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Anthropology of the Senses
A Sourcebook in The Sensory Experience
The Varieties Of
CHAPTER 1

The Shifting Sensorium

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Man communicates with his whole body, and yet the word is his primary medium. Communication, like knowledge itself, flowers in speech.

The fact that man communicates with his whole body through all his senses is evident enough to us today. Modern psychology has underscored the way in which the child constructs his first world under the influence of touch (including kinaesthesia), of taste, and of smell, as well as of sound and sight. The child’s physical contact with his mother’s body and hers with his is already communication, a sharing through touch, which will influence not only his feeling but his thought throughout his life. Taste and smell attract and repel him in his relations with persons and things around him, helping him ultimately to shape his life-world in which his thought itself will take form. Sight, at first perhaps less informative, soon becomes in many ways the most informative of the senses, commonly in connection with kinaesthesia and other senses of touch, for the tactile senses combine with sight to register depth and distance when these are presented in the visual field.

Finally sound, a medium of communication since the child’s first cry, manifests new potential of meaning as the child passes through the lalling stage, where he constructs around himself a vast bubble of sound, burbling, gurgling, playing with his diversifying vocal powers—and with his lips at the same time, for sound, both in speaking and in hearing, is closely linked with touch and kinaesthesia. One ‘mouths’ words quite literally, and our hearing is partly feeling, as Ilse LeHiste and Gordon E. Peterson (1959) have shown. The term ‘seesaw,’ to take an example related to theirs, seems to our hearing to have the accent on the first syllable, even though the last syllable may actually be pronounced to
produce more volume (this can be tested on a moderately sensitive oscilloscope), for we have to work harder to produce the sound 'see-', constricting our oral muscles and pushing air through a small space, and we interpret this greater effort (whether we make it ourselves or by listening share in the effort of others) as greater noise.

The oral-aural world of words is a highly complex and mystifying construct, but as he passes through the faltering stage the child learns to insert himself into it, and this world of words soon becomes paramount in the communications process. By the same token it becomes paramount in the child's thinking processes, since human thought apparently cannot arise at all outside a communications setting, either proximate or remote.

This is not to say that for the child or the adult all communication is lodged in speech or even, in the deepest sense of communication, in other bodily activities as apprehended by the senses. It is quite true, as Heidegger in *Being and Time* (1962, 1: sec. 34) and other existentialist thinkers like to insist, that language itself is at its deepest level not primarily even a system of sounds. There is a primordial attunement of one human existent to another out of which all language comes. Man is rooted in 'speaking silence.' All this is true, and in a certain sense commonplace, but it is noteworthy that when we thus think of silence as communicating, we are likely to think of it as a kind of speech rather than as a kind of touch or taste or smell or vision - 'speaking silence,' we say. The reason is plain: silence itself is conceived of by reference to sound; it is sound's polar opposite. Thus, even when we conceive of communication as a transaction more fundamental than speech, we still conceive of it with reference to the world of sound where speech has its being, and thus attest in a reverse way to the paramountcy of sound and the oral-aural world in communication.

Because words are always primarily spoken things - writing transposes language to a spatial medium, but the language so transposed has come into existence in the world of sound and remains permanently a part of this world - to a certain degree the oral-aural world, the world of voice and hearing which the child enters in learning verbal communication, will retain its paramountcy for good. But only to a certain degree. For, as we have lately learned, the world of sound itself does not have always the same importance in all cultures with relation to the worlds of the other senses.

Cultures vary greatly in their exploitation of the various senses and in the way in which they relate their conceptual apparatus to the various senses. It has been a commonplace that the ancient Hebrews and the ancient Greeks differed in the value they set on the auditory. The He-

brews tended to think of understanding as a kind of hearing, whereas the Greeks thought of it more as a kind of seeing, although far less exclusively as seeing than post-Cartesian Western man generally has tended to do. Thorlief Boman (1961) has brought together massive evidence of the Hebrew-Greek contrast, and, although James Barr (1961) has contested some of Boman's interpretations and procedures, the contrast itself remains clear enough. The work of Benjamin Whorf (1956) with the Hopi Indians has shown how, in the Hopi life-world, time is retained as a sense of duration (with a base which appears largely kinesthetic) and how this life-world contrasts with that built into and out of what Whorf styles Standard Average European languages, which present time as 'long' or 'short' (as though it were a stick) and as discontinuously quantified, with one minute or hour or day broken off from the next as on a clock face or calendar, as time itself never is.

Some cultures, similarly, make more of the tactile than do others. In his *Art and Geometry*, William M. Ivins, Jr., has pointed out that ancient Greek geometry differs from most modern geometry in that the ancient Greeks thought more about the way the various shapes felt (they tended to imagine themselves fingering their way around a geometrical figure), whereas modern geometers think more about the way the various shapes look (1946: 1-13). Ours, consequently, is a spectator's geometry, theirs a participator's.

Some cultures make more of taste than do others. Whereas modern English, for example, has only a handful of concepts formed directly from gustatory sensations (concepts such as sweet, bitter, sour), complementing these with analogies borrowed from other sensory fields (a taste is flat or sharp) or with crude similitudes (it tastes like an overripe pineapple), the Korean language, I am told by Korean friends, has many more concepts referring more directly to taste.

Taste provides a good example of a sensory field which even the same culture attends to with different intensity at different points in its history. In the eighteenth century through much Western culture, questions concerning taste somehow or other become extraordinarily urgent. In England Pope cried out against vulgar 'taste'; Dr John Armstrong published an important poem entitled *Taste* (1753); and Hume wrote an essay 'Of the Standard of Taste' (1757). The questions agitated did not concern the sense of taste directly in any obvious way, it is true, but rather its analogical extensions into other areas of life - taste in poetry, art, style of living. Nevertheless, this analogical taste had indubitable, real connections with the sense of taste. That is why the term taste rather than smell or hearing or touch or vision came into play.

Some reasons for the ascendancy of taste in the eighteenth century
can readily be seen. The sense of taste is basically a discriminatory sense as the other senses are not (Hume's title registers this fact: taste provides a standard or norm). Taste is a yes-or-no sense, a take-it-or-don't-take-it sense, letting us know what is good and what is bad for us in the most crucial physical way, for taste concerns what we are inclined to take into ourselves by eating, what will by intussusception either actually become ourselves or refuse to be assimilated and perhaps kill us. Undoubtedly the eighteenth-century concern with taste, analogously understood, derived in great part from the growing number of acts of discrimination which men were having to make. As feudal society finally bowed out, the individual and even a whole society were being forced to make decisions which an older, more tradition-bound culture used to provide ready-made. With democracy, the concern with taste wanes, as 'public opinion' is formed to take over regulatory functions, the crises of decision assume other shapes, and the relationship of the human life-world to the complex of the senses changes once more.

The relationship of sound and of the word itself to the human life-world varies, too. Sound and the word itself must thus be considered in terms of the shifting relationships between the senses. These relationships must not be taken merely abstractly but in connection with variations in cultures. In this connection, it is useful to think of cultures in terms of the organization of the sensorium. By the sensorium we mean here the entire sensory apparatus as an operational complex. The differences in cultures which we have just suggested can be thought of as differences in the sensorium, the organization of which is in part determined by culture while at the same time it makes culture. Freudians have long pointed out that for abstract thinking the proximity senses—smell, taste, and in a special way touch (although touch concerns space as well as contact and is thus simultaneously concrete and abstract)—must be minimized in favour of the more abstract hearing and sight. Growing up, assimilating the wisdom of the past, is in great part learning how to organize the sensorium productively for intellectual purposes. Man's sensory perceptions are abundant and overwhelming. He cannot attend to them all at once. In great part a given culture teaches him one or another way of productive specialization. It brings him to organize his sensorium by attending to some types of perception more than others, by making an issue of certain ones while relatively neglecting others. The sensorium is a fascinating focus for cultural studies. Given sufficient knowledge of the sensorium exploited within a specific culture one could probably define the culture as a whole in virtually all its aspects. Such full or exhaustive knowledge is not easy to come by, and we are a long way from it at present. But to say we are far from knowing all about the sensorium is not to say we know nothing about it.

A seminal book by Marshall McLuhan, The Gutenberg Galaxy (1962), shows, among other things, how widespread the interest in the sensorium has become, often among authors who do not even think of the sensorium as such under that name. McLuhan's work connects closely with that of Harold A. Innis (1950, 1951), as McLuhan himself has always graciously insisted, though few of his admirers or critics seem aware of the connection. In addition to Innis, McLuhan quotes from scores of scholars in vastly different historical fields—art history, literature, economic history, sociology, anthropology, religion, and many others—who have been turning up more and more material relevant to variations in the ratio or balance between the senses. The interests of most of these authors are not technically psychological but historical or cultural. Vast as McLuhan's spread of citations is, one could enlarge it indefinitely. There is, for example the well-known interest of the French symboliste poets in the transposition of the senses (assigning specific colours to specific sounds, as Baudelaire and Mallarmé do). The work of a number of recent philosophers enters into or touches on the organization of the sensorium. One thinks of Bergson's misgivings in Time and Free Will (1907) about the tendency of the past few centuries to over-spatialize the universe so that everything is reduced to models picturable in space, and what is unpicturable ('unimaginable' is often the term invoked) is discarded as impossible or unreal. Or one thinks of Whitehead's subsequent comments in Process and Reality (1929). Louis Lavelle (1942) and Jean Nogué (1943) elaborate discussion of the sensorium far beyond Bergson. Others concerned in one way or another with what we are here styling the sensorium include of course Freud and his followers, linguistic historians such as Jespersen and Sapir, psychologists such as Jean Piaget and Jerome Bruner, and a number of phenomenologists. Many in these last three groups can be identified through the comprehensive bibliography in John W.M. Verhaar's valuable work, Some Relations between Perception, Speech, and Thought: A Contribution toward the Phenomenology of Speech (1963).

Whitehead, in his Modes of Thought (1958), was one of the earliest to call rather specific attention to the need for study of the effects of changes in the communications media on the organization of the sensorium (without, however, naming the sensorium as such). Today there is a common awareness of the general pattern of these changes as man has developed his verbal communications media out of the initial spoken word. In general, before the invention of script man is more
oral-aural than afterward, not merely in that his words are all spoken and heard words, never visually perceived marks on a surface, but in that his whole response to actuality is thereby organized differently from that of typographic man. Writing, and most particularly the alphabet, shifts the balance of the senses away from the aural to the visual, favouring a new kind of personality structure, and alphabetic typographic strengthens this shift, as I pointed out at length some years ago when assessing the significance of Ramism in Ramus, Method, and the Decay of Dialogue (Ong 1958).

The greater visualism initiated by script and the alphabet is given more and more play in the West through the Middle Ages and then suddenly is brought to a new intensity in the fifteenth century and thereafter with the invention of alphabetic typography. As will be seen, this new intensity involves much more than print—the word literally locked in space—for at approximately the same time that alphabetic typography appears, painting is being swept by a revolution in its treatment of perspective, and the mechanical reproduction of instructional (as against decorative) illustrations and diagrams becomes widespread. Historians of art and design, such as Erwin Panofsky (1955) and Gyorgy Kepes (1956), have traced this and other developments in the use of vision. The visualism encouraged by print connects also with the increased use of maps and with the actual physical exploration of the globe (dependent on visual control of space in maps and imagination) which opens the modern age.

The modern age was thus much more the child of typography than it has commonly been made out to be. And, largely by reason of this fact, the modern age is now a thing of the past. Our own age today, as has by now frequently been pointed out, is marked by a new stress on the auditory. We live by telephone, radio, and television (which is never mere pictures, but is unequivocally a sound medium quite as much as it is a visual one), as well as by rapid transit, which expedites physical presence, and the use of voice to a degree unthinkable for typographic man.

But this is not to say that we are returning to an earlier oral-aural world. There is no return to the past. The successive verbal media do not abolish one another but overlies one another. The present sensorium is dismaying mixed and we are hard put to understand it, but for the first time in the history of mankind the possibility of some kind of understanding is opening up. This itself gives us a unique opportunity to become aware at a new depth of the significance of the word.

CHAPTER 2
The Sensotype Hypothesis

Mallory Wober

A modern rapprochement between theories of personality and of intellectual development has been made by Witkin and his collaborator who introduced the concept of field independence (Witkin, Lewin-Kutner, Machover, Bretonn-Meissner, and Wapner 1954). Receiving support from the work of Bennett (1956), Epstein (1957), Young (1959 and others, though with some equivocal findings as for example from Gruen (1955), the position was thoroughly reviewed and restated in terms of the concept of psychological differentiation by Witkin, Dwyer, Faterson, Goodenough, and Karp (1962).

Recent work in Africa is relevant to refining Witkin's theories, as it is suggested that the skills involved in the performance of tests used by Witkin need to be more carefully understood than hitherto. Particular skills might be associated with particular cultural backgrounds, and the finding of a given degree of psychological differentiation might not be so generalized throughout all aspects of an individual's functioning as Witkin's theories suggest. Use is made of the idea of 'sensotypes' put forward by Wober (1966) to suggest that in the field of visual perception and the exercise of allied powers of psychological differentiation, Witkin's schema associating social and psychological test data may hold good; but that it remains to be shown if it also holds good for transactions in the field of proprioception, which may be culturally of salient importance in parts of Africa.

Theory of Field Independence and Psychological Differentiation

Field independence was defined by Witkin et al. (1962: 47) as the ability to separate an item perceived from its context. Most experiments use