Charles Baudelaire versus Doctor Frankenstein

During the nineteenth century, in a series of fairly distinct and generally spectacular stages, the way was cleared for a major aspiration, for what can perhaps be seen as the carrier wave of the bourgeois ideology of representation. From Daguerre's Diorama to Edison's project of a Kinetophonograph, each of the technologies that positivist historiography sees as a series of advances converging on the Cinema, was intended by its technicians and perceived by its publicists as one more step towards the Recreation of Reality, towards the realisation of a perfect illusion of the perceptual world.

The reconstruction 'as if you were there' of famous natural disasters or architectural monuments in the Diorama (just like the art of Madame Tussaud, contemporaneous with it) is an (ideo)logical extension of the *trompe l'œil* scene painting at which Daguerre excelled, as was the invention of photography, to which his name, along with that of Niepce, remains attached. After this, each new achievement was perceived by the ruling ideology in the area as *supplying a deficiency:* thus, the presentation at the London Exhibition of 1851 of the *Stereoscope,* an apparatus for which there was immediately an extraordinary craze (250,000 sold in three months) was greeted in the following terms by a contemporary: '... photography, reinvigorated, perfected and crowned by the stereoscope, is so superior to its former self that the day will soon be here when all photographic pictures ... will come ... in pairs to reproduce in all their truth, in all its gentle or harsh beauty, immaterial and living nature' (Moigno 1852, pp.9-10; cit. Deslandes 1966, p.67). And Baudelaire, sworn enemy of the naturalistic ideology of representation, railed against 'these thousands of greedy eyes bent over the holes of the stereoscopes as if over peepholes to the infinite' (1965, p.153). Let me anticipate the results of my investigations and reflections: I believe it was this aspiration to three-dimensionality that was satisfied by

the blossoming of the Institutional Mode of Representation from around 1910, and that the latter continues to satisfy it more than all the ephemeral re-appearances of red-and-green or polarising spectacles, raster screens, etc.

That other 'lineage' constituted by the succession of graphic animation devices, from Plateau's Phenakistiscope to Reynaud's Praxinoscope, had a similar reception, as, *a fortiori,* did all the attempts to link together, however imperfectly, these various strategies for the reconstitution of reality: 'The stereoscope gives the sensation of three-dimensionality to objects, the Phenakistiscope that of movement. The Stereofantascope or Bioscope, as its name implies, gives at one and the same time the sensations of three-dimensionality and of movement, or the sensation of life.'[1]

And of course, Edison's wish to link to his phonograph an apparatus capable of recording and reproducing pictures, fulfilling a dream of 'grand opera being given at the Metropolitan Opera House at New York ... with artists and musicians long since dead' (Edison 1895), is not just the ambition of an astute captain of industry; it is also the pursuit of the fantasy of a class become the fantasy of a culture: to extend the 'conquest of nature' by triumphing over death through an ersatz of Life itself.[2]

Later I shall examine some of the ways this genuine collective drive was delayed and sidetracked in the first decade of the cinema, before the constitution of the Institutional Mode of Representation whose genealogy it is my intention to trace. We shall see how that constitution occurred under the ægis of the reproduction in the field of the cinema of the theatrical, pictorial and literary modes of representation that had been prized by the bourgeoisies of Europe and the Americas for more than a century in 1915. And we will see how the series of advances towards the system of representation reigning by and large over the cinema today arrived to fill *deficiencies* that are in the last analysis analogous with those the bourgeois ideology of representation felt when confronted with the Daguerrotype or the Phenakistiscope.

But we shall also see that for a decade this ideology found it hard to master the cinema, and that, thanks to this 'failing' and the contradictions it gave rise to, something else developed, which I shall have to try to define when the time comes. For the

moment, however, there is another factor to be examined, one which contributed directly to the invention of moving photographic pictures, but also helped to cause the important 'detour' made in an otherwise ineluctable historical movement; I must go back and examine the relations between scientific and technological research on the one hand, and what, following C.W. Ceram (1965), is usually called the 'archæology of the cinema' on the other.

****

Photography was invented just as painting, with Turner in particular, was 'changing spaces', as, in Francastel's words, it ceased to give the patron 'a view of a piece of land to dominate' (1977, p.170). This 'proprietary' dimension of the representation of space emerging in the quattrocento is unquestionably taken over by photography throughout the second half of the 'bourgeois century' in the portraits, still lives and genre pictures denounced by Baudelaire (1965, p.153), even if, as Francastel also emphasised, photography helped, through its impact on innovatory artists, in the gradual destruction of the system of representation inherited from the Renaissance.

But it is impossible to reduce the diachrony of this system, so tightly bound up with the rise of bourgeois power, to a mere symbolic and ideological instrumentalism. Panofsky (1953, pp.86-7) has demonstrated in Leonardo's anatomical experimentation the dialectical links beginning to be forged between artistic and scientific practices in Renaissance Italy, and, in the same study, suggested other such links in the centuries that followed:

> Anatomy as a science (and what applies to it applies to all the other 'descriptive' disciplines) was simply not possible without a method of preserving observations in graphic records complete and accurate in three dimensions. For, in the absence of such records, even the best observation was lost because it was not possible to check it against others and thus to test its correctness and, no less important, its general validity. It is no

> exaggeration to say that in the history of modern science the invention of perspective, coupled with the nearly simultaneous emergence of the multiplying arts, marks the beginning of a first period; the invention of the telescope and the microscope that of a second; and the invention of photography that of a third. In the descriptive sciences illustration is not so much the elucidation of a statement as the statement itself.

Indeed, if the researches that culminated in the invention of photography corresponded in immediate awareness to an ideological drive, it is just as clear that this new technology objectively answered a need of the descriptive sciences of the period (botany, zoology, palæontology, astronomy, physiology). At the same time, it should not be forgotten that the economic expansion and accession to political power of the bourgeoisie were closely linked to advances in the sciences and in technology, and that hence by evoking the strictly scientific effects of some instrument or mode of representation we are by no means leaving the historical terrain of the relations of production. Here, therefore, no more than anywhere else, can one set scientific practices apart from ideological ones without the utmost care.

Turning for a moment to another current contributing to the prehistory of the cinema, i.e., the search for a pictorial but non-photographic illusion of movement, beginning with optical illusions like the Thaumatrope and culminating in a kind of dead-end with Reynaud's Praxinoscope, here too we can see a dialectical relationship between science and ideology.

The English scientists studying the persistence of vision who, around 1825, discovered the principle of the Thaumatrope—a disc the rapid rotation of which perceptually superimposed two images, one drawn on each of its sides—do not seem to have tried to locate their discovery in the movement towards naturalistic representation. For them it was nothing but an illusion and its designation as such was inseparable from the desired effect. In fact, the applications they suggested for it seem to have been primarily pedagogic, either directly, to teach about the phenomenon of persistence of vision, or symbolically, as a memory aid in teaching other things.[3]

The crucial studies of the great researcher Plateau, also

concerned with the persistence of vision (to the extent of losing his sight in attempts to gaze at the sun) suffered a similar downgrading. But in parallel with the process that made his Phenakistiscope an enormously fashionable toy, the latter did, unlike the Thaumatrope—and this suggests the existence of a historical threshold—come to find a place in the Frankensteinian ideology. The Austrian scientist Stampfer (1833, p.11; cit. Deslandes 1966, p.37), simultaneously perfecting a disc like the Phenakistiscope but without knowledge of Plateau's work, praised it in the following terms: 'It is clear that in this way it is possible to represent not only the different movements of a human being or animal, but also machines in motion or even longer lasting actions, theatrical scenes or pictures from life.'

Alongside a claim that prefigures the representational vocation of the cinema institution, this formulation contains an allusion to potential technical and scientific applications. But on the one hand, only an *analytic* description of animal or human movement (or that of machines) could be of interest to the science of the period, for which mere representation was *redundant*—as we shall see with Janssen, Marey and Londe—and on the other, the Phenakistiscope and its successors (the Zoetrope and the Praxinoscope) constituted a *regression* on the level of graphic representation (they essentially adopted the flat-tint engraving techniques of the *Images d'Epinal* or the caricatures in the illustrated press). That is why such inventions were abandoned to the children of the bourgeoisie as 'educational toys' (we shall see later the importance to be attached to the privileged connections between these children and certain modes of representation which, right through the nineteenth century, continued to deviate in these essential respects from those that engaged the serious attention of their parents).

Despite all the Stereofantascopes, Phasmatropes and Omniscopes whose ingenious inventors sought, like the alchemists of the middle ages, the Great Secret of the Representation of Life (notice the appeal to the very significant term Bioscope), the first technologically decisive steps were taken under more modest auspices. On the one hand there was a rather curious team formed by a Californian millionaire governer and race-horse breeder, and an English photographer fascinated by the

photographic freezing of movement, who first joined forces to perfect training methods for a pedigree trotter—on the other a top French scientist who also had no interest in the representation of the movement of life but only in its analysis. I believe this detour via scientific and technical practices in which photography ceased to be a substitute for academic painting and became, as Baudelaire wished, 'the servant of the sciences' (1965, p.154), was to have a certain impact on the early cinema.

It is true that Muybridge's status seems somewhat ambiguous today, that there was much of the showman about him. But the use he made of his Zoogyroscope—derived from the Phenakistiscope and later rechristened the Zoopraxinoscope—to animate shots of a galloping horse at the end of the lectures he organised (notably in Parisian salons in 1881) was simply to 'prove the excellence of the method for the analysis of movement that he had perfected: the analysis was accurate because from it he was able to achieve a synthesis and reconstitute the real appearance of the subjects he was studying' (Deslandes 1966, p.101). For the first pictures obtained by Muybridge *were not believed.* That is perhaps one of the most symptomatic features of his experiment. Even Meissonier, the great equine painter, steeped in the codes of representation of academic painting thanks to which the West as a whole was persuaded of the phenomenal identity of a certain idealisation of the movement of the horse and Reality, refused for a time, we are told (Foster-Hahn 1973, p.91), to believe in the authenticity of the documents Muybridge had published. This was perhaps the first time that 'photography—the possibility of mechanically recording a picture in conditions more or less analogous to those of vision—revealed not the real character of traditional vision but, on the contrary, its systematic character' (Francastel 1977, p.44). Need I add that all those—and there seem to have been many of them in Paris—who found these pictures unrealistic also found them *ugly.* This sentiment was shared by Marey himself, moreover, who later made the following remark about Muybridge's pictures: 'Is it not that the ugly is only the unknown, and that the truth seen for the first time offends the eye?' (Marey 1895, p.183).[4] This first break between photography and the codes of representation of the 'naturalistic' painting of the nineteenth century made by Muybridge seems to me to be

absolutely crucial, for, from a certain point of view, all the work of the 'Great Pioneers of the Cinema' was to consist of restoring to moving photography the 'beauty'—that of bourgeois painting, but also of bourgeois theatre and the novel—which Muybridge's innocent procedure had robbed it of. In a certain sense, of course, the act of passing these snapshots one after another to prove their *veracity* already resulted for the first spectators in London and Paris in their reintegration into the domain of Beauty. But if we are here closer than is generally realised to Lumière's founding procedure, we are also at the antipodes of the IMR. And it can even be said that a true history of the gestation of the latter must trace the itinerary from this flat, remote silhouette of a trotting horse, however 'real' its movement, to the carefully modelled shot of Al Jolson tossing off his famous sentence 'You ain't heard nothin' yet!'

Technologically speaking, Marey's efforts, deriving like Muybridge's from the Phenakistiscope (via Janssen's Photographic Revolver), lie in the direct line of the great Frankensteinian dream of the nineteenth century: the recreation of life, the symbolic triumph over death. But the man and his works were in some sense innoculated against the virus of representation by the ideology then suffusing his discipline. For Marey, and the physiology of his period, animals, and hence men, are machines: 'Living beings have been frequently and in every age compared to machines, but it is only in the present day that the bearing and the justice of the comparison are fully comprehensible' (1874, p.1). A vulgar and mechanistic materialism whose utility to the ruling classes in the era of wild capitalism is clear—Sadoul (1973, t.I, p.76) underlines the fact that the investigations into the graphic inscription of movement undertaken at the beginning of his career by the future inventor of the Chronophotographe[5] enabled him to find a 'way to subordinate man more closely to the machine, since his *odographe* is nothing but the first "spy in the cab", familiar to railwaymen and lorry drivers.'[6] It might be added that the other aspect of his earliest endeavours—the graphic analysis of animal and human movements—opened the way to Taylorism.

It was their mechanistic materialism that made Marey and Londe (at any rate until the international enthusiasm for the

Kinetoscope) ferocious opponents of the synthesis of movement. In 1899, Marey could still write about *moving photographs:* 'But after all, what they show, our eyes could have seen directly. They have added nothing to the power of our vision, subtracted nothing from our illusions. But the true character of a scientific method is to supply the inadequacies of our senses or to correct their errors. To do so chronophotography must therefore renounce the representation of the phenomena such as we see them.' And he concluded that 'only slow and fast motion are of any interest for scientific synthesis' (Marey 1899; cit. Sadoul 1973, t.I, p.100). Albert Londe, a photographer and, in 1891, the inventor of a twelve-lens camera designed for medical research, shared the same strict viewpoint: 'Leaving aside the curiosity aspect that enables us to reproduce various scenes, there is no doubt that seeing these series leaves us in exactly the same position as we are before the model itself' (1896, p.726; cit. Sadoul 1973, t.I, p.100). It is gratifying, but also instructive, to compare such declarations with those of Dziga Vertov—'we cannot improve the making of our own eyes, but we can endlessly perfect the camera' (1984, p.15)—or Jean Epstein—'a documentary shot describing in a few minutes twelve months in the life of a plant ... seems to free us of terrestrial, i.e., solar time, of the rhythm to which we seemed ineluctably bound' (1946, pp.49-50). But the comparison is only meaningful in the context of an analysis of the objectively real but highly complex links between a whole 'anti-illusionist' aspect of the cinema before Griffith and the global critique made by Vertov, Epstein, Dulac and others of the cinema usually said to have begun with Griffith.

Moreover, Marey, with his customary obstinacy in research, following his photographic rifle and before his film Chronophotographe—correctly regarded as the first moving picture camera—made a third invention running directly counter to linear, analogical representation. This was the plate Chronophotographe, which produced the first stroboscopic photographs, synchronic decompositions of movement on the surface of a single picture. This is perhaps the clearest material trace among all those that locate Marey outside the Frankensteinian tendency. Let me also cite the following blind spot, in the same sense: the system of arresting the film by friction he insisted on retaining

and which precisely prevented him from obtaining from his second Chronophotographe projections able to produce the illusion of continuity, because the images jumped about so much: Marey, as he himself said, did not care.

It is true that in 1892-3, spurred on nonetheless, it seems, by the successes of Edison, he did try to perfect a machine 'to project the synthesis of movement in an effective way' (Marey 1898, p.24). But having run into difficulties in transforming an apparatus which was poorly adapted in principle to the task, he quickly abandoned this experiment in an undertaking he regarded as secondary.

****

So far, my reading of the history of the cinema is not basically in contradiction with the classic perspective. I have simply been concerned to bring out certain features I believe will make what follows clearer. However, my claim that Lumière's works—and at any rate the characteristic picture they gave rise to—reflect an attitude closer to that of Marey than to that of Daguerre may seem more surprising. For the Cinématographe Lumière was universally perceived as the culmination of the long quest for the 'absolute', for the secret of the duplication of life, a few milestones in which I have just singled out. But to hold such a view is to ignore precisely the fact that the efforts of Janssen, Marey, Muybridge and Londe are evidence of an ideological configuration quite different from the one inspiring the achievements of the Daguerres, Dubosqs and company: it is to ignore the detour through applied science of which the achievements of Lumière and his cameramen are simply, in the last analysis, a continuation: it is also to neglect the essential features distinguishing the early films of W.K.L. Dickson—closer to the Frankensteinian tradition, and to be discussed in the next chapter—from most of the films shot by Lumière and the cameramen he trained.

Only after several months of trial and error did Louis Lumière, supported by the apparatus of research and manufacture

provided by the firm producing sensitive plates and films that he and his brother Auguste had made the most important in Europe, succeed where so many other more isolated and less well-endowed investigators had failed. The first subject to be shot on celluloid film by the new camera in 1895 was **Sortie d'usine** ('Employees Leaving the Lumière Factory'—the first version, not included in the Lumière catalogue). Its mode of shooting, a mode clearly inscribed in the image itself and needing no resort to intentionalism for its reading, seems very significant to me in relation to the contribution Louis Lumière was to make as a film-maker to the cinema of the first ten years.

This first subject consists, like all the earliest films, of a single *view* (shot). It shows the workers, men and women, of the Lumière plant leaving work, and also the exit of the carriage of the owners. 'The camera was set up in a room on the ground floor of a building,' explains François Doublier, an assistant of the Lumières, so that the 'subjects' would not be 'distracted by the sight of the camera' (cit. Pinel 1974, p.415). The framing chosen is such that the figures occupy about half the height of the screen when they move towards the frame edge to leave the field of vision. Although a wall occupies half the picture, the sense of space and depth which was to strike all the early spectators of Lumière's films is already present in the contrast between this wall blocking the background to the left and the movement of the crowd emerging from the dark interior on the right, its perspective emphasised by a framing which brings out what seem to be the supports of the roof. Once the workers had begun to leave the camera was started, and cranking continued until there was no more film in the camera, i.e., for about a minute (55 feet at about 16 frames per second).

Thus, as well as this being a decisive experiment made with the prototype of this historical camera, it also represents an experiment in the observation of reality; as we would put it today, it was a matter of 'catching' an action, known in its overall lines beforehand, predictable within a few minutes, but random in all its details, which randomness was deliberately respected by concealing the camera.

It is all these characteristics, adopted in a large number of the films of the 'Lumière school', linked to the 'slice-of-life' content

of so many of their views, that have led to Lumière acquiring the reputation of having been the 'first documentarist', the first champion of a 'direct' or 'actuality' cinema. And this is a perfectly justifiable standpoint.

But I should like to examine these same characteristics (and also some others) in the light not of conceptions and practices which often grew up much later, but in the perspective of that short period of the primitive cinema.

Thus, this subject's characteristics are a certain breadth of the field of vision and a certain height of the 'actors' in the frame, thanks to the distance between the camera and the people filmed and the focal length of the lens used, and also a rigorous frontality. Now, as we shall see, these features reappeared constantly in the years to come, they mark almost all films between 1900 and 1905, and then eventually came to be felt by the most self-aware pioneers of the IMR to be obstacles to be overcome.

But what is the source of the choices that presided over the shooting style found in this film as in so many others? First, undoubtedly, practices then dominant in still photography. Georges Sadoul (1964, p.51) has emphasised how much **Repas de bébé** ('Baby's Dinner') and many other scenes of Lumière family life preserved on film by Louis Lumière resemble the photographs of his own family he found in an attic. And it should not be forgotten that Louis Lumière, co-director of a firm which had practically created the amateur photography market in Europe by the release of his first invention, the famous 'Etiquette Bleue' plates, was himself a very experienced 'amateur' photographer. But here, and even more in the innumerable street scenes that were to predominate in the successive catalogues of the company, we are dealing with a mode of photographic representation popularised by the picture postcard. This is the 'urban landscape' made possible, like the experiments of Marey and Muybridge, only by the appearance on the market of high-speed emulsions (as opposed to rural landscapes, of course, which were already accessible to the collodion wet plate process, whose limitations also helped produce the frozen portraits and genre pictures of the 'first generation' of photographers). What transformations was this mode of photographic representation to undergo as a result of its contact with the Cinématographe, and, more generally, when it came to

be inscribed in the first filmic practices? The moving urban landscape was to be characterised by a maximalisation of the 'polycentrism' of a picture already free of the centripetal rules of academic painting.[7] In other words, neither the street scenes nor the other general views that succeeded them spontaneously offer the reader's guide that would allow their complex content to be grasped and enumerated, especially at a single viewing. For, once the 'subject' has been designated—by its title in the Lumière catalogue—what is the content of a film like **Sortie d'usine**, like **Arrivée d'un train à La Ciotat** ('Arrival of a Train at La Ciotat'), or like **Place des Cordeliers (Lyon)**? Only an exhaustive listing of all that can be seen in the picture (which is what the first newspaper accounts tried to provide) can give an answer to this question, which could easily give rise for each of the Lumière films to a text at least as prolix as Raymond Roussel's *La Vue*. But it was a standard practice at the earliest projections (and especially at those provided at the four corners of the earth by the Lumière cameramen) to run the films several times in succession, and one should not, I think, reduce this practice to the mere desire of the new audiences for a repeat of the 'shock'; these images carry inscribed in them the need to be seen and reseen, it is inconceivable that an audience of the period, any more than one of today, could have reckoned that they had seen them definitively after seeing them once, in the way that today we can say we have seen the film on last week at our local cinema which we will not go to see again precisely because we have seen it (and *consumed* it). Here we are touching on one of the basic contradictions between the primitive cinema and the IMR, one to which I shall return.

But it would be narrow and reductive to treat the 'Lumière picture' as a mere avatar of the postcard. Not only did it become the model for thousands of 'documentary' films in the first ten years of the cinema, but certain of its features are also found in one whole aspect of French narrative film-making from Zecca and Alice Guy to Perret and Feuillade.

Taking into account certain subjective factors (the ideology, education and all the activities of Louis Lumière and his brother Auguste) as well as the objective factors described above, the production and influence of this model picture can be linked with the 'scientistic' tendency manifested by Muybridge, Marey, etc., a

tendency which seems to have made all these great researchers of the end of the archæological period immune to the seductive dream of total representation, probably because that dream is, precisely, a *spiritualist* one.

But the Lumière brothers saw themselves throughout their lives as researchers, as scientists. Their researches were, of course, applied ones. Auguste devoted most of his life to medical research. As for Louis, I agree completely with Vincent Pinel's estimate that his real life's work was the colour photography process called Autochromie, on which he began work in 1891 but which he did not perfect until 1907. Moreover I regard it as highly revealing as to the attitude he took to his work, an attitude diametrically opposed to that of an Edison or a Demenÿ, that the first presentation of the Cinématographe outside the laboratory was given as an addendum to a lecture devoted in the main to the projection of colour transparencies:

> Louis Lumière had come to give a lecture on the Photographic Industry, on the Company of which he was a director, and on the attempts to industrialise the Lippmann colour photography process to which a large part of his research work was devoted at the time. However, at the end of the lecture there followed an impromptu presentation of a 'projection Kinetoscope' as the proceedings describe it. The three Lumières, all present at the projection, were more surprised than anyone by the wave of enthusiasm that greeted the projection of a single film: **Sortie d'usine**. The success obtained by this short subject was, to their astonishment, greater than that of the fixed colour projections (Pinel 1974, p.411).

Moreover, a few weeks later, Louis again presented a film 'as an encore' to a colour demonstration, and once again was surprised by the reactions.

But it is above all Lumière's attitude to his subjects, the framing that generally allows ample space for the development of the action in all directions, that reveals a quasi-scientific attitude. The scene in fact seems to unfold before his camera rather like the behaviour of a micro-organism under the biologist's microscope or the movement of the stars at the end of the astronomer's

telescope. Nor is it without interest that that first film, **Sortie d'usine**, was re-filmed five months later to test a technical improvement, in exactly the same conditions as the first time. Of course it was a shot within arm's reach, as it were, but the fact that it was reproduced as precisely as possible seems to me to confirm my thesis about Louis's attitude to his work.

Of course, all the films conforming to this type were not shot with a concealed camera. In **Arrivée des congressistes à Neuville-sur-Saône** ('Disembarcation of Photography Congress Delegates at Neuville-sur-Saône'), the conferencees unselfconsciously take their hats off to the camera, and, looking at the various versions of **Arrivée d'un train à La Ciotat**, it seems possible that Lumière asked his wife to take a different path for each 'take'. But these films and all the other 'documentary tableaux' that share in the constitution of the Lumière model seem to me to derive in the end from the same procedure: to choose a framing as likely as possible to 'catch' a moment of reality, then to film it without any attempt to control it or to centre the action.[8] In this respect, moreover, I can only formally deny the thesis proposed by Georges Sadoul and other historians following him, that with **Arrivée d'un train à La Ciotat** Louis Lumière prefigured classical editing. This thesis, based on an analysis of frame stills—always a dangerous procedure if films are to be treated as a socio-phenomenal reality, which implies the end-result of cinematic projection—is of a piece with the overall approach of linear historiography, which attaches great importance to 'first times'. In fact, the result is to conceal the specificity of a procedure in which chance plays so large a part that it could not but produce such a succession of 'shot scales', but for which the way such successions demand to be read had nothing to do with what was to form the basis for the 'editing codes' (the stills so conveniently stationary in a book go by very quickly during projection).

Towards the end of his life, Louis Lumière confided in Georges Sadoul: 'My endeavours were endeavours of technological research. I never did what they call "direction" (*mise-en-scène*). And I can't see myself in a modern studio' (Sadoul 1964, p.107). '"In the cinema, the age of technicians is over, this is the age of theatre." On another occasion,' says Sadoul, 'I used the word "direction" in talking about his films and he raised his eyebrows.

It was clear that he holds that direction is not appropriate in a film' (ibid., p.100).

These declarations are, of course, perfectly compatible with the ideology and practice of 'documentary', which Lumière has been said to have initiated. Nevertheless I believe, as Vincent Pinel acutely suggests (1974, p.420), that one should speak rather of a practice and an ideology closer to those of amateur film-making (as it developed after the appearance on the market around 1900 of sub-standard-gauge cameras and films) than to those of, say, the GPO Film Unit. No doubt Lumière did make a number of technological contributions to the promotion of the Frankensteinian dream, not only in his invention of the Cinématographe but also in an improvised attempt at 'direct synchronisation' (at the Lyon Photographic Congress), in the giant screen of the 1900 Exposition, and in a three-dimensional cinematic process presented at the Cannes Festival in 1935. But in all we know of him, throughout his life he never fell victim to the lyrical dream of analogical representation, the mythology of victory over death. He and his brother belonged by their education to the same rationalist tradition as Marey and Londe, and it was this tradition that so decisively overdetermined films that were to exert a real hegemony over production and consumption internationally for a number of years, helping to point the latter into a path that was soon to seem a side track. The next chapter offers a very convincing proof of this in that strange phenomenon, 'Hale's Tours', which demonstrates so clearly that Lumière's 'hyper-realism' was *problematic*.

Of course, the Cinématographe was nevertheless recruited at the outset and in the footsteps of the Diorama and the Stereoscope in the service of the Frankensteinian ideology, whatever may have been the private feelings of its inventor or the objective characteristics of the figuration it established. A famous article printed in *Le Radical,* one of the two minor papers that announced the historic première in the Salon Indien (the established press failed to note the occasion) is highly suggestive: 'Whatever the scene thus taken, and however large the number of individuals thus surprised in their everyday activities, you see them again natural size, in colour [sic], with perspective, distant skies, houses, with a perfect illusion of real life.... Speech has

already been collected and reproduced, now life is collected and reproduced. For example, it will be possible to see one's loved ones active long after they have passed away' (cit. Bessy & Lo Duca 1948, p.47). And it is noteworthy that the only other article on the matter that came out that December 30th 1895 (in *La Poste)* ends on the same mortuary note: 'When these cameras are made available to the public, when everyone can photograph their dear ones, no longer in a motionless form but in their movements, their activity, their familar gestures, with words on their lips, death will have ceased to be absolute' (cit. ibid., pp. 47-8).

Thus form, movement, colour (added because *it goes with the others,* even if this was to anticipate by a number of years),[9] all, for these bourgeois journalists, come together to fulfill the supreme fantasy: the suppression of death.[10]

NOTES

1 Dubosq, addition to patent no.13,609, November 12th 1852; cit. Deslandes (1966), p.73.

2 'Only in the sixteenth century did this modern pattern of death become the norm. In the Counter Reformation and the funereal and obsessive games of the Baroque, but especially in Protestantism which, by individualising each conscience before God and decathecting collective ceremonies, hastened the process of the individual fear of death. It too was to give rise to the mighty modern undertaking to exorcise it: the ethic of accumulation and material production, the sanctification by investment, labour and profit usually called the "spirit of capitalism" (Max Weber: *The Protestant Ethic*)—that machine of salvation from which intra-worldly ascesis has gradually withdrawn, giving way to worldly and productive accumulation without changing the purpose: protection against death.... Death has become a "right-wing", individual and tragic notion, "reactionary" in regard to movements of revolt and social revolution' (Baudrillard 1976, pp. 273-4).

3 'It has occurred to me that this amusing toy might be made instrumental in impressing classical subjects upon the memory of young persons .... Why can we not ... thus represent the Metamorphoses of Ovid; or what say you ... to converting the fleet of Æneas into sea-nymphs ...?' (Paris 1827, pp.11-12; cit. Deslandes 1966, p.29). This is the spirit in which the Thaumatrope became a fashionable toy, associations of this kind becoming the basis for 'comic quatrains, puns and political allusions' (Deslandes 1966, p.28).

4 He went on as follows: 'These positions, as revealed by Muybridge, at first appeared unnatural, and the painters who first dared to imitate them astonished rather than charmed the public.' The painters in question were Meissonier and, of course, Degas.

5 Muybridge's inspiration in the realisation of his first camera system.

6 Marey was aware and proud of the possible applications of his work. In *Movement* (1895), he explains that his analyses will enable soldiers to carry heavier gear longer distances.

7 Certain very acentric urban landscapes painted by Manet or Degas may probably be regarded as a kind of reaction from photography onto the most advanced painting of the period.

8 I am not here referring to **Repas de bébé** (and the other Lumière films deriving from it) or **Arroseur et arrosé** (properly **Le Jardinier et le petit espiègle**, 'The Gardener, the Bad Boy and the Hose' or 'Watering the Gardener') and other comic sketches. The latter, of course, open onto different horizons.

9 As we can see here—and will see again with Gorky (p.23 below)—colour has a place in the Frankensteinian dream. To this extent Lumière contributed to that dream, following Ducos du Hauron and others, with his Autochromie process. However, non-photographic colour was to appear very quickly in the cinema, without a decisive step being thereby taken towards institutional presence. In fact colour has never, even in our own day, provided more than an *extra reality* in the IMR.

10 In a famous article (Bazin 1967), André Bazin traces this 'mummy complex' back to the ancient Egyptians, regarding it as a kind of universal drive. As such it serves as a legitimation for his own attachment to bourgeois illusionism.