Chapter 1

Multimodal Studies: An Emerging Research Field

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Multimodal Studies

Halliday (1991: 39) has remarked that the twentieth century was the "age of disciplines, when knowledge was organized into subjects each having its own domain, its own concept of theory, and its own body of method". Identifying this trend as an increasing constraint, he predicted that the twenty-first century would find emerging (1991: 39) "structures of another kind, this time not disciplinary but thematic", organized according to the "kinds of questions that are being asked". It certainly appears that disciplinary boundaries are increasingly being crossed in the early twenty-first century, with inter-disciplinary collaboration becoming increasingly valued in the pursuit of particular research questions and social challenges. The emerging field of multimodal studies stands in an interesting historical relationship with such changes. The phenomenon of multimodality has, as Jewitt (2009: 3) observes, has generated interest "across many disciplines...against the backdrop of considerable social change" where social boundaries have become fluid, networked and transient (Bauman 2000). Yet the implications of there being a distinct field of multimodal studies emerging from and reflecting such wider social changes are only just beginning to become apparent.

Certainly, as Kress and van Leeuwen (2001: 1) point out, there was a distinct shift in the twentieth-century from monomodal to multimodal social semiotic practices in societies at large, "such that both the popular and 'high culture' arts began "to use an increasing variety of materials and to cross boundaries between the various art, design and performance disciplines, towards multimodal Gesamtkunstwerke, multimedia events and so on". Kress and van Leeuwen (2001: 1) go on to claim that the "desire for crossing boundaries inspired twentieth century semiotics", particularly in the range of multimodal phenomena which it sought to bring within its theoretical compass in the goal of "a theoretical framework applicable to all semiotic modes, from folk costume to poetry, from traffic signs to classical music, from fashion to theatre." Today, the wider cultural trends noted by Bauman (2000) have on the one hand undoubtedly begun to leave their mark on academic practices, the move towards cross-disciplinary collaboration and fertilization being one such consequence of this influence. The relation between academia and the wider society has also changed, such that theory development and application are ever-more intimately related, with an increasing focus on developing solutions to real-world tasks in a range of domains. Thus, there are stronger correlations between theory and practice of multimodal studies, something which can be seen clearly in the corpus of work within the field of multimodal studies within the social semiotic tradition (e.g. Kress and van Leeuwen 1996/2006; Jewitt 2009, O'Halloran et al 2010 in press).

On the other hand, the emergence of both an increasing array of multimodal social practices and the move towards inter-disciplinarity have brought with them two major challenges. The first challenge is one that is already being addressed within the emerging field of multimodal studies, by scholars from a range of backgrounds and with a range of applied and theoretical concerns, with productive results: how to account for the increasing range of semiotic resources available to contemporary societies, particularly their affordances and roles within multimodal texts in the age of interactive digital media. It is this challenge that Kress and van Leeuwen (2001) address in their comments on the goal of twentieth century semiotics quoted above: a theory of a range of social semiotic phenomena and practices.

The second challenge, however, is one that has not been widely addressed, although it is a feature of the emerging field of multimodal studies, one which has its roots in the disciplinarity of the twentieth century and in particular the development of increasingly specialized fields of theory and application: how to productively draw upon and integrate the potentially very wide range of

disciplinary, theoretical and practice-based approaches to the study of multimodal phenomena. By their very nature, multimodal texts tend to draw upon a range of semiotic resources and media such that the study of a single text or corpus might demand of the analyst quite a wide range of knowledge and analytical skills, for example, in a film, potentially drawing on various traditions of study of film and other visual art, music, spoken language, gesture, and so forth. But the issue of interdisciplinary research is also an institutional one, bound up not only with protocols for funding, institutional structuring, teaching and research, publishing and so on, but also with the fundamental principle of specialization that underpins modern societies, including the social issues of affiliation and disempowerment through specialized discourses and practices.

This challenge may be one of the reasons why Jewitt (2009: 2) states that "[m]ultimodality, it could be argued, strictly speaking, refers to a field of application rather than a theory". If by its very nature, the study of multimodality calls upon scholars to address issues within a wide range of domains – different modes, semiotic resources and practices, media, etc – then the development of 'theory' begs the question, 'whose theory?' as much as 'what theory?'. Just as cultures at large have developed registers and genres of discourse, specialized ways of communicating requiring initiation, so too academic cultures have their registers and genres requiring initiation. To venture into another's academic and

intellectual domain (for example, phonology, grammatics, musicology, theatrical and literary studies, art theory, anthropology, ethnography, psychology, architecture, all of these with domains of theory and practice) is still, in the present socio-academic environment, daunting to say the least. Each domain has its own expertise, and registerial conventions of theory and practice, both in research and discoursing about (including publishing) one's research. Each scholar cannot be expected to learn the specialized knowledge and discourse conventions of every domain, field or tradition potentially relevant and of use to any multimodal study. Inter-disciplinarity may be, to a large extent, more of an aspiration than an actuality, at least in terms of the genuine integration of theories, methods and practices of different disciplines.

The move across into another's field of expertise has been, since O'Toole's (1994) pioneering work on visual fine art, one that explicitly demands an account of one's justification for such boundary breaking, a statement of one's credo (apology or qualification) with respect to the move across disciplinary boundaries. For O'Toole, the justification was to bring the fresh and theoretically powerful social semiotic perspective of systemic functional theory to bear upon the analysis of visual art, an established domain of study. Meanwhile, since Van Leeuwen's (1999) early work on the semiotics of speech, music and sound and Kress and van Leeuwen's (1996/2006) work on visual semiotics, the practice of bringing in a

variety of theoretical and disciplinary perspectives to bear upon particular domains of research has been characteristic of the emerging multimodal studies field, as has the move towards enquiry into new or unexplored domains, and across the boundaries of traditionally separate domains of investigation, an explicit goal in van Leeuwen's 1999 unified theoretical treatment of speech, music and sound) [italics in original]:

It is the project of this book to explore the common ground between speech, music and other sounds. These three have usually been treated as separate, in theory as well as practice. They have been talked about in different ways and with different terminologies: linguistics to talk about speech, musicology to talk about music; not much at tall to talk about 'sound effects'. And they have been practiced as separate disciplines too....This book tries to do on a theoretical level what many contemporary musicians, poets, film-makers, multimedia designers and so on, already do in practice (and what children have always done): *integrate* speech, music and other sound (van Leeuwen 1999: 1-4)

In fact, an ambiguity in the use of the term 'multimodality' in general which reflects these two concerns within the emerging field of multimodal studies is evident. On the one hand terms such as 'multimodal studies', 'multimodal

semiotics' and 'multimodality' have been taken to refer to the study of any form (media, mode, semiotic resource) of communication other than the supposed dominant (at least in academic terms) form, (written and spoken) language. Here the focus is on the domain of application, usually involving the extension of an existing framework or set of theoretical principles to the study of a new domain of phenomena: thus, O'Toole's (1994) application of Halliday's (1978, 1985/1994/2004) framework for the study of language to the study of paintings, sculpture and architecture is an example of a study that addresses meaningmaking practices in a previously under-studied domain within this particular theoretical tradition. However, a consequential interest is the development of the theory being applied and in particular the development of new descriptions arising from that theory (e.g. descriptions of visual art semiotics), which both arise from the challenges of the new medium or semiotic modality and serve as a tool for further application within existing and new domains.

On the other hand, in perhaps its more theoretically-motivated use, the term 'multimodal studies' can be taken to mean the study of meaning that relies upon more than one semiotic resource for its expression. Here the focus is often on theory more than application or the domain of application: how to develop theoretical and descriptive tools for analyzing the way in which different semiotic resources make distinct contributions to while being integrated within unified

meanings and texts. Often with such a research focus, the domain is a familiar one (such as film) with the focus being on the way in which various semiotic and inter-semiotic phenomena may be appropriately and sensitively accounted for within the theory.

The use of these two interpretations of the term "multimodality" - multimodality as theory for the combination of resources and modes in multimodal phenomenon, and multimodality as the exploration of new domains (semiotic resources, modes, or media) or the application of a particular approach to domains not previously treated within that tradition - is implied in Jewitt's (2009: 1) definition in the introduction to the comprehensive *Handbook of Multimodal Analysis*, which follows that of Kress and van Leeuwen (2001):

Put simply, multimodality approaches representation, communication and interaction as something more than language. Kress and van Leeuwen define multimodality as, 'The use of several semiotic modes in the design of a semiotic product or event' (2001: 20).

The two formulations capture the two commons uses of the term multimodality, at least within the fields of social semiotics and discourse studies from which the majority of recent multimodal research in the social sciences has arisen.

Multimodal Studies: Approaches and Domains

In the present volume we provide the forum for both interpretations or practices of multimodal studies: multimodality as exploring what it means to combine different semiotic resources and modes in artifacts and events, problematising the development of theory for such phenomena; and multimodality as exploring new or underexplored domains (semiotic resources, modes and media) or applying a particular approach to domains not previously treated within that tradition. In individual chapters, of course, there is ample evidence of the concern to do both: in fact, each chapter presents research that is an exploration both of particular 'semiotic modes' of discourse as well as of the theoretical and methodological means by which we study these modes. However, while each chapter makes a contribution to both aspects, there emerges from the volume as a whole a complementarity of focus or theme between the different chapters: towards solving issues of approach (theoretical or disciplinary contribution), or of domain (applied contribution). Hence, the primary division within the present volume is into two sections: 'Approaches to Multimodal Studies' and 'Domains of Multimodal Studies'. As with all divisions and classifications, it is ultimately an artificial one, but it is a productive one for thinking about the contributions presented here within the wider context of contemporary multimodal research.

A. Approaches to Multimodal Studies

Bateman's focus is on the theory of and analytical resources for the study of multimodal phenomena in the first sense identified above, multimodal studies as developing theory for the study of multimodal phenomena, with a particular focus on the term mode and its application. His concern is to move beyond description to the development of theory and method enabling the production of what Forceville (2007) has characterised as non-trivial explanations. Drawing on social semiotic approaches to multimodality, but also upon work within other fields such as cognitive science, computer science and film studies, Bateman challenges apriori assumptions about the identification and composition of specific semiotic modes within typical multimodal analysis work, and recognizes the challenge to scholars within this field in formally and semantically relating signs and sign repertoires in terms of their inter-semiotic activity within multimodal texts. However, although his theme is theory, the discussion is firmly grounded in the applicability of theory to analysis tasks, and builds upon the illustrative analysis of a text. Bateman addresses the need to "improve our ability to 'hear' what multimodal artefacts are saying and how they are doing so" [6]. Of particular interest for Bateman is the challenge of producing "a formal characterization" of the relation between the "physical substrate and the respective discourse

semantics of a semiotic mode" [2]: that is, between the physical and the abstract planes. This is treated as both a theoretical issue and one having practical significance with respect to applied multimodal analysis: Bateman shows how his model can assist in facilitating the "identification of finer-grained modes in multimodal artefacts than has typically been the case hitherto" [2] through the "development of a more discriminating notion of mode" [6], "one which is responsive to empirical results without prejudging what is occurring" [7].

The chapter by Berry and Wyse could be seen at first glance to sit comfortably within the section on 'Domains', being specifically concerned with a specific domain, the development of tangible interfaces for the manipulation of significant aspects of sound during real-time musical composition and collaboration. In fact, the development of such technology, the 'music table' (Berry et al 2006), forms the domain of focus for this chapter. However, as the authors point out, this chapter is concerned with revisiting the music table explicitly from a theoretical perspective. The focus is on the use of multimodal technologies to address a particular problem, one also taken up by Bateman, that of relating the material (in this case tangible interfaces) and the abstract (musical composition, structure, notes etc; virtual graphical interfaces). Here there is a definite appeal to different disciplinary, theoretical and practical traditions and an attempt at their integration for the discussion at hand: "[t]he composition process, inspiration and execution;

the instrumental role of representation; the representational role of instruments: all provide lenses through which to look at the literature of tangible interfaces, especially those made for music" [4]. The authors draw upon Piaget's ideas of stages of learning and compare these with traditional and contemporary practices of musical composition and performance, and review current state-of-the-art within the field of tangible interfaces in a clear and accessible account, identifying the advantages and limitations of each. Tangible interfaces generally offer advantages in terms of their physical accessibility and nature, but are limited in what they can offer in terms of the large scale abstractions which motivate music composition. "Despite this, they continue to fascinate, and invoke our childhood attempts at abstraction through familiar, physical things: when mathematics was found on our fingers and in rows of blocks" [4]. The development of tangible interfaces also forms a site for the exploration of profound questions as to the nature of music, its composition and performance, and the relation of the abstract and concrete in general (as in Bateman, this volume).

Feng is concerned with multimodal theory and the assessment of the epistemological status of one approach, Kress and van Leeuwen's (1996/2006) social semiotic approach to the study of visual composition, from the perspective of another, cognitive theory as found in Lakoff & Johnson's (1980) Conceptual Metaphor Theory. In particular, Feng is interested in the study of the construction

and viewer interpretation of spatial orientations and page layout, and of the construction of ideology through such resources. Feng draws upon the analysis of a corpus of 100 static visual car advertisements from newspapers, magazines and the internet for his comparative investigation, and he widens the scope of enquiry to apply the cognitive concept of orientational metaphor not only to spatial composition but also to other expressive resources of the visual advertisement page to uncover how meaning, in particular persuasive ideology, is constructed through the semiotic choices of layout, car positioning within the page and camera (that is, viewer) positioning in relation to the car. Feng's chapter is an illustration of how different theories can offer different perspectives on a particular domain of research (i.e. visual images). The comparison and calibration of different theoretical perspectives enriches the analysis as well as our understanding of the complementarities between the two approaches they afford.

Smith, like Feng, problematises a mono-theoretical approach to the study of multimodal phenomena, this time taking us back to what he refers to as a 'prototypical' domain of multimodal studies: the different characteristics and functional roles within literate cultures of spoken and written modes of language, with a particular focus on the intonational affordances of speech, and the consequences when speech gets 'turned into' writing and then subsequently turned back into speech. Smith shows how two different theoretical approaches to

the study of intonation can yield different results in terms of analysis and in terms of what gets analysed, arguing that one cannot privilege one approach over another, that in fact each approach has its own affordances and constraints in terms of its capacity for making statements of meaning about semiotic phenomena. He then shows through the analysis of a written transcript of a spoken dialogic text (an excerpt from the legal trials of Oscar Wilde) how many different intonational interpretations can be made of such a text when reading it aloud (cf Davies 1986, whose work Smith extends), and explores the consequences of these different interpretations for the meaning of the text and the implications of this potential variation for literate cultures in general, which have traditionally privileged and to a large extent still do privilege written text within the society. Smith's chapter also has a practical aim: he offers an approach to interpreting scripts (transcriptions, literary dialogue) into speech that is grounded in theory (register theory within systemic functional linguistics: cf Halliday and Hasan 1985), and thus is capable of empirical support based on the relations of text and context.

The integration of different theoretical and particularly disciplinary backgrounds is a hallmark of the approach taken by Lim et al to the study of communications and new media. The focus in this chapter is thus on broadening the study of new media to address a range of issues with respect to the changing demands made of

consumers of media within the contemporary mediascape, in particular "the growing ease of manipulability of media content, the rise in media genrehybridisation and the increasing proliferation of user-generated media content" [4]. The need for new media literacy is identified (cf also Jewitt, this volume), with a focus on all the players in the media landscape, the producers and particularly the consumers, in terms of media literacy. The critical link is made between consumption and production, and their integration within an understanding of the new media landscape. The multimodally-literate media consumer is identified, the authors observing that "[t]he ability to critically analyze symbolic texts thus lies at the intersection of multimodal literacy and media literacy and a robust definition of media literacy that serves today's mediascape has to take into account multimodality and incorporate multimodal literacy" [19]. A range of key literacies are then discussed, with the important point being made that "[w]hile the current multimodal and hypertextual media environment seems to exemplify a 'brave new world' in media representations, the basic principles of critical literacy which applied to traditional print and massmedia contexts are still relevant today" [20]. However, although "the ability to critically appraise the heterogeneity of sources, competing authorities, non-linear or visual forms of representation are not skills which are specific to the multimodal media environment" [20], the authors point out contemporary refinements of these literacies. The authors also observe that "the onus of information credibility no longer rests mainly on traditional gatekeepers" [27], although greater transparency on the part of media producers is urged.

Although Goebel has a specific interest in a particular domain, focusing analytically on "how representations of personhood in Indonesian television serials figure in the construction and circulation of knowledge relating to ethnicity and social relations" [3], the major feature of this chapter is his interdisciplinary approach which draws upon "linguistic anthropological interpretations of ethnomethodology and semiotics" [2]. The author has a particular theoretical interest in the process of 'enregisterment' whereby "particular signs become emblems of identity or personhood across time and space" [4]; and thus lead to the formation of a "semiotic register' (SR), defined as a category of signs that include both linguistic and non-linguistic signs, such as facial expressions, gesture, prosody, pause, space, and so on" [5]. Goebel's chapter extends studies of semiotic register formation beyond the typical focus on "meta-pragmatic commentaries about a person's sign usage in printed media or television news" [7] to a consideration of films and serials, audiovisual media types which enable "the linking of personhood with concrete hearable and observable signs in ways not possible through the type of written representations one finds in novels, etiquette magazines, letters to the editor in newspapers and so on" [7]. Goebel applies the methods of ethnomethodology and studies of embodied interaction and

the ethnography of communication, identifying the affordances of each approach to the investigation and the power of their integration within the overall research task.

Lim Fei's chapter is also one that at first sight seems focused on the extension of multimodal studies into a particular domain: the analytical focus is on teacherrecruitment television advertisements commissioned by the Ministry of Education in Singapore, with the aim being to explore "teacher's identity as a form of commodification against the backdrop of a consumeristic culture" [2]. But in fact for the author, this domain serves as the site for foregrounding and problematising the approach taken, as he "develops and applies the macro-analytical and microanalytical approach in the transcription and analysis" [2] of his data, having had a long-standing interest the development of theoretical and analytical resources for the study of multimodality (e.g. Lim Fei 2004). In the present work, drawing upon work within the emerging field of systemic functional multimodal discourse analysis, and in particular Martin's (1992) work on developing a discourse semantics stratum or language, this chapter "argues for the conceptualisation of a visual semantics stratum to investigate inter-frame relations in the analysis of film text" [7]. Lim Fei applies a practical and useful method for the analysis of dynamic film text which seeks to decompose a film text into semioticallysignificant parts "to bring out the meanings in sequential images that are 'textsized' rather than just focusing on meanings made in the single image itself. The semiotic and intersemiotic choices made in each frame and inter-frames thus result in a view on the 'emergent narrative'" [10], offering a means to overcome methodological transcription and analysis problems identified by leading scholars for this type of text (eg Baldry and Thibault 2006). Much of the chapter is taken up with a description of the analytical resources employed, followed by the discussion of a detailed micro- and macro-transcription of texts, thus grounding the work in empirical analysis.

Zhang's chapter is also focused on a particular domain of application, the comparative study of two university website homepages, but as with Lim Fei the main concern is with the approach taken to the analysis of these texts. Zhang foregrounds her decision to draw on both social semiotics for the analysis of the pages and socio-cultural theories to interpret the results of this analysis. Zhang's chapter presents a powerful demonstration of how an analysis of low-level multisemiotic features can be linked to high-level abstract social meanings and motivations. Specific choices in the semiotic resources of the website design of the two university homepages are explicitly related to the construction of large-scale university identity for each of the universities, which is then related to the goals of each university and the wider contexts of culture for the two institutions. Zhang draws on the systemic functional semiotic approach for the analysis of

features of the website homepages, and on Hall's (1976) concepts of 'high context' versus 'low context' culture for the interpretation of this analysis, relating features to the wall culture versus open culture evidenced in the homepages and reflecting prevailing cultural values of each of the universities. Zhang also addresses the growing trend towards universities' involvement in marketization, which also forms a powerful explanatory context for contrasting the two homepages and their manifest ideologies. Although acknowledging there is more empirical work to be done, Zhang's work is a spur to further research both in the domain of cross-cultural comparative multimodal studies (which involves, as Zhang highlights, theoretical issues in terms of cultural assumptions: cf also Yang, this volume), and also of the increasingly competitive tertiary market, where universities engage in marketisation processes in order to attract students from over the world. Zhang's work thus has direct relevance to discussions of this trend, its implications for the way in which universities represent themselves, and the tools analysts may use to critique these representation strategies.

Ventola's unusual choice of text as the domain of her analysis and discussion – her own home - allows her to foreground different approaches to the semioticisation of home living space, in particular the differing ways in which inhabitants and professional home decorators treat and interpret the same living space within the context/s of the discourses and functions of/within those spaces.

A "transformation of a layperson's design of a home" is compared and contrasted with "a professional stylist's construal for a home" [38]. Locating the semiotization processes involved within the wider contexts of city planning and the architecture of the building in which the flat exists, Ventola "then considers the theoretical tools with which we can get a clear picture of the semiotization of architectural meanings intended for the home in a building and in a flat" [2]. Ventola explicitly intends this chapter to be a contribution to cross-disciplinary theoretical interaction, bringing ideas developed for different fields of study (multimodal semiotics in general, architecture, interior home design and decoration, personal (practical) experiences of a living space) to bear upon the analysis and discussion. Ventola points to the professional separation of, for example, architecture and building, and these with understandings of how people inhabit their living spaces and conduct their semiotic social activities within them, and advocates a holistic approach that takes into account all of these aspects. On the one hand, "[w]e construe our daily lives in spaces that are designed for certain kind of activities and talk" [38], having an intimate knowledge of such activities, the personally functional motivations for the way in which we arrange our domocile. "Yet, we hardly ever think of how our actions and discourses link up with the rooms and the elements in the rooms. Professionals do" [38]. "This paper has shown that the tools developed within systemic-functionally oriented approach, here labelled as *multisemiotics/ multisystemiotics* (or perhaps

polysystemiotics?), can offer us useful tools for analysing the meanings that our contexts – whether homes or official buildings, etc. – can carry' [38].

B. Domains of Multimodal Studies

As discussed earlier, the division of the chapters into those thematising approach, and those primarily concerned with the domain of application, is an artificial because in order to develop and problematise theory, each of the authors in the previous section worked with a particular domain for analysis (eg, car advertisements, university websites, representations of teacher identity, Indonesian television serials, and so forth). Likewise, the chapters discussed in the following all clearly have an interest in the approach taken, their value and development. However, the chapters here seem clearly marked out as being orientated more to the solution of specific problems within particular domains, foregrounding the way in which the application or extension of frameworks into new territory can help cast new light on such domains.

Van Leeuwen's chapter is a fitting first chapter within this section in this respect, as it straddles the division set up in this volume between approach- and domain-oriented work, being clearly concerned with and relating both. On the one hand, van Leeuwen is explicitly concerned with an argument for and suggestions

towards the development of a semiotics of a new domain which is considered to be underdeveloped, that of decoration, of ornamentation, urging a "new semiotics" of decoration" [11]. But in this attention to a new domain he also clearly offers a challenge to our understanding of what constitutes a domain of application for semiotics theory, and through consideration of this domain develops a discussion of issues of wider relevance for multimodal social semiotics. In this van Leeuwen clearly follows the movement, predicted by Halliday (1991), towards thematic questions which have application across a wide range of domains. For van Leeuwen, a domain of application can be very broadly identified, 'decoration' representing here a particular philosophical approach to design within such disparate fields as dress, architecture, Powerpoint, language, music, typography etc. Furthermore, a feature of van Leeuwen's work here, as throughout his academic oeuvre as one of the pioneers of multimodal semiotics study, is his willingness to draw upon a wide range of work relating to his domain, in particular from practical fields of relevance to the study. Thus he draws extensively on writings from the 19th and 20th centuries on decoration, design, ornamentation etc, to relate specific features within decorative (or 'nondecorative) discourse to the wider social motivations and implications of design principles embodied in decorative. The division between functionality and decoration (for aesthetic pleasure) is problematised and explored. An important observation is that what is habitually considered purely functional in fact incorporates decorative design principles: as van Leeuwen puts it, "[c]ontemporary culture and cultural communication is as much, if not more, in the props and settings of our everyday practices as in the 'texts' that we consciously and concentratedly interact with" [5]. This is an important element of van Leeuwen's work in general, and a feature of this chapter: that as semioticians we need attend to meaning-making activities beyond those traditionally thought of or attended to as such – that this is one of the primary tasks of contemporary multimodal studies. He also offers "some notes towards the analysis of decoration" [11], and gives an example of an analysis of a text, the annual report of a university library. Not for the first time, van Leeuwen may have created a whole sub-field for multimodal semiotics.

Like van Leeuwen, Eisenlauer is clearly interested in defining broadly his domain of study: social networking as a category distinct from the old and new media through which such social discourse has historically been mediated. Eisenlauer's focus is on "the mediated actions of *social network sites* (as one particular form of these personal publishing texts)" [2], and particularly in relating them to "functionally related precursor texts, i.e. texts utilized for documenting and maintaining social networks before the advent of the Internet" [2]. Thus, Eisenlauer applies a diachronic perspective to a new media form, in particular with the aim of showing the continuities and also the differences between new

and old forms of media (a point also discussed by Lim et al, Jewitt, both this volume). This chapter reminds the reader that the study of multimodal discourse is not only the study of new technologies and techniques but also relating these to the wider and deeper-lying cultural patterns and structures that spread across generations. The author bases the discussion upon the analysis of an interesting and valuable corpus of data: examples of the German Posiealbum or 'poetry album', also referred to as *Stammbuch* (album), *Liber amicorum* or *Denkmal der Freundschaft* (friendship souvenir), a site for social networking since the mid 16th century, persisting into the 20th century primarily amongst school pupils; and contemporary social networking discourse on the internet. Eisenlauer relates the analysis of higher-level social contexts and communicative structures to their expression in lower-level media resources. One task identified here as elsewhere, then, for multimodal studies is to differentiate what is new and distinctive, what is derivative in 'new' technologies, media and modes of discourse.

Tan's chapter also addresses issues both for her specific domain of study and for the wider concerns of multimodal studies. Combining approaches from social semiotics, critical discourse analysis and other disciplinary perspectives, particularly those concerned with news discourse, Tan focuses on another underdeveloped domain of study, that of business news, beginning with the observation that although "[t]he news is probably one of the most widely researched discourse genres in a variety of disciplines, in particular from textlinguistic perspectives" [3], "[b]usiness news discourse, specifically the continuous twenty-four-hour network version mediated through the internet, however, has remained an under-theorized area of academic enquiry" [3]. "In particular, the paper is concerned with how events, identities, and social relationships are constructed and represented through dynamic, interactive blends of verbiage, images, graphics, audio and video clips" [2]. Through a brief casestudy, the chapter "essentially aims to address the question how business news events are contextualized in a particular mode/medium and why, by considering the cultural, industrial and institutional practices that may be encoded in the various ways in which they are represented to their audiences on the internet" [3]. Tan complements a systemic functional metafunctional approach with work by Fairclough (1995) on the contextualizing and recontextualising of events in different types of media and the consequences for meaning of these recontextualisations. Tan concludes, "[t]he underlying ideological assumptions and implications that may be encoded in the ways business news networks choose to represent and position themselves, their sources, and their target audiences through electronically mediated forms of business news discourse, are complex and multifaceted, and difficult to conceptualize without resorting to the insights of more than one discipline or research tradition" [32]. An important finding for multimodal studies is that "while there seems to be high consistency in the way

the event is represented textually by the different networks, especially in the way social actors are portrayed visually as well as verbally, salient variations in style start to emerge in way the event is mediated televisually" [32].

Maier also explores the multimodal communication of knowledge within business contexts, focusing on a video on a General Electric Corporation website. She identifies how "the meaning-making potentials of language and images are integrated, and how this multimodal integration influences the persuasive communication of knowledge types" [2], with respect to GE's positioning of itself as an eco-friendly corporation. Maier brings to bear extensive research on ecolanguage, again with cross-disciplinary perspectives, focusing on the language of the contemporary ecological movement as evidenced in business/marketing and other discourses. There is thus a thematic focus on a domain - discourse on environmental issues – which has "attracted the attention of researchers belonging to various research traditions such as linguistics, philosophy anthropology, natural sciences, social sciences and so on" [6], as well as within critical approaches such as ecophilosophy and ecofeminism. The chapter therefore aims to extend research into this domain via a focus on the multimodal aspects of environmental discourse. There is also a definite applied focus relating to this domain, Maier identifying that "the strategic exploitation of the meaning-making potential of multimodal combinations when creating environmental discourses targeted at multiliterate audiences is of vital importance for all contemporary communicators" [4]. In terms of analytical approach, Maier, like Bateman (this volume) identifies that "[a] first step in this process would be a more nuanced understanding of the specific roles of several semiotic modes and of their interplay in effectively communicating various types of knowledge" [5]. An important change in advertising discourse, from persuasion to presenting credentials as eco-friendly, is identified. The verbal and visual modes of discourse are shown to subvert rather than complement one another, something which can only be revealed through this type of multimodal analysis, leading to practical recommendations for those engaged in producing marketing discourse by showing the discrepancies between what the discourse is ostensibly aiming to convey and what it actually (multimodally) communicates.

Wignell's specific domain of interest is children's picture books, presenting an ontogenetic study of the changes that occur to the relationships "between images and written text as the age of the children the books are aimed at increases" [2], based on large-scale and small-scale detailed analytical treatment of a large corpus. The corpus was sorted into continuum of amount of written text and relative prominence of images and writing, which was then mapped onto age groups, with a detailed analysis following of a sample of texts from each category. Drawing primarily upon O'Toole's (1994) framework and also Kress

and van Leeuwen (1996), Wignell shows a metafunctional analysis to be fruitful for his analytical concerns. The findings show that the amounts and relations of image and text change over increasing age groups. Wignell goes on "to consider the implications of any pattern of change with particular regard to how picture books help initiate young children into literate practice" [3-4], revealing through the metafunctional theoretical approach taken, for example, the shift from foregrounding of the interpersonal metafunction in books for younger infants to a less interpersonal prominence in books for older kids, corresponding with other changes along the same timeline: another illustration of the general principle that one's theory (metafunction) to a large extent enables and determines the type and range of findings one makes. Wignell identifies several key tendencies in the move along the ontogenetic timeline, for example, the move from a tendency "for the words to depend on the images..." [25] to "[t]he next step ... in books aimed at children aged between 12 months to 24 months, [where] the relationship between images and words starts to change... so that the images come to depend on the words". This "pattern of change in the relationship between words and images ... seems to represent a good apprenticeship into reading written text" [27] showing "a steady movement from meanings in language which are context dependent to meanings which are context independent" [37-8]. An important suggestion from the findings is that "in very early literacy learning, the

interpersonal provides the impetus which leads the way into the textual and ideational" [29].

Liu Yu also focuses on the pedagogic domain, this time addressing the issue of multimodal literacies in the Chemistry Science classroom. Although thematically oriented to a specific domain, Liu Yu explores the application of a particular theoretical tradition, systemic functional multimodal discourse analysis, in dialogue with a psychological model, adapted for integration within the SF-MDA, social semiotic approach. A key concern for his chapter is that "[w]hile research on scientific and science literacy has made significant contributions to educational practices, there is a need for constructive dialogues between these two domains. This chapter sets out to make a modest step to bridging the gap between scientific literacy and science literacy. Insights from a classic psychological approach...are adapted to inform the Systemic Functional Multimodal Discourse Analysis approach..." [6]. Liu Yu also has a diachronic focus, in that his study "investigates the semogenesis of modern chemical symbolism and analyzes its functional affordances" [6] throughout this development. The psychological model and the SF-MDA approach are also complemented by a view from the perspective of Bernstein's (1990) sociology of education, explicitly with an applied concern for useful teaching and learning implications of the study. Although Yu shows how the psychological approach can complement, inform and

indeed be integrated within the SF theoretical and descriptive framework, he warns against thereby confusing the two approaches, given their distinct ideologies and assumptions, which Yu explicates.

For Jewitt the focus is also on the pedagogic domain, in this case the application of multimodal analysis to the use of interactive digital technology – the interactive whiteboard (IWB) - within UK schools. To quote a section title, the theme of the chapter is "School English through a multimodal lens" [3]. But this becomes the site for a discussion with wider implications for the study of multimodality itself as well as for pedagogic studies. A key perspective is a diachronic one: the changes since year 2000 in the technological landscape of typical UK classrooms and the use of various multimodal resources and practices. Pointing to earlier research (Kress et al, 2005) which "developed a multimodal research methodology to examine school English" [3], and relating multimodal communicative practices and competencies and the evolving critical social contexts within which such practices occur, Jewitt poses for her chapter such questions as "what modes are available, how are they used, and for what purposes? What sites of display are introduced into the classroom and how are these drawn into practices? Do these change the position of teacher and students in the classroom, and if so what is the effect? What kinds of texts enter the English classroom?" [8-9]. A very useful, up-to-date short review of research in

this domain (multimodal literacy and pedagogy) is provided: we are indeed fortunate to have the benefit of Jewitt's perspective (cf Jewitt 2009) on the multimodal studies landscape within this specific domain. As Jewitt observes, "[t]he pedagogic landscape of subject English classrooms in the UK is changing as a consequence of the use of technologies. The changing representational and communicational facilities made available via technologies are of particular importance for changing forms of knowledge, and how these are mobilized and circulated" [2]. A general theme for multimodal studies articulated here is thus that technologies and modalities do not come with their own immanent meanings, uses and significances but are conditioned and constructed within the wider contexts of prevailing and emerging social practices and conventions.

An important emerging sub-field of multimodal studies is cross-cultural comparisons of multimodal texts and practices. Yang's study is of relations between an art and its cultural background, providing a cross-cultural comparison of two works of art, one Chinese, the other English, and in particular showing how variation in the use of semiotic resources in the two works can be interpreted in terms of cultural differences between the two contexts of cultures operating for the two works of art. However, although a major feature of the study is the strategy of complementing a systemic functional analysis with cultural perspectives in a similar way to Zhang (this volume), Yang's focus here is on

extending O'Toole's (1994) systemic functional descriptive framework for visual art analysis to the study of a particular domain of analytical interest. As Yang points out, cross-cultural comparisons particularly between Western and Chinese paintings have been a popular theme in various scholarly traditions, but to date haven't been treated from the perspective of systemic functional semiotics. The detailed empirical analysis which drives the discussion is, of course, one of the features of O'Toole's approach to art analysis, rather than an emphasis on features extraneous to the work itself, such as the artist's biography and cultural context. However, Yang shows how both perspectives can complement one another in a powerful vision of the relation of text and its context of culture, arguing that "these findings demonstrate that the distinctive features of visual arts must be investigated by considering their cultural differences" [34]. Despite its small corpus, the chapter is an important step towards developing analytical resources for cross-cultural comparative applications of systemic functional multimodal theory.

O'Toole is one of the acknowledged pioneers of multimodal studies, being among the first to take an existing theory within one discipline, systemic functional linguistics, and testing its application to another, the description of visual art. A hallmark of O'Toole's early (e.g. 1994) work was his emphasis on enjoying works of art, in particular on providing and using meta-semiotic tools with which

to increase the appreciation and understanding of fine art and the techniques used by artists, without necessarily being an art historian or critic. In this, O'Toole has also not only been remarkably prescient in discerning this cross-disciplinary nature of multimodal studies and the challenges it presents to those entering this field, but has also offered an approach or at least an attitude to overcoming such disciplinary hurdles or boundaries. In this current paper the fine art studied is the dynamic audiovisual work by Trey Parker and Matt Stone, the popular satirical cartoon television series, 'South Park'. Here O'Toole makes a diachronic study of the series from its pre-digital to digital phases of production, showing how the semiotic affordances available to and exploited by the producers have changed over time and the consequences of this diachronic multimodal evolution: what has and hasn't changed in the multimodal discourse and ideologies of the series. A detailed analysis forms the basis for a series of observations on the role that digital resources have played in contemporary animation. O'Toole importantly identifies the difficulties inherent in presenting a discussion of an audiovisual text where much of the discussion relies upon some form of annotated representation of the audiovisual (multimodal) aspects of the text under examination, arguing for the detailed textual annotation presented in his piece as necessary. These are issues of wide significance to the developing field of multimodal studies. Clearly presented and accessible, O'Toole's approach is very much a meaning-based one, his transcriptions and discussion allowing the reader to reference the aspects of the source text of essence to the analysis and argument. The perspective is not only multimodal, but holistic at all times, and is an instructive demonstration of the wide applicability of the approach and descriptions he produced in his early work for static visual art.

Multiple Disciplines, Theories and Practices: A Metadiscourse of Diversity

As is evidenced in the above discussion, a feature of the volume as a whole is the inclusion of perspectives from a broad range of disciplinary and theoretical backgrounds, presented in an accessible format. This relates to the discussion earlier with respect to disciplinary and theoretical boundaries. We feel that what is required within the heterogeneous community of scholars interested in multimodality is a 'shared space' where we may meet and share their ideas and knowledge in a way that is accessible and welcoming, pluralistic, and making explicit and plain things that may be assumed knowledge and highly abstracted within the theoretical or disciplinary tradition within which we normally work. The challenge to multimodal science in the present century is to create such a shared space, a space which increasingly will incorporate contributions from physical, biological and social sciences, the humanities and arts, and from academic researchers, teachers and practitioners, and industry. In this sense, what we are advocating here follows wider social practice within contemporary

societies, where the internet and other interactive digital technologies are rapidly increasing the forums for different communities to share, cross-fertilise with and learn from each other, and where the boundaries between social groups and particularly between specialised and everyday or practice-based knowledge are becoming more porous.

The challenges facing multimodal researchers and practitioners also need to be seen in the light of the disintegration of traditional networks and institutions which have given way to transience, fluidity and rapid change, largely in the pursuit of profit. '[I]t is the mind-boggling speed of circulation, of recycling, ageing, dumping and replacement which brings profit today - not the durability and lasting reliability of the product' (Bauman, 2000: 14). Educational institutions have become part of the new global corporate world where researchers must deliver (e.g. publications, conference presentations and students), and so while multimodal research presents exciting new research opportunities, we must resist the temptation for quick and easy solutions to problems where 'durability and lasting reliability of the product' would have a much greater payoff for us all. There is a need at this stage of the development of multimodal studies to pause, and consider wider perspectives on this emerging field, its goals and practices (cf also, in this respect, Jewitt 2009, Bateman 2008).

We bring together in this volume scholars and practitioners from a wide variety of academic and non-academic disciplines, theoretical traditions and practices. Such a forum does not necessarily provide the means for quick and easy solutions to the (explicit or implicit) questions raised therein. Nor do we propose thereby to simplify and thus reduce the effectiveness of work within specialized disciplines. Rather, because of the particular demands of multimodal discourse and its multiple forms, and the way in which contemporary societies use increasingly complex media and modes, we wish to provide a forum where the difficulties faced by those studying such phenomena may be lessened through the communication of knowledge and practice relevant to those domains of study, through the concerted action the discourse of a volume such as this brings. Disciplinary and theoretical domains will continue to yield fruit out of their respective separate areas of specialized expertise and focus; while there will, we hope, emerge, above and beyond this, a metadiscourse which is the integration of these different perspectives on human communication, its means, meanings and motivations. Such a discourse requires an extra effort on the part of the authors to make their work – in particular, their discourse about their work - accessible across disciplinary and theoretical boundaries, something which we also feel is a feature of this volume.

This we believe is the first and most important step towards the true interdisciplinarity that seems to elude our best efforts at actualization in the early part of this century. As a whole this volume doesn't lay claim to being interdisciplinary, in the strict sense of that term, although individual chapters do make contributions towards that endeavour. Here, rather, we are advocating not so much inter-disciplinarity as multi-disciplinarity. The bringing together within the same volume, and for many within individual chapters, of perspectives from different disciplinary and theoretical backgrounds helps establish such a 'shared space' as we have proposed as essential for the emerging field of multimodal studies. No one discipline or theoretical tradition can claim ownership of this space, either in terms of their discursive and analytical conventions, or institutionally.

Many papers follow varieties of social semiotic approaches (based on systemic functional theory), which have been, as Jewitt (2009) points out, along with interactional and discourse analysis approaches, perspectives strongly linked with the development of a specifically multimodal studies field. However, this need not be a contradiction of the above-stated aim of this book. Firstly, multimodal studies has emerged as a distinct and popular theme for many working within this theoretical tradition. Secondly, this theoretical tradition has always displayed a capacity and willingness to absorb, adapt, and apply theoretical perspectives and

resources from other traditions, to reinterpret them in 'systemic functional/social semiotic' terms, as is done in several of the chapters herein. Furthermore, even within this tradition, there is such a wide diversity of ideas, approaches, domains and techniques that it is in fact misleading to speak of this as a unitary approach. We should think, rather, of it involving diverse communities sharing some common principles and ideologies, points of contact. Diversity, that is, can be within as well as between disciplines, theoretical frameworks and domains of application.

We put these papers alongside each other within one volume, therefore, on the one hand so that the reader can access each separately as contributions with specific and distinct goals, domains, issues, theories and methodologies, as well as academic styles of presentation; while on the other hand we hope that the volume will, by virtue of it being a volume, stimulate interest across disciplinary boundaries: that readers will 'stray' from the safe and familiar territories of their own disciplinary and intellectual backgrounds into domains and approaches with which they possibly have less or little familiarity. In the multimodal texts we study, each semiotic resource has its own distinct contribution to make to the whole as well as an integrative (inter-semiotic) aspect, and different semiotic resources may for a time coexist without synergy and then later evolve as intersemiotic resources. In the same way, within multimodal studies there first needs

to take place a period and space for different disciplines and traditions to mingle and discourse while retaining their own distinct integrity. We feel that this multidisciplinarity is an essential step on the road to true inter-disciplinarity (of theory and practice), and towards the development of distinct theories of multimodality. We hope that the reader may find within some pleasant surprises and helpful suggestions for their own pathways into this field.

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