MULTIMODAL SIGNS OF LEARNING
TRACKING SEMIOSIS IN THE CLASSROOM

Shirley Palframan
Multimodal Signs of Learning proposes a methodology to uncover evidence of learning in students’ multimodal compositions. Informed by social semiotic theory, the book tracks representation of subject content from physical and embodied teaching resources to students’ handmade artefacts and physical presentations.

Using materials from secondary school history and science classrooms, multimodal realizations of specific representational processes are tracked from the input of resources through to the students’ multimodal compositions – their posters, models and physical presentations. Through tracking semiosis, the book exposes the epistemologies inherent in the representational choices articulated in the students’ multimodal designs. These, it is argued, are to be valued as signs of learning. Learning is thus characterized as ‘design’ and the transformation of subject content through representation in different modes shown not only to promote learning, but also to contain evidence for its recognition.

The book raises important questions about what constitutes multimodal learning and how it can be applied. It contributes to the growing body of research into the changing dynamics of classrooms and assessment practices and will be of great interest to researchers, and academics in the fields of education research, multimodality, semiotics and communication.

Shirley Palframan has 25 years experience in international education and completed her PhD at the London Institute of Education.
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In memory of Gunther Kress.
## Contents

- **List of figures** viii
- **List of tables** ix
- **Preface** x
- **Acknowledgements** xiv

1. **Introduction** 1
2. **Theoretical principles and perspectives** 9
3. **Multimodal classroom data: Theoretical positioning** 27
4. **Tracking semiosis: Framing the representational structures** 40
5. **Macro semiosis: Classroom contexts** 64
6. **Micro semiosis: Students’ designs** 76
7. **Tracking semiosis: Science lessons case study** 83
8. **Tracking semiosis: History lessons case study** 96
9. **Signs of learning: Process charting** 116
10. **Signs of learning: Mode mapping** 133
11. **Signs of learning: Conformity or divergence?** 158

- **Bibliography** 161
- **Index** 164
**Figures**

4.1 Representational structures (from Kress and van Leeuwen, 1996) 42
4.2 Filtration: students’ model 43
4.3 Representational processes: top left, analytical processes; top right, narrative processes; bottom left, classificatory processes; bottom right, symbolical processes (adapted from Kress and van Leeuwen, 1996) 45
4.4 Benin City Plan: students’ poster 49
4.5 Benin City Plan: multi-levelled overt taxonomy with vertical and horizontal orientation 52
4.6 Visual and verbal symbolic attributes in the Benin City plan. Top left, ‘Open roof house of an ordinary person in City of Benin’; top right, ‘Forest’; bottom left, ‘No doors, it is a possibility they went through the windows’; bottom right, ‘Nine gateways to stop evil spirits’ 56
4.7 Representations of filtration (particles): analytical processes 58
4.8 Representations of Benin City (access): topological processes 60
5.1 Semiotic landscape: history display 74
6.1 Students’ multimodal representations of separation processes 79
7.1 Representations of filtration: narrative processes 84
7.2 Representations of filtration (particles): classificational processes 88
7.3 Representations of filtration (equipment): analytical processes 92
7.4 Representations of filtration (particles): topographical processes 94
8.1 Representations of Benin City: classificational processes 97
8.2 Representations of Benin City: inclusive and exhaustive processes 100
8.3 Representations of Benin City (Oba’s palace): analytical processes 104
8.4 Representations of Benin City: symbolic suggestive processes 109
8.5 Representations of Benin City: symbolic attributive processes 112
9.1 System networks: narrative processes (filtration) 118
9.2 System networks: classificational processes (filtration) 120
9.3 System networks: analytical processes (filtration) 123
9.4 System networks: classificational processes (Benin City) 125
9.5 System networks: analytical processes (Benin City) 127
9.6 System networks: symbolic processes (Benin City) 130
Tables

3.1 Transcription extract: students’ representational activity in history lesson

10.1 Orchestration of modes: teacher representation of a particle

10.2 Modes and representational processes (filtration): students’ text

10.3 Modes and representational processes (filtration): resource texts

10.4 Modes and representational processes (Benin City): students’ text

10.5 Modes and representational processes (Benin City): resource texts
Preface

Reviving my research from 20 years ago and preparing it for publication has certainly been a challenge. Nevertheless, the drive has remained strong, and I hope my experience can encourage other teacher-researchers.

This recent journey of mine began by chance when I came across Anderson and Kachorsky’s literature analysis concerned with assessing students’ multimodal compositions. I noted, with interest, that both this analysis and an earlier review mentioned a ‘lack of detail in the literature of what multimodal composition actually looks like in classrooms as well as students’ experience with it’ (Nash, 2018). In addition, Anderson and Kachorsky noted a ‘lack of detailed accounting for assessment of such compositions in the classroom’ (2019). Given the focus of my own research, I read this as a call to arms.

It was in 1999 that I completed my MA at the London Institute of Education where one of the modules, concerning multimodality, was taught by Gunther Kress. Following that introduction to the field, and with encouragement from both Gunther and Mary Scott, I was awarded a research scholarship to develop my emerging interest in the multimodal representations of students at the girls’ secondary school in east London where I was working as a teacher of literacy and English as an additional language. This role had given me the chance to participate in delivering lessons across the secondary school curriculum, where I had become interested in the variety of students’ multimodal work and, more importantly, what these items could have to say about how the students were actually thinking and learning. Those moments of interest went on to shape my entire research project and are recounted in detail in Chapter 6. So, my journey in formulating a research question began.

Looking back, my first encounters with multimodality were filled with a sense of its potential to radically change the ways in which teaching and learning are organized. Since those early encounters with multimodality, I have participated in education systems around the world which have been predictably similar: delivery of prescribed content and skills followed by written, standardized assessments. Meanwhile, multimodal learning often thought to have arrived with the advent of new technologies for learning seems only to have entrenched the same old-fashioned pedagogy. In the introduction to their important recent work, ‘Pedagogies for Digital Learning,’ Cope and
Kalantzis suggest that the increased use of computers for learning has only made didactic teaching styles ‘cheaper and easier to deliver’ (2021). It is certainly true that digital learning tools rarely take account of the affordances of the available modes. It is this that the book seeks to demonstrate; an appreciation of the affordances of different modes and the cognitive processes activated when students engage with them. By focussing attention on these fundamentals of multimodality and learning, without the obscuring layers of digital mediation, my hope is that the book can reactivate its radical potential.

Following the successful completion and examination of my PhD in 2006, I was contracted to publish the research. However, I faced a variety of personal and practical obstacles and also came to realize that my work was becoming something of an anomaly: it concerned multimodality and learning but did not, directly, relate to any of the new technologies. Furthermore, it seemed that such a book could only be effectively marketed if directly associated with the emerging technologies impacting on young people’s lives at the time; the chat rooms, text talk and so on. This was not a good fit for my work. I had strong reservations and delayed publication indefinitely.

During the intervening years I taught in secondary school classrooms in Southern Africa, south-east Asia and then northern Europe, attempting to keep in touch with developments in the field of multimodality and learning. Meanwhile, the term ‘multimodality’ was starting to be widely used in relation to screen-based technologies. It seemed, from this distance, however, that little of the research concerned multimodality and assessment, even less having direct relevance to secondary school teaching. Indeed the range of modes being engaged for learning in the classrooms I saw were only decreasing with the advent of technology-mediated learning. Interacting alone with a screen and keyboard was becoming a normal type of learning experience for students. Creative, collaborative multimodal design in secondary school classrooms was becoming rare. Students were less and less likely to be involved in activities, as seen in these case studies, which involve the spatial, actional and tactile modes. And then the pandemic came, along with the necessity of technology-mediated distance learning. Once lost, perhaps inevitably, the physical, face to face learning experiences of the classroom began to attract fresh interest. Assessment, too, became the focus of urgent consideration when exams were cancelled and alternative sources of evidence needed. In response, the World Economic Forum spoke of ‘reimagining’ and described this disruption as ‘an opportunity to reset the skills that need to be prioritized in primary and secondary education and beyond’ (2021). With this book I would like to place multimodality at the heart of that reimagining.

From my perspective now, as a classroom teacher, it does seem that the conflation of technology-mediated learning with multimodality has unhelpfully reduced and obscured its potential. The book, then, will also function as a reminder that our human interactions have always been multimodal, even though we seem to have needed technology to bring it to our attention. In addition to its other claims, the book’s detailed descriptions of teenagers
representing what they learnt together using tangible, material resources demonstrate the enduring value of learning through physical and collaborative multimodal design.

My main claim, of course, concerns signs of learning; ways of recognizing what learners know. As any teacher knows, unanticipated learning outcomes can be both joyous and challenging. Joyous because they confirm the endlessly creative instincts that make us human, and challenging because they rarely fit with prescribed schemes of work or measurable assessment criteria. Of course, there are many democratic models of education which seek to acknowledge unanticipated outcomes, however, there appear to be few, if any, that offer the rigour necessary to give such outcomes proper recognition and status in terms of assessment. The book, I think, resolves this issue by turning attention away from prescribed objectives and outcomes towards the students themselves, and what they make of what they have. By focussing on how students reshape subject content, the information and ideas, using different configurations and modes, their new relationship to the knowledge can start to be recognized. In Chapter 9, for example, the tracking semiosis and process charting tools reveal a specific innovation in how students represent, visually and verbally, one aspect of the subject content being studied; the lives of inhabitants of the ancient city of Benin. This and other examples in the book are a step towards formalizing multimodal evidence for meaningful formative assessment.

Needless to say, the usefulness of the tracking semiosis methodology in this book will rest on whether or not a convincing case can be made for its wider applicability; beyond its pre-digital origins. My argument here is that the methodology, being generic in nature, will be transferable. The premise is this: that a methodology originating from a physical learning environment can be adapted to wider contexts whereas one developed in a technology-mediated setting is less useful elsewhere. Certainly the general principles of tracking semiosis, which I propose here, involve systems and organization of content which can easily transfer to technology-mediated learning. Indeed screen-based text, image and video can even more conveniently be juxtaposed with student reconfigurations when they occur in similar digital formats. This also allows for greater ease and quality of analysis. In a similar vein, the tools for recognizing signs of learning: the process charting described in Chapter 9 and mode mapping in Chapter 8, are both methods that can work well with technology-mediated learning.

Today, I find that the case studies I conducted all those years ago have acquired a new, and rather unusual, kind of significance: something akin to a historical snapshot. Certainly schools look very different now. The classroom settings described in Chapter 5, which were commonplace at the time of my study, are now a rarity. Most of the materials, classroom interactions and activities shown here have now been replaced by the various forms of technology-mediated learning. Students are more likely to watch a PowerPoint presentation than a teacher’s gestures, to print images from Google than sketch on paper,
to find information on Wikipedia from than printed materials and so on. Whether or not the fundamental imparting and assessment of knowledge has really changed, however, is an entirely separate issue. Nevertheless, the fact that those taken-for-granted classroom norms from the turn of the century disappeared so rapidly does mean that any records from that time are bound to acquire a certain additional, historical interest and value. That being the case, I would also like to believe that this book, in holding up a mirror to the past, will prompt some appropriate reflection and evaluation of these changes.

To conclude here, I would like to offer some explanations and request a little generosity on the part of the reader. Firstly, a reminder may be needed that most of the text was written over 20 years ago. The prose style and certainly the references belong to that era. For various reasons, I decided not to rewrite the text as a retrospective study or update it, but to keep its original form in tune with the period of the research. In spite of their age, I still find the earlier chapters, with their theoretical and philosophical positioning, a helpful framework for understanding the proposed methodology. I am also hopeful that they may, with their reflective, situated tone, be of interest to teacher-researchers in particular. A reminder may also be necessary that technology was still quite limited when I conducted the research. Although I did have a handheld digital camcorder, to film and take still shots of students at work, the audio recordings had to be made with a small analogue tape recorder and many of the photographs with an analogue camera. As a result, throughout the book, a number of images, although fit for purpose, are of a rather poor quality. Finally, the reader will probably notice the impersonal and detached style of writing throughout the book. I think this is because I had made a conscious effort to create a discoursal identity distinct from my role as a teacher and employee of the school. With close colleagues and students, the subjects of my research, maintaining an objective researcher stance certainly required regular personal reinforcement and public reminders. Looking back, that impersonal tone is at least partly due to the effort involved in balancing those dual roles. I just hope that my fascination with the data and enthusiasm for the project are still apparent.

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1 Introduction

This book is concerned with signs of learning as evidenced in the multimodal representations of students. In the spirit of an archaeological excavation, it seeks to uncover evidence of that which cannot be seen; of learning.

Positioning the research

As an application of social semiotics, this study explores the abstract relationships between texts and text-makers; the realization of mental propositions in choices of textual configuration. In choosing this focus, two assumptions have been made: firstly, that learning and representation are indeed related and secondly, that this relationship has the potential, under appropriate investigation, to yield significant insights. The research, being concerned with both the invisible processes of learning as well as tangible, visible texts consequently draws on a wide range of qualitative educational research conventions. What follows is an attempt to broadly sketch out the position of this research in relation to existing conventions: to clarify what kind of knowledge is sought by this research and, by implication, what claims can be made on its behalf.

The first positioning feature of the study to be addressed is its scope. It focuses, primarily, on the texts produced by just one group of four students during two sets of lessons taught in 2001. It does so, however, on the understanding that the full and detailed exploration of one specific set of relationships, between one group of students and the texts they produce, is indeed a relationship from which generalizations can be made. It will also be shown that the findings offered by the research concern both individual instances of learning and the principles behind them which, it is proposed, govern relations between representation and learning more widely.

There are, however, questions raised by this proposed generalizability that need to be addressed. (Clearly, this is not generalization based on accumulative instances.) There are two propositions regarding generalizability of educational research which hold currency within the research establishment and to which this particular study can usefully make reference. The first of these propositions is Stake’s notion of ‘naturalistic generalization’; a concept

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originating from the concern to direct researchers and evaluators to practical experience in context rather than abstract issues. Generalizations under these circumstances, Stake argues, have a particular quality: ‘... they seldom take the form of predictions but lead regularly to expectations’ (Stake, 1983). Such generalizations are grounded in vicarious experience and tacit knowledge being shaped by the rich ‘thickly described’ circumstances of the localized study which offer the reader a ‘surrogate experience’ on which expectations will be based. Eisner (1991) makes a similar case for ‘evaluative connoisseurship’ from which the ‘thematics’ or concrete universals of the individual case evaluated are of likely interest beyond it. The notion of connoisseurship is not out of place in this research where the data consist of richly detailed accounts of texts and their contexts of production. The intention here is to offer the reader the experience of a particular way of seeing; engagement with the data thus affording a range of opportunities for generalization. For this to succeed, the accounts must ring true and be recognizably typical. Arising, then, from its validity as vicarious (surrogate) experience and as concrete data, the investigation into the relationship between learning and multimodal representation offered here is intended to be of wider interest. As such, it should be regarded as relevant to teaching and learning in other curriculum areas and with other age groups. The research will consequently invite generalization and will propose that the principles underlying the relationship between multimodal representation and learning uncovered here may indeed constitute ‘concrete universals’ which can usefully inform wider contexts.

Having expressed the view that the findings of this research are intended for generalization, it is important to identify the nature of the findings on offer. Certainly, the findings are not, as has already been stated, confined to the specific patterns and regularities observed in this set of research data. Although they are of great interest and value in their own right, these observations are more usefully understood as a demonstration of the tools and techniques developed for the purpose of making the relationship between multimodal representation and learning explicit. This being the case, the findings do not so much concern the learning of these specific students but the propositions concerning how to go about finding out how they learnt. In short, the development of the methodology and its possible usage are being offered as valid in their own right. The research account, consequently, is weighted heavily towards the development of tools and techniques: their underpinning theory, design principles and practical application.

**Philosophical contexts**

All research has a philosophical basis. In this case, where the focus and approach are not clearly identifiable with a particular convention, it is particularly useful to explore, at least in very general terms, that basis. This will be done by positioning the research in relation to the major philosophical traditions, a relationship which is complex and apparently contradictory. For
example, although post-positivist, the research does share at least one characteristic of even this philosophical tradition, a desire for some kind of social improvement to emanate from the findings. It is genuinely believed that perspectives arising from the research, if allowed to inform educational practice, could lead to better teaching and learning. There is also, in line with the positivist tradition, an element of empirical measurability implied in the proposed tools and techniques. One only needs to glance over the scientific-looking diagrams in later chapters to gain a sense of this. To this extent, the research does appear to subscribe to a single version of reality; albeit one which serves the purpose of producing a much wider appreciation of multiple perceptions. It should also be noted that such wholehearted engagement with a singular version of reality is necessitated by the use of these methodological tools to organize and conceptualize a wide range of phenomena. It does not preclude alternatives. What is offered, rather, is an engagement with a particular (version of) reality in order to propose plausible interpretations.

This indeed brings the positioning of the research to a more obvious place; that of the interpretivist or hermeneutical approach. The primary aim of this research is indeed to generate new understanding and perspectives and even the development of multiple perspectives. Its concern is with interpretation of meaning invested in what is apparent: features of the written, visual and embodied texts of the classroom. The context bound subjectivities of the varying texts are struggled with in order to establish coherent patterns and regularities. There is mediation and accommodation, rather than denial of difference. A further characteristic of the research which aligns it firmly with the interpretivist approach is the fact that the methodology (the tools and techniques) derived from it are explicitly informed by metatheory: the social semiotic theories of communication.

Having so firmly aligned the research with the interpretivist approach, there are nevertheless emancipatory elements in it which draw on notions of hidden truths and masked power relations more typical of critical theory. It is indeed the intention of the research to inform and thereby change practice. Engagement with theory alone is not an intended outcome. Although the scope of the study does not allow for extensive exploration of practical implementation of new perspectives afforded by the research, it is, fundamentally, a practice-driven piece of research whose findings are intended to be the impetus for change. The interpretation of texts offered by the research brings into question the nature of the power relationships at the heart of education: the relationship between teachers and learners, between learners and their peers and between learners and the established communities of experts. By casting learners as agents it implicitly addresses power relations historically underpinning education policy and practice. This is further reinforced through consistently foregrounding the value of learners’ conversations, texts and artefacts. In focusing on the experience of the learner, as interpreted from their texts, it seeks to uncover what has previously been unseen and in so doing seeks to transform the conditions of learning.
Methodological contexts

Having mapped out the position of the study in relation to major philosophical strands, it should also be positioned in relation to conventional research methods to identify which existing research practices have been drawn on. As with the philosophical approaches, this research, as multimodal analysis, draws on a wide and varied range of practice.

Although the understanding of ‘text’ here embraces a number of different types of multimodal representation, the practice is nevertheless closely aligned with the kinds of context-based text analysis and deconstruction known as ‘discourse analysis.’ The practice undertaken here and that of discourse analysis share a common assumption: the existence of analysable elements other than what is immediately apparent in the one-off text. What is sought is an understanding of the underlying social practices which shape the acts of communication (or representation) in which individuals are participants (Fairclough, 1989). In common with discourse analysis there is, in the methodology of this research, a preoccupation with what is implicit in the text and how this reflects the social construction of its context of production.

Because it also relies heavily on transcribed dialogue, action and observations of students, the research practice undertaken bears many resemblances to ethnography. The data occur in everyday settings, in real time. They were not staged for the purposes of research and the stance taken was non-interventionist. In keeping with the practice of critical ethnography, there are no claims to neutrality or transparency (Clifford and Marcus, 1986), in contrast, the research seeks out and give prominence to the perspectives of the students themselves (the subjects). The study, however, is emphatically not ethnography but multimodal analysis; description of comparable forms of data arising from a concern with them as instances of semiosis; of representation of meaning, not as a lens through which culture may be observed. Despite superficial similarities, the defining characteristics of ethnography (that it is concerned with understanding, from the perspective of the insider, a particular social or cultural scene, Fetterman, 1989) are redundant. There are no such competing perspectives in multimodal analysis. Nor is there any attempt to build up the kind of prolonged, repetitive and contextualized observations proposed by Spindler (1982) in his ‘Criteria for a Good Ethnography of Schooling.’ Although the origins of the research did indeed lie in familiarity arising from the researcher’s prolonged involvement with the students concerned, data of equal value could also have been drawn from a new or unfamiliar site.

As multimodal analysis, this study, as has been discussed, does make some claims to generality. This being the case, some similarities with case study practice, where issues of generalizability are more prominent, can usefully be drawn. Certainly, the almost exclusive focus on the representational activity and learning of one particular group of students is evocative of the case study approach. The use of interviews to validate other data (in particular the students’ written and visual representations) reinforces this position.