



"The major advances in civi that all but wreck the socie lization are processes ties in which they occur."

N. Whitehead

The medium, or process, of our time-electric technology-is reshaping and restructuring patterns of social interdependence and every aspect of our personal life. It is forcing us to reconsider and reevaluate practically every thought, every action, and every institution formerly taken for granted. Everything is changing - you, your family, your neighborhood, your education, your job, your government, your relation to "the others." And they're changing dramatically.

Societies have always been shaped more by the nature of the media by which men communicate than by the content of the communication. The alphabet, for instance, is a technology that is absorbed by the very young child in a completely unconscious manner, by osmosis so to speak. Words and the meaning of words predispose the child to think and act automatically in certain ways. The alphabet and print technology fostered and encouraged a fragmenting process, a process of specialism and of detachment. Electric technology fosters and encourages unification and involvement. It is impossible to understand social and cultural changes without a knowledge of the workings of media.

149

The older training of observation has become quite irrelevant in this new time, because it is based on psychological responses and concepts conditioned by the former technology-mechanization.

Innumerable confusions and a profound feeling of despair invariably emerge in periods of great technological and cultural transitions. Our "Age of



30-million toy trucks were bought in the U.S. in 1966.

Anxiety" is, in great part, the result of trying to do today's job with yesterday's tools-with yesterday's concepts.

Youth instinctively understands the present environment-the electric drama. It lives mythically and in depth. This is the reason for the great alienation between generations. Wars, revolutions, civil uprisings are interfaces within the new environments created by electric informational media.

"In the study of ideas, it is necessary to remember that insistence on hard-headed clarity issues from sentimental feeling, as it were a mist, cloaking the perplexities of fact. Insistence on clarity at all costs is based on sheer superstition as to the mode in which human intelligence functions. Our reasonings grasp at straws for premises and float on gossamers for deductions."

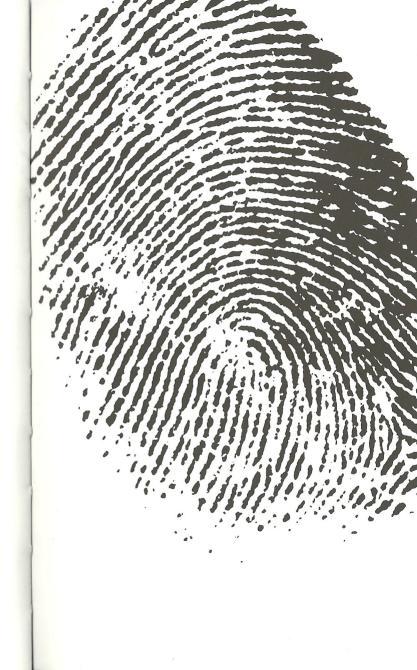
-A.N. Whitehead, "Adventures in Ideas."

Our time is a time for crossing barriers, for erasing old categories—for probing around. When two seemingly disparate elements are imaginatively poised, put in apposition in new and unique ways, startling discoveries often result.

Learning, the educational process, has long been associated only with the glum. We speak of the "serious" student. Our time presents a unique opportunity for learning by means of humor-a perceptive or incisive joke can be more meaningful than platitudes lying between two covers.

"The Medium is the Massage" is a look-around to see what's happening. It is a collide-oscope of interfaced situations.

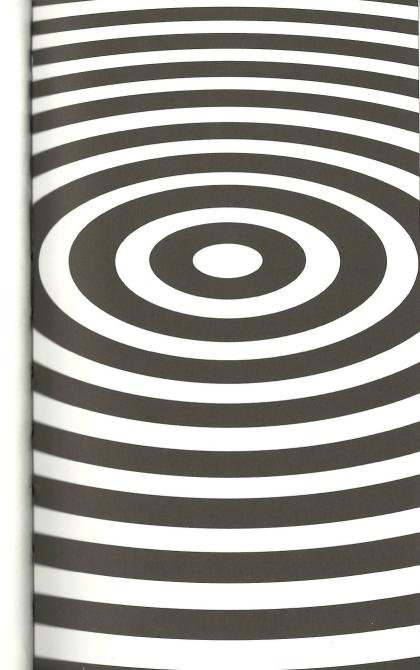
Students of media are persistently attacked as evaders, idly concentrating on means or processes rather than on "substance." The dramatic and rapid changes of "substance" elude these accusers. Survival is not possible if one approaches his environment, the social drama, with a fixed, unchangeable point of view—the witless repetitive response to the unperceived.



you



How much do you make? Have you ever contemplated suicide? Are you now or have you ever been ...? Are you aware of the fact ...? I have here before me... Electrical information devices for universal, tyrannical womb-totomb surveillance are causing a very serious dilemma between our claim to privacy and the community's need to know. The older, traditional ideas of private, isolated thoughts and actionsthe patterns of mechanistic technologies-are very seriously threatened by new methods of instantaneous electric information retrieval, by the electrically computerized dossier bank-that one big gossip column that is unforgiving, unforgetful and from which there is no redemption, no erasure of early "mistakes." We have already reached a point where remedial control, born out of knowledge of media and their total effects on all of us, must be exerted. How shall the new environment be programmed now that we have become so involved with each other, now that all of us have become the unwitting work force for social change? What's that



your neighborhood

X

Electric circuitry has overthrown the regime of "time" and "space" and pours upon us instantly and continuously the concerns of all other men. It has reconstituted dialogue on a global scale. Its message is Total Change, ending psychic, social, economic, and political parochialism. The old civic, state, and national groupings have become unworkable. Nothing can be further from the spirit of the new technology than "a place for everything and everything in its place." You can't <u>go</u> home again.



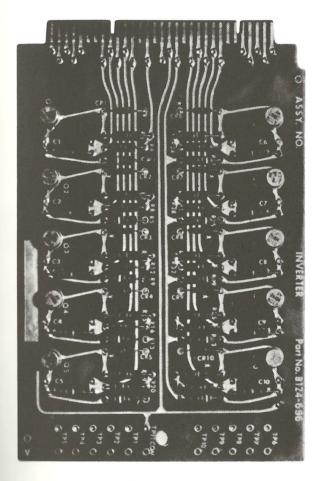
your education



There is a world of difference between the modern home environment of integrated electric information and the classroom. Today's television child is attuned to up-to-the-minute "adult" news-inflation, rioting, war, taxes, crime, bathing beauties-and is bewildered when he enters the nineteenth-century environment that still characterizes the educational establishment where information is scarce but ordered and structured by fragmented, classified patterns, subjects, and schedules. It is naturally an environment much like any factory set-up with its inventories and assembly lines.

The "child" was an invention of the seventeenth century; he did not exist in, say, Shakespeare's day. He had, up until that time, been merged in the adult world and there was nothing that could be called childhood in our sense.

Today's child is growing up absurd, because he lives in two worlds, and neither of them inclines him to grow up. Growing up—that is our new work, and it is total. Mere instruction will not suffice.



your job



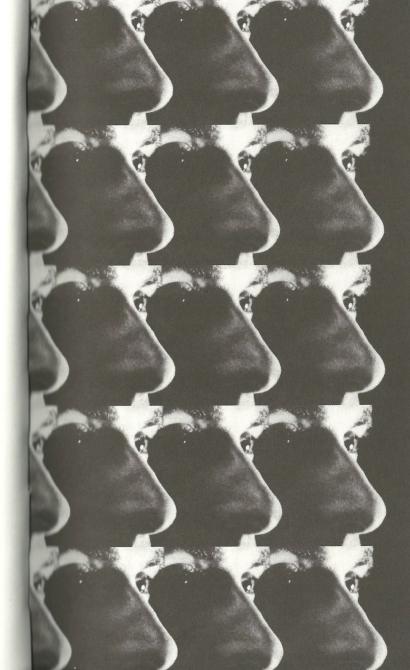
"When this circuit learns your job, what are you going to do?"

"Jobs" represent a relatively recent pattern of work. From the fifteenth century to the twentieth century, there is a steady progress of fragmentation of the stages of work that constitute "mechanization" and "specialism." These procedures cannot serve for survival or sanity in this new time.

Under conditions of electric circuitry, all the fragmented job patterns tend to blend once more into involving and demanding roles or forms of work that more and more resemble teaching, learning, and "human" service, in the older sense of dedicated loyalty.

Unhappily, many well-intentioned political reform programs that aim at the alleviation of suffering caused by unemployment betray an ignorance of the true nature of media-influence.

"Come into my parlor," said the computer to the specialist.

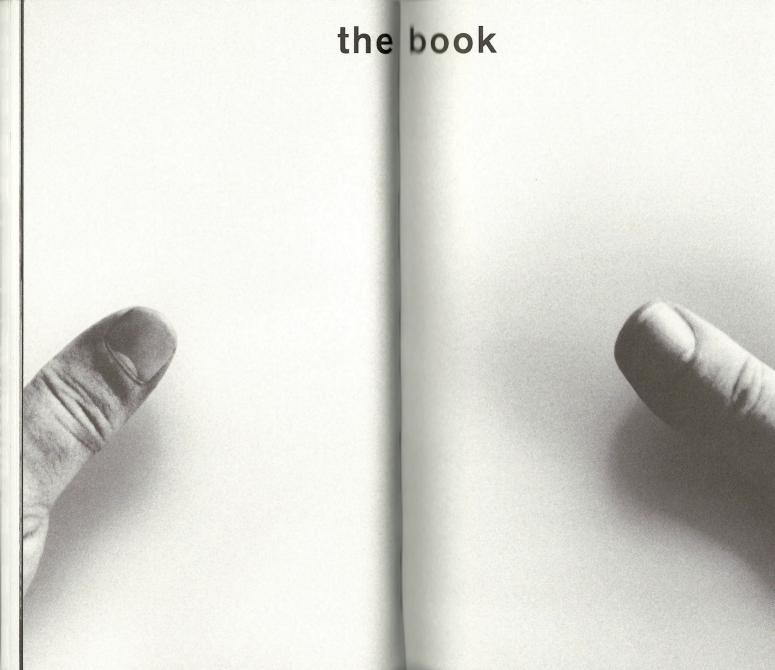


26

All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the massage. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.







clothing, an extension of the skin...



electric circuitry,

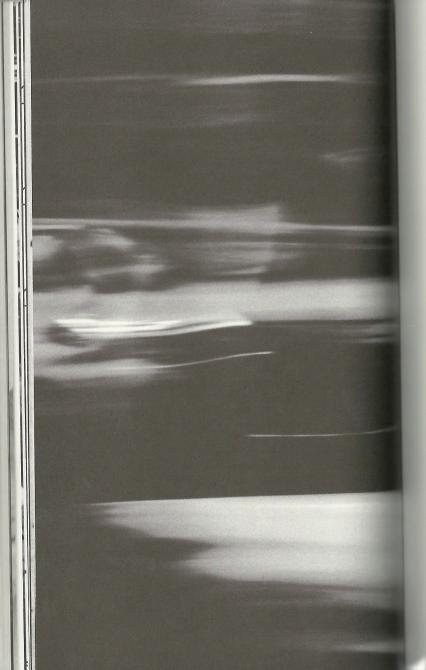
an extension of the central nervous system

Media, by altering the environment, evoke in us unique ratios of sense perceptions. The extension of any one sense alters the way we think and actthe way we perceive the world.

When these ratios change,

men change.

41



Ours is a brand-new world of allatonceness. "Time" has ceased, "space" has vanished. We now live in a <u>global</u> village...a simultaneous happening. We are back in acoustic space. We have begun again to structure the primordial feeling, the tribal emotions from which a few centuries of literacy divorced us.

We have had to shift our stress of attention from action to reaction. We must now know in advance the consequences of any policy or action, since the results are experienced without delay. Because of electric speed, we can no longer wait and see. George Washington once remarked, "We haven't heard from Benj. Franklin in Paris this year. We should write him a letter."

At the high speeds of electric communication, purely visual means of apprehending the world are no longer possible; they are just too slow to be relevant or effective.

Unhappily, we confront this new situation with an enormous backlog of outdated mental and psychological responses. We have been left d-a-ng-l-i-n-g. Our most impressive words and thoughts betray us— they refer us only to the past, not to the present.

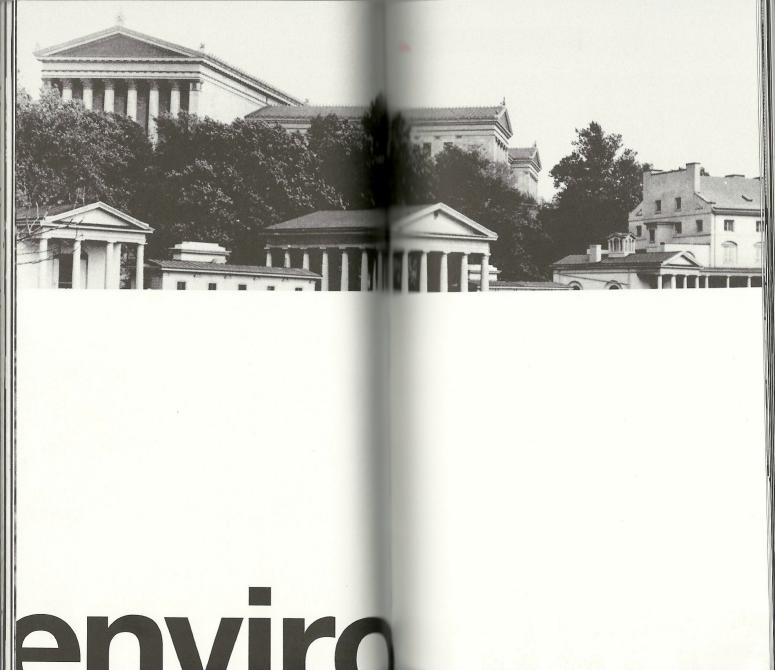
Electric circuitry profoundly involves men with one another. Information pours upon us, instantaneously and continuously. As soon as information is acquired, it is very rapidly replaced by still newer information. Our electrically-configured world has forced us to move from the habit of data classification to the mode of pattern recognition. We can no longer build serially, block-by-block, step-by-step, because instant communication insures that all factors of the environment and of experience coexist in a state of active interplay.

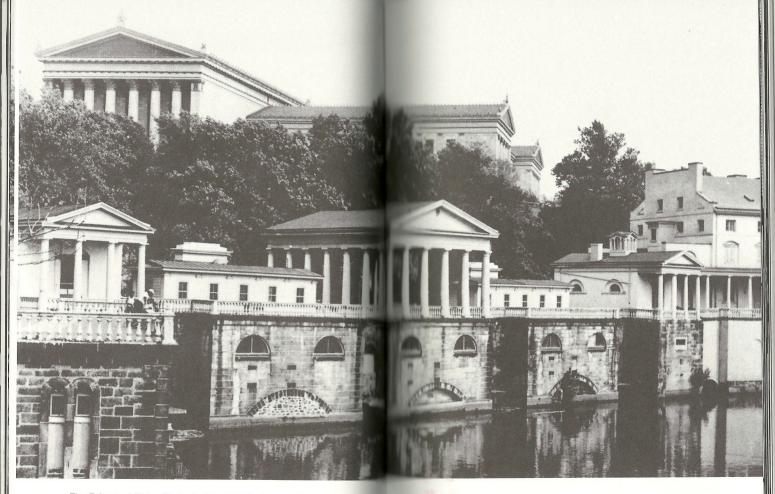
The new electronic interdependence recreates the world in the image of a global village.

Sec. Sec.

When information is brushed against information...

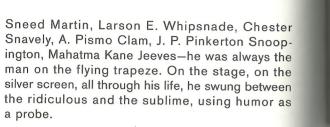
In the name of "progress," our official culture is striving to force the new media to do the work of the old.





The Fairmount Water Works in Philadelphia, Penna. We impose the form of the old on the content of the new. The malady lingers on.

nment



Humor as a system of communications and as a probe of our environment—of what's really going on—affords us our most appealing anti-environmental tool. It does not deal in theory, but in immediate experience, and is often the best guide to changing perceptions. Older societies thrived on purely literary plots. They demanded story lines. Today's humor, on the contrary, has no story line no sequence. It is usually a compressed overlay of stories.

amateur

"My education was of the most ordinary description, consisting of little more than the rudiments of reading, writing, and arithmetic at a common day school. My hours out of school were passed at home and in the streets." Michael Faraday, who had little mathematics and no formal schooling beyond the primary grades, is celebrated as an experimenter who discovered the induction of electricity. He was one of the great founders of modern physics. It is generally acknowledged that



Faraday's ignorance of mathematics contributed to his inspiration, that it compelled him to develop a simple, nonmathematical concept when he looked for an explanation of his electrical and magnetic phenomena. Faraday had two qualities that more than made up for his lack of education: fantastic intuition and independence and originality of mind.

Professionalism is environmental. Amateurism is anti-environmental. Professionalism merges the individual into patterns of total environment. Amateurism seeks the development of the total awareness of the individual and the critical awareness of the groundrules of society. The amateur can afford to lose. The professional tends to classify and to specialize, to accept uncritically the groundrules of the environment. The groundrules provided by the mass response of his colleagues serve as a pervasive environment of which he is contentedly unaware. The "expert" is the man who stays put.

"There are children playing in the street who could solve some of my top problems in physics, because they have modes of sensory perception that I lost long ago."

-J. Robert Oppenheimer

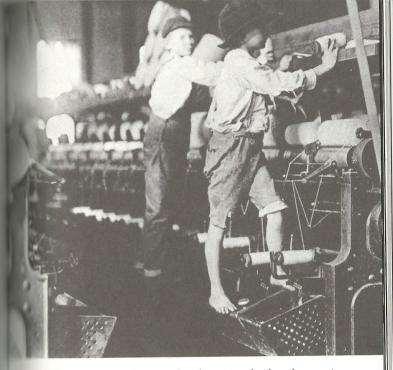
The youth of today are not permitted to approach the traditional heritage of mankind through the door of technological awareness. This only possible door for them is slammed in their faces by a rear-viewmirror society.

The young today live mythically and in depth. But they encounter instruction in situations organized by means of classified information—subjects are unrelated, they are visually conceived in terms of a blueprint. Many of our institutions suppress all the natural direct experience of youth, who respond with untaught delight to the poetry and the beauty of the new technological environment, the environment of popular culture. It could be their door to all past achievement if studied as an active (and not necessarily benign) force.

The student finds no means of involvement for himself and cannot discover how the educational scheme relates to his mythic world of electronically processed data and experience that his clear and direct responses report.

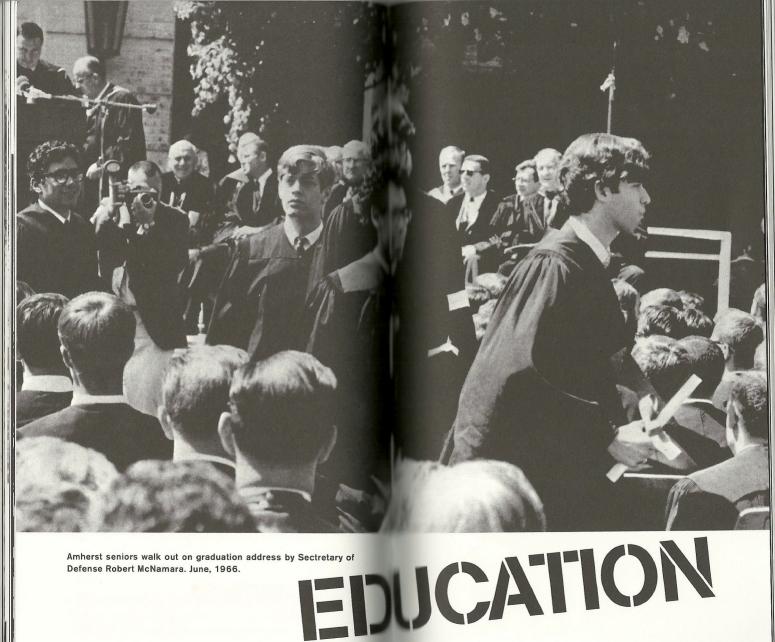
It is a matter of the greatest urgency that our educational institutions realize that we now have civil war among these environments created by media other than the printed word. The classroom is now in a vital struggle for survival with the immensely persuasive "outside" world created by new informational media. Education must shift from instruction, from imposing of stencils, to discovery—to probing and exploration and to the recognition of the language of forms.

The young today reject goals. The want roles— R-O-L-E-S. That is, total involvement. They do not want fragmented, specialized goals or jobs.



We now experience simultaneously the dropout and the teach-in. The two forms are correlative. They belong together. The teach-in represents an attempt to shift education from instruction to discovery, from brainwashing students to brainwashing instructors. It is a big, dramatic reversal. Vietnam, as the content of the teach-in, is a very small and perhaps misleading Red Herring. It really has little to do with the teach-in, as such, anymore than with the dropout.

The dropout represents a rejection of nineteenthcentury technology as manifested in our educational establishments. The teach-in represents a creative effort, switching the educational process from package to discovery. As the audience becomes a participant in the total electric drama, the classroom can become a scene in which the audience performs an enormous amount of work.



Amherst seniors walk out on graduation address by Sectretary of Defense Robert McNamara. June, 1966.



"Authorship"—in the sense we know it today, individual intellectual effort related to the book as an economic commodity—was practically unknown before the advent of print technology. Medieval scholars were indifferent to the precise identity of the "books" they studied. In turn, they rarely signed even what was clearly their own. They were a humble service organization. Procuring texts was often a very tedious and time-consuming task. Many small texts were transmitted into volumes of miscellaneous content, very much like "jottings" in a scrapbook, and, in this transmission, authorship was often lost.

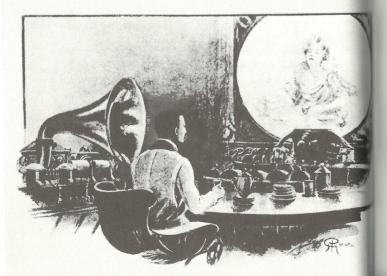
The invention of printing did away with anonymity, fostering ideas of literary fame and the habit of considering intellectual effort as private property. Mechanical multiples of the same text created a public—a reading public. The rising consumeroriented culture became concerned with labels of authenticity and protection against theft and piracy. The idea of copyright—"the exclusive right to reproduce, publish, and sell the matter and form of a literary or artistic work"—was born. Xerography—every man's brain-picker—heralds the times of instant publishing. Anybody can now become both author and publisher. Take any books on any subject and custom-make your own book by simple xeroxing a chapter from this one, a chapter from that one—instant steal!

As new technologies come into play, people are less and less convinced of the importance of selfexpression. Teamwork succeeds private effort.

A ditto, ditto device. A ditto, ditto device. A ditto, ditto device. Even so imaginative a writer as Jules Verne failed to envisage the speed with which electric technology would produce informational media. He rashly predicted that television would be invented in the XXIXth Century.

Science-fiction writing today presents situations that enable us to perceive the potential of new technologies. Formerly, the problem was to invent new forms of labor-saving. Today, the reverse is the problem. Now we have to adjust, not to invent. We have to find the environments in which it will be possible to live with our new inventions. Big Business has learned to tap the s-f writer.

AU XXIX^{me} SIÈCLE ⁽¹⁾.

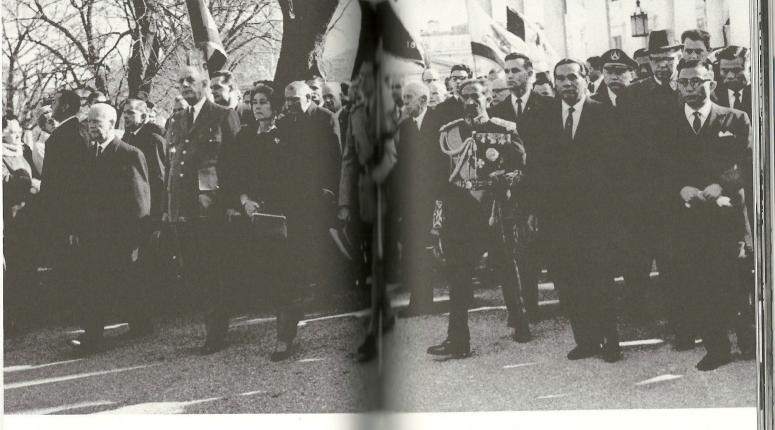


Television completes the cycle of the human sensorium. With the omnipresent ear and the moving eye, we have abolished writing, the specialized acoustic-visual metaphor that established the dynamics of Western civilization.

In television there occurs an extension of the sense of active, exploratory touch which involves all the senses simultaneously, rather than that of sight alone. You have to be "with" it. But in all electric phenomena, the visual is only one component in a complex interplay. Since, in the age of information, most transactions are managed electrically, the electric technology has meant for Western man a considerable drop in the visual component, in his experience, and a corresponding increase in the activity of his other senses.

Television demands participation and involvement in depth of the whole being. It will not work as a background. It engages you. Perhaps this is why so many people feel that their identity has been threatened. This charge of the light brigade has heightened our general awareness of the shape and meaning of lives and events to a level of extreme sensitivity.

It was the funeral of President Kennedy that most strongly proved the power of television to invest an occasion with the character of corporate participation. It involves an entire population in a ritual process. (By comparison, press, movies, and radio are mere packaging devices for consumers.) In television, images are projected at you. You are the screen. The images wrap around you. You are the vanishing point. This creates a sort of inwardness, a sort of reverse perspective which has much in common with Oriental art.



The television generation is a grim bunch. It is much more serious than children of any other period when they were frivolous, more whimsical. The television child is more earnest, more dedicated.

Most often the few seconds sandwiched between the hours of viewing—the "commercials"— reflect a truer understanding of the medium. There simply is no time for a narrative form, borrowed from earlier print technology. The story line must be abandoned. Up until very recently, television commercials were regarded as simply a bastard form, of vulgar folk art. They are influencing contemporary literature. Vide "In Cold Blood," for instance. The main cause for disappointment in and for criticism of television is the failure on the part of its critics to view it as a totally new technology which demands different sensory responses. These critics insist on regarding television as merely a degraded form of print technology. Critics of television have failed to realize that the motion pictures they are lionizing—such as "The Knack," "Hard Day's Night," "What's New Pussycat?" would prove unacceptable as mass audience films if the audience had not been preconditioned by television commercials to abrupt zooms, elliptical editing, no story lines, flash cuts.

"When you consider television's awesome power to educate, aren't you thankful it doesn't?"

-Value pulle

Drawing by Donald Reilly; © 1965 The New Yorker Magazine, Inc.

