A retreat from verbal communication has occurred in contemporary society because of new emphases on ritual and the apparent inadequacy of verbal expression in science and art. Formal ritual surrounds people and involves all human senses; but printed matter or words separate the senses and reduce reality to a one-dimensional, sequential abstraction, thus interfering with the individual's submersion in the ritualistic experience. Problems with linguistic communication have also occurred in science and art. Because language concentrates on surface qualities and sensory perception, it has proved inadequate to describe recent scientific research, most of which has been devoted to interior structure and to phenomena off the sensorial spectrum, where only mathematics seems capable of picturing reality. In describing such artistic phenomena as abstract painting and electronic music, in which the senses are directly engaged, language also seems deficient. Because of these difficulties, society has moved away from verbal communication, and literacy consequently appears to be surviving only among the "drop-outs" and hippies for whom print has become a medium of dissent. (LH)
3 Feedback

8 Language and Environment
Edmund Carpenter A probe into the relationship between language and environment by a noted anthropologist

14 Beat the Street
Bud Church Literature can reach the kid in the street. But Chaucer won’t do it for you

18 A View from the Sidewalk
Frances Hochberg A multi-media trilogy which re-creates the bizarre world of the prize-fighter

24 An Alternative to Wandering Willie
Charles Stonebarger Another use for the cartridge tape recorder especially apt for the season: taping nature trails

34 Paperback Briefcase
Frank Ross The pick of recently issued paperbacks

30 Recommended Shorts
William Sloan The best of current 16mm films

38 Audiophile
Kirby Judd New releases: Folkways, Spoken Arts, and Caedmon

33 Filmstrips
Abraham Cohen Initiating a column of reviews

37 Telelog: March/April

Educators Guide to MEDIA AND METHODS is published nine times per year, September through May, by Media and Methods Institute, Inc., division of North American Publishing Co., 10017. Phone: (215) 564-0170. Subscription: $6.00 per year. $6.00 in Canada. $4.00 each for ten or more to one school address. Single copy 50¢. © Copyright, Media and Methods Institute, Inc., 1968. Printed in U.S.A. by World Color Press. Controlled circulation paid at Sparta, Illinois.
Language and Environment

by Edmund Carpenter

We know almost nothing about the origin of language. Anthropologists don’t always admit this to undergraduates, but among themselves, when they’re not trying to impress anyone, they acknowledge that we don’t know whether language dates from a million years ago, or half a million, or fifty thousand. There are lots of theories, but few facts—and the facts fit lots of theories.

It was once rather loosely believed that man was an alienated ape who, after becoming erect, commenced talking. This early walkie-talkie roamed several continents, producing pebble tools that remained nearly changeless for hundreds of thousands of years. Then, less than fifty thousand years ago, man burst forth with a plurality of tools and art that presupposed, it was assumed, the existence of fully developed language.

Today it all seems more complicated, largely as a result of new fossil discoveries, as well as the findings of ethnology and somatology. It has recently been suggested, for example, that language emerged from a wordless but not soundless ritual, like Eliot’s, “The word within a word, unable to speak a word / Swaddled in darkness.” Alan Lomax, from the study of ethnic music, concluded that song is “danced speech.” Bess Hawes found that the underlying principle in the songs of the Sea Islanders is the unheard beat—like an orchestra in which nobody plays the tune because everybody hears it. The underlying beat is a motor beat. The music is a dance executed while standing still.

Some of the undergraduates I teach in California, especially the more intelligent ones, remind me, in their incapacity for formal speech, of Lancelot Andrewes’s “The Word, and not to be able to speak a word.” They either stand mute, with all the dumb paths of inarticulate farm animals, or they stammer, their faces twisting, like aphasia victims. What’s called illiteracy is not ignorance of meaning, but non-sensitivity to word arrangements.

This retreat from language is surely one of the more interesting phenomena of our time. As George Steiner points out in Language and Silence, the syntheses of understanding which made common speech possible, today no longer work. Large areas of meaning are ruled by non-verbal languages such as mathematics or symbolic language. Little or nothing is “verbal” in modern music or art. Both are languages, yet nothing can be said of either that is pertinent to the traditional habits of linguistic sense. When we ask the contemporary artist to explain himself, he refers us back to his work. He is reluctant to translate his efforts into words, that is, into a wholly different medium. Contemporary music also flies from exterior meanings. Language today
deals only with surfaces of experience. "The rest," says Steiner, "and it is presumably the much larger part, is silence. The space-time continuum of relativity, the atom structure of all matter, the wave-particle state of energy are no longer accessible through the word. Reality now begins outside verbal language." Not since Babel have words and thoughts clashed in such protesting combination.

The current situation is complicated even more by the re-birth of ritual which, though its origins are seemingly more ancient than language itself, lay dormant for 2500 years under literacy.

[THE BELLY OF THE BEAST]

Both preliterate and postliterate ritual are highly involving, and what involves, surrounds. Thus it's not enough to say of x-ray art that it shows both inside and outside of a figure simultaneously. The question is, what does it mean to go right inside a form—to be "in the belly of the beast"? I suspect it's something like Alice going through the looking glass, or a Zuni patient stepping into a sand painting, "rolling in it," as it were. One enters, becomes one with, what is portrayed. One goes right inside and takes over temporarily. One comes to know a thing by being inside it. You get an inside view. You step into the skin of the beast at that, of course, is precisely what the masked and costumed dancer does. He puts on the beast.

Much the same may be said of the electronic environment where we are constantly bombarded by light images emanating from the cathode tube—Joyce's "Charge of the Light Brigade"—playing on us, going inside us, making us all the "Lord of the Flies," engulfed by flickering images.

"People don't actually read newspapers," says McLuhan, "they get into them every morning like a hot bath." The breakfast-reader, like the subway-reader, uses his newspaper as a wrap-around environment: he steps into the news.

Such art is "put on" art. It's the experience of entering a Bridget Riley walk-in, or a Light Happening ("Step right in," begins Allan Kaprow), or a tribal ritual where everyone participates in art. "When I am in my painting . . .," said Jackson Pollock.

At most, words play only an integral part of ritual; at times they get in the way. Certainly ritual is not ordered and ruled by words or the gammas of either speech or print.

Artists, poets, children, tribesmen, film-makers, find it much easier to accept the term "wordless thinking" when applied to ritual, than do scholars who will admit to two languages only: verbal and mathematical. For them, the analytical mode of thought alone is autonomous with intelligence. They are reluctant, for example, to grant dancers membership in a college faculty. But the knower as observer and the knower as actor behold different worlds and shape them to different ends, and it's senseless to condemn one for failing to meet the standards of the other.

Speech, emerging from ritual, retained much of ritual's multi-sensory character. In the tribal world, where the eye listens, the ear sees, and all the senses assist each other in concert, speech is a kind of web, a many-layered symphony of the senses, a cinematic flow which includes all of our "five and country senses." Eliot reminds us of this when he says a word can be a poem.

"Writing," says McLuhan, "meant a translation of this many-layered concert into the sense of slight alone. Reading and writing in this respect represent an intense degree of specialization of experience. Writing meant that the acoustic world with its magic power over the being of things, was arrested and banished to a humble sphere. Writing meant the power of fixing the flux of words and thought. Writing permitted analysis of thought processes which gave rise to the division of knowledge. With writing came the power of visually enclosing not only acoustic space but architectural space. And before writing all of these divisions were merged into a single knowledge, a single rhythm in which there was no present but all was now."

Yet manuscript culture still retained some of the qualities of oral speech. Nothing was more alien to medievalism than silent reading. Reading was aloud, often as song, with gestures, usually performed while standing. Physicians sometimes prescribed reading as a form of exercise. Carrels were like telephone booths, designed to keep down noise.

Patients who have undergone throat surgery are forbidden to read, for there is a natural tendency for a reader to evoke absent sounds, and his throat muscles work silently as he scans the page.

A child learns to separate senses when he learns, in class, to read silently. His legs twist, he bites his tongue, but by an enormous tour de force, he learns to fragment his senses, to turn on one at a time and keep the others in neutral.

"A child learns to separate senses when he learns, in class, to read silently. His legs twist, he bites his tongue, but by an enormous tour de force, he learns to fragment his senses, to turn on one at a time and keep the others in neutral."
eyes, and gallery guards warn, "Do not touch."

Print accelerated what writing began. The eye was no longer simply primary: with print it became dominant. This visual emphasis was twofold: the nature of the eye is such that it fragments the field of observation; it favors one-thing-at-a-time; it isolates one element out of that total field and focuses on it, abstracts it out, forcing all else into the subliminal. It shatters the polysyllabic into minimal, specialized units: the nature of the eye is such that it fragments the field of observation; it favors one-thing-at-a-time; it isolates one element out of that total field and focuses on it, abstracts it out, forcing all else into the subliminal. It shatters the polysyllabic into minimal, specialized units. This visual emphasis was twofold: the nature of the eye is such that it fragments the field of observation; it favors one-thing-at-a-time; it isolates one element out of that total field and focuses on it, abstracts it out, forcing all else into the subliminal.

There's a second factor: the eye emphasizes observable, measurable material things, and deals with their external surfaces, their outer appearances. The non-material was translated linguistically into the material: such psychological states as tendency, intensity, duration, were expressed as spatial metaphor: we said, "I can't come to grips with your argument, for its level is over my head, our views being so far apart my imagination wanders, etc."; "thenafter" became "thereafter," etc.

**[LANGUAGE WITHOUT RITUAL]**

Speech imitated print and language retreated further from ritual. Step-by-step language cast off its ritualistic features. It divested itself of all sensory connections, save sight, which it used in a highly specialized, restricted way: the eye of the marksman; the eye of the man holding a fixed position ("from where I stand"), having a "point of view," reviewing all experience, like Stalin reviewing troops or Milton reviewing life.

As late as the Renaissance, it was still possible to believe that language could enclose within its bounds the sum of human experience, at least human sensate experience. Mathematics was still anchored in material experiences which, in turn, were ordered and ruled by language. But with the formulation of analytical geometry, the theory of algebraic functions, and the development of calculus, mathematics ceased to be a dependent notation, an instrument of the empirical, and because an autonomous language, totally untranslatable into speech.

Mathematics allowed man to escape from the spiral of language. "Language," says Steiner, "yields nothing except a further image of itself. It's an elaborate tautology. Unlike numbers, words do not contain within themselves functional operations. Added or divided, they give only other words or approximations of their meanings." Mathematics broke out of this circle.

Beginning about 1900, science shifted away from the empirical to the invisible. The concern, for example, was not with how calcite looked, smelled or felt, but how it reacted to hydrochloric acid. Buckminster Fuller writes: "In World War I industry suddenly went from the visible to the invisible base, from the track to the trackless, from the wire to the wireless, from visible structuring to invisible structuring in alloys. The big thing about World War I is that it went off the sensorial spectrum forever as the prime criterion of accrediting innovations. . . . All major advances since World War I have been in the infra and ultrasoneral frequencies of the electromagnetic spectrum. All the important technical affairs of men are invisible. . . ." Even government has become invisible. We speak of the CIA as the "invisible government." What could be more natural in a society where truth is regarded as invisible, inner structure. In personal terms, the inner trip now supplants outer travel.

It's the psychic leap man has been performing in this century. We no longer think of reality as something outside of ourselves, something there, to be observed, measured. This concept came with the Greeks, with literacy, and it goes with literacy, with the coming of the electronic media. Once more, after an interval of 2500 years of literacy, reality is conceived as being within one, and the search for truth has once more become an inward trip.

Language plays little part in the inward trip. Words get in the way. Silence is regarded as a higher state, beyond the impurities and fragmentation of speech, free of the naive logic and linear conception of time implicit in print.

The application of mathematics in science, coupled with a concern with inner structure, lead scientists away from the empirical and hence, away from language. Today, chemistry is largely mathematical; genetics, almost wholly so. Increasing areas of biology are being taken over by mathematics. The Origin of Species is now regarded as essentially literary. Darwin and his contemporaries were concerned with outer appearances: how turtles looked. No wonder it took thirty-five years for them to understand the significance of Mendel's discovery.

Numbers are used in still another way: as neutral alphabet. Let me give a simple illustration: the first English census was called the Doomsday Book, not because it was used for taxation, but because its entries were visual, not verbal. "John Smith," written, lost many levels of meaning which "John Smith," spoken, retained, and this threatened the sense of identity of many people. When telephone companies dropped the prefix, e.g., GRanite 7 1111, and substituted 477 1111, many people were resentful for they found numbers, which didn't evoke an auditory image, more difficult to re-
member. People often feel a loss of identity when they are designated by number rather than by name; they say "My name is 'John Smith,' not '47862.' In this context, numbers aren't used as numbers but as neutral alphabet, totally devoid of all sensory associations.

Art and music, of course, cannot escape the sensate word; both are

Of Tolstoy, Hawthorne and Melville we must say to students "This is strange, but it's human and worth knowing."

permanently tied to the senses. But neither is permanently tied to language. We could say of Rembrandt's work: this is a portrait of a man with a golden helmet. "But," says Steiner, "absolutely nothing that can be said about a Franz Kline painting will be pertinent to the habits of linguistic sense. A De Kooning canvas has no subject of which one can render a verbal account. It bypasses language and seems to play directly on our nerve ends." Art has ceased to be re-presentationa l; it no longer strives to create an illusion of being more than itself. It's a thing, to be responded to directly.

The same can be said of contemporary music, especially electronic music. Contemporary music isn't background music; it's foreground music: it engages our senses directly and requires our participation.

As we become increasingly tribalized in art and outlook, and draw closer to the Eskimo and Trobriander, anthropologists lose their best tool: the comparative method, its built-in shock, its challenge. My notion is that for the truly alien we must turn to literature: Tolstoy, Hawthorne, Melville; we must say to students, "This is strange but it's human and it's worth knowing."

History is full of delightful reversals, where the opposite of what one predicts comes true. Where does literacy survive in this vastly confusing Tower of Babel? My guess is that it may survive among drop-outs. In California, bookstores are feared as subversive centers; the underground press is written by and for drops-outs; the Word, not film, has become the medium of dissent. The hippies have discovered print, something totally new to them, and they are obviously thrilled by it. They discovered it outside their homes and outside their schools. They may not be able to express themselves very clearly as yet, but they have turned to literature, to classics in fact, and it's possible the whole thing may turn out to be more than a put-on. Certainly print has proven an effective weapon in their search for identity through protest. Literature may survive as a result of their growing involvement in it. In contrast, the classroom presupposes an audience totally ignorant of all literary traditions: I recently saw a memo from a college textbook editor explaining that Joyce and Pound would have to be identified. We live in a scene where a large percentage of college presidents come from Physical Education, but drop-outs read Elizabethan verse and Greek drama.

When Constantinople fell, its scholars fled West, carrying their manuscripts with them. To read them, Western scholars had to learn Greek and thus they encountered not only Plato and Aristotle (hitherto known to them only through imperfect Latin translations), but a whole library new to them. This library, perhaps more than anything else, helped harness Renaissance technology to creative human ends.

Today's hippies are much like those fleeing scholars. They've taken the classics and fled from campuses which have fallen to weapon development, the CIA, and schools of Social Work. The notion that anything might come from this must appear, to school authorities, as wildly preposterous as the notion, to the conquering Moslems, that ragged monks with battered manuscripts were escaping with Constantinople's real treasures.