind of analysis enables consideration of interpersonal resources for meaning-making and "allows the researcher to develop a linguistic theory linking the linguistic resources to the social roles and identity of the individuals" (p. 211). Mortensen (2005) analyzes the genre structure and semantics of personal letters written by writers with brain impairment and discusses the variation in this corpus, as well as the challenges of comparing patterns of variation. Thompson (2001) illustrates how cohesive harmony analysis helps track the progress of a patient with schizophrenia. Togher (2001) provides a case study illustrating how SFL analysis helps the clinician/ researcher explore relationships between discourse context and the language realized in that context, pointing to the power relations underlying therapeutic interactions and treatment goals focused on assisting the client in achieving autonomy and choice. She suggests that SFL analysis "can unveil some of the mystery of why people with communication difficulties and their communication partners find everyday interactions awkward or unrewarding. It allows the clinician to tease out how the words being used, the way information is exchanged, and the structure of interactions are linked to context" (pp. 145–146). (See also Fine, 2006; and the 2005 special issue of Clinical Linguistics and Phonetics, 9 (3)). Körner (2010) uses appraisal categories to describe how patients and physicians adopt different intersubjective stances in discussing challenging treatments for hepatitis C.

SFL has been a popular tool for critical discourse analysis (see e.g. Fairclough, 2003; Gee, 2004; Rogers *et al.*, 2005), with ongoing dialogue (e.g. Billig, 2008, and responses; Martin and Veel, 1998; Martin, 2000; Martin and Wodak, 2003). Achugar (2008) uses genre and register analysis as well as analysis of intertextuality and appraisal resources to show how the actions of the Uruguayan military were construed in various discourses at the time they occurred and afterward, legitimating and then transforming the official memory while constructing a positive institutional identity. Oteiza Silva (2006) offers a multimodal analysis of the ways the overthrow

of Allende and the resulting Pinochet regime are represented in Chilean history textbooks. Bonnin (2009) explores nominalization and grammatical metaphor in an analysis of the historical relationship between religious and political discourse in Argentina. Butt *et al.* (2004) analyze speeches given in Iraq prior to the war, in order to uncover the various ideologies at play in discourse at that time. Young and Harrison (2004) show how SFL analysis can raise awareness of the power of language to naturalize certain ways of thinking and can help us recognize how different positions are constructed in language, so that those positions might be challenged or queried.

Media analyses have also drawn on SFL (e.g. White, 2003b). Moore (2006), for example, analyzes how articles in the *Economist* magazine use similar genre structures and semantic relations in their reporting on Cambodia, and relates these findings to the cultural and situational context. Literary texts have also been a frequent focus of SFL discourse analysis – one that illustrates how the grammatical choices of an author redound with the themes and motifs of a text, enabling that author to create particular effects (Halliday, 2002; see Lukin and Webster, 2005 for a history and exemplification of SFL in literary analysis). Lukin (2008) offers a comprehensive SFL treatment of a poem by Edna St. Vincent Millay, illustrating how a linguistic analysis can afford insights that enable students to engage in critique rather than just rely on personal response.

Recent developments in SFL discourse analysis include tools for creating corpora coded for SFL grammar and discourse features that allow large-scale semantic analyses, and multimodal and multi-semiotic analyses that draw on SFL theory to explore how other modalities and semiotic systems interact with language in making meaning (Kress and van Leeuwen, 1996; Royce and Bowcher, 2007; O'Halloran, 2008; van Leeuwen, 2008; see Martin, 2009 for other references).)

Contributions of SFL to discourse analysis

As this review indicates, the tools of SFL can be drawn on in a variety of ways to explore the linguistic systems through which social actors instantiate meaning. This makes SFL a valuable resource for research across fields. Deciding how to approach authentic language in context, in spoken or written form, is often a challenging task. SFL offers a "way in" by providing concrete tools for exploring language comprehensively and for making sense of discourse data. Its flexible set of tools can be adapted to working with multimodal texts, and the results of SFL analyses can be presented in qualitative discussions as well as used in quantitative studies. In fields where discourse data are collected and analyzed, the functional grammar of SFL offers grounded ways to explore meaning in such data.

Christie (2002: 16) notes that "language does not just passively reflect a pre-existing social reality. It is an active agent in constructing that reality." SFL discourse analysis recognizes the dialectical nature of the relationship between language and context. By enabling the analyst to reveal how every text shapes and is shaped by social situations, SFL offers powerful tools for comprehensively exploring meaning in language at the levels of genre, register, and clause and for accounting for differences between speakers, differences over time, or differences in context. The variety of contexts to which SFL discourse analysis contributes testifies to its flexibility and utility in meeting the needs of analysts from different disciplines and settings. Furthermore, as the most elaborated meaning-based grammar available to discourse analysts, SFL can be used by sociolinguists and discourse analysts in conjunction with other analytic tools, providing a means of attending closely to the linguistic realization of meanings in spoken and written discourse, to supplement exploration of other aspects of interaction in context.

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Further reading

Halliday, M. A. K. (1994) An Introduction to Functional Grammar. Second Edition. London: Edward Arnold. A good introduction to SFL grammar.

Halliday, M. A. K. and Matthiessen, C. M. I. M. (2004) An Introduction to Functional Grammar. Third Edition. London: Arnold.

Expands the grammatical description with more detail and examples.

Martin, J. R. and Rose, D. (2003) Working with Discourse: Meaning Beyond the Clause. First and Second Editions. London: Continuum.

Introduces SFL discourse analysis tools, illustrated with analysis of a range of genres.⁴

Eggins, S. and Slade, D. (1997) Analysing Casual Conversation. London: Cassell.

Illustrates spoken discourse analysis of casual conversation with SFL.

Martin, J. R. (1999c) 'Grace: the logogenesis of freedom', Discourse Studies, 1 (1): 29-56.

Uses many of the tools and constructs described here to analyze an excerpt from Nelson Mandela's autobiography that illustrates how Mandela uses his life story to develop a deep understanding of the meaning of freedom and to inspire the reader. This is a good introduction to what the SFL tools afford the analyst.

Notes

- 1 This chapter focuses on the grammatical and discourse semantic systems, but SFL analysts have also worked with phonological/graphological systems and systems from different modalities, such as visual display and gesture (see Martin (2009) for references).
- 2 Different SFL analysts carve up the meaning spaces in different systems in different ways. Martin and Rose (2003) use these four categories of processes, while Halliday (1994) describes six: material, behavioural, mental, verbal, relational, and existential. This variation reflects the fact that language is a complex system and categories are ineffable (Halliday, 1984); but, whichever set of categories an analyst uses, the categories are meant to cover the entire meaning space of the system.
- 3 Grammatical metaphor has become an important construct in the analysis of language development in the individual as well (see e.g. Christie and Derewianka, 2008; Halliday, 1993b).
- 4 There are significant differences between the two editions, as a chapter on negotiation and analysis of spoken language was added and the chapter on ideation was revised so as to take an ergative rather than a transitive perspective on the clause.

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