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THE MYTH OF TOTAL CINEMA

Paradoxically enough, the impression left on the reader by Georges Sadoul's admirable book on the origins of the cinema is of a reversal, in spite of the author's Marxist views, of the relations between an economic and technical evolution and the imagination of those carrying on the search. The way things happened seems to call for a reversal of the historical order of causality, which goes from the economic

infrastructure to the ideological superstructure, and for us to consider the basic technical discoveries as fortunate accidents but essentially second in importance to the preconceived ideas of the inventors. The cinema is an idealistic phenomenon. The concept men had of it existed so to speak fully armed in their minds, as if in some platonic heaven, and what strikes us most of all is the obstinate resistance of matter to ideas rather than of any help offered by techniques to the imagination of the researchers.

Furthermore, the cinema owes virtually nothing to the scientific spirit. Its begetters are in no sense savants, except for Marey, but it is significant that he was only interested in analyzing movement and not in reconstructing it. Even Edison is basically only a do-it-yourself man of genius, a giant of the *concours Lépine*. Niepce, Muybridge, Leroy, Joly, Demeny, even Louis Lumière himself, are all monomaniacs, men driven by an impulse, do-it-yourself men or at best ingenious industrialists. As for the wonderful, the sublime E. Reynaud, who can deny that his animated drawings are the result of an unremitting pursuit of an *idée fixe*? Any account of the cinema that was drawn merely from the technical inventions that made it possible would be a poor one indeed. On the contrary, an approximate and complicated visualization of an idea invariably precedes the industrial discovery which alone can open the way to its practical use. Thus if it is evident to us today that the cinema even at its most elementary stage needed a transparent, flexible, and resistant base and a dry sensitive emulsion capable of receiving an image instantly—everything else being a matter of setting in order a mechanism far less complicated than an eighteenth-century clock—it is clear that all the definitive stages of the invention of the cinema had been reached before the requisite conditions had been fulfilled. In 1877 and 1880, Muybridge, thanks to the imaginative generosity of a horse-lover, managed to construct a large complex device which enabled him to make from the image of a galloping horse the first series of cinematographic pictures. However to get this result he had to be satisfied with wet collodion on a glass plate, that is to say, with just one of the three necessary elements—namely instantaneity, dry emulsion, flexible base. After the discovery of gelatino-bromide of silver but before the appearance on the market of the first celluloid reels, Marey had made a genuine camera which used glass plates. Even after the appearance of celluloid strips Lumière tried to use paper film.

Once more let us consider here only the final and complete form of the photographic cinema. The synthesis of simple movements studied scientifically by Plateau had no need to wait upon the industrial and economic developments of the nineteenth century. As Sadoul correctly points out, nothing had stood in the way, from antiquity, of the manufacture of a phenakistoscope or a zoötrope. It is true that here the labors of that genuine savant Plateau were at the origin of the many inventions that made the popular use of his discovery possible. But while, with the photographic cinema, we have cause for some astonishment that the discovery somehow precedes the technical conditions necessary to its existence, we must here explain, on the other hand, how it was that the invention took so long to emerge, since all the prerequisites had been assembled and the persistence of the image on the retina had been known for a long time. It might be of some use to point out that although the two were not necessarily connected scientifically, the efforts of Plateau are pretty well contemporary with those of Nicéphore Niepce, as if the attention of researchers had waited to concern

itself with synthesizing movement until chemistry quite independently of optics had become concerned, on its part, with the automatic fixing of the image.

I emphasize the fact that this historical coincidence can apparently in no way be explained on grounds of scientific, economic, or industrial evolution. The photographic cinema could just as well have grafted itself onto a phenakistoscope foreseen as long ago as the sixteenth century. The delay in the invention of the latter is as disturbing a phenomenon as the existence of the precursors of the former.

But if we examine their work more closely, the direction of their research is manifest in the instruments themselves, and, even more undeniably, in their writings and commentaries we see that these precursors were indeed more like prophets. Hurrying past the various stopping places, the very first of which materially speaking should have halted them, it was at the very height and summit that most of them were aiming. In their imaginations they saw the cinema as a total and complete representation of reality; they saw in a trice the reconstruction of a perfect illusion of the the outside world in sound, color, and relief.

As for the latter, the film historian P. Potoniée has even felt justified in maintaining that it was not the discovery of photography but of stereoscopy, which came onto the market just slightly before the first attempts at animated photography in 1851, that opened the eyes of the researchers. Seeing people immobile in space, the photographers realized that what they needed was movement if their photographs were to become a picture of life and a faithful copy of nature. In any case, there was not a single inventor who did not try to combine sound and relief with animation of the image—whether it be Edison with his kinetoscope made to be attached to a phonograph, or Demenay and his talking portraits, or even Nadar who shortly before producing the first photographic interview, on Chevreul, had written, "My dream is to see the photograph register the bodily movements and the facial expressions of a speaker while the phonograph is recording his speech" (February, 1887). If color had not yet appeared it was because the first experiments with the three-color process were slower in coming. But E. Reynaud had been painting his little figurines for some time and the first films of Méliès are colored by stencilling. There are numberless writings, all of them more or less wildly enthusiastic, in which inventors conjure up nothing less than a total cinema that is to provide that complete illusion of life which is still a long way away. Many are familiar with that passage from *L'Éve Future* in which Villiers de l'Isle-Adam, two years before Edison had begun his researches on animated photography, puts into the inventor's mouth the following description of a fantastic achievement: ". . . the vision, its transparent flesh miraculously photographed in color and wearing a spangled costume, danced a kind of popular Mexican dance. Her movements had the flow of life itself, thanks to the process of successive photography which can retain six minutes of movement on microscopic glass, which is subsequently reflected by means of a powerful lampascope. Suddenly was heard a flat and unnatural voice, dull-sounding and harsh. The dancer was singing the *alza* and the *olé* that went with her *fandango*."

The guiding myth, then, inspiring the invention of cinema, is the accomplishment of that which dominated in a more or less vague fashion all the techniques of the mechanical reproduction of reality in the nineteenth century, from photography to the phonograph, namely an integral realism, a recreation of the world in its own

image, an image unburdened by the freedom of interpretation of the artist or the irreversibilty of time. If cinema in its cradle lacked all the attributes of the cinema to come, it was with reluctance and because its fairy guardians were unable to provide them however much they would have liked to.

If the origins of an art reveal something of its nature, then one may legitimately consider the silent and the sound film as stages of a technical development that little by little made a reality out of the original "myth." It is understandable from this point of view that it would be absurd to take the silent film as a state of primal perfection which has gradually been forsaken by the realism of sound and color. The primacy of the image is both historically and technically accidental. The nostalgia that some still feel for the silent screen does not go far enough back into the childhood of the seventh art. The real primitives of the cinema, existing only in the imaginations of a few men of the nineteenth century, are in complete imitation of nature. Every new development added to the cinema must, paradoxically, take it nearer and nearer to its origins. In short, cinema has not yet been invented!

It would be a reversal then of the concrete order of causality, at least psychologically, to place the scientific discoveries or the industrial techniques that have loomed so large in its development at the source of the cinema's invention. Those who had the least confidence in the future of the cinema were precisely the two industrialists Edison and Lumière. Edison was satisfied with just his kinetoscope and if Lumière judiciously refused to sell his patent to Méliès it was undoubtedly because he hoped to make a large profit out of it for himself, but only as a plaything of which the public would soon tire. As for the real savants such as Marey, they were only of indirect assistance to the cinema. They had a specific purpose in mind and were satisfied when they had accomplished it. The fanatics, the madmen, the disinterested pioneers, capable, as was Berard Palissy, of burning their furniture for a few seconds of shaky images, are neither industrialists nor savants, just men obsessed by their own imaginings. The cinema was born from the converging of these various obsessions, that is to say, out of a myth, the myth of total cinema. This likewise adequately explains the delay of Plateau in applying the optical principle of the persistence of the image on the retina, as also the continuous progress of the syntheses of movement as compared with the state of photographic techniques. The fact is that each alike was dominated by the imagination of the century. Undoubtedly there are other examples in the history of techniques and inventions of the convergence of research, but one must distinguish between those which come as a result precisely of scientific evolution and industrial or military requirements and those which quite clearly precede them. Thus, the myth of Icarus had to wait on the internal combustion engine before descending from the platonic heavens. But it had dwelt in the soul of everyman since he first thought about birds. To some extent one could say the same thing about the myth of cinema, but its forerunners prior to the nineteenth century have only a remote connection with the myth which we share today and which has prompted the appearance of the mechanical arts that characterize today's world.

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