A photograph of “St. Peter’s at a Moment of History” was the cover feature of Life magazine for June 14, 1963. It is one of the peculiar characteristics of the photo that it isolates single moments in time. The TV camera does not. The continuous scanning action of the TV camera provides not the isolated moment or aspect, but the contour, the iconic profile and the transparency. Egyptian art, like primitive sculpture today, provided the significant outline that had nothing to do with a moment in time. Sculpture tends toward the timeless.

The power of the camera to be everywhere and to interrelate things is well indicated in the Vogue magazine boast (March 15, 1953): “A woman now, and without having to leave the country, can have the best of five (or more) nations hanging in her closet—beautiful and compatible as a statesman’s dream.” That is why, in the photographic age, fashions have come to be like the collage style in painting.

A century ago the British craze for the monocle gave to the wearer the power of the camera to fix people in a superior stare, as if they were objects. Eric von Stresem did a great job with the monocle in creating the haughty Prussian officer. Both monocle and camera tend to turn people into things, and the photograph extends and multiplies the human image to the proportions of mass-produced merchandise. The movie stars and matinée idols are put in the public domain by photography. They become dreams that money can buy. They can be bought and haggled and thumbed more easily than public prostitutes. Mass-produced merchandise has always made some people uneasy in its prostitute aspect. Jean Genet’s The Balcony is a play on this theme of society as a brothel environed by violence and hornor. The avid desire of mankind to prostitute itself stands up against the chaos of revolution. The brothel remains firm and permanent amidst the most furious changes. In a word, photography has inspired Genet with the theme of the world since photography as a Brothel-without-Walls.

Nobody can commit photography alone. It is possible to have at least the illusion of reading and writing in isolation, but photography does not foster such attitudes. If there is any sense in deploring the growth of corporate and collective art forms such as the film and the press, it is surely in relation to the previous individualist technologies that these new forms corrode. Yet if there had been no prints or woodcuts and engravings, there would never have come the photograph. For centuries, the woodcut and the engraving had delineated the world by an arrangement of lines and points that had syntax of a very elaborate kind. Many historians of this visual syntax, like E. H. Gombrich and William M. Ivins, have been at great pains to explain how the art of the hand-written manuscript had permeated the art of the woodcut and the engraving until, with the halftone process, the dots and
lines suddenly fell below the threshold of normal vision. Syntax, the net of rationality, disappeared from the later prints, just as it tended to disappear from the telegraph message and from the impressionist painting. Finally, in the pointillisme of Seurat, the world suddenly appeared through the painting. The direction of a syntactical point of view from outside onto the painting ended as literary form dwindled into headlines with the telegraph. With the photograph, in the same way, men had discovered how to make visual reports without syntax.

It was in 1839 that William Henry Fox Talbot read a paper to the Royal Society which had as title: "Some account of the Art of Photogenic Drawing, or the process by which Natural Objects may be made to delineate themselves without the aid of the artist's pencil." He was quite aware of photography as a kind of automation that eliminated the syntactical procedures of pen and pencil. He was probably less aware that he had brought the pictorial world into line with the new industrial procedures. Photography mirrored the external world automatically, yielding an exactly repeatable visual image. It was this all-important quality of uniformity and repeatability that had made the Gutenberg break between the Middle Ages and the Renaissance. Photography was almost as decisive in making the break between mere mechanical industrialism and the graphic age of electronic man. The step from the age of Typographic Man to the age of Graphic Man was taken with the invention of photography. Both daguerrotypes and photographs introduced light and chemistry into the making process. Natural objects delineated themselves by an exposure intensified by lens and fixed by chemicals. In the daguerreotype process there was the same stippling or piercing with minute dots that was echoed later in Seurat's pointillisme, and is still continued in the newspaper mesh of dots that is called "wire-photo." Within a year of Daguerre's discovery, Samuel F. B. Morse was taking photographs of his wife and daughter in New York City. Dots for the eye (photograph) and dots for the ear (telegraph) thus met on top of a skyscraper.

A further cross-fertilization occurred in Talbot's invention of the photo, which he imagined as an extension of the camera obscura, or pictures in "the little dark room," as the Italians had named the picture play-box of the sixteenth century. Just at the time when mechanical writing had been achieved by movable types, there grew up the pastime of looking at moving images on the wall of a dark room. If there is sunshine outside and a pinhole in one wall, then the images of the outer world will appear on the wall opposite. This new discovery was very exciting to painters, since it intensified the new illusion of perspective and of the third dimension that is so closely related to the printed word. But the early spectators of the moving image in the sixteenth century saw those images upside down. For this reason the lens was introduced—in order to turn the picture right side up. Our normal vision is also upside down. Psychically, we learn to turn our visual world right side up by translating the retinal impression from visual into tactile and kinetic terms. Right side up is apparently something we feel but cannot see directly.

To the student of media, the fact that "normal" right-side-up vision is a translation from one sense into another is a helpful hint about the kinds of activity of distortion and translation that any language or culture induces in all of us. Nothing amuses the Eskimo more than for the white man to crane his neck to see the magazine pictures stuck on the igloo walls. For the Eskimo no more needs to look at a picture right side up than does a child before he has learned his letters on a line. Just why Westerners should be disturbed to find that natives have to learn to read pictures, as we learn to read letters, is worth consideration. The extreme bias and distortion of our sense-lives by our technology would seem to be a fact that we prefer to ignore in our daily lives. Evidence that natives do not perceive in perspective or sense the third dimension seems to threaten the Western ego-image and structure, as many have found after a trip through the Ames Perception Laboratory at Ohio State University. This lab is arranged to reveal the various illusions we create for ourselves in what we consider to be "normal" visual perception.

That we have accepted such bias and obliquity in a subliminal way through most of human history is clear enough. Just why we are no longer content to leave our experience in this subliminal
state, and why many people have begun to get very conscious about the unconscious, is a question well worth investigation. People are nowadays much concerned to set their houses in order, a process of self-consciousness that has received large impetus from photography.

William Henry Fox Talbot, delighting in Swiss scenery, began to reflect on the camera obscura and wrote that "it was during these thoughts that the idea occurred to me . . . how charming it would be if we were possible to cause these natural images to imprint themselves durably, and remain fixed on paper!" The printing press had, in the Renaissance, inspired a similar desire to give permanence to daily feelings and experience.

The method Talbot devised was that of printing positives chemically from negatives, to yield an exactly repeatable image. Thus the roadblock that had impeded the Greek botanists and had defeated their successors was removed. Most of the sciences had been, from their origins, utterly handicapped by the lack of adequate nonverbal means of transmitting information. Today, even subatomic physics would be unable to develop without the photograph.

The Sunday New York Times for June 15, 1958 reported:

**TINY CELLS “SEEN” BY NEW TECHNIQUE**

Microphotographic Method Spots Million-Billionth

of Gram, London Designer Says

Samples of substances weighing less than a million-billionth of a gram can be analysed by a new British microscopic technique. This is the "microphotographic method" by Bernard M. Turner, a London biochemical analyst and instruments designer. It can be applied to the study of the cells of the brain and nervous system, cell duplication including that in cancerous tissue, and it will assist, it is believed, in the analyses of atmospheric pollution by dust . . .

In effect, an electric current pulls or pushes the different constituents of the sample into zones where they would normally be invisible.

However, to say that "the camera cannot lie" is merely to underline the multiple deceits that are now practiced in its name. Indeed, the world of the movie that was prepared by the photograph has become synonymous with illusion and fantasy, turning society into what Joyce called an "allnight'sewsday reel," that substitutes a "reel" world for reality. Joyce knew more about the effects of the photograph on our senses, our language, and our thought processes than anybody else. His verdict on the "automatic writing" that is photography was the *abolition of the etym*. He saw the photo as at least a rival, and perhaps a usurper, of the word, whether written or spoken. But if *etym* (etymology) means the heart and core and moist substance of those beings that we grasp in words, then Joyce may well have meant that the photo was a new creation from nothing (*ab-nihilo*), or even a reduction of creation to a photographic negative. If there is, indeed, a terrible nihilism in the photo and a substitution of shadows for substance, then we are surely not the worse for knowing it. The technology of the photo is an extension of our own being and can be withdrawn from circulation like any other technology if we decide that it is virulent. But amputation of such extensions of our physical being calls for as much knowledge and skill as are prerequisite to any other physical amputation.

If the phonetic alphabet was a technical means of securing the spoken word from its aspects of sound and gesture, the photograph and its development in the movie restored gesture to the human technology of recording experience. In fact, the snapshot of arrested human postures by photography directed more attention to physical and psychic posture than ever before. The age of the photograph has become the age of gesture and mime and dance, as no other age has ever been. Freud and Jung built their observations on the interpretation of the languages of both individual and collective postures and gestures with respect to dreams and to the ordinary acts of everyday life. The physical and psychic *gestalts*, or "still" shots, with which they worked were much owing to the posture world revealed by the photograph. The photograph is just as useful for collective, as for individual, postures and gestures, whereas written and printed language is biased toward the private and individual posture. Thus, the traditional figures of rhetoric were individual postures of mind of the private speaker in relation to an audience, whereas myth
and Jungian archetypes are collective postures of the mind with which the written form could not cope, any more than it could command mime and gesture. Moreover, that the photograph is quite versatile in revealing and arresting posture and structure wherever it is used, occurs in countless examples, such as the analysis of bird-flight. It was the photograph that revealed the secret of bird-flight and enabled man to take off. The photo, in arresting bird-flight, showed that it was based on a principle of wing fixity. Wing movement was seen to be for propulsion, not for flight.

Perhaps the great revolution produced by photograph was in the traditional arts. The painter could no longer depict a world that had been much photographed. He turned, instead, to reveal the inner processes of creativity in expressionism and in abstract art. Likewise, the novelist could no longer describe objects or happenings for readers who already knew what was happening by photo, press, film, and radio. The poet and novelist turned to those inward gestures of the mind by which we achieve insight and by which we make ourselves and our world. Thus art moved from outer matching to inner making. Instead of depicting a world that matched the world we already knew, the artists turned to presenting the creative process for public participation. He has given to us now the means of becoming involved in the making-process. Each development of the electric age attracts, and demands, a high degree of producer-orientation. The age of the consumer of processed and packaged goods is, therefore, not the present electric age, but the mechanical age that preceded it. Yet, inevitably, the age of the mechanical has had to overlap with the electric, as in such obvious instances as the internal combustion engine that requires the electric spark to ignite the explosion that moves its cylinders. The telegraph is an electric form that, when crossed with print and rotary presses, yields the modern newspaper. And the photograph is not a machine, but a chemical and light process that, crossed with the machine, yields the movie. Yet there is a vigor and violence in these hybrid forms that is self-liquidating, as it were. For in radio and TV—purely electric forms from which the mechanical principle has been excluded—there is an altogether new relation of the medium to its users. This is a relation of high participation and involvement that, for good or ill, no mechanism had ever evoked.

Education is ideally civil defense against media fall-out. Yet Western man has had, so far, no education or equipment for meeting any of the new media on their own terms. Literate man is not only numb and vague in the presence of film or photo, but he intensifies his ineptness by a defensive arrogance and condescension to “pop culture” and “mass entertainment.” It was in this spirit of bulldog opacity that the scholastic philosophers failed to meet the challenge of the printed book in the sixteenth century. The vested interests of acquired knowledge and conventional wisdom have always been by-passed and engulfed by new media. The study of this process, however, whether for the purpose of fixity or of change, has scarcely begun. The notion that self-interest confers a keener eye for recognizing and controlling the processes of change is quite without foundation, as witness the motorcar industry. Here is a world of obsolescence as surely doomed to swift erosion as was the enterprise of the buggy- and wagon-makers in 1915. Yet does General Motors, for example, know, or even suspect, anything about the effect of the TV image on the users of motorcars? The magazine enterprises are similarly undermined by the TV image and its effect on the advertising icon. The meaning of the new ad icon has not been grasped by those who stand to lose all. The same is true of the movie industry in general. Each of these enterprises lacks any “literacy” in any medium but its own, and thus the startling changes resulting from new hybrids and crossings of media catch them unawares.

To the student of media structures, every detail of the total mosaic of the contemporary world is vivid with meaningful life. As early as March 15, 1933, Vogue magazine announced a new hybrid, resulting from a cross between photograph and air travel:

This first International Fashion Issue of Vogue is to mark a new point. We couldn't have done such an issue before. Fashion only got its internationalization papers a short time ago, and for the first time in one issue we can report on couture collections in five countries.
The advantages of such ad copy as high-grade ore in the lab of the media analyst can be recognized only by those trained in the language of vision and of the plastic arts in general. The copy writer has to be a strip-tease artist who has entire empathy with the immediate state of mind of the audience. Such, indeed, is also the aptitude of the popular novelist or song writer. It follows that any widely accepted writer or entertainer embodies and reveals a current set of attitudes that can be verbalized by the analyst. "Do you read me, Mac?" But were the words of the Vogue writer to be considered merely on literary or editorial grounds, their meaning would be missed, just as the copy in a pictorial ad is not to be considered as literary statement but as mime of the psychopathology of everyday life. In the age of the photograph, language takes on a graphic or iconic character, whose "meaning" belongs very little to the semantic universe, and not at all to the republic of letters.

If we open a 1938 copy of Life, the pictures or postures then seen as normal now give a sharper sense of remote time than do objects of real antiquity. Small children now attach the phrase "the olden days" to yesterday's hats and overshoes, so keenly are they attuned to the abrupt seasonal changes of visual posture in the world of fashions. But the basic experience here is one that most people feel for yesterday's newspaper, than which nothing could be more drastically out of fashion. Jazz musicians express their distaste for recorded jazz by saying, "It is as stale as yesterday's newspaper."

Perhaps that is the readiest way to grasp the meaning of the photograph in creating a world of accelerated transience. For the relation we have to "today's newspaper," or verbal jazz, is the same that people feel for fashions. Fashion is not a way of being informed or aware, but a way of being with it. That, however, is merely to draw attention to a negative aspect of the photograph. Positively, the effect of speeding up temporal sequence is to abolish time, much as the telegraph and cable abolished space. Of course the photograph does both. It wipes out our national frontiers and cultural barriers, and involves us in The Family of Man, regardless of any particular point of view. A picture of a group of persons of any hue whatever is a picture of people, not of "colored people." That is the logic of the photograph, politically speaking. But the logic of the photograph is neither verbal nor syntactical, a condition which renders literary culture quite helpless to cope with the photograph. By the same token, the complete transformation of human sense-awareness by this form involves a development of self-consciousness that alters facial expression and cosmetic make-up as immediately as it does our bodily stance, in public or in private. This fact can be gleaned from any magazine or movie of fifteen years back. It is not too much to say, therefore, that if outer posture is affected by the photograph, so with our inner postures and the dialogue with ourselves. The age of Jung and Freud is, above all, the age of the photograph, the age of the full gamut of self-critical attitudes.

This immense tidying-up of our inner lives, motivated by the new picture gestalt culture, has had its obvious parallels in our attempts to rearrange our homes and gardens and our cities. To see a photograph of the local slum makes the condition unbearable. The mere matching of the picture with reality provides a new motive for change, as it does a new motive for travel.

Daniel Boorstin in The Image: or What Happened to the American Dream offers a conducted literary tour of the new photographic world of travel. One has merely to look at the new tourism in a literary perspective to discover that it makes no sense at all. To the literary man who has read about Europe, in leisurely anticipation of a visit, an ad that whispers: "You are just fifteen gourmet meals from Europe on the world's fastest ship" is gross and repugnant. Advertisements of travel by plane are worse: "Dinner in New York, indigestion in Paris." Moreover, the photograph has reversed the purpose of travel, which until now had been to encounter the strange and unfamiliar. Descartes, in the early seventeenth century, had observed that traveling was almost like conversing with men of other centuries, a point of view quite unknown before his time. For those who cherish such quaint experience, it is necessary today to go back very many centuries by the art and archaeology route. Professor Boorstin seems unhappy that so many Americans travel so much and are changed
by it so little. He feels that the entire travel experience has become “diluted, contrived, prefabricated.” He is not concerned to find out why the photograph has done this to us. But in the same way intelligent people in the past always deplored the way in which the book had become a substitute for inquiry, conversation, and reflection, and never troubled to reflect on the nature of the printed book. The book reader has always tended to be passive, because that is the best way to read. Today, the traveler has become passive. Given travelers checks, a passport, and a toothbrush, the world is your oyster. The macadam road, the railroad, and the steamship have taken the travail out of travel. People moved by the silliest whims now clutter the foreign places, because travel differs very little from going to a movie or turning the pages of a magazine. The “Go Now, Pay Later” formula of the travel agencies might as well read: “Go now, arrive later,” for it could be argued that such people never really leave their beaten paths of impertinence, nor do they ever arrive at any new place. They can have Shanghai or Berlin or Venice in a package tour that they need never open. In 1961, TWA began to provide new movies for its trans-Atlantic flights so that you could visit Portugal, California, or anywhere else, while en route to Holland, for example. Thus the world itself becomes a sort of museum of objects that have been encountered before in some other medium. It is well known that even museum curators often prefer colored pictures to the originals of various objects in their own cases. In the same way, the tourist who arrives at the Leaning Tower of Pisa, or the Grand Canyon of Arizona, can now merely check his reactions to something with which he has long been familiar, and take his own pictures of the same.

To lament that the packaged tour, like the photograph, cheapens and degrades by making all places easy of access, is to miss most of the game. It is to make value judgments with fixed reference to the fragmentary perspective of literary culture. It is the same position that considers a literary landscape as superior to a movie travelogue. For the untrained awareness, all reading and all movies, like all travel, are equally banal and unenriching as experience. Difficulty of access does not confer adequacy of perception, though it may involve an object in an aura of pseudo-values, as with a gem, a movie star, or an old master. This now brings us to the factual core of the “pseudoevent,” a label applied to the new media, in general, because of their power to give new patterns to our lives by acceleration of older patterns. It is necessary to reflect that this same insidious power was once felt in the old media, including languages. All media exist to invest our lives with artificial perception and arbitrary values.

All meaning alters with acceleration, because all patterns of personal and political interdependence change with any acceleration of information. Some feel keenly that speed-up has impoverished the world they knew by changing its forms of human interchange. There is nothing new or strange in a parochial preference for those pseudo-events that happened to enter into the composition of society just before the electric revolution of this century. The student of media soon comes to expect the new media of any period whatever to be classed as pseudo by those who have acquired the patterns of earlier media, whatever they may happen to be. This would seem to be a normal, and even amiable, trait ensuring a maximal degree of social continuity and permanence amidst change and innovation. But all the conservatism in the world does not afford even a token resistance to the ecological sweep of the new electric media. On a moving highway the vehicle that backs up is accelerating in relation to the highway situation. Such would seem to be the ironical status of the cultural reactionary. When the trend is one way his resistance insures a greater speed of change. Control over change would seem to consist in moving not with it but ahead of it. Anticipation gives the power to deflect and control force. Thus we may feel like a man who has been hustled away from his favorite kiosk in the ball park by a frantic rout of fans eager to see the arrival of a movie star. We are no sooner in position to look at one kind of event than it is obliterated by another, just as our Western lives seem to native cultures to be one long series of preparations for being. But the favorite stance of literary man has long been “to view with alarm” or “to point with pride,” while scrupulously ignoring what’s going on.
One immense area of photographic influence that affects our lives is the world of packaging and display and, in general, the organization of shops and stores of every kind. The newspaper that could advertise every sort of product on one page quickly gave rise to department stores that provided every kind of product under one roof. Today the decentralizing of such institutions into a multiplicity of small shops in shopping plazas is partly the creation of the car, partly the result of TV. But the photograph still exerts some centralist pressure in the mail-order catalogue. Yet the mail-order houses originally felt not only the centralist forces of railway and postal services, but also, and at the same time, the decentralizing power of the telegraph. The Sears Roebuck enterprise was directly owing to stationmaster use of the telegraph. These men saw that the waste of goods on railway sidings could be ended by the speed of the telegraph to reroute and concentrate.

The complex network of media, other than the photograph that appears in the world of merchandising, is easier to observe in the world of sports. In one instance, the press camera contributed to radical changes in the game of football. A press photo of battered players in a 1905 game between Pennsylvania and Swarthmore came to the attention of President Teddy Roosevelt. He was so angered at the picture of Swarthmore's mangled Bob Maxwell that he issued an immediate ultimatum—that if rough play continued, he would abolish the game by executive edict. The effect was the same as that of the harrowing telegraph reports of Russell from the Crimea, which created the image and role of Florence Nightingale.

No less drastic was the effect of the press photo coverage of the lives of the rich. "Conspicuous consumption" owed less to the phrase of Veblen than to the press photographer, who began to invade the entertainment spots of the very rich. The sights of men ordering drinks from horseback at the bars of clubs quickly caused a public revulsion that drove the rich into the ways of timid mediocrity and obscurity in America, which they have never abandoned. The photograph made it quite unsafe to come out and play, for it betrayed such blatant dimensions of power as to be self-defeating. On the other hand, the movie phase of photography created a new aristocracy of actors and actresses, who dramatized, on and off the screen, the fantasies of conspicuous consumption that the rich could never achieve. The movie demonstrated the magic power of the photo by providing a consumer package of plutocratic dimension for all the Cinderellas in the world.

The Gutenberg Galaxy provides the necessary background for studying the rapid rise of new visual values after the advent of printing from movable types. "A place for everything and everything in its place" is a feature not only of the compositor's arrangement of his type fonts, but of the entire range of human organization of knowledge and action from the sixteenth century onward. Even the inner life of the feelings and emotions began to be structured and ordered and analyzed according to separate pictorial landscapes, as Christopher Hussey explained in his fascinating study of The Picturesque. More than a century of this pictorial analysis of the inner life preceded Talbot's 1839 discovery of photography. Photography, by carrying the pictorial delineation of natural objects much further than paint or language could, had a reverse effect. By conferring a means of self-delineation of objects, of "statement without syntax," photography gave the impetus to a delineation of the inner world. Statement without syntax or verbalization was really statement by gesture, by mime, and by gestalt. This new dimension opened for human inspection by poets like Baudelaire and Rimbaud le paysage intérieur, or the countries of the mind. Poets and painters invaded this inner landscape world long before Freud and Jung brought their cameras and notebooks to capture states of mind. Perhaps most spectacular of all was Claude Bernard, whose Introduction to the Study of Experimental Medicine ushered science into le milieu intérieur of the body exactly at the time when the poets did the same for the life of perception and feeling.

It is important to note that this ultimate stage of pictorialization was a reversal of pattern. The world of body and mind observed by Baudelaire and Bernard was not photographic at all, but a nonvisual set of relations such as the physicist, for
example, had encountered by means of the new mathematics and
statistics. The photograph might be said, also, to have brought to
human attention the subvisual world of bacteria that caused Louis
Pasteur to be driven from the medical profession by his indignant
colleagues. Just as the painter Samuel Morse had unintentionally
projected himself into the nonvisual world of the telegraph, so
the photograph really transcends the pictorial by capturing the
inner gestures and postures of both body and mind, yielding the
new worlds of endocrinology and psychopathology.

To understand the medium of the photograph is quite im-
possible, then, without grasping its relations to other media, both
old and new. For media, as extensions of our physical and nervous
systems, constitute a world of biochemical interactions that must
ever seek new equilibrium as new extensions occur. In America,
people can tolerate their images in mirror or photo, but they are
made uncomfortable by the recorded sound of their own voices.
The photo and visual worlds are secure areas of anesthesia.