

Communicating

Many accounts of human communication suggest that we are limited to communicating through words, visual images, the mass media and by digital means. This perspective underestimates the multisensory qualities of much of our human interconnecting and the multiple sounds, touches, sights and material objects that humans use so creatively to interconnect both nearby and across space and time.

Ruth Finnegan brings together research from linguistic and sensory anthropology, alternative approaches to 'material culture' and 'the body', non-verbal communication, cultural studies, computer-mediated communication and illuminating work on animal communication. Examples from both western and non-western cultures, together with plentiful illustrations, enrich and deepen the analysis.

The book uncovers the amazing array of sounds, sights, smells, gestures, looks, movements, touches and material objects that humans use so creatively to communicate – resources consistently underestimated in those western ideologies that prioritise 'rationality' and referential language.

Focusing on embodied and material processes, and on practice rather than text, this comparative analysis challenges the underlying cognitive and word-centred model common to many approaches to communication.

The second edition of *Communicating* includes a new preface, updates to take account of recent work, an additional chapter covering ethereal non-verbal non-bodily communicating such as telepathy and dreams, fresh illustrations, a new conclusion and an updated bibliography.

This authoritative but accessible book is an essential transdisciplinary overview for researchers and advanced students in language and communication, anthropology and cultural studies.

Ruth Finnegan is Emeritus and Visiting Research Professor in Sociology at the Open University, UK. Her previous publications include *Oral Literature in Africa* (1970/2012), *Oral Poetry* (1977/1992), *Information Technology* (1987), *Literacy and Orality* (1988), *The Hidden Musicians* (1989/2007), *Oral Traditions and the Verbal Arts* (1992), *South Pacific Oral Traditions* (1995) and *Tales of the City* (1998).



Figure 0.1 Palimpsest, 2010

Sonata mulattica; our beautiful multisensory world. From a series of Jack Leibowitz's photographs of South Africa's environmental objects, this one inspired by Rita Dove's life of the nineteenth-century virtuoso violist George Bridgetower: the son of a white woman and an 'African prince', he travelled to Vienna to meet Beethoven whose subsequent sonata was dedicated to him. As well as the obvious auditory and visual associations we can almost feel the grainy texture, scent the fragrance (Credit: Jack Leibowitz).

Communicating

The multiple modes of human communication

Second edition

Ruth Finnegan

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Typeset in Perpetua
by M Rules

**For my grandparents and my grandchildren,
now and to come, and all the intervening
and extending links in between**

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Preface to the first edition

As I sit here tapping into my computer I have memories of story-telling in West Africa with its songs, movements and actively performing audiences, of the calls, colours and scents from sparkling displays of produce laid out to entice buyers in a Fijian market, and of the shared experiences, somatic and visual not just acoustic, of musical performances in England. I think of the gestures and unspoken signals of everyday living and of contacts across distance through telephones, letters, presents; also of those variegated family heirlooms, material contacts with earlier generations. I cannot forget either the experiences of reading authors from the long past, Homer's rhythms and cadences as well his words, and the body-stirring excitements of Greek dramatic metres, with their dances and choruses.

All these, it seems to me, are ways that human beings interconnect with each other – modes of communicating. And yet so many accounts seem not to take on this full multisensory range, presenting instead a thinner more parochial view of communicating, as if it is limited to words or, at best, to recent expansions in visual images and the ramifications of currently expanding information technologies. Words are indeed wonderful, and my personal and scholarly life has been imbued with them – but there is so much else too.

This book developed out of such reflections. Looking back at my own experiences, I felt the need for a wider view of communication. There seemed a place for a book which could draw together something of the many current insights into the importance of *all* the senses in our human interconnecting, of material objects, contacts across space and time, and the significance of experiential dimensions of human life, not just the cognitive. Too many of our assumptions and analyses have been logocentric or unidimensional, cutting out the dynamic processes of gesture, movement, dance, often even sound itself.

The book also grows out of my earlier research. In studying first story-telling in Sierra Leone, then oral poetries and performances in Africa and elsewhere, processes of literacy and orality, Fijian and English music-making, and urban tales, I have for long, I now realise, been involved not just with the anthropology of expressive art and performance but also, in the broad sense, with communication. Going in the same direction too, perhaps, was my initial training in the beautiful

works of Greek and Roman literature. Back in 1973 Robin Horton and I edited a collection on *Modes of Thought*. Now, a quarter of a century or so later, I wish to keep the comparative perspective of that work but to suggest a more multifaceted conspectus than we altogether envisaged then, and to direct attention not to thinking but to the multiply overlapping processes, intricate and thickly interwoven, through which people actively interconnect.

This book is about communication, then, but communication in a wider sense than adopted in many studies. It is narrow too in focusing on different dimensions from those pursued in many other specialist works. It looks to embodied performances and human artefacts rather than to 'texts', to multidimensional shared and active processes rather than the transfer of messages. It has little to say about evolutionary origins in prehistoric times, or about the brain, mental representations, technical transfers of data, the arguably capitalist tendencies of the modern mass media, or new globalising trends. Nor does it address detailed questions about the effects of human communicating and how far these should be judged 'good' or 'bad'. Rather it focuses on charting the modes by which people interconnect in the world – the multiple bodily resources we can draw on and the multifarious arts and artefacts which we humans create. In one way this is an unambitious undertaking: merely a kind of catalogue of the various modes and resources used in human communicating with some accompanying commentary. But that in itself is actually a staggering task – an attempt to capture something of the amazing creativity of human beings as they deploy an equally amazing range of resources.

Such an endeavour, even narrowed down, is necessarily interdisciplinary, with all the costs and benefits that that implies. It draws most directly on the insights and findings from anthropology, the discipline in which I am most rooted; I much value both its fertile combination of comparative perspective with meticulously detailed ethnography, and a series of illuminating recent studies, not as widely known outside the discipline as they should be. The comparative contexting and the examples from many areas of the world, not just the modern west, are important dimensions of my approach. Also relevant have been certain converging strands across a range of disciplines in both the social sciences and the humanities to do with emotions, 'the body', the anthropology of the senses, and a concern with process, not least the micro-processes and non-verbal dimensions of face-to-face interaction. I have also inevitably drawn on work in, for example, social history, social psychology, sociolinguistics and linguistic anthropology (a specially rich and developing field), art history, material culture and, not least, animal communication.

Any attempted synthesis must fail to do full justice to the subtlety of much of this work and inevitably omits many of the finer debates. Because I hope this book will be accessible to readers with a variety of backgrounds I have tried not to overload the text with detailed argument, references and up-to-the-minute reports (specialists, please forgive me for not citing all the important works); I have tried to add further references in brackets or notes to enable others to follow up – or dispute –

the interpretations here. Overall I would like to think that the book might open up new channels for those not aware of the riches of this transdisciplinary work, as it certainly has for me, even if the cost is a curtailed coverage of any one area.

Some short remarks on the book's format and presentation might be useful to the reader. First, it is in one way linear with an unfolding argument and series of descriptions. But in another way there is no right order: by the end the separate points have become inextricably mixed. We are now more conscious of non-linear communication, and of the possibilities of organising communication in multiple orders. It is the same here. Some will wish to start with the relatively abstract discussion of communication and theoretical perspectives in Chapter 1, others with Chapter 2's treatment of the basic resources that humans have for communicating. Others again may prefer the concluding chapters, or turn at once to the more detailed examples of modalities of communication in Part II, in a way the heart of the volume.

Second, the figures are integral to the book. They are not meant just to decorate it but to be part of the account. In practical terms, and as the social world now is, it would be hard to provide a properly multisensory volume. But the pictures can at least serve as some token that our communicating does not lie in words alone, nor just in visible written marks on a piece of paper, but is also realised in wider multi-dimensional processes – all part of the remarkable multiplex world of human communicating.

Finally, the book refers to examples from throughout the world. Scattered cases cannot of course prove a particular thesis; rather they are intended to illustrate the overall position taken up here and to open up our imaginative grasp of what can be involved. They are presented as examples of resources, processes or artefacts that *can* be used for communicating and in some cases have been so used; but it should not be assumed that they are always used in this way. Different people, groups, cultures or historical periods have differing conventions and occasions, and part of the multiplicity referred to in the title of this volume lies in the versatility of our manifold communicative processes.

Preface to the second edition

Ten years later . . . From one perspective I have in no way changed my views since writing the first (2002) edition. I still believe communicating is best treated in a pragmatic way as human interacting – a process – rather than either the *products* of human minds or the verbal, rational and cognitive dimension of human life. I would still urge that in the study of communication we must be prepared to go further than technological mechanisms and think beyond the speculative boxes of evolutionary or psychological theorising. Neither do I think it sufficient to focus on just one kind of culture (by default, no doubt, that of twentieth-century Europe).

There has been a spate of new writing since the first edition of this book, referred to at appropriate places in the text rather than gathered up here. There is still much – too much in my view – based on assumptions queried throughout this volume. But much has also, encouragingly to me, been on somewhat similar lines to mine, a route to the opening of minds to the many-sided aspects of human cultures through the ages, guided but not limited by the insights of comparative anthropology: the burgeoning (and welcome) pragmatist approach to speaking, the sociology and anthropology of the body, dialogic approaches, new cultural studies, and fresh insights into memory, imagination and consciousness. In particular there has been a flurry of mind-blowing research into multisensory topics. Even more justifiably than in 2002 we can truly speak of a ‘sensory turn’ in the humanities, taking it even further than the perspectives fore-shadowed in the first edition of this work and bringing new insights into the nature not just of communicating but of human nature itself.

As I reflected in the original Preface, an intractable problem in the first edition, to my eyes at least, was that though it – rightly – devoted much attention to communicating across distance, across space, contact across *time* remained a puzzle. How could it be possible? Must not death and oblivion render us blind, incommunicado? There seemed no appropriate tool to get a purchase on the question of how, given the mortality of earthly life and the succession of new generations, this could ever be practicable. For of course just the sheer survival of the products of human culture – in books, libraries, museums, schoolrooms – could surely not be enough. Writing, it is true, and other long-lasting and seemingly imperishable

artefacts do indeed provide some element of continuity – is this truly contact between human *minds*? And if not, is this really to ‘communicate’ in the truly human senses implied here? And if not contact between human beings, human *persons*, is it indeed *communication*?

And yet – do not all religions of the past and present in their different ways assume a link beyond the present, an understanding across the generations, some bridge between life and death? Studies of memory and – increasingly fashionable nowadays – of brain and consciousness shadow out a continuity. Does not quotation – the carrying on and re-enactment of others’ words, above all of those loved and revered – offer us a way to enter and re-enact the minds and thoughts – and wisdoms – of others from past times, near or far? As I found in my study of the nature and history of quotation (Finnegan 2011), quoting has been experienced as a mode of personal contact, conceptualised by those involved as an experiential means of direct communicating. Here indeed is a mode of contact – communication, not just with family members, dead as well as alive (though they may be the most mentioned and present in our thoughts and on our lips) but with earlier generations – with other congenial souls across centuries as across the continents. Now as in the past we do indeed find means of contact across time. And let us not forget the mode of connection that somehow takes us beyond the here and now of our mortal world – surely we have all experienced some touch of that? The new chapter 8 describes such access and communion.

And then in the end I return perforce to the multisensory. It is true that at times the senses are not simultaneously exploited. In the settings of day-to-day bodily presence the skills of contact across space and time, so wonderfully and miraculously developed in the appropriate contexts, are not needed. But for the most part, and counter-intuitively to us children of the linguistic turn whose eyes are too readily closed to all but the verbal, they work in concert – still the key theme of this book. In hidden and continually subtle ways they link humanity to humanity through their multiple modes. And not just in our everyday earthly lives but, equally earthly, in that contact with (however we term it) the somehow *beyond-the-here-and-now* – or, if you will, in our experience of dreams, of trance, telepathic communion and heaven-return journeys – *all* the senses are, least expected, still in play.

And finally: we know from other studies that muscles well exercised enlarge and vivify the corresponding portions of the brain: violinists mastering the unnatural movements of their play, chess prodigies who have come just to ‘know’ the right moves, even – as I noticed an hour ago – ourselves able to cut the nails of our dominant hands (strange indeed!). The skills of our movements and senses, above all vision and audition, we have learned and exercised in like manner. We both inherit and transmit them – together with the linked brain skills that result from and enable them – to and from our co-members of the great race of humankind.

Now, perhaps, are we on the brink of revivifying those skills of mutual knowing –

communicating through a multitude of modes, not least those skills of communicating through and by the ether so sadly atrophied in the controversially scientific age of the twentieth century? Do they still lurk unseen in our brains from previous ages, to increase and bequeath to our grandchildren?

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A book on human interconnection should certainly have some acknowledgement to make to those others who have been embroiled in one way or another in the process of creating it. Not surprisingly I have many thanks that I wish to express here.

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Illustrations

The sources of the illustrations are given in their captions. Many are by now out of copyright but I wish to acknowledge permission to reproduce the figures listed below.

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10 Through space and time

We must enlarge our appreciation to encompass the formation taking place before our eyes . . . of a particular biological entity that has never existed on earth – the growth, outside and above the biosphere, of an added planetary layer, an envelope of thinking substance, to which for the sake of convenience and symmetry, I have given the name of the Noosphere.

(Teilhard de Chardin, *The Future of Man*, 1964, p. 131)

This human world of communicating is not just an abstract matter. Human creatures live in space and in time, dimensions which set both the openings and the limits for their interconnectedness. They move to many places, live scattered across the globe, are born, change, mature, die. How is it then that in their individual bodies humans can span these temporal and spatial separations? And are our capacities to do so changing with the technologies of recent centuries? These issues have inevitably crept into the discussion at many points already, but we should now look at them more directly.

Covering distance, spatial and temporal

Much of the writing on communication assumes a model of immediate co-presence by the key participants. Rightly so perhaps, for humans are gregarious animals, and even at the most distant, where individuals are indeed separated by space or time, *some* bodily engagement by some enactor(s) is necessary, in this world at least, for active human interconnection. But, remarkably enough, human interconnectedness is also realised over distance, both through conventions recognised across wide spans of space and time and, overlappingly, through our human-made artefacts and technologies.

The concept of ‘distance’ needs some unpacking. Its opposite is commonly taken to be where people are in direct somatic contact, physically touching or able to do so. Alternatively it is where they can see each other (‘face-to-face’ or ‘in sight’ are common phrases, prioritising vision over touch) or, less often, being within mutual hearing. All these situations are a matter of degree. Once one gets beyond actual physical contact distance becomes relative; so too does ‘in sight’ or ‘in earshot’. Clearly there *is* a difference between close and distant communicating, unmistakable

at the extremes, but the boundary is fuzzy and the possible criteria complex. Like our bundle-definition of communication, it is not an all or nothing thing – we are dealing with a spectrum, not clear-cut contrasts.

For this reason it is hard to draw a sharp distinction not only between near and distant communication in general but also between the practices of humans and of other animals. Other species besides humans communicate across temporal or spatial separations. There are nests and other structures that endure over time, deposits of visual or olfactory marks on trees, ground or air, and the complex acoustic repertoire of birds – all means for communicating presence or control even in the physical absence of the originators. Some animals use chemical communication to cover wide distances or linger over time. Others communicate across many miles through vibration while the space-conquering properties of audition, especially through water, are utilised in the sonic communication of whales and other aquatic animals over even longer spans – sometimes hundreds even thousands of miles. Distance communicating is nothing extraordinary in the world of living creatures. Indeed in some respects the human potential for long-distance communicating falls far short of other animals by our terrestrial (not aquatic) habitat and our apparently poorly endowed olfactory and seismic capacities.

Still, humans *do* communicate through space and time, exploiting their resources in organised ways to do so. Like many other living creatures, they move from place to place and, as social animals, both maintain contact with their well-known fellows when separated only temporarily and by short distances, and interact with previously unknown individuals when they move over longer spans. Humans are often travellers and it is not only in recent centuries that some have moved to distant lands, explored previously unfamiliar parts of the globe, or produced maps to share and propagate their visions of the world (those in Figure 5.4 for example). For this, the local practices of small and intimate groups do not wholly suffice; interaction between less familiar people raises the need for more widely recognised patterns of interconnection.

There is also the even more elusive issue of communication across time. This is partly linked to mobility, for communicating can be after one of the participants has left the scene. Many animals employ devices like long-lasting smells, physical marks or deposits, and material structures. Humans utilise comparable strategies, especially in the form of material artefacts, enabling links between people separated by wide stretches of time, even by generations or millennia. Like other animals, humans also live and develop in time. Our habits and our capacities for interaction, as well as the cultural worlds we inhabit, vary throughout our lives. In this context too some joint expectations are needed to enable effective interconnections not just at separate points in time but also through time and even, at a quite mundane level, between co-members of our species at different stages of their life cycles.

Humans draw on a multiplicity of (relatively) shared practices to cope with these spatial and temporal barriers. Particular gestures and facial expressions have been used and recognised among huge numbers of human communicators, for

Der Alten Finger-Rechnung. Tab. I.

1 	10 	100 	100 	5 	50 	500 	500
2 	20 	200 	200 	7 	70 	700 	700
3 	30 	300 	300 	8 	80 	800 	800
4 	40 	400 	400 	9 	90 	900 	900
5 	50 	500 	500 	10000 	10000 	20000 	20000
20000 	30000 	30000 	40000 	40000 	50000 	50000 	50000
50000 	60000 	60000 	70000 	70000 	80000 	80000 	80000
80000 	90000 	90000 	100000 	<p><i>Rechen Taffel Vermittelst der Finger und Hände wie solche bey dem Beda ent- lehnet.</i></p> <p style="text-align: right;"><i>Th. Arithm.</i></p>			

Figure 10.1 An ancient system of finger notation
The Romans had a complex system for representing numbers from 1 to 10,000 on the fingers of both hands which they also used to calculate, apparently using both place-value

example, sometimes organised into highly articulate ‘sign languages’. Individuals across extensive geographical regions have shared – more, or less – similar forms of speaking or writing which have in turn persisted to a degree over time; musical and verbal genres, dance traditions and iconographies have been accepted and practised across continents and generations; artefacts like pictures, coins, jewels or books, often with multiple evocative overtones, have circulated over far areas or endured through generations; styles of architectural display are established over many areas of the globe and monuments last as tactile and visible objects through many centuries.

The span of such patterned conventions is relative, sometimes widely current, sometimes confined to small numbers of people and with little continuity over time. Nor are they in absolute terms wholly distinct from the ways in which individual animals (human or other) who are hitherto unknown to each other nevertheless seem to have some degree (more, or less) of mutual recognition as members of the same species.¹ Even long-enduring and widespread systems have fluidities and variabilities as well as continuities. Local ways of speaking, or specific processes of gesturing or greeting among small groups, even individuals, merge into more general patterns. And where the skills and practices of these (relatively) established conventions are indeed passed on over time, then this is no automatic transmission but possible only through the activated and emergent engagements of their human participants at particular times and places. People are notably separated as well as connected, furthermore, by the disparate conventions of different places or times, even by the smaller diversities of practice over small-scale temporal or spatial divisions.

So our shared communicative practices can be fluid, diverse and in a sense fragile. But given the spread of the human species over area and time, the surprise must be not the differences but that there are indeed certain shared patterns which, if only up to a point, yet facilitate interconnection among human beings over both small and (sometimes) immense spans of space and time. The long-lasting finger-counting system of Figure 10.1 is only one example of many – though an impressive one – for there are extensive shared human conventions, drawing on the many modalities discussed in earlier chapters, the material artefacts in which they are often realised, and the multiple associations with which human beings exploit them in their interconnecting. To an extent they allow us to transcend the limitations of our separate ephemeral bodies, enabling in some real sense the active bridging of spatial or temporal separation.

position and the concept of zero (a relaxed finger position). The system continued as part of the classical inheritance of western Europe and was used extensively in mediaeval times, a practical commercial tool between peoples speaking many different languages. The English monk Bede gave a verbal description in the eighth century, reproduced in illustrated format in Jacob Leupold’s mathematical compendium nearly one thousand years later (see Menninger 1969: 201ff for a fuller account) (from Jacob Leupold, *Theatrum Arithmetico-Geometricum*, 1727, Tab. 1. By permission of the British Library, shelfmark HS 74/67).

Humans also actively extend their basic resources for distance communication through the creation of external artefacts and technologies, assisting us to interconnect even when divided by physical location or the gap of time ('external', of course, again only a relative term). In one sense, *all* communicating, near or distant, involves the corporeal presence of at least some enactors, but in another, all artefacts contain something of ourselves, emergent as we interconnect with both them and each other. We have distinctive human-made tools which help us tussle with the divides of time and of space.

For the smaller temporal or spatial separations humans have developed ingenious ways of extending their bodily capacities (distance, remember, is relative). We raise our voices to carry effectively, make our gestures large and slow to be detectable further away, and capitalise on the distance-covering properties of audition in specific environments by whistled or yodelled signals across valleys or ocean expanses. Auditory memories are trained and cultivated in a variety of ways – in some traditions more strikingly than others – so as to retain and transmit human interconnections over time. Physical objects are created or adapted to cover greater distances: projecting the human voice through loudhailers or amplifiers, setting speakers on vantage points to be better seen and heard; or utilising glasses and telescopes to enhance eyesight; ropes, canes or weapons to extend tactile contact; or vibrating and percussive instruments to carry sound further. All these contrivances extend the scope of human interaction, even if the distances are still relatively small and the problem of time less surmountable than that of space.

And then there are the artefacts and technologies decisively outside our bodies. The production and use of 'extrinsic' objects are by no means unknown among other animals; but among humans seem to be developed to an extraordinarily high degree. Many examples have featured in previous chapters, evident especially in the discussions of audition and of vision. Humans have long harnessed fire and reflected light to be visible across many miles, drawn on the assistance of birds, and created artefacts portable across space or enduring over time – woven, written, pictorial, shaped, forged, built. Manifold media have been utilised to link people across the far-flung cultural domains and empires of the past and present. Some highly systematic forms have been developed too, such as semaphore, Native American smoke signals and flag-based systems at sea. Over even greater distances humans have exploited the visual properties of fire and heliographs. In England relays of fire beacons reported the movements of the Spanish Armada in Queen Elizabeth I's reign. Longer still was the chain of towers along the North African coast at the end of the first millennium, from Ceuta in the west to Alexandria in the east, with messages taking three to four hours between Tripoli to Alexandria or a night to run the whole course (Solyman 1999: 18). The 'mechanical telegraph' for military signals in late eighteenth-century France used the same relay principle. Coded messages were signalled by mechanical arms, read through telescopes, then transmitted on to the next tower; the system covered 5000 km of line and 534 stations by the early

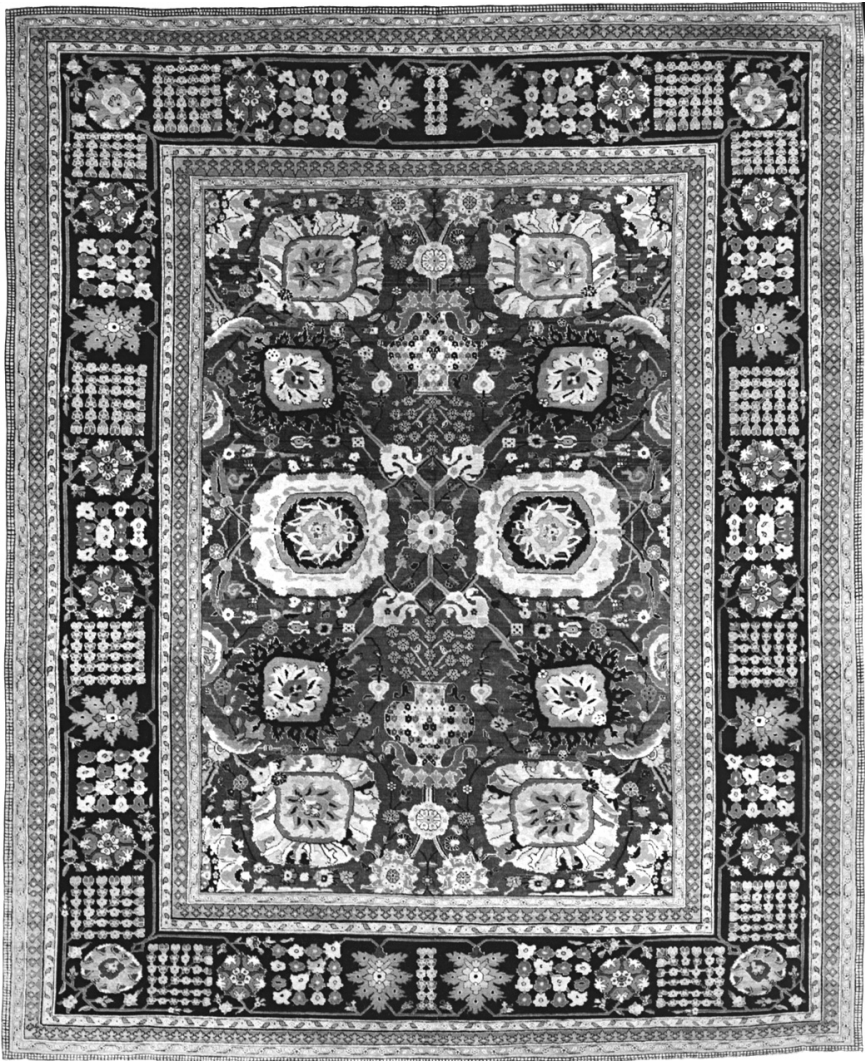


Figure 10.2 Indian carpet

Amritsar carpet, India, about 1870. Just one of the many Middle-Eastern and Asian carpets which have helped to spread particular decorative and, for some people, religious visions and evocations so widely through the world (Courtesy of the Atlantic Bay Gallery, London).

nineteenth century (Solymar 1999: 20ff, 302–3). Similar systems were installed elsewhere in Europe and America before succumbing to competition from the faster electrical telegraph and the developing technologies of what Mattelart (2000) calls the ‘networking of the world’ over the last two centuries.

In this, the visual channel has taken a leading role, from ‘humble’, beautiful

artefacts (Figure 10.2) to the great figures of the Greek Parthenon. For if vision in itself cannot take human interconnectedness through far distances, it is a different matter when external and transportable visible objects are used. As we saw in Chapters 4 and 5 humans make effective use of this channel and have done so for millennia. Pictures, weapons, writing, clothes, flags, carpets – all have on occasion served to connect human beings both in day-to-day close interactions and, at times, over even the furthest stretches of space. These visible devices also have that other important property of durability (more, or less) through time. This vastly extends our powers of distance communicating, taking it not just across space but also time, sometimes immensely long tracts of time. We are well acquainted with this use of, for example, carvings, buildings, graphics, the images of film and television, and the material forms of writing. We can interact both nearby and at a distance through material tokens which link us to others and share in their actions and experiences. Interconnection becomes possible even between enactors far removed in time, the more so because of the subtle overtones – the clusters of associated evocations – with which such artefacts are often in practice connected.

Externalised acoustic communication across time and space seems to be less established than for vision. But among the most striking developments of the last couple of centuries are the expanding technologies for far-reaching auditory communication through telephones, radio and television. By now there are also materialised ways both to transport sounds and, equally important, to lengthen their life through mechanical and electronic audio-recording. Other modalities have been drawn on as well, if in a limited way. Scents have long been produced, stored and used in areas far from their original provenance. The tactile channel, too, is sometimes exploited well beyond the direct contact of bodies at a single place or moment, notably in tactile systems like the braille alphabet, usable in communicating over both space and time.

Some of these material resources and our ways of using them are organised into standardised and explicit systems, sometimes widely current over space and time. There are graphic or pictorial designs, film conventions, computer displays, braille and other tactile systems, and the many versions of visible writing. Some utilise complex permutations and combinations of units, as in forms of visible and tangible writing or the relatively substitutable gestures of some ‘sign languages’, articulated and applied quite explicitly as a common currency among people who are otherwise widely separated. None, of course, makes up an automatic and one-to-one mechanism for ‘recording the world’, so to speak (as perhaps implied by the term ‘code’ which is often used to describe them). Various notations and recording devices have been mentioned or illustrated earlier that have endeavoured to capture, for example, sounds, places or movements (for instance Figures 3.4, 5.4, 5.8); all represent just one ‘fix’ on the world – useful indeed on occasion for certain purposes and dimensions but inevitably partial. It is the same for pictures and photographs, or the Noh play performance script in Figure 10.3. This applies to writing too. At one point this

was assumed (especially in its alphabetic form) to be the perfect transparent form for directly capturing reality. And it is true that the various writing systems have made up a vast and fertile range of communicative forms with great potential to interconnect over space and time. But they are nothing inevitable and even the most long-lasting are rooted in human artifice rather than predestined outcome. The same must apply to the many acoustic, tactile or visual systems that have no doubt been developed in the past, just as others will be in the future. None provide 'complete' coverage nor, probably, can any achieve universal or permanent currency; as communicative devices they are realised only in the specificities of their actual human usages. Despite the qualifications, however, these (relatively) standardised and codified systems do indeed provide hugely impressive and readily manipulable tools for human communicating. The explicit systems, together with all the other less articulated conventions of human interaction and the notable human-made external artefacts outside their own bodies, provide remarkable vehicles by which human beings interconnect with others both nearby and at a distance.

Like other forms of communicating, interconnection at a distance draws on a mix of arts. It is true that this is sometimes less prominent than with more immediate interaction – communicating after all is a relative matter. Some situations limit or preclude multimodal expression. Telephoning is one example: though visible gesture and facial expressions do play some part in quite complex ways, the emphasis is certainly centred on audition. But distance does not always mean single-channel contact. Sound recordings are often implicitly linked to visual and perhaps olfactory experiences too, and are now commonly supported by visual packaging and print. As we saw in the last chapter, writing systems which on the surface may seem purely visual are often multidimensional when considered within the actual process of communicating. And even when vision is, as so often, the dominant channel over distance, in actual practice it is not always the only one in play nor – an important point – without its associated multiple overtonalities.

The same applies to the multiple modes of communicating through which human contacts are realised and shared over time. Memory – 'the time dimension of culture' as Hannerz has it (1992: 147) – is often now analysed not as some entity in the mind or as necessarily confined to the cognitive or verbalisable. Rather (like the view of communication here), it is envisaged as a creative and culturally shaped human process, potentially multisensory and open to many human modalities including the use of material objects.² Unsurprisingly, the modes vary among different groups and historical periods as well as in different situations. Frances Yates (1966) describes the trained 'art of memory', developed by the Greeks and continuing in earlier centuries of European history, which relied centrally on visual images and places. The fixed visible marks of writing have played a large part in recent times – though again, some would see memory as still essentially 'a language of images' (Annette Kuhn in Radstone 2000: 188). Elsewhere (but in Europe, too) auditory memory has been strongly developed, as in the amazing memories of early Irish bards and of South

業平の面影

シテ中シツリ

老いにけるぞや 地上 子ながら

見みえー。昔男の冠直衣い女とも

見えず男なりけり。業平の面影


見ればなつかや 地 我ながら

懐かーや。亡婦魂霊の姿、凋める

花の色なうて白ひ残りて在原の

寺乃鐘もほのぐーと 上 明くれば

「鐘も」ノモノ引ハ
 持上夫也モ實際六
 三三引カ女魚ニテ間保ッ



酒のも花の色も
 心持シ商カニ

「業平の面影」
 句履ハ別カ心シテト
 シテハヤハハ間オキチ
 蘇ビ出ス




Figure 10.3 Performance script for the Japanese Noh play *Izutsu*
 Elements of performance – both auditory and kinesis – are presented and encapsulated in fixed visual format. The page is from an ‘utaibon’, a libretto text printed in 1977 by the Kanze School of Noh with musical notation for voice (running down alongside the text) and illustrations for movement, designed for amateurs or budding professionals. Learning to

Pacific dwellers like the Maori experts with their trained capacity to memorise huge corpora of oral poetry. In less systematic ways we are also probably all familiar with the acoustic resonances of our everyday recall and of 'learning by rote'. And perhaps we would even be wrong to dismiss the experiential dimensions in multimodal rituals where through sound and scent, and perhaps other modalities too, people are carried beyond the here and now into other space and time.

As eloquently illustrated in recent collections (such as Forty and Küchler 1999, Kwint *et al.* 1999) 'material memories' are important, too: memorial representation through objects. Over many millennia a multitude of material forms have been used to carry visible and tangible records and evocations across the ages. We have contact with the pictures, carpets, carvings or writings not just from far-off places but also from people long dead. Places, scenes and the visible and tactile material objects around us play a part in materialising our memories and carrying continuities and evocations of the past and of our own place within this larger temporal order. There are some long-lasting and spectacular forms through which such continuities are mediated, like the laughing Buddha statues, great architectural monuments or – another example of the 'picture book' of the Christian church – the wonderful narrative window of St William's deeds in York Minster (Figure 10.4). But it is not just a case of specialised artistic genres. Rapoport describes the 'mnemonics' of the built environment (1990), while for agricultural families in northern England the material layout of farms, cottages and village streets are a continual reminder of their ancestry (Christensen *et al.* 2001: 76), and spoken stories and ritual actions are associated with abiding features of the landscape. Bodily enactments enter in too, for the connections with the past are not seldom formulated and symbolised through embodied ritual performances. As Connerton points out, performative memory is one dimension of 'how societies remember' (1989).

People interconnect across time through the sharing, to a degree, of ideas, aesthetic experiences and communicative genres across the ages. There are many inherited continuities. This is an elusive process, true, but nevertheless a real part of human experience. Here the enactors include both those who in some senses created the

perform Noh plays was from the sixteenth century a popular hobby and came to be an important element of samurai education; 'reading' a Noh play has until very recently meant learning to chant it as a performance. *Izutsu*, composed by Zeami in the fifteenth century, is from an episode in the ninth-century 'Tales of Ise' (like most Noh plays, the story comes from a well-known tale). It portrays an elegant woman's passion for the famous poet/lover Narihira. As children they played around a well curb (*izutsu*) and later became husband and wife. She continues her love for him even long after their deaths and at the play's climax dons his formal robes while dancing and looks into the water's reflection and sees his face. Her spirit is unable to give up her love and gain rebirth in nirvana. The illustration at top right shows her looking into the well (Courtesy Hinoki Publishing Company, Tokyo, and (also for caption) C. Andrew Gerstle).

forms in the first place (if it is ever totally accurate to speak of ‘the’ form or the ‘first place’ . . .), and those others who have participated over time, developing partially shared and/or disputed understandings and continuities of experience. Bakhtin speaks of literary and spoken genres (though I would not confine it just to those), which

throughout the centuries of their life accumulate forms of seeing and interpreting particular aspects of the world. . . . A work of literature . . . is revealed primarily in the differentiated unity of the culture of the epoch in which it was created, but it cannot be closed off in this epoch: its fullness is revealed only in *great time*.

(Bakhtin 1986: 5)



Figure 10.4 From the St William window, York Minster

In 1415 John Thornton designed a stained glass window in York Minster with one hundred panels recounting the life, times and miracles of St William, the patron saint of York; his first miracle was to save hundreds of people from the river Ouse after a wooden bridge collapsed in 1154. Now being restored, it has for centuries visually displayed the story of a Christian saint’s deeds. Interpreted somewhat variously no doubt over the ages and by different individuals, it still carries evocative pictorial representations, imbued with both Christian and everyday imagery, even to many modern viewers (Photograph © Andrew Crowley).

Likewise an art form, like that summed up as the *Ramayana*, can be used to inter-link people through many centuries, not by the mechanical reception of unchanging text but through multifarious different creative enactments and experiences by living people in a multiplicity of media. So too with the reading even of more fixed and entextualised forms – not passive reception but, again, active experiencing, co-constructing, and, no doubt, interacting with yet other agents during the process (and if not something like this, then it would fall beyond the edge of even that wide and relative spectrum that I include as ‘communicating’). People do make active uses of multiple media for interconnecting over distant time as well as nearby. They work through visual artefacts (not least the visible written, graphic and pictorial systems), through recorded sounds, material memories and somatic performances. All these can again evoke multiple overtones as they connect human creatures across time as well as space, bringing them into that ‘great time’, in Bakhtin’s poignant image, and linking human beings over centuries and millennia from the far past to the further reaches of the future. Interconnecting across distance may, like all communicating, be a complex and elusive affair; but it is a regular feature of human living.

What now?

The history of human communicating, far and near, is still often presented as a one-way path leading humankind up and away from animals and progressively separating the modern from the uncivilised, the literate from the oral, the higher cognitive abilities from lowlier sensual experiences. Parallel narratives recount tales of salvation (or, alternatively, damnation) through the imminent electronic ‘revolution’, those ‘information and communication technologies’ destined to bring new global interconnections and sweep away the older cultures of the book. And then there is the long-told darker side, telling of the costs as humankind loses its ‘older’ modes of face-to-face and oral interaction.

These great stories still stir us. But we are rightly more cautious nowadays about their implicit paradigms of progress and their ethnocentric and often ill-informed evaluations. The human strategies for communicating are too variegated to be ranked on hierarchical and chronological ladders. Over the ages human beings have tried manifold strategies to initiate and maintain their interconnect-edness, overlapping as well as relatively distinct, and (depending on your viewpoint) with deplorable as well as laudable consequences. Even when apparently large changes have affected particular groups and usages or been trumpeted by particular parties with their own interests – the spread of western moveable print for example or of telegraphy – in actual practice many other communicative modes continued to be drawn on concurrently by multiple actors in the multifarious diversities that make up the world of human communicating. Unidimensional swathes through the multiplex processes of human interconnecting are inevitably over-simplified.

Nevertheless there *are* changes which our justified suspicion of unilinear narratives of human history should not make us ignore. It is illuminating to reflect on recent developments and on the mix of resources now available to humans. The vast amount of commentary on current technologies, much (not all) couched in generalised and often speculative terms, is too large to treat here.³ Instead let me pick out a few points related to these same issues of interconnecting across spatial and temporal barriers.

First, audition has been significantly extended by recent technologies for capturing sound in recorded form and transmitting it over distance. Since the nineteenth century, the space-conquering potential of audition has been progressively enlarged by telephonic, radio and most recently computer technologies. Even more strikingly, the property usually missing in acoustic communicating – endurance over time – has been to an extent achieved through gramophone records, tapes and other audio-recording devices. Like other visible and tangible artefacts, these can be physically carried in material and relatively permanent form from place to place (as well as transmitted over the air), and retained over time. Furthermore the combination of both spatial spread and recordability means that humans can now engage in long-distance *auditory* communicating, both more or less instantaneously and across a period of time. There are opportunities, that is, for both synchronous (same-time) communication, through live broadcast transmissions and fixed or mobile telephones, and for the storing of sound for later retrieval (asynchronously), as in ‘voice mail’ and other audio-recorded forms. All this opens new resources for long-distance interconnection unavailable in the past.

Second, rapid communication over space has been extended over the last centuries. There have been telegraph systems (both semaphore and electric), telegrams, fax, emails, and a variety of computer-mediated interactions both synchronous and asynchronous. The increasing means of *rapid* travel across wide distances has meant that individuals, families and other groups directly known to each, have endeavoured to keep in frequent and direct touch despite their separation – small wonder perhaps that it is during much the same period that humans have developed fast, even instantaneous, modes of distant contact. The speed with which even the furthest distances can now in principle be overcome is striking indeed.

Third, electronic technologies offer new ways for interweaving different forms of communication. Though much computerised material is still primarily visual and in printed (largely alphabetic) format, pictorial, non-linear and audio forms are increasingly intermingling with this. The visual displays of networked computers offer openings to expand communication through iconic (or semasiographic) formats with the potential to transcend language divisions. They can also capitalise on the pictorial and diagrammatic representation of, for example, juxtaposition and contrast, conveying this with an immediacy and economy often lacking in print or speech. Computer technologies may perhaps also lead to greater opportunities for multisensory communication at a distance. Up to a point this is already happening

through the 'multimedia' (i.e. audio-visual) displays in both networked and CD-ROM formulations, but it may be that the technological potential of computers will be exploited for distance communicating in channels not as yet much systematised by humans – tactile and olfactory.

Computer technologies have implications for writing, that long-established if diverse visual medium for communication over time and space. The relatively fixed or 'permanent' quality often taken as its unquestioned characteristic, even part of writing's definition, is being broken up by the fluidity of electronic text. One much-acclaimed result is the new flexibility this offers readers, no longer constrained by one-way linear arrangements of fixed text but able to proceed through multiply branching paths selected by each reader individually. This is obviously a significant development. Its novelty has been somewhat exaggerated, however. In the past, too, readers have at times exploited the opportunity for scanning and skipping, and non-linear, multiple ways of reading have long been the norm for written works like encyclopaedias and dictionaries. There have been many formats for presenting, reading and illustrating texts besides the straight one-line presentation of written words. In any case, texts closely linked to performance traditions have probably always had more versatility. Kersenboom notes the 'dynamic nature' of the Tamil text, the basis for performance, where (for example) three lines noted down in a manuscript

serve as seeds for the organic growth of the stem, branches and foliage of a tree. The text develops branches, sub-branches and rich foliage that fans out like a peacock's tale, displaying the splendour of its imagery.

(Kersenboom 1995: 31)

Following on from this, it could be argued than an even more important quality is that computer text, not being fixed, can similarly be changed, manipulated and realised in multiple transformations. It takes on something of the transient and performative quality that has in the past more often been associated with oral formulations, with far-reaching implications, perhaps, for current relationships between spoken and written forms.⁴

All these trends have probably been intensified through the development of the internet and world wide web. This has attracted great attention from commentators. Some regard the internet as the central communication symbol of our time, even as encapsulating more or less all human knowledge. Thus if it can be suggested, following Marie-Laure Ryan, that

every period has its monument to a totalizing vision: in the Middle Ages it was the Cathedral, complex architecture whose windows and sculptures encompassed all of space and all of history; in the Enlightenment it was the Encyclopedia, immense compendium of knowledge

(Ryan 1999: 14)

then in the early twenty-first century might it be the apparently unending proliferation of databases of the world wide web? At any rate this computerised resource enables (in principle) the rapid access by participants from just about all over the human world to a colossal amount of material from many sources. It gives people the potential to interact with others, whether near or afar. They can arrange for commercial, political and other transactions which interconnect with other people's actions, organise direct contact between named individuals today and/or have experience of their productions both in the present and, through web versions of books, manuscripts or works of art, from the past.

Computer technologies, then, have markedly widened human resources for rapid, sometimes near-instantaneous, contact over far distances. They may not always be fully exploited to this end, true, but in principle offer truly brilliant strategies for interconnecting human beings separated by even the furthest of spatial distances, on land, in air, in space, and on or under the sea.

On the temporal front they are less impressive. Certainly they can be useful over relatively small timescales, enabling the storage of both audio and video records and their usage at different points of time. Visual records from long ago can be put on the web for wider distribution. But for interaction through longer temporal spans or the persistence of enduring records over many years, let alone generations or centuries, electronic communication has serious limitations. Admittedly all human arts and artefacts are liable to go out of usage, and most are subject to the ravages of decay, accident, even deliberate destruction. Textiles have perished, pictures been painted over, libraries – even the greatest – been burned. Even long-lasting forms like architectural monuments, cuneiform tablets or, it must be said, printed books do not last for ever. But computerised records have additional vulnerabilities. These partly lie in the fluidity of electronic text: once deleted or changed the 'original' version may be gone for ever. Equally important is the ephemerality of hardware and software systems. Records from even a few decades back sometimes cannot be deciphered easily, if at all, because expertise and equipment in 'obsolete' technologies have gone. And then there is the well-known susceptibility of computer records to being attacked. The wiping of the whole web system by virus or hacker is an engaging topic for science fiction and for horrified (or gloating) speculation. But the loss or corruption of computer data is regularly reported, sometimes on a large scale, occurrences that can only reinforce the impression of the likely fragility of electronic systems for communication over lengthy periods of time. Computer technologies, in short, provide a wonderful resource for communication over space, but over time may prove much more limited.

The overall significance of these developments is controversial. They have great potential for human modes of communicating both today and in the future. Human technologies for rapid contact across great spatial spans, and (if to a lesser extent) over time, have without doubt widened human resources, giving us yet more ways to push at the limits of our human-endowed capacities. More important still, it

seems, are the overlapping technologies for rendering sound more lasting, enabling us to partly bypass one long-standing limitation of audition as a communicative mode. This development, even more than other changes, might be the real breakthrough.

But it would be equally true to say that in a wider perspective such technologies add only marginally to the mix of communicative arts already developed by human beings and in principle available to them. Rhetoric about the 'electronic revolution', 'the information age', or some great move to 'virtual reality' (often in high-flown, even mystical terms) overlooks the immensely rich, variegated and changing human take-up of communicative resources already developed and flourishing through the ages. Now as in the past technological changes can be presented as more uniform and all-embracing than they ever were or are in practice. Moveable type did not supplant speech, pictures, music and gestures; telephones may have affected the specific uses of written communication but did not destroy it; television or computers will not do away with books. It is also worth highlighting the 'in principle' phrase much used above. Certain resources may indeed be 'available', whether in the form of human capacities, specific artefacts, technologies or social practices – but that is far from saying they are equally accessible to all, used (or indeed desired) by everyone, widespread among all groupings or individuals in particular social contexts, or suitable for all human purposes. As with all resources, they are only relevant in the real-world processes of human interconnection insofar as they are actively deployed by human practitioners.

The basic characteristics of human communication are likely to persist despite passing enthusiasms for whatever 'new revolution' is fashionable among particular groups or specific interests. Humans will continue their many-sided mix of arts in both nearby communication and interconnections across space and time. The age-old human practice of travelling, and thus of direct embodied interaction with people who are at other times far away, will not disappear (whatever our 'virtual' resources); nor will those other long-used vehicles for distance communication in the form of material objects, with all their varying associations. People will go on finding means of mediating their interconnections with others over long spans of time, including across the generations of those long passed away, through human-made material resources extrinsic to the individual human body. There is no reason to believe they will cease to engage in multiplex, differential and multiply-used interactions both within and alongside new developments.

The senses – again: earthly and heavenly

Human experience, we would surely now agree across a range of humanistic and social disciplines, is a matter not just of beautiful literature, although that has been a feature of human culture since – I almost said since the world began – certainly since the human world began. It is eminently mind *and* body and all the senses that

we humans have been blessed with. Too often overlooked even by anthropologists, our human communication and expression are fundamentally multisensory. It is well expressed in Hieronymus Bosch's *The Garden of Earthly Delights* (see Figure 10.5) which in its way sums up the resources that humans so wonderfully draw on in their communicating – before that inspired picture this book is scarcely necessary.

But in our human settings words must strive to convey this, so let me use language to explain, a little, of how, even in non-bodily communication the senses can still – however counter-intuitively – be as fully in play as in 'normal' communicating.

First, it takes place through verbalised language. This brings up some interesting points. Out-of-the-body – 'psychic' – communicating proved to be in very different style, vocabulary and grammar from my 'normal' (academic) writing. In the end, unintentionally and at first unnoticed, much turned out, like so many African and Native American narratives, to be mangled in their transcription (Hymes 1996), but really a species of poetry. Given the traditions in which I grew up and the Bible- and Bunyan-rich Quaker school I attended, the language, cadences and images of my own communicating, both earthly and heavenly, could not avoid being biblical, although often in ways I was not aware of when I was writing them down – sometimes, as it felt, from dictation. Like the dream-narrator of Chapter 8, I too have worked – hard – at trying to put dreams into the narrative language in which I grew up, influenced, I now see, by my experience of African narrative forms, especially the Sierra Leonean Limba and their wonderful story-teller Karanke Dema (Finnegan 1967, 1970, 2007, 2012): their verbal stylistics lack for the most part what we might term prepositions, conjunctions and adverbs but there are other, perhaps richer, resources in their place, together with musical cadences and interpolated songs, personalities (twins, including three twins, figured often) and characterisation, dramatic moves, everyday style and setting, above all perhaps the ubiquity of repetitions – repetitions both within and between words.

This has made me more aware of the creativity of language, both spoken and written. I used to picture language use as drawing out from a tangle of wired words in the brain, already there, perhaps even in a Chomskian way (as in Chomsky 2012). My present image is more of an empty sphere and around the dark edges the words – and chunks of words – and sounds of words and phrases lurking for me to draw them out into the light. And share with others. Beyond that the great sphere of words and stars and creations lies waiting; waiting for the curtain to be drawn back, the darkness to be lifted to human communicating.

One remarkable point worth noting is that during ethereal 'conversations' the resemblance to earthly turn-taking is striking. While the other is speaking I cannot utter – even in my mind (although at a deeper level I know, and perhaps subliminally convey – what I want to say). I do, however, find myself silently nodding and smiling automatically to show I am attending. Then it is my turn, speaking to a silent but receptive auditor (audition, I realise, is the main sense here (silent as it is), although, as in any conversation, vision and kinesics come in too).

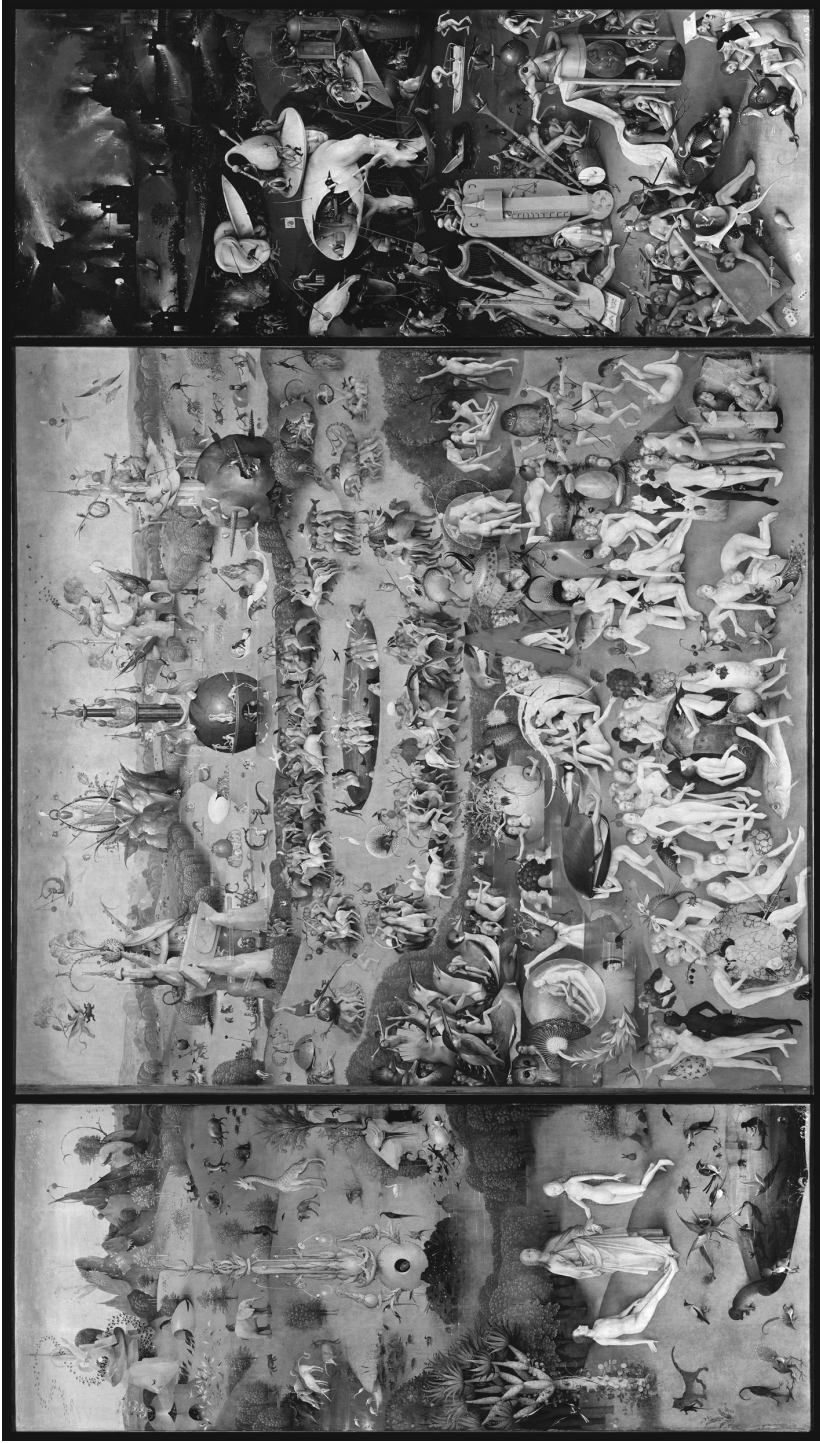


Figure 10.5 A wonderful vision encompassing our human resources for communication, our lovely multisensory world
Hieronymus Bosch, *The Garden of Earthly Delights (El jardín de las Delicias)*, © Madrid, Museo Nacional del Prado.

And then music. Clearly of central importance in the ether – and in heaven – it also plays a crucial part in dreaming and creation: In my own case – parallel to that of many others – I find myself drawing on the culture in which I have been fortunate to grow up, Irish, English and European alike, with a touch of African music too.

To illustrate with just one example: one day in autumn, away from home, I drifted up from deep sleep with the tune and sung words of *Deo gratias* ringing in my head. Unwinding it sceptically to its start I found it was the last line of a fifteenth-century carol, one I knew well but had not thought about since the previous Christmas. It was ‘Adam lay ybounden’ with its stunning – heretical? – conclusion: ‘Blessed by the day/that apple taken bin’. At first it seemed irrelevant, a distraction. But sleeping and waking through that night I saw that it was a crucial part of a story that before had seemed, although completed, so thin and uninteresting.

I was puzzled, for surely music comes before words in human experience? I had always believed so. But I should not have been surprised by the music fighting to come up to my consciousness. For if music is somehow more fundamental than verbal language is it surprising we have to dig deeper and come to it later?

The stories and dreams – and poems too – were, like the performed art forms I had studied before and indeed all human experience, notably multidimensional, only fully realised in their sounds and sights and movements – landscape, sea and sky; birds both strong and weak, trees and their tracery of branches; wild flowers, streams and still waters. And the glowing light of pearl catching pearl, whirling timeless skies and great oceans, the pain of birth, separation and sacrifice. Water was rippling sound, too – somehow auditory as well as formed in dazzling rainbow colours, symbol of the delights, less often of the pains, of love, frozen ice of the shock of lover’s tears withdrawn: a painful theme.

In dreaming and in many death experiences, vision seems to be the main channel, just as we have seen it is dominant in much human experience: light, colour, striking heavenly figures, dazzlement mixed with calmness. But there is also travel – motion (human indeed) – and, resonant moreover, audition, with the singing of angels and the spoken messages of reassurance. Scent and touch? Less often mentioned (as indeed less, however unconsciously powerful in both presence and remembrance, in our human experience) but perhaps implicit in heaven’s felt and fragrant atmosphere, reminiscent of incense, loving touch and the perfume of trance and fragrant leaves in many parts of the world, the background to dream and inspiration. But the abiding themes, as I say, seem, as in human communicating, to be visual, verbal and – most potent of all – musical, working always together.

Humans as communicators

At the most mundane as well as the most high-flown levels, then, human creatures have developed ways to exploit and extend their bodily capacities, among them the

amazing practices by which they can interconnect through vast tracts of space and over many generations. Some practices have small temporal or geographic currency or relatively narrow scope. Others, more widely recognised, standardised or codified, have the potential to relate to a broad range of human experience and to help formulate people's interaction over great areas. And all are intertwined in complex and multifaceted ways both with each other and with the multisensory experiences, materialities and overtonalities of the enactors who actually use them at given times and places.

Are humans distinctive in developing and exploiting this multiple range of resources? Given our relative lack of knowledge, it behoves us to be cautious about sweeping comparisons with other animals; different species have different resources and challenges and it is scarcely acceptable to rank them in any simple, inevitably humano-centric, hierarchy. Nonetheless it is fair to say that certain characteristics of human communicating do indeed seem unparalleled – not only their multiply overlapping communicative modes but their ability to span far space and time through their material creations.

It is worth recalling the particular resources of the human species sketched out in Chapter 2 (pp. 52ff): among them, the human audio-visual capacities, extensively developed in an astonishing variety of communicative forms; the respiratory-vocal tract with all its implications for vocal communication; relatively large size; and bipedal locomotion freeing our hands not just for a series of subtle gesturing systems but also for the creation and manipulation of objects – our hands are crucial communicative tools indeed, too often underestimated in our respect for mentalist models. We lack the distance-communicating abilities of some other animals, true, in particular olfactory and vibrational resources and avian flight. But we have other skills to compensate, especially our arts and artefacts for crossing space and time. It is a striking array of resources, both in their combination and in the effective ways that humans exploit them.

Two further features are also almost certainly in play: our human propensity to live in social groups and our relative longevity.⁵ As social animals, humans like to remain in contact (not that this is always harmonious or equitable . . .) and the shared social processes that we engage in depend on – consist in – a high degree of mutual communication; our interconnectedness is an inescapable fact of our humanity. We live, often, in dense settlements, needing effective communication for spacing ourselves at close quarters. But we also constantly exploit our capacities for mobility, using our bodies for signalling in a multitude of ways, actively constructing external media and technologies usable for keeping contact, and moving from place to place. The human species is widely distributed over the globe and has for long created networks of communication to suit this, possibly, as suggested above, with a particular surge in this direction over recent centuries. Humans, in short, are a gregarious, dense but also scattered species who like and need to keep in regulated contact and to work and express themselves jointly with others. They have actively

developed numerous ways through which they can do so, interconnecting with others both now and in the past and future.

The generally long lives of human beings facilitate lengthy processes of learning and of manipulating and shaping the world around them. At the same time they make possible the joint involvements in the creation and usages of cultural and material artefacts for handing on – mostly – to those who follow. So perhaps our longevity, combined with our other attributes of sociality, energy and the active production of extrinsic material resources, is also related to the striking continuities as well as the changes and diversities in human life. Human beings interactively hand on their conventions, their practices and their evocative material artefacts over the generations: linguistic patterns, kinesic conventions, written and pictorial marks, literary and performance genres, architectural monuments, built edifices, conventions for shared experiences, and our multiply decorated *oikoumene* (to use the beautiful Greek word for the inhabited world). There are changes, certainly, and the essential condition for human interaction also lies in the individual creativities and unique experiences through which their communicating is in practice enacted – there is something to be said for the view that we do not step twice in the same river. But the continuities are striking too, and the diverse yet overlapping cultural products created by human beings are, to one degree or another, spread between different localities and handed on between different generations.

It is a characteristic and striking human capacity both to create new resources and flexible ways of using them *and* to share them with others. Think of the manifold communicative modes developed by human action – the subtle and diverse gestural systems, the manifold sign languages, the verbalised forms of vocal speech, tactile systems like braille, visible writing of many kinds, pictorial and graphic systems, cartographic techniques, mood-altering processes through olfaction . . . the existence of all these systems and practices is actually something extraordinary. So long as we could just think of them as the result of predestined evolution blindly working its way up, or of traits laid down in our prehistoric brains, there was really no challenge to consider the human means by which they were created. But when one recalls our manifold communicative practices and, amidst them, standardised arts like the diverse forms of writing, sign languages, or iconographic, musical and choreographic systems, we might well wonder how these and other systems really got created and, more or less, kept going. It is a staggering question, worth raising even if we cannot tell the answer.

Speculation can too easily turn into hopeful myth. But if we can surmise a little from the recent evidence, deliberate human input certainly had much to do with it. Some systems, we know, got going by organised human inventiveness. There are the tactile systems for the blind, the deaf signing languages, the new scripts invented over recent centuries in Africa, Asia or Native America, or the many writing systems – reputedly and perhaps truly – developed by earlier saints, rulers or reformers (see above p. 165; Gaur 1992: 130ff). In such cases we sometimes know

names and can appreciate the human innovating and establishing that created them. There is no reason why other systems should not have been due, at least in part, to similar elements of deliberate invention by individuals or small groups in the past: our own ignorance and our 'dimwit model' of earlier humanity should not tempt us to underestimate the potential for human inventiveness in eras less familiar to ourselves.

Human systems are also developed with the flow, so to speak, created over time by innumerable small actions in the emergent processes of human interconnecting. There are constant adaptations of existing practices, mergings, new twists on what is already practised – a trend made the more viable by the many continuities between different communicative forms noted earlier. One flows into another: pictorial, graphic, musical, danced, voiced, gestured, felt. Some element of this no doubt played a part even in the more purposively designed innovations. To say this is not to minimise the human input involved – in fact the opposite. Some practices may have been shaped slowly (more, or less), but their organised patternings are no less the result of human creativity in both their incremental development and, in some cases, their successful establishment in widely current systems.

Many other systems will, presumably, be created in similar ways in the future – we have certainly not reached the end of human innovation. But neither new systems nor those already developed come automatically: only as a result of human action. Our present communicative modes are in fact stunning, their constraints as well as their creativities. They are all the more amazing when we ask, as we have just done, about the human actions through many eras in the past which must underlie so many of them, and the consolidation of communicative conventions brought about through these actions – not forgetting those other systems and practices which have doubtless fallen into disuse or failed to take off.

This capacity for both innovation and its continuing establishment over space and time must be counted as among the great achievements of the human species – sometimes unevenly tapped and certainly not always achieving wide circulation, but exploited, in however diverse or contested ways, by the many many generations of human communicators. Our variegated modes of communicating necessarily take us beyond the narrower vision of humans as essentially sites for mental representations or unidimensional information-transfers, to appreciate them as full multisensory beings actively living in the world. It is in these embodied and meditational practices, not in our brains, that (to follow Tim Ingold's phrasing, 2000: 69) we experience 'the ongoing, temporal interweaving of our lives with one another and with the manifold constituents of our environment'.

To what purposes we use our interconnectedness is another question. So is how each of us might wish in the last analysis to judge the directions of these countless acts of human interconnecting now and in the past and the future. But that, as humans, we have developed manifold and marvellous modes of communicating is incontrovertible. We have pushed at our basic communicative resources and

continue to do so. We have extended them through creative uses of our bodily capacities intertwined with human-made artefacts; communicated nearby and at a distance; enlarged the possibilities of sound; mingled the different modalities in both fluid and more standardised ways; and exploited a wonderful multimodal and evocative mix of arts. We have developed not a thin fashion of communicating but a richly stranded mix of multimodal interactions, marked by multiple overtones and creative enactments. Through all these modes, muddled and vulnerable as they sometimes are, we human communicators continue to forge our active interconnectedness and in doing so have fashioned routes towards transcending our bodily separations and interconnecting with other human creatures, those nearby as well as those at other places and times.

We have gone through many developments in our understanding of the universe. Just to consider the shortened millennia in western history we may recall the three-fold Greek concept of the soul, moving to Newtonian physics, the Cartesian duality of mind and matter, the twentieth century collapsing into single-dimensional materiality and now – notably – to the break-up of our certainties in quantum theory, relativity, indeterminism, MRI imaging of the brain (the soul?) and the concept of myriad ‘bits’, separating and joining, in the ether. Einstein (1977) could scarcely have foreseen our most recent developments, but surely he grasped their import when he wrote:

A human being is a part of the whole, called by us ‘Universe,’ a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty (2005: 206).

We now accept – magic to past generations – the reality of sound and light waves in the ether, telegraphic, electrical and electronic impulses interpenetrating the world’s web of communication – the ‘cloud(s)’ – and the million and more ways in which we experience one another’s extended minds. We might envisage this shared consciousness as a kind of layer between heaven and earth – nothing less than miraculous – filled with the sounds and sights and fragrances of human messages and memories, reaching as far as the universe and all its wonders, but as close and familiar as the quiet space between eyelid and eye, sleeping and waking – Teilhard de Chardin’s planetary layer, an envelope of thinking substance (1964: 131).

Is this really any less ‘scientific’ or any more of a miracle than those other amazing forms of communicating that form the subject of this book?