ly, with respect to the task of representing and communicating about social relations of the viewer of the image to the image (a relation which allels that of the maker of the image to the represented object), we me a use of visual elements which indicate a set of social relations ged to be significant in that society. For instance, indications of social ance may be coded by the size of the element represented; or in its ed distance from the viewer: attitudinal relations may be coded by the ver's lateral position in relation to an element (e.g. 'front on', 'to the of', 'from the margin'). Relations of power are coded by the position he viewer in vertical relation to the object; if the object is more powerful ook up to it; if we are more powerful, we look down on it, and so on. ns of 'factuality' may be coded by kinds of realism, so that in relation to main example we might say that the mode of representation is in a er-realist form (perhaps a surrealist form) of everyday realism. In Figure the child-drawer looks straight out from the image, in a kind of 'visual ement'.

nterested readers should use the much fuller description available in s and Van Leeuwen (1996). Here we simply want to indicate that there regularities of structure, and regularities of a 'grammatical' kind in erent modes and to use this skeletal framework to indicate one of the nt research tasks for a project of Multiliteracies.

10

DESIGNS FOR SOCIAL FUTURES

Bill Cope and Mary Kalantzis

Design, culture, transformation

Meaning-making, as Gunther Kress has observed, is prospective; it is interest-laden and future-oriented (see Kress, Chapter 7 above). Semiosis involves the representation of interest (a need to communicate); selection from the range of representational resources (drawing from Available Designs, be they, for instance, in various Linguistic, Gestural, Visual, Spatial or Multimodal forms); and representational action or the meaning-making process itself (Designing).

Thus, meaning-making involves Design in both its senses. 'Design' in the sense of morphology, that is, structure and function, such as the design that 'is' a motor car or a skeleton, for instance; and design in the sense of an active, willed, human process in which we make and remake the conditions of our existence, that is, what 'designers' do. Design, therefore, refers both to structure and to agency.

Design is a process in which the individual and culture are inseparable. The representational resources available to an individual are the stuff of culture; the ways of making meaning that an individual has learnt and used perennially over the course of their life; as well as those new ways of making meaning that they know are there and that they could pick up with more or less effort if and when they were needed. Others' interests have already been expressed though Designings that have resulted in the Redesigned, and these, in turn, become Available Designs for the individual in their own meaning-making. Culture is no more and no less than the accumulated and continuing expression of agency; of Designing.

These propositions seem obvious and, in a way, a kind of common sense. The notion of Design, however, entails a very different conception of meaning-making from that which traditionally underlies both theories of language and practices of literacy teaching. It also entails a very particular concept of culture.

Culture = the accumulated & continuing expression of agency, of designing agents

Building upon the arguments developed by Kress in Chapter 7, there is a common view of language in particular, and patterns of meaning-making in general, as inherently stable systems of elements and rules. The focus here is on convention and use. Individuals are at worst passive recipients of these systems, at best they are agents in the reproduction of conventions. This view finds its expression in language and literacy curricula which focus on grammar and form, and which measure results against the official 'standard' of the national language. It also finds its expression in many 'immersion' models of language learning, in which students are expected to drift in the direction of a standard form of the language as a result of being immersed in texts of ostensible literary significance, or social power.

In either case, culture is implicitly or explicitly regarded as stable, and teaching and learning fundamentally a business of leading students in the direction of a singular norm – variously understood to be 'national culture', 'common culture', 'core culture'. This is a view of culture in which students come to be passive bearers of culture more than active and responsible cultural participants. It is also a view of culture that is not very good at explaining change.

These views of language and culture are very much a product of the era we have already described in Chapter 6, when the systems logic of Fordism, nationalism and mass culture attempted to force the cultural simplicities of homogeneity on a world that was inherently heterogeneous. Some of the more simplistic versions of multiculturalism try something which is, in essence, much the same. They neaten up the boundaries of cultures in an attempt to impose the stamp of 'identity' in its literal sense; they focus on maintenance as if they were curators in some kind of museum of human life forms; and they retreat into fragmented separatisms.

The Design notion, on the other hand, starts with a very different set of assumptions about meaning and ends with a very different notion of culture. Instead of a focus on stability and regularity, the focus is on change and transformation. Individuals have at their disposal a complex range of representational resources, never simply of one culture but of the many cultures in their lived experience; the many layers of their identity and the many dimensions of their being. The breadth, complexity and richness of the available meaning-making resources is such that representation is never simply a matter of reproduction. Rather, it is a matter of transformation; of reconstruing meaning in a way which always adds something to the range of available representational resources.

There are two elements to change or transformation. One aspect is 'voice'. The last few hundred words of this chapter have never been written this way before; there is something unique about them, even if there is nothing particularly startling about the words or what they are saying. And, no matter how everyday their context and content, the next few hundred words you say could not be said in precisely the same way, have the same

'feel' about them and embody the same expression of personhood, as anyone other than you at this particular moment in your life, with your own life history and exposure to a peculiar range of representational resources.

The second element of change or transformation is hybridity. The many layers of identity, the many aspects of experience, and the many discourses that represent the Available Designs of meaning, are ever being related, combined, and recombined in such a way that all utterances are polymorphous reconstructions. The range and complexity of representational resources at a person's disposal are such that every representation is invariably unique and hybrid. There is just so much to draw from in the breadth and subtlety of Available Designs that every Designing re-creates the world afresh. Every Designing picks and chooses from all the bits in the world of Available Designs and puts it back together in a way it has never quite been before. In both of these aspects – voice and hybridity – agency is the critical factor. Available Designs are transformed in the act of Designing.

This view of meaning embodies an understanding of culture which fits well with that strategically optimistic analysis of our near futures already presented in Chapter 6: a future of Productive Diversity, of Civic Pluralism and of Multilayered Identities. Culture is hybrid; dynamic, open and forever undergoing transformation. This is also an understanding of culture capable of accounting for change, both retrospectively in the sense of how our history and our lives have changed, and prospectively in the sense of how we are designers of social futures and makers of our own futures. And finally, it is an account of culture which has implications for individual responsibility and the ethics of participation. As transformers of meaning and makers of culture, we are all deeply responsible for the immediate consequences of our Designing and, in a larger sense, our individual and collective futures.

Yet there is agency and agency; Designing and Designing. All meaning and Design is transformative in one sense: human agency constitutes meaning (Designing) and remakes the world in the process (the Redesigned). Yet in some moments, agency or Design is more transformative than in others – transformative in this sense being more a matter of creative change than sticking to existing Designs of meaning. Some Designs, or transformations, are more in the nature of cultural copies and are thus more predictable, more passively compliant and more neatly within conventional cultural boundaries. Others are more creative, more hybrid and complex in their cultural sources, and more reflexively conscious of their own replication of, or divergence from, their cultural and representational roots.

Then, there is also change in a positive and constructive sense, and there are changes in a myriad of miserable, exploitative, and humanity-denying senses. It is one thing to have a theory of meaning and culture that can account for change. It is quite another to have a theory that can evaluate

different kinds of change and the comparative merits of various attempts at being human – cultures or moments within cultures. It is one thing to say there are cultural differences, and then to stand back, to live and let live; it is another to evaluate the import of these differences.

The concept of 'lifeworld' helps us differentiate between transformation in the sense of cultural reproduction and transformation in the sense of creative change. The lifeworld is the world of everyday lived experience; a world where transformation occurs in a less creative and self-conscious sense: richly organised, to be sure, and laden with linguistic and cultural tradition, but serving immediate or practical ends. The lifeworld is pre-given – already there – as the surroundings that shape every individual as they becoming human, as babies and then children are 'socialised', and in our simply assumed or 'commonsense' surroundings as adults.

In Husserl's terms, the lifeworld is 'the world valid as existing for us', the 'intuitive surrounding world of life', the 'realm of original self-evidences', 'habitually persisting validities', 'everyday practical situational truths', 'the world of straightforward intersubjective experiences' (Husserl 1970, pp. xl–xli, 109, 121, 127–8, 109, 132, 133). The lifeworld is just there; it is what we unreflexively expect to be there because we know it is always there; it is the world in which our everyday understandings and actions have some purchase. It is the ground of our everyday lives.

For the individual, the basis of the lifeworld is the functioning, kin-aesthetic ego. 'Thus we are concretely in the field of perception, . . . and in the field of consciousness . . . through our living body.' The way of knowing within the lifeworld, of knowing its Designs if you like, is in the manner of 'naive experiential self-evidence, the certainty of coming to know, through seeing, touching, feeling, hearing etc., the same thing through its properties, through "repetition" of the experiences'. However, for all its pre-given, everyday, intuitive, self-evident character, the lifeworld is no less a site of subjectivity and agency than any other. Although it 'is always already there, existing in advance for us', we are nevertheless 'wakingly alive in it, . . . always somehow interested subjects' (Husserl 1970, pp. 108, 343, 142).

This lifeworld is the raw material of culture; a shared set of assumptions about what is both practically achievable or good in the world, as well as what is practically useless or bad in the world. It is 'all the built-up levels of validity acquired by [people] for the world of their common life'. This build-up Husserl calls 'sedimentation', a process soaked with culture in which 'all of us together, belong to the world . . . through . . . living together'. Language is one of the primary media in 'the unavoidable sedimentation of mental products'. Indeed, we fall under the spell of what Husserl calls 'the seduction of language', in which the apparently fixed 'validities of association' make things appear natural, permanent and universal by virtue of their having been named. They are none of these

things, he warns, and we cannot but be 'disappointed by subsequent experience' (Husserl 1970, pp. 133, 361–2).

What Husserl doesn't say, however, is that the lifeworld is also inherently diverse; it is polymorphous, multilayered and capable of multiple combinations in all the senses elaborated upon in this book. There is not one lifeworld but an infinity of overlapping lifeworlds; always unique at any moment in time and space and yet, in the nature of sedimentation, always referenced elsewhere to established patterns of representation and culture.

Although fully a place of Design and transformation, therefore, the Designing of the lifeworld takes place within limited horizons – horizons, indeed, the limits of which will not necessarily be visible to the actors in their Designing and transforming. Though fully willed, transformation purely within the lifeworld involves a limited field of vision. It is no more than an unreflective appropriation of representational and cultural resources that are circumstantially available. Within the lifeworld, 'active consciousness . . . is surrounded by an atmosphere of mute, concealed, but cofunctioning validities'. What lies beyond the 'horizon of interest' or beneath the surface in the deep structures of culture and meaning 'does not disturb the course of normal practical life' (Husserl 1970, pp. 145, 379, 344).

So, the lifeworld is a place of Design and transformation within practically limited horizons. This, of course, is the datum point of Situated Practice in the Multiliteracies pedagogy outlined in the next section of this book. Overt Instruction and Critical Framing are both strategies to extend students' cultural and representational horizons beyond where they already are and take these broader practices back into the lifeworld in the form of Transformed Practice. This also means that the lifeworld is the datum point for the process of transformation that is the purpose of the education, which we have already described in Chapter 6.

Beyond the horizon of the lifeworld are more expansive and deeper forms of knowing and meaning, which Husserl calls 'the transcendental'. We will start here with Husserl's concept, and then extend it. Husserl's transcendental is rather like natural science; it is 'a method which is designed for progressively improving, through "scientific" predictions, those rough predictions which are the only ones that are possible within the sphere of what is actually experienced and experienceable in the lifeworld'. The transcendental looks at the world from various angles, seeking new ways in which the world might exhibit itself, such as the 'alteration of perspectives' and developing a theory-like synthesis. These are some of the ways in which 'we measure the lifeworld . . . for a well-fitting garb of ideas'; some of the ways in which we can know and mean in ways that have greater depth and broader horizons than what is possible within the lifeworld (Husserl 1970, pp. 51–2, 110, 158).

But the transcendental does much more than conventional natural science. Science often naively tends to name things as objective truths or

facts, as if they stood in isolation from human interests. The transcendental, by contrast, always reflects back on the lifeworld, to reflect on which facts interest us, and why they are presented as if they were self-evident, objective truths (Husserl 1970, pp. 59, 159, 205). This means that we have to suspend belief and stand back from the world – a process Husserl calls 'bracketing' off the 'habitual one-sidedness' or 'naive objectivism' of the lifeworld (Husserl 1970, p. 152).

How do we do this bracketing? It is at this point that we extend and apply Husserl's notions of lifeworld and the transcendental into a critical theory of cultural pluralism.

For a start, there are the phenomena of cultural difference. Lifeworlds are evidently different, either in terms of the characteristics of groups 'living together' or in terms of the unique flows of influence that create multilayered identities, those uniquely hybrid designs of meaning in every utterance, and 'voice'. Lifeworlds immediately strike you as distinctive by way of contrast, for the differences that simply stare you in the face. Differences are the phenomena; the first impressions, the immediate appearance, of lifeworlds.

Beneath this, however, the hard work of the transcendental can uncover two more layers of cultural sedimentation. One is the most basic of the institutional structures of everyday life, fundamental ways of being, of thinking, of making meaning in the world and of imagining possible futures. In our modernity, for instance, it might be possible to uncover the motives and outcomes of the market, or liberal individualism. People live these things in various ways, but the fundamentals are not always immediately visible; nor are the ways in which these fundamentals affect the lives of recruits from other forms of life – immigrants from peasant farming communities, or indigenous societies, for instance.

And, digging yet another layer further, there comes a point at which we need to get completely out of the this-ness of any particular culture and ask the unfashionable question, what is our species being? From which follows the equally unfashionable questions, what are the universal elements of our human natures? what is the meaning and purpose of culture? and what does this imply for the way we do this bit of our culture or the way they do that bit of their culture? If there is one irreducible fact of human species being, it is the fact of culture. This is not just a fact, moreover; it is a moral imperative. As a species, we subsist through culture and culture gives us meaning by which to live. In some moments, our actual cultural experience is true to our natures, true to our species being. In others, it is a travesty. This is not to imply that there is a single or clear answer to the question of our human natures. Rather, it is to suggest that this is an important question that needs to be addressed to provide an ethical grounding for critical readings of meaning.

Starting with the cultural phenomena of differences in the lifeworld and always returning to those cultural phenomena, the transcendental

The lifeworld of everyday experience

The Designed	*Designing* *Types of transformation*
• The world of everyday experience and 'commonsense' self-evidence. You 'know' what you do because certain expressions of meaning have purchase on the world, because they seem to work.	• Voice: making subtly variant meanings based on the unique mix that is individual life experience • Hybridity: drawing from the enormous range of Available Designs, and recombining these meanings in a way never quite done before • Change is semi-conscious and not always obvious: more like cultural reproduction – uncritical, relatively predictable, passively compliant

Larger processes of system and structure

The Designed	*Designing* *Types of transformation*
• Expanded horizons for meaning-making and social action, such as working with underlying theories (discipline knowledge) or knowledge of other cultural practices.	• Analytical, reflective, systems thinking. Meaning-makers more reflexively conscious of their own meaning-making or Designing processes (in the fashion of an architect compared to the home renovator), as well as the extent of their replication of, or divergence from, the cultural and representational roots of their meanings in Available Designs. • Depth dimensions: knowing and using larger, explanatory patterns of meaning, their social contexts, purposes and effects

The Designed	Designing
	• Breadth dimensions: cross-cultural comparison, seeing things from multiple cultural perspectives and using those perspectives
Our human natures	
The Designed	*Designing*
	Types of transformation
• Human needs and their expression through meaning	• Ethical action, action on the basis of universal moral imperatives, such as human rights

adds perspectives along two dimensions: the dimensions of depth and breadth.

To take the depth dimension, we need to go beyond our reading of the phenomena of culture and differences and measure these phenomena against the deep structures of everyday life and meaning (digging down to the second layer of critical cultural analysis) and the moral facts of our species being (digging down to the third layer of critical cultural analysis). Suspension of belief or bracketing on a depth dimension involves critical thinking, systems thinking (Senge 1990), reflexivity (Beck 1994; Lash 1994), holistic thinking, working through interrelations between apparently separate phenomena, and figuring out paradox and contradiction. This depth dimension itself has space, time and structure dimensions within it, and this is what we attempted in our reading of the state and nationalism, and of postFordist work, in Chapter 6.

And, on a breadth dimension, we need to undertake the process of cross-cultural comparison; how does this particular lifeworld, our lifeworld (or, to be more precise, each of the layers of the multiplicity of overlapping lifeworld sources which constitute our daily experience) measure up against alternative ways of being human, of doing culture? Nationalism and racism, for instance, are prominent examples of knowing and meaning within the horizon of the lifeworld; and with them come practical orientations to the other lifeworlds one encounters, such as exclusion or assimilation. Measured up against a more expansive view than that which is possible from within the lifeworld in which racism and nationalism are generated, they are decidedly inadequate views of our pasts, our future and our species being (see Kalantzis and Cope, Chapter 6 above). Nor is this cross-cultural

breadth simply the view of a disinterested observer, in the manner of a kind of anthropological curiosity. In an era of increasing local diversity and global interconnectedness, this breadth must be the stuff of practice; of learning by constantly crossing cultural boundaries, of shunting backwards and forwards between one lifeworld context and another.

Both depth and breadth dimensions are processes for 'denaturalising' the lifeworld, of making the everyday strange in order to cast new light on it and have a more informed basis upon which to design both imminent meanings and our larger social futures.

Designs of meaning

How, then do we describe meanings? Following is just one suggestion, examining five dimensions (representational, social, organisational, contextual and ideological) across five modes of meaning (linguistic, visual, gestural, spatial and audio). It is simply indicative of the kinds of questions we might ask ourselves in order to add depth (systems and structure) and breadth (cross-cultural) dimensions to teaching and learning about the meaning of meanings.

Multimodal meaning is no more than the other modes of meaning working together, and much more as well.

The 'no more' is based on the fact that all meaning-making is in its nature multimodal. Multimodal meaning is no more than the other modes of meaning working together. And work together they always do. Linguistic meaning in the form of speaking, for instance, is achieved in combination with audio meaning (prosody) as well as gestural meaning, not to mention spatial meaning (the words of the lecturer compared to the conversation of two students sitting next to each other). And linguistic meaning in the form of writing is linked to visual, from the business of handwriting itself (graphology) all the way through to the heavily designed pages of desktop publishing in which fonts, point sizes, leading, kerning, bolding and italics are all integral to the grammar of the words – and the organisation of linguistic meaning around headings, subheadings, indents, bullet points, pictures, diagrams and open spaces.

Yet multimodal meaning is also much more than the sum of linguistic, visual, spatial, gestural and audio modes of meaning. It also involves processes of integration and moving the emphasis backwards and forwards between the various modes. At the heart of the processes of integration is the inherent 'multiness' of human expression and perception, or synaesthesia. Meanings come to us together: gesture with sight, with language, in audio form, in space. And, we can shift our meaning-making emphasis, through processes of transduction or transcoding. We can describe in words scenes that might otherwise be represented pictures, or represent three-dimensional spaces visually in two dimensions, or represent

Dimensions of meaning, with some examples

		Linguistic examples	*Visual examples*	*Spatial examples*	*Gestural examples*	*Audio examples*
Representational: What do the meanings refer to?	**Participants**: Who and what is participating in the meanings being represented?	Naming words, which make sense in terms with their relationships with nearby words and contextual pointers	Naturalistic and iconic representations, visibly distinguishable contrasts	Objects in relation to nearby objects, part/whole relationships, contrasts	Mimicry, gesture-shapes	Naturalistic representations in sound (e.g. recording of bird sounds); iconic representations (e.g. alarm sounds)
	Being and acting: What kinds of being and acting do the meanings represent?	Processes, attributes, and circumstances	Vectors, location, carriers	Placement, topography, scale, boundaries, location	Direction, location, size	Tempo, tonality, accompaniment
Social: How do the meanings connect the persons they involve?	**The roles of the participants in the communication of meaning**: How does the speaker/writer mean to draw the listener/reader into their meaning?	Participant relationships and vicarious observer relationships	Perspective, focal planes of attachment or involvement	More or less negotiable spaces: e.g. parks versus prisons	Visible sentiment, relationships of persons	Listening, overhearing
	Commitment: What kind of commitment does the producer have to the message?	The kind of affinity meaning-makers have to the propositions they are making, and the degrees of certainty they express – 'modality'	Contextualisation, depth, abstraction	Emphatic (fences, barriers), or less insistent spatial designs	Gesture as order; gesture as incidental expression of personality	Beethoven versus easy listening
Social continued	**Interactivity**: Who starts the interchange, and who determines its direction?	Agenda-setting, turn-taking, topic control	Eye contact, response	Spatially determined interchanges: audiences by a theatre, students by a classroom	Patterns of gesture response and interaction	Orchestra compared to cassette in car (start, volume, balance etc.)
	Relations between participants and processes: How are the participants connected to each other and with the actions and states of being that are represented?	Agency, or transitivity, 'nominalisation'	Agency as represented through vectors, eyelines, perspective	Principles of layout	Agency: e.g. sulking compared to assault	Mood
Organisational: How do the meanings hang together?	**Mode of Communication**: What is distinctive about the form of communication, and what conventions and practices are associated with this form of communication?	Spoken or written language; a part of what is going on or representing what is going on; monologic or dialogic	Still or moving images, two- or three-dimensional representation, representational versus interactive	Architecture topography geography	Gesture, demeanour, fashion	Natural sounds, prosody in voice, music

		Linguistic examples	*Visual examples*	*Spatial examples*	*Gestural examples*	*Audio examples*
Organisational continued	**Medium**: What is the communication medium and how does this define the shape and the form of the representation?	Physical medium, such as recorded or ephemeral speech	Different media, such as oil painting versus photography	Natural environment, building, website	Hand gesture, facial looks, clothing	Sound waves in the air; recorded or ephemeral
	Delivery: How is the medium used?	Intonation, stress, rhythm, hand-, writing, typing	Brushstrokes, photographic film	Construction	Expression	Intonation, stress, rhythm, pitch, loudness
	Cohesion: How do the smaller information units hold together?	Information structure, reference, omission, conjunction, wording	Left/right, top/bottom, centre/margins, framing, salience/ gravitational pull	Structural, aesthetic	Rhythm, opening and closing gestures	Notes, bars and scales; repetition, parallelism, elaborations, contrasts
	Composition: What are the overall organisational properties of the meaning-making event?	Genre, such as romance novel or doctor-patient conversation	Genre, such as landscape photography compared to photojournalism	Building or environment types	Demeanour, style	Genre, such as jazz or reggae
Contextual: How do the meanings fit into the larger world of meaning?	**Reference**: How do meanings point to contexts and contexts point to meanings?	Frame of reference, pointers, metaphor	Frame of reference, foregrounding/ backgrounding, resemblance/ metaphor	Location, prominence, metaphor	Setting	Where the sounds are heard; resemblance and analogy
Contextual continued	**Cross-reference**: How do meanings refer to other meanings?	Intertextuality, hybridity	Pastiche, collage, icon	Motifs	Expressive traditions	Motifs, riffs
	Discourse: How does the whole of what I communicate say something about who I am in a particular context?	Primary and secondary discourses, dialects, register, orders of discourse	Imagery	Topography, architectonics	Persona	Repertoire
Ideological: Whose interests are the meanings skewed to serve?	**Indication of interests**: How does the meaning-maker declare their interests?	Authorship, context and purpose of meaning	Naturalistic or stylised images	Façades, signs	Demeanour and clothing pointing to role	Where and why the sounds are produced
	Attributions of truth value and affinity: What status does the meaning-maker attribute to their message?	Assertions as to the extent of the truth of a message, declaring one's own interest, representing agency	Realistic (e.g. scientific diagrams), versus heavily authored (e.g. artistic) images	Spatial arrange-ments, such as of a courtroom compared to a park	Acting/mimicry compared to expressions of authenticity, inner feelings	Intensity
	Space for readership: What is the role of the reader?	Open and closed or directive texts, anticipated and unanticipated readings	Highly detailed panoramas versus propaganda	Alternative ways of using a space, directive or allowing alternatives	Directness versus ambiguity of expression	Capacity to turn sound on/off, volume, balance, sampling

through the gesture language of signing what might otherwise have been said in spoken words. We visualise a thought before the words come. Or we hear a word and a whole lot of visual and audio senses seem to fill our minds. It is revealing how naturally metaphors from one mode of meaning slip over to describe meaning processes in another: 'imagery' in written text, or 'perspective' in oral argument, or 'visualisation' of alternative word-centred 'points of view'.

Synaesthesia and transduction are the stuff of our human nature. However, as Kress argues, in our recent modernity we have privileged linguistic meanings, and particularly written or literate linguistic meanings, over other modes of meaning (see Kress, Chapter 7 above). Not only does this represent a reduction expressive possibility. It is also increasingly anachronistic given recent social as well as technological trends in our communications environment which extend the range and technical integration of multimodal communication – from the highly designed audio-linguistics of radio, for instance, through to the digitalisation of words and images which allows the unprecedented integration of visual and linguistic design. The culture of literacy, the future of our communications environment, and the changing role of education are the subjects of the remainder of this chapter.

Designs for social futures: the case of literacy

Literacy is just one aspect of linguistic meaning. Yet it has been highly privileged in modern education at the expense of other modes of meaning and even orality as another aspect of linguistic meaning. This privileging of literacy is accompanied by all sorts of claims about what literacy does for people and their futures; claims that it is inherently superior as a representational tool to oral language and visual or gestural meanings; that it will bring about progress in the sense of an improvement in material well-being; that it is an instrument of cultural and scientific progress; or that it enhances cognitive development. Such claims range from the exaggerated to the just plain false (Olsen 1994, pp. 3–19). They are, nevertheless, claims about written language which promise personal and cultural transformation.

And, indeed, the historical transformation that has accompanied the spread of literacy in the modern world has been enormous. Phillipson documents the process of linguistic imperialism in which the teaching of literate forms of imperial and national languages does enormous damage to most of the ancestral and primarily oral languages of the world, as well as their cultures (Phillipson 1992). Mühlhäusler traces the destruction of language ecologies – not just languages but the conditions that make these languages viable – by what he calls 'killer languages' (Mühlhäusler 1996). The result is that, of the estimated two hundred and fifty languages existing

	Linguistic examples	*Visual examples*	*Spatial examples*	*Gestural examples*	*Audio examples*	
Ideological continued	**Deception by omission if not commission**: What's not said and what's actively one-sided or deceptive – deliberately or unconsciously?	Selectiveness in foregrounding and backgrounding, non-declaration or obscuring of interests	Foregrounding and backgrounding, distortion, perspective	'Front' and 'back' spaces, public and private	Using the covering of larger motions to blur small motions; social front, decorum	Aura, such as mood music when a plane is taking off
	Types of transformation: How is a new design of meaning created out of available designs of meaning?	Extent of creativity, degree of self-consciousness of representational resources and their sources	Extent of creativity, degree of self-consciousness of representational resources and their sources	New or hybrid forms of spatiality: e.g. websites, food courts	Conscious versus unconscious behaviours	New and hybrid forms of music, or faithfulness to received traditions of the repertoire

in Australia in the late eighteenth century, two centuries later there are only seventy left possessing more than fifty speakers; perhaps only a dozen languages will survive another generation; and even those that survive will become more and more influenced by English and interconnected with Creole (Dixon 1980).

Language change of this order is what the pundits of English literacy education and national development might have predicted and even recommended. But it's more than languages that have changed; more than the ostensibly arbitrary relationships of signs to signifiers. Whole ways of being have been transformed as well. The transition from oral to literate culture, Ong says, transforms our very ways of relating to the world. Oral as compared to literate cultures, he claims, are additive, rather than subordinative; aggregative, rather than analytic. They are redundant and copious in contrast to linear, in which each thing needs to be uttered only once. They are conservative in the sense of relying on repetition to ensure that people remember what has been learnt over generations, rather than intellectually experimentative because things forgotten can be retrieved from written text. They are situational, rather than abstract; empathetic and participatory, rather than objectively distanced. Moreover, they are close to human lifeworld rather than operating through a distancing and denaturalising neutrality in the fashion of science (Ong 1982, pp. 37–49). Olsen says that writing performs a new epistemological function; it is the basis of an understanding of the conditions of knowledge, theoretical thinking and critical and reflexive consciousness (Olsen 1994, pp. xv, 21, 258–82). Vygotsky says that writing is 'more abstract, more intellectualised, further removed from immediate needs' than oral language and requires a 'deliberate semantics', explicit about context and self-conscious of the conditions of its creation as meaning (Vygotsky 1962, pp. 98–101). Luria contrasts the situational, analogical thinking of adults who had grown up speaking only the oral languages of Soviet Central Asia with the abstract and conceptual language of literate adults (Luria 1976).

Whatever the truth of each of the particulars of these claims, literacy and its modern accoutrements affect the depths of people's being: how we think, how we see the world, what we do in the world. The transformative project that is literacy teaching is always chancing upon differences, and handles these differences in several ways: through exclusion ('literacy measures you as an irretrievable loss to civilisation, certainly in its higher forms'); through assimilation ('we can teach you to be literate, and you will pick up at least some of the benefits of becoming like us'); or through the marginalisation inherent in a simplistic version of multiculturalism ('we will recognise your differences as interesting and colourful extras in the human museum of folk life, but that recognition will not extend so far as to shift the fundamental course of literate culture or our developmental designs on your life').

The shapes of the first two of these approaches to differences are clear cut. 'We leave you off the literacy agenda', or 'we teach you the standard, written form of national languages'. The third approach is more subtle as it appears to be sensitive to difference, but is not really about difference at all.

An Anglican mission was established at Angurugu on Groote Eylandt in Australia's Gulf of Carpentaria in 1921. This was the first sustained contact with Europeans for the several thousand speakers of the various dialects of Anindilyakwa, then living across the several thousand square kilometres of the island. For decades, the relentless project of the mission was assimilation: the word of God in English and the words of English taught in the mission school. Now, the missionary tells us in a literacy research project that took us to Groote in the mid-1990s, people want to keep their culture strong, and this is why she is translating the Bible into Anindilyakwa. Meanwhile in the schools, which are now run by the Northern Territory government, there has been an uneven attempt to introduce what is variously called 'two-way' or 'both ways' education and bilingual education, which are, needless to say, culturally sensitive education initiatives (Cope 1998).

One of the missionary's linguist offsiders tells us that Anindilyakwa is the world's hardest language – the number of pronouns, the number of cases, the number of tenses, the amount of inflection which makes translating the Bible difficult. 'Aboriginal languages break things down into their component parts', the offsider tells us. 'There is lots of redundancy. For example, both pronouns and verbs indicate person. In writing the Bible down, a lot of the redundancy is removed, edited out.' This is the business of completely transforming Anindilyakwa by writing it down, of making it simple after the style of the culture of writing.

In school, the old Dick and Jane readers have been thrown away, and now it's apparently empowering and relevant reading and writing which have taken their place. The Aboriginal Schools Curriculum Materials Project starts with students' own cultural experience and then applies a particular notion of genre: as 'staged, goal oriented social process'. In the box is an ostensibly relevant example of narrative genre in the materials from another part of northern Australia.

'Narrative genre is goal-oriented because it has a purpose', the materials tell us. And 'the purpose is: to entertain [and] to help people think about the meaning of life and experiences in life. Narratives open the door to the world of literature.' Little Red Riding Hood, the materials explain, works in the same way (Northern Territory Department of Education 1993).

Narrative in this form, however, is just as deeply a product of the cultural orientation of the English written word as the structures it replaces. Making the curriculum culturally relevant in these terms means reconstructing things Aboriginal as stories and myths – a variation on the epistemological

Orientation
Long, long ago, a giant serpent called Inganarr lived in Arnhem Land. He ate people wherever he went. He moved from west to east, eating people as he went.

Complication
Inganarr went to North Goulburn Island and ate all the people there. He returned to the mainland and rested. Two boys, out hunting, were surprised when their spears came back to them when they threw them in a certain direction.

Crisis
Inganarr slowly made his way to eastern Arnhem Land. He had eaten too many people. He felt sick. Suddenly, he opened his mouth and threw up.

Resolution
Out came all the people, still holding their hunting weapons. They settled down in eastern Arnhem Land and never returned to the west. And that is why, to this day, there are no people living on North Goulburn Island, and there are more people in eastern Arnhem Land than in the west.

theme of Little Red Riding Hood, from entertainment all the way through to the literary canon.

But it is when linguistic and educational relevance translates into literacy in indigenous languages that the full complexity of 'cultural sensitivity' comes into play. As the linguists and educators develop their word lists and dictionaries, they have to overcome the difficulties inherent in these languages of abstraction, of metaphor, of overlaid references so complex that their meaning required dedicated lifetimes. What becomes a word was once a person, a place, a god in a cosmological narrative, or an object in the natural world. It was, perhaps, once a clan, an iconically represented image in body painting and art, or a motif in sacred song and sacred dance. In fact, this overlay is not even metaphorical or abstract; it is like nothing previously existing in the culture of literacy. If anything it is more like a relationship of identity rather than metaphor. Here also the visual, the spatial, the gestural, the audio and the linguistic are located together in inseparably multimodal forms of representation.

Nor was this world of representation in any way fixed. As a person died, his or her name could no longer be mentioned. So the whole world had to be renamed, and all the layers of reference in their name. As a person progressed through life, the world was represented in progressively more

complex and arcane oral, visual and danced languages of age. Women represented their world in ways different from men. Clans represented their lands and other people's lands in dialects of affected differentiation. Your relationship with everything was evident in how you named it differently, pictured it differently or danced it differently, by tribe, moiety, age, or gender. And everything was always up for renegotiation, for reappropriation through renaming, for singing again, for telling again, for redrawing, for creating the world anew by remembering and refashioning its manifold meanings. The songs, dances and images of ceremony and law were sung and resung, danced and danced again, drawn and redrawn, but never twice the same way. Ceremonies were points of negotiation; of living with constant change by constantly taking control of the change; of always throwing sovereignty into question by reopening the discussion about words and people and places and history. This was a society of continual re-creation; of people actively negotiating their identities and remaking their history all the time. And the fundamental cultural logic was one of differentiation, of meaning-in-divergence, making it clear who you peculiarly were in the cosmos by the way you named and drew and danced that cosmos (Christie 1993; Cope 1998; Dixon 1980).

In contrast, the words of English, the language of the world of supposed progress and even 'future shock', are fixed in dictionaries, signifier representing signified in a seemingly static and nearly non-negotiable relationship. We might like to claim as a virtue that English has 150,000 words – more than any other language – even though most of them are practically useless to almost all of us almost all the time. The evidence is that the reading vocabulary of an average literate adult is about the same as the vocabulary of most Australian languages (Dixon 1980). But the grammar, the pronouns, the relating of ourselves in the world are far simpler. You can count English pronouns on a little more than one hand versus the hundreds of pronouns in Anindilyakwa; and there are just a few English tenses compared to the manifold complexity of Anindilyakwa pasts in relation to presents in relation to futures. Fundamentally this means that today's culture of English literacy, which has designed us and with which we design our futures, is very much reduced to the world of the concrete, the predictable and the repetitive; units forced by the process of abstraction to be sufficiently identical that they can be counted, which is quite obviously a peculiarly mechanical and repetitive version of abstraction. There is very little scope here to renegotiate meanings and very little scope for change, let alone scope for participating in change.

The reductions and simplifications of the culture of literacy continue to the level of genre, with the reports that remove voice ('always use the third person'), and which exude authority by pretending naturalistic truth, as if the natural or social world were speaking for itself – and the narratives which play the game of fiction, as if entertainment were innocent fun and

the message in the medium the product of the author's own creative whimsy rather than the communal voice of culture and politics.

There are two issues here. One is the nature of the cultural sensitivity of a naive multiculturalism. When languages like Anindilyakwa are put into the straight lines of lists in a dictionary, meaning and reference are frozen in the same way that written English is based on frozen meaning; on frozen referents. Only then, however, can they be taught in schools. Only then can they be read in bibles. Only after the epistemological scaffolds have been set in place, with Anindilyakwa reconstructed as a written language which forces these texts from another lifeworld into the genre of myth-narrative with its invisible cultural frame internalised, can the scaffolds be allowed to fall away. Then, it would appear, language and culture have been preserved.

At this point, of course, liberal sensitivity to difference has become a white lie. The linguists and educators have really listened to the language of difference only so they can write it down and then teach it on their own terms. Such sensitivities to difference are the niceties of a kinder, gentler racism but they are racism nevertheless.

The second issue concerns our contemporary crisis of meaning and futures. Clearly, we in the modern world do not have the conceptual and cultural resources to be able to face the future in such a way that we can be confident that there will even be a future. There is great relevance, then, in alternative ways in being human; in alternative designs of meaning and meanings for social futures. There is even relevance in knowing that such alternatives are possible. It's not that there are any immediate answers to the peculiar problems of modernity in these different attempts at being human, nor that there is any point in trying to preserve cultures in a kind of anthropological museum, nor that there is any possibility of nostalgic regret holding back change. Rather, it's a question of the possibilities inherent in hybrid experimentation and re-creation as we tackle the problems of culture, economy and environment which sometimes seem nearly intractable to us now. It is also a question of who's in control of the change in communities such as Groote Eylandt. Is it those with enduring roots outside of the modern world or the modernisers who have come from the outside, even if they perform the conceit of sensitivity to difference? For the results will invariably be very different from what is intended.

Our times are making unusually difficult demands upon us. What, for instance, might we be able to recover from the social logic and grammar of productive divergence inherent in indigenous languages? The paradox is that our conditions, such as globalisation and the nature of local diversity, are such that the conceptual tools of the era of national languages and standardised literacy are no longer serving us well. Instead an epistemology of productive divergence may be what we need, albeit of course a very different one from the epistemology inherent in indigenous languages. As

Rather = cultural jump.

we face a crisis of the environment, what might we be able to recover from the deeply personalised science inherent in indigenous languages and their epistemologies? As we face a multimedia revolution, what forms of cross-modal synaesthesia might we recover from worlds where words and landscapes and iconic religious visual imagery were overlaid in a way comparable to, but perhaps very different from, our own notions of metaphor, mimesis and abstraction? Just as the visual-symbol languages and gesture languages of indigenous cultures were *lingua francas* developed in the face of a close proximity to language diversity, so globalisation and local diversity force similar developments in media and multimedia. The paradox here is that the world of our recent modern past, dominated as it was by a word-centred rationality both straightforward and descriptive with stable signs fixed to stable signifiers, is fast disappearing. To address the fundamental problems of contemporary existence, we simply have to go looking for other ways of being human.

Thus we make the move from addressing the large questions of our futures and the measure of our human natures back to the more mundane stuff of literacy pedagogy. Let's consider a couple of examples in which a kind of contrastive linguistics and critical pedagogy might make us creatures of modernity truer to our natures as humans. Kress has argued that multimodality and synaesthesia are in our natures because our senses never operate independently of each other. Yet the culture of literacy suppresses our human potential by favouring one, restricted form of meaning-making, that is the written word (see Kress, Chapter 7 above). Investigating the subtleties of synaesthesia in oral cultures and exploring the multimodality of the new, globalised communications media can both be part of the process of recovering wasted human possibility. And, to take another example, it is simply knowing that other cultures have resources for scientific and personal meaning very different to the genres of report and narrative in their classical modern forms that allows us the possibility of a science that makes human interest and the sources of the self visible, and narratives that acknowledge their political interests more readily than 'entertainment' and the 'literary canon' can do (Christie 1990).

Designs for social futures: the case of multimedia

The newly emerging communications environment seems at first to involve a mere technological jump which primarily raises issues of medium and delivery. In fact, we will argue that the changing communications environment involves, more profoundly, a cultural jump; a jump in which the issue of cultural divergence is crucial. Possibly even, the jump will be as radical as was the contrast between the intrinsic cultural pluralism of 'first nation' Australia and the standardising, nationalistic and monocultural culture of literacy.

It is incontestable that computers and multimedia are changing the world we live in. But precisely what do we mean by 'multimedia'? This is, it becomes evident on analysis, a very slippery word which can in general usage possess four different meanings.

Definition 1: Multimedia is a technical thing, a description of the characteristics of the focal machines themselves. In this definition, multimedia is conceived in terms of the mechanics of the information medium.

Definition 2: Multimedia describes the way in which different forms of information are stored and managed, in which there is a convergence of media based on a common, digital medium of recording and representation. Convergence now means that the same machine – the multimedia computer – can do many things, from music and text to still and moving pictures. Convergence also means that even those machines still dedicated to one form of representation are developing increasingly computer-like qualities.

Definition 3: Multimedia is manifest primarily in multimodal representation; it is in this definition the form or content which defines it. In a practical sense, the development of multimedia has led to the conflation, or at least closer integration, of many formerly arcane and separate craft forms into one all-embracing multimedia.

Definition 4: Multimedia is to be defined in terms of its inner logic, its narrative structure, and the peculiar orientation of the viewer, reader, or user. In this definition, two characteristic features of multimedia are brought into the foreground: interactivity and the logic of hypertext.

Unfortunately, these four definitions of multimedia do not simply and comfortably overlay each other. Multimedia machinery (definition 1) and digital media (2) are not intrinsically interactive or hypertextual (4), even though that possibility is clearly immanent. As a consequence, the machines (1) and the digital medium (2) can be used for long-established forms of representation without impacting in any significant way on either form or content (3 and 4) – such as newspapers. The transition in these cases might simply be a matter of increasing productivity and reducing costs. Multimodal representation, moreover, (3) does not have to be entirely digital, or even digital at all. And the relationships of readers, viewers or audiences to representations of meaning can be transformed in ways analogous to multimedia (4) without any of the technology (1 and 2).

Nevertheless, computers are, undoubtedly, changing the world and multimedia represents the cutting edge of computer-based communication and information technology. This is what a whole raft of literature – old-fashioned academic and popular writing, as well as new types of writing published on the Internet – is telling us today. In one sense, this is a statement of the obvious. Yet the tone of much of this writing, wending its way through the well-trodden territories of science fiction triumphalism and apocalyptic techno-enthusiasm, gives us immediate cause to be sceptical.

The new information and communication technologies, we are told, portend the end of space as we know it. Once we lived in a civic world where you had to go to particular places to do particular things. The infobahn, by contrast is antispatial. It puts an end to geographical and institutional separations. And, with the demise of spatiality, so the social distinctions of space also wither away. Now, for instance, you can live and work anywhere and the distinction between home and work becomes blurred. This spells the end of social distinctions and 'civic legibility'. The bank's façade, the boss's suit and the fancy letterhead are all reduced to the level playing field of Web pages and e-mail messages, a kind of vernacular republic. The new information/communication environment is also asynchronous, unlike the necessary coincidences of time as well as space in the pre-information city. It is, moreover, a place of disembodiment; of messages detachable from bodies and times and places. Without the reference points of the pre-information world, this environment is also a place of easy concealment and multiple identities. Perhaps the cyborg is a key metaphor to capture the physiology of computer connectivity. Perhaps even, the mechanics of the virtual might mean the collapse of the self–other distinction. Or perhaps, the technological trend to miniaturisation that is at the heart of the computer revolution might eventually mean dematerialisation, and a focus on trade in cultural symbols rather than a trade in things. These are some of the current philosophical-technological speculations in the literature on computers, information systems and multimedia (Gilster 1997; Mitchell 1995).

As a consequence, it is argued, forms of representation are also transformed in the new multimedia environment. The form of the message is transformed by the nature of the medium; or perhaps the scope and technological possibilities of the medium create a space for the creation of new forms of message, new ways of seeing and speaking and thinking the world. Gilster refers to a new, digital literacy which, contrary to the sequential reading of the printed word, is non-linear and discontinuous. We become browsers instead of readers. Information is packaged into screen-size fragments, linked by the user's hypertextual choices. So whereas the stuff of book-length arguments and narratives demands sustained attention, hypertext is the stuff of reader-constructed pastiche. Gilster also speaks of new relationships of cultural creators and their audiences. Whereas television is exclusive, he says, the Internet is inclusive; whereas television broadcasts out, the Internet draws users in (Gilster 1997).

As a consequence, established forms of meaning-making, such as the work of literature, will be transformed. Take, for instance, the relationships between the work of art and its audience. According to Sal Humphries, we are now witnessing a transition from the 'simple branching structure of CD ROMs with a point and click interface' to 'an immersive 3D virtual environment where a user and other people and artificially intelligent

creatures co-author a narrative of undecided outcome'. The rise of 'interactive narrative' means a shift in the framework of literary production and reception in which the 'audience moves from being actively engaged on an interpretative level to actively intervening in the representation'. This means a 'convergence of creator with the spectator' (Humphries 1997).

Andy Cameron foretells the end of the world as we know it, in which narrative itself comes under challenge. History, politics, memories, and even our subjectivity, our sense of identity, he says, are all representations in narrative form – signifiers chained together in temporal, spatial and causal sequence. But, in its very nature, the new regime of interactivity is on a collision course with the old world of narrative. We are in the midst of 'a general transformation from a culture of stories to a culture which expresses its truths through an immersive, interactive medium'. He takes the computer game 'Hellcats' to be paradigmatic. Narrative closure is not inevitable, and has to be fought for; and whereas traditional narrative is of the past, the simulator places the player firmly in the present; and the player is just that – in a position more closely resembling an actor rather than an audience, though without the script. 'Digital computers and digital communications will provide a unified site for first world culture in the near future', he concludes, somewhat enigmatically (Cameron n.d.).

For every multimedia utopia, however, there is a dystopian alternative. For every techno-enthusiast, there is a technophobe, somebody who expresses at least some reasonable cause for anxiety.

Some of the dystopian forewarning comes even from the enthusiasts, recognising that access to the benefits of the new communications environment will invariably be uneven. Clearly the world of the information superhighway will be more accessible to some than to others. Such is the way of commerce, and capitalism. So Lash writes of the geography of 'wild zones' that are 'communication-dead' – from urban ghettos to Third World regions. The new information and communication technologies may well be the basis of a new reflexivity – a central concept in Lash's sociopolitical analysis of our late modernity (Lash 1994). But, in every moment during which new relationships of civic communication and participation are created, a new machinery of exclusion leaves out those who were previously left out in other ways. This is not just a question of access to the Internet for poor whites, or women at home, or immigrant minorities. It's also a domestic question of who's holding the remote or the Sega controller. Or who can afford only the copper-wire telephone connections to the 'world wide wait', versus those who can afford the fast, fibre-optic connections. Here, Mitchell speaks of a new 'bandwidth disadvantaged' (Mitchell 1995).

Paul Virilio provides a more systematically dystopian version of our imminent multimedia communications future. The new technologies, in his view, are forms of 'electronic dazzlement: optical, acoustic and tactile',

ash wild zones, communication dead

in which the able-bodied person is modelled on the disabled person. These technologies make us 'telepresent'; a state of being virtually anywhere and everywhere without ever having to leave. The person comes to be like a terminal, computer-like, 'sedentary man'. This leads to a phenomenon he calls dromospheric pollution, which comes from the Greek word *dromos*, meaning running or racing. Telepresence creates forms of contamination in which the space between the object and the subject (the trajective, or journeying) is abolished. It also leads to the creation of a 'civilisation of forgetting' epitomised in the paradoxical immediate memory in the all-powerful nature of the image, which actually spells the end of a traveller's tale and a loss of memory. This world of 'telepresence', or 'trans-appearance', or 'tele-existence', creates an environment in which we are deprived of both horizon and optical density; it is an environment lacking in depth of field. There is no longer a clear distinction between the here and the there, the inside and the outside, the virtual and the real. In the end, we will be living in a 'grey ecology' devoid of regional distinctions, where local cultures are collapsed into the cultural grey of the global dromosphere, and where the exotic has disappeared. As relationships of immediate proximity give way to remote relationships, we make strangers of those close to hand, and we come to experience a 'generalised insecurity of territorial hold' (Virilio 1997).

Virilio's is a relentlessly totalising technological dystopia. It is a dystopia not just where distance and difference are destroyed. It is also one capable of forms of centralisation of knowledge and power, coupled with systematic surveillance barely imaginable even in Orwell's *Nineteen Eighty-Four* dystopia.

There is also, however, a chaotic-fragmentary version of technology-induced dystopia. When every culture or language or subculture and dialect can have its global channel of communication – on cable television or on the Web – what common culture will we conceivably share, locally let alone nationally? Not to mention every subcultural group with every conceivable interest, and style, and sense of affiliation. Does the technology lead us into a kind of babel; a world of cultural fragmentation where we share less and less with those who are closest to us? Does not the technology promote a fragmenting cultural divergence, quite the opposite of Virilio's oppressive, 'greying', global convergence?

Add the utopias to the dystopias and they come out to something like zero. But zero is not the answer; things really are changing. The answer seems to be more like a paradox, and, as we will argue later, a paradox in which the logic of cultural pluralism is central.

Before addressing the nature of this change, there are important respects in which in the technological changes (multimedia definitions 1 and 2) need not make any great cultural or representational difference. In other words, there is no necessary flow-on from the technologies into the multi-modal, interactive and hypertextual aspects of multimedia highlighted

in definitions 3 and 4, even though the technology seems to beg such applications. On the other hand, the cultural effects achieved in multimedia definitions 3 and 4 do not require multimedia technology. This means that there is nothing so very new about the representational forms of multimedia in its multimodal, intertextual and hypertextual aspects.

For a start, probably in the bulk of its uses, multimedia technology is simply a tool for increased productivity. There is less interactivity in computerised banking transactions than there is in relating to a teller; and multimodal representations are of the simplest iconic variety and there is nothing hypertextual of any note. And, after all, most of the zeros and ones zooming along the information superhighway add up to numbers so dreary as to justify automation. Multimedia does boring things in a way that adds nothing other than efficiency to older paperwork systems. Or it does inspiring or deliberately aesthetic things in ways directly analogous to other representational media. When Jukurrpa artists <http://www.ozemail.com.au/~jukurrpa> or Yothu Yindi <http://www.Yothu.Yindi.com> put themselves on the Web, they do nothing more than they would in a printed mail order catalogue. They might reach people in a different way, reach them more quickly, and possibly reach different people. But the Web has not affected the way they do art; they are not doing art on the medium and they are not adopting any of its multimodal, interactive, or hypertextual resources as a representational tool. At most, the Web is an advertising medium. The art and the representational innovation happen elsewhere. In other words, for much of their life, the new communications technologies do nothing new, or nothing new at least in terms of the revolutionary cultural potentials suggested by utopians and dystopians alike.

And when the new technologies are recruited to do things that are new – genuinely multimodal, or interactive, or hypertextual, for instance – one is always left with a nagging sense of *déjà vu*. The methodology of hypermedia, Hilf points out, evolved from the conventions of cinema, with stages directly analogous to cinema's processes of pre-production, storyboarding, script development, production, post-production or editing (Hilf 1996). The first of the Web browsers, Mosaic, was modelled on television; and the hypertext language Java makes the Internet even more television-like, argues Gilster (Gilster 1997). Certainly there are new things about multimedia, but they draw on existing traditions of production and have more than a ring of familiarity in their reception.

The argument about the novelty of interactivity in multimedia is also dubious. Communication is, in its very nature, interactive. This was precisely Umberto Eco's point about 'the role of the reader' (Eco 1981). Readers, after all, have never been mere receivers of texts for they choose what they read; they read as much of a text as interests them; and they read into texts what they will. The meaning in literature is as much in its reception as in its production. There is always interaction between the

world of artists and the world of audiences, whether as applause, or ticket sales, or reviews. Indeed, interacting with audiences becomes a prime focus in most moments of art, from theatrical engagements which necessessarily incorporate audiences to the shock value of modern art. These are all interactive media.

Nor are the precise techniques of multimedia new. For example, the film by the Argentinians Fernando Solanas and Octavio Gettino, *La hora de los hornos* (*The Hour of the Furnaces*, 1976), was presented at the time as a 'film act', designed in such a way that the audience might interact with the controversial political and cultural issues it raised. The projectionist stopped running the film on cues which raised critical questions. The film was 'branched' to suit audience response, much in the fashion of interactive multimedia. The film was also left open-ended so the audience could construct its own narrative resolution (Hilf 1996). And, to give another example, in the late 1980s there developed a genre of adolescent novels that provides stories with multiple paths and multiple endings. The text was divided up into many small parts, with cross-links at the end of each part akin to those of hypertext – if you want the story to go such and such a way, turn to page *x*, or this other way, turn to page *y*. The whole book, therefore, is scrambled, in the sense that, apart from the introductory framing, text fragments are placed in arbitrary order. The path of the story, and its ending, are constructed by the interests and inclinations of the reader. The most interesting thing about these examples is that they are at best obtuse and obscure, or at worst junk. The key representational resources of multimedia interactivity have always been available, if rarely used.

There are, of course, domains of interactive multimedia in which the reader is made author in a way far more radical than the traditional artist–audience relationship. These, however, are rarely considered to be art. Arcade, television and computer games are perhaps the best examples of cutting-edge multimedia interactivity to date. But their lineage is not from the world of art; it derives from the world of board games and sport. Here the player becomes like an actor in a narrative that is partly open (choices in the range of possible moves) and partly constrained (the rules and the aim of the game). The closure of the narrative is the triumph or failure of the will or skill of the player. And much of the fun of the engagement is the framework of restraint, the restrictions on the scope of player interactivity, and the pitting of will against closures which relentlessly restrict that will. In one sense, however, this is only an extension of the anxieties, and hopes and expectations of the interested 'reader' as they relate to the restraint on their will that is traditional, authored narrative.

Similar generalisations might be made about hypertext. Not only have conventional texts always had their own hypertextual devices, such as contents pages, indexes, footnotes and explicit cross-references, to facilitate non-linear readings. Hypermedia technology, in fact, uses terms such as

such as 'browsing', 'bookmarking', 'home pages' and 'searching', taken directly from the world of the printed text to describe the reading process. More broadly, however, art is in its nature hypertextual, the stuff of cross-references in the form of allusions, iconic representations and metaphor, for instance. And the fragmentary, non-linear, anti-narrative feel of hypertextual readings is very much like the effect deliberately created by modernism, by Joyce or Kafka in literature for instance.

Then there is the phenomenon of 'the virtual', the ostensible verisimilitude created by multimodal representation. And, once more, there is a remarkable ring of familiarity to this discussion. It feels like something we have been talking about for a long time, even though we are supposed to think that 'virtual reality' is something special or new. In their time, the photograph, the telegraph, the newspaper, the book-novel, the telephone, the radio, the television were all credited for their remarkable virtualness – remarkable for the 'real' being so far away, yet here so easily, so fast, and so seemingly true to life. In their time, each of these new virtual presences became a new kind of reality; a new 'telepresence' in our lives. We virtually lived through wars, through the medium of newspapers; and we virtually made ourself party to the lives of other people in other places in other times through the medium of the novel. Multimedia is just another small step in the huge journey that is the cultural logic of modernity. For art, multimedia simply reopens the fundamental questions of aura, authenticity and location raised by Walter Benjamin in the 1930s in his discussion of 'the work of art in the age of mechanical reproduction' (Benjamin 1970).

Furthermore, there's an even bigger question here, as representation is, to a greater or lesser degree, an exercise in virtualness, bringing the distant, the other, into close proximity with the reader or the audience. Yet there are defined limits, and this is the point of the medium. The great thing about novels and paintings is that you can be there to the extent that you want to, without the burden of actually being there. The implied objective of virtual reality is verisimilitude. But the allure of most communication media is systematic lack of verisimilitude – why, for instance, a telephone call is a better and not just a quicker way to communicate than going there, or why 'chat rooms' on the Internet work precisely because they are in some important respects quite unlike chatting in rooms, so identities can be constructed around particular forms of unreality. So it is with art. The art is in the less-than-virtualness, the nature of the representation in the context of the constraints of the medium – a meaning expressed in two dimensions and paint on canvas, the evocation of physical location in words alone.

We might weave our way between enthusiastic utopias and bleak dystopias, yet still be left with the sense that nothing is really changing, and this despite the aura of cultural transformation that surrounds multimedia

technologies. Yet there is a one important thing that is without a doubt happening, and this is centred on the paradox that is cultural pluralism.

The factual socioeconomic-technological variant of the pluralism paradox is that the more the world becomes interconnected by the global cultural web of communication and information technologies and integrated into a single accessible market, the more significant these differences become. For every moment of the global convergence of cultures and peoples, there is another moment of divergence. And here is the in-principle political and cultural variant of the paradox of pluralism. In the face of the inexorable reality of difference, the most powerfully integrating political and cultural forces are those most comfortably able to negotiate differences, and those that are able to operate pragmatically on the basis of the devolutionary principles of subsidiarity and federalism (see Kalantzis and Cope, Chapter 6 above).

Let's spell out the socioeconomic-technological facts, first, and illustrate the argument by way of the example of the news media. Information and communication technologies of our recent past operated in a fashion that came to be characterised as 'mass media'. The three or four major newspapers, and later the half a dozen or so radio stations and four or five television channels, together created the 'we' of the modern nation-state. This was the basis for the illusion of common experience upon which the nation state imagined its citizenry into existence. The presumption was cultural and linguistic homogeneity; the process of negotiating difference was cultural assimilation to the imagined community of nation through the creation of a 'mass culture'.

Recent developments in information and communication technologies might soon provide us with hundreds of television channels. They already provide us with millions of websites. In a way, this makes us even more strongly interconnected, and seems to put our lives on progressively more convergent cultural paths. However, while all this is true, it is also quite untrue. As soon as there are dedicated Croatian, or gay, or biker television channels and websites, we are moving away from a media regime that forces us in the direction of common cultural experience. Our interest and aspirations at once become more expansive than the nation-state, and more narrowly refined. By way of direct counterpoint to the era of 'broadcasting' and the mass media, the new media regime is often called 'narrowcasting'. These developments are not just the result of technical possibility, even though the main lesson of consumerism must be that supply is the parent of demand. The same is happening in areas where there have been no significant technological developments in the communication medium, such as in the proliferation of subculturally defined specialist magazines, each with their own progressively more divergent and arcane discourses and imagery.

Overlaying this is the next aspect of the socioeconomic-technological

paradox of pluralism. For all the domination of the new media by the likes of Murdoch and Gates, and for all its domination by the language of an ethnic group who just a few centuries ago lived only around London, the new media are more open than ever to forms of expression other than these domineering voices. Digital media are cheaper than their analogue equivalents, and less demanding of technical-craft skills. And on the Web, distance costs nothing. Short-run production costs no more than long-run, and the marginal cost of reproduction is zero. The Web's general accessibility can be accounted for in part in terms of its origins in environments quarantined from commercial imperatives – the US military and higher education – and it has proved notoriously hard to turn into marketable product. The consequence is that more powerfully interconnected global diasporas have become possible and affordable, and there are no economies of cultural scale. Every culture, every subculture and every subtle variation on every subculture can have its say. And whereas non-alphabetic scripts produced enormously expensive difficulties for analogue text reproduction, digitisation is the great leveller.

Even the character of English is changing. Ken Wark talks of 'netlish', a strange *lingua franca* or interlanguage in which an increasing proportion of the communicators are not speakers of English and the conventions of 'standard English' don't seem to matter (Wark n.d.). On the other hand, divergence is a phenomenon already existing within English itself, in part a result of its peculiar character as a world language, a *lingua mundi*. English has different national forms different dialects from Creole to 'wog English', and an increasingly mutually unintelligible number of register variations from professional to hobbyist. The name of the communicative game is not so much learning an international standard as negotiating language differences within English on a global scale.

The possibility also arises for machine translation, now available in as yet fairly crude forms, and no doubt destined always to be limited. This is further evidence that the new communication technologies might not be an homogenising force. In fact, they could be quite the reverse as they could conceivably obviate the practical need to be proficient in the standardised form of the language of global power.

The paradoxes of pluralism extend still further than this. The forces of globalisation engender, as their obverse assertions of difference, a kind of resistance to the possibility of cultural homogenisation. Indeed, it is doubtful whether there is even any longer much cultural sense in homogenisation. The differences are the reasons why the newfound proximity is of interest. There is no point in having the exotic closer to home if the process of bringing it closer makes it more like home. Such is the case with tourism, and film, and, for that matter, websites. You take each of these journeys only because they take you somewhere else. This means that people visit only for that 'somewhere-elseness', more or less preserved,

or celebrated, or exaggerated in order to encourage the visiting. The paradox here is that the technologies of connection and communication, technologies that glory in global reach and local exoticism, intensify the significance and poignancy of differences.

Then there's the increasingly important role of the reader and of more active audiences – of 'churn rates', 'site visits', and the interactive relationships of multimedia. Once again, the broader the audience that is drawn into the communication-information system, and the more scope it allows for their subjectivities, the more important differences become in the making of cultural meaning. In the era of mass media and supposed mass culture, culture makers could almost afford to be blasé about differences, with more than a little moral backing from public ideologies such as assimilation and the melting pot. Now the key ideas are 'customising your information feed' on the Net and, more generally, niche marketing of culture and information.

These are the socioeconomic-technological paradoxes of pluralism. They fit within a larger frame of reference in which multiculturalism and pluralism become central factors within a new kind of social contract. Charles Taylor points out that the modern nation-state and liberal-democratic political philosophy were founded on the universal individual, with the interests and needs of all citizens conceived of as identical (Taylor 1994). This vision of the state has reached a crisis point, particularly since the end of the Cold War. This crisis is most clearly manifest in the politics of difference, from the crazy ethno-nationalisms that have replaced Cold War frontiers as the primary reason for wars to the rise of forms of identity politics that do not fit comfortably on to the old left–right political spectrum (Kalantzis 1997).

The solution can be only in new forms of overlapping sovereignty, cultural as well as political, where it is possible to live and work across self-governing communities, shunting backwards and forwards between them. Being, for example, a member of an Aboriginal people, to being part of the self-governing Aboriginal and Torres Strait Islander Commission, to being Australian, and gay, and part of the global movement of indigenous peoples. The stronger states of the post-Cold-War world will be strong only because they are federal as a matter of cultural principle, taking strength from their ability to delegate cultural control, to negotiate differences, and to take their cue as subsidiary groups delegate cultural responsibilities to groups whose responsibility is more broader and integratory.

Differences are an inexorable cultural reality. They are more critical than ever, and the new communications and information environment is just one of the things that makes them more critical. Cultural pluralism, paradoxically, makes for stronger integration than forced homogeneity.

Literacy education as a design for social futures

Literacy is perhaps the pivotal element in the project of modern education. In this chapter we have mounted three major arguments about how we as educators might change the 'what' of literacy pedagogy. Through these arguments, we have attempted to challenge the place accorded to literacy understood narrowly as reading and writing the standard form of a national language. And so we have argued for a redefinition of the project of literacy education in which literacy might be understood more broadly – as 'Multiliteracies'.

First, literacy is a matter of design or transformation; drawing on available designs of meaning, to be sure, but always adding something of yourself and thus changing the world in your designing. Thus, we add agency, or the dynamics of designing, to earlier 'transmission' notions of literacy teaching. We also recognise diverse resources for meaning, as well as hybrid redesigned meanings.

Second, literacy is in its nature multimodal – a matter of visual as well as linguistic design. And multimodality itself is becoming more significant in today's communications environment where, from multimedia desktops to shopping malls, written text is represented in a dynamic relation to sound, visuals, spaces and gesture. Globalisation and local diversity also progressively transfer the balance of meaning away from language. As a consequence, literacy teaching and learning need to be an increasingly interdisciplinary endeavour, in which the boundaries of literacy with art, drama and music are no longer so clearly defined.

Third, there are no rules of correct usage. The metalanguage of design that we presented in this chapter is more in the nature of a series of critical questions with which to locate variations in meaning-form in relation to variations in meaning-function. This is not the kind of 'grammar' that you can get right and wrong. Rather, it is a grammar that contrasts and accounts for different usages, not only between languages but within what might otherwise be regarded as the one language – differences in meaning-making according to age, or gender, or regional origins, or ethnic background, or social class, or occupation, or fashion, or fetish . . . or whatever.

These three changes of emphasis, we have been arguing, will lead us in the direction of a pedagogy of Multiliteracies. Certainly such a pedagogy represents a more relevant and useful educational design for the social futures of our students.

Part IV

PEDAGOGY

The 'how' of Multiliteracies