

CINEMA AND REVELATION: FOR PROFESSIONAL EYES ONLY

Michael Barchet, Friedrich Schiller Universität - Jena

Cinema has been abducted. It has been robbed from the nurturing womb of science, kidnapped from the respectful estate of empirical science to be raised in the smudgy quarters of popular tastes, fast money and cultural pretense. Barely an infant, cinema has been stolen by the showmen, the merchants and the artists. If cinema's "pre-history" was to be adapted for a screenplay, the plot of abduction could be its central narrative conflict.¹ A host of characters like Edward Muybridge, whose story "has always seemed to illustrate a peculiarly American mixture of applied science, sportsmanship, and pleasure,"² and the notorious Dr. Doyen, whose "teaching films" recorded amputations and other feats of surgery to be publicly exhibited in early 20th century France³ could stand for the proverbial "foul apples to spoil the whole barrel," since their activities provided the means for the instrument of science to be purloined in the sense of Edgar Allan Poe's famous incriminating letter - precisely for the difficulty the eyes of science have shown in recognizing it ever since.

Needless to say, cinema was thoroughly corrupted by the company it was forced to keep. Since the abduction occurred in the most impressionable phase of development for positivisms most promising - however certainly neither only nor last - child, its most promising future never was: to be the instrument of science in the service of enlightenments defining quest of revealing the rational order of nature and thus produce the disciplinary knowledge that enables technological control. Instead, as many a source is telling us - the abducted cinema and its culture industrial siblings were instrumental in eventually bringing down enlightenment's project all together.⁴

While many of the little gadgets that emerged during the 19th century were designed to feed popular pleasures in illusionist movements, the "machines of the visible" built by scientists like Janssen, Marey and Muybridge were meant after all, to be devices of compensation; almost therapeutic in their design to redeem an ailment of the human sensorium that separated empirical scientists from most crucial knowledge. They were meant to extend the reach of the visible into a realm that most recalcitrantly remained imperceptible - the realm of motion, notably the body in motion, that most seriously remained unseen in its precise workings,⁵ since the incorporated sense of vision was simply unable to register the details of movement beyond or below a certain speed. Analytical machines of inscription like Marey's photographic gun or Muybridge's series of still cameras promised and demonstrated the ability to transport the observational gaze's need to measure, map and calculate into those realms of natural laws that had defended their secrets most stubbornly against the penetration of surveillance. These machines claimed to produce evidence and knowledge by revealing the empiri-

cally sound answer to serious quests for truthful information, such as: “Is there a moment when a horse’s legs all leave the ground?”

In the hands of the showmen and artists the very flaw these analytical machines of inscription and measurement were designed to compensate, the very insecurity as to the veracity of perceptual information, the very imperfection of the human senses as empirical instruments became the basis for a practice of deception. Instead of revealing the true workings of nature by arming the flawed senses with technological devices, the instrument was used to feed upon these very flaws and perceptual lacks to produce the mimetic illusion of motion for an audience seeking visual and other pleasures and craved for tricks being played on their senses. Magic tricks and conjurers acts the instrument of science was made to perform, its purity spoiled, its innocence corrupted, its reputation damaged and destroyed beyond repair.

Nothing but mocking salutes have been paid by the kidnappers in return. Such as the thoroughly distorted views of science and scientists, the Dr. Caligari’s, Frankenstein’s and *Metropolis*’ Rotwang that popular film has issued countless times as characters and scenarios. Nothing but slander and mockery also in the relentless analytical onslaughts by theorists of film like Metz, Baudry and Comolli, that have read the applied science of the cinematic apparatus’ technologies as the means of ideological naturalization⁶ and defining instances of the cinema of science, such as Muybridge’s “Human and Animal Locomotion” as the birthplace of hard core porn.⁷ Perhaps even the plot of abduction so prominent in early narrative cinema, such as Cecil Hepworth’s *Rescued by Rover* (1904), D.W. Griffith’s *Rescued from the Eagle’s Nest* (1908) and *Adventures of Dolly* (1908) are nothing but mockery, since they celebrate and demonstrate the growing mastery of the story-tellers over the positivist recalcitrance their prey had inherited from empiricism. And the most cutting mockery being perhaps that those films’ happy endings, the reunion of the kidnapped child with the family it belongs to by right of birth, has forever been tantalizingly withheld, precisely for the undecided answer to the “academic question” of due practice in studying cinema – within the disciplinary accountability of a “cinema science” or the heterogenous, trans-disciplinary terrain of “cinema studies.”

Perhaps the sense of resentment evoked by the following passage from the notes for the film program *Origins of Scientific Cinema*⁸ should not be surprising then: “This series of films,” the unidentified author proclaims, “provides evidence that proves that cinema’s roots lay in science.” Issued as a contribution to the celebrations erupting around cinema’s 100th birthday, this speaker (and the film he announces) seems not only after a record to be set straight, but a birthright to be reclaimed – spurred certainly not only by the various versions of cinema’s history that relegate the empirical machines of 19th century firmly in a somewhat hastily sketched terrain of “pre-history,” “forerunners” or “prototype” but as much by the salacious flippancy of understating remarks like that of Marshall McLuhan, who continues the tradition of mockery by noting in passing, that “physiologists did have much to do with the development of film.”⁹

This tale could stop here, if its sole purpose was to illustrate the “dead end” empiricist theories of instrumentality represent for the search of cinema’s true roots and epistemological belongings. Surely the plot of abduction suggested here, could be related to its Peircean notion, yet primarily the tale is meant to stress a territorial mapping of cultural domains that is so routinely acknowledged in the accounts of cinema’s emergence as a mass medium, that its implications seem to be all but invisible: namely that the transformation of the measuring instrument of inscription into a public spectacle does

not merely articulate the tension between scientific research and technological “application” – a most common plot of abduction by the way – but is analytically to be described as a structural shift of address – as opposed to the strangely biologist metaphor of a “birth.”

Yet even if the screenings of 1895 are rarely mistaken for an origin resembling birth, they most consistently provide the demarcation to decisively separate the history of (popular) film from its (scientific) pre-history in the instance of the singular, decisive event of “going public.”

Strangely enough it is the radical critique of the myths of cinematic origins that the theories of the cinematic apparatus conducted from the late 1960s on, that exhibit a most peculiar insistence on the “first instance of visibility.” While intended to denounce the accounts of technological determinism that tell cinema’s history as a series of inventions along the path of inevitable and rational progress, Jean-Louis Comolli, perhaps one of the most radical proponents of the apparatus theorists, announces that “the cinema is born immediately as a social machine” in 1895 by virtue of its instant success as public spectacle.¹⁰ He continues with the provocative statement, that “one might as well propose, that it is the spectators who invent cinema.”¹¹

Yet with privileging not only the moment of the first public presentation – a moment of revelation so to speak – but with the claim for an exclusive determination of cinema’s history by its presence and libidinal economy as popular spectacle a number of problems arise. Thus Lisa Cartwright in her critique of Comolli maintains a number of blind spots being produced by this conception. Eclipsed are thus the “epistemological and ideological baggage [...] the techniques of power and knowledge [...] carried into the post-1895 popular cinema from the laboratories of our cinematic patriarchs.”¹² For Cartwright an even more crucial oversight is articulated by Comolli’s often quoted, yet somewhat generalized notion of the 19th century “frenzy of the visible” documented in those “hundreds of little machines” designed to produce the illusion of motion. “Many of these machines,” writes Cartwright,

*The numerous cameras, projectors, and compound instruments that emerged over the course of the 19th century, in fact were no mere little machines, the silly contraptions of amateur inventors; they were fairly sophisticated instruments used in laboratories of physics, chemistry, and physiology. Understanding the social context of the laboratory – its technology, its economy, its own cultural mode of spectatorship – is no simple matter of evoking an unspecified artisanal science or a generalized technology.*¹³

And it is the last instance of Cartwright’s lists of invisible subjects – the laboratory’s-cultural mode of spectatorship, where the blind spot of cinema’s exclusive conception as public spectacle may well become crucial. If devoid of a conception of its historical and contemporary mode of what may be called “professional spectatorship,” the dispositive of the public spectacle is bound to be blind for its implications as another. If the rigid protocols of empirically produced knowledge, the modes of reading that transform cinematically produced materials into databases of technological inscription are outside the scope of cinema studies’ scenarios, these kinds of readings are all but left to the hands of those, who practice them and apply their results. In as much as it is nothing less than the scientific conception and production of “life” by means of empirical observation that was at stake in 19th century physiology and if the suspicion has any

ground that contemporary practices of medical imaging are more than indebted to these 19th century conceptions (as Barbara Duden suggests)¹⁴ it may well be asked if cinema studies can afford to be satisfied with the plot of popular cultures triumph of abduction, since it may serve as a convenient discursive demarcation that allows important social practices to remain unseen – unrevealed so to speak to the eye of an analytical gaze that could question their foundations and implications.

If this is to mean a fundamental re-orientation of cinema studies in a new terrain of visual studies, as Lisa Cartwright recently suggested and Ulrike Hick's massive and extremely well researched *Geschichte der optischen Medien*¹⁵ convincingly practices from the vantage point of early cinema is surely beyond the scope of this essay. Similarly beyond this scope are issues of institutional implications or new methodological orientations. What I propose therefore for the remainder of this essay is an initial query into a topic of research that could produce knowledge about various modes of professional spectatorship of cinema. For momentary lack of a better term, the settings for this mode could be called "non-public spectacle" – in order not to be confused with the dispositive privacy of "home viewing."

Professional spectators

While no account of film's history is complete without the tale of those first spectators seeking cover under the seats of the *improptu* screening room, because they feared to be run over by the train closing in on them from the screen, the outlines for the character of the professional spectator – early or contemporary – is rather vague. Should we imagine him as the air force staff sergeant in uniform scanning the film recorded by the B-52 gun camera to validate the effectivity of the bomb raid? Is it the good doctor in white garments viewing the chronophotographical document of a tumor growth? The engineer in his standard white collar office outfit concentrating on the slow motion footage, that shows a given material's reaction to extreme mechanical strain and reveals the point where it finally breaks? Or even this film studies professor, replaying a single scene of *Citizen Kane* for the third time on her/his VCR to complete her/his notes on its shot-countershot structure?

We can place him (or her?) hardly in the iconography of spectatorship film has developed itself historically as part of its diegesis¹⁶ – with a certain yet significant exception perhaps to be made for the character of the "computer wizard" in much recent film and television – the technician manipulating images on the computer screen, zooming in on details, calling up mysterious programs of enhancement that all the sudden clearly show the detail that solves the case or reveals the location of the perpetrator. Neither has the study of cinema's history, that has given us a relatively clear and differentiated image of the popular spectator over time provided all that much information about professional spectators, aside from the analytical viewer produced by the disciplinary protocols of film analysis and the cultural character of the film critic.

Despite this lack of information there are a few differences we can ascribe to the professional spectator as opposed to the spectator in public spectacle: she/he has been formally and more or less extensively trained for the task of watching film by an institution other than the cinema other audio-visual media, such as university, a program of vocational training or the military. Rather than "mere pleasure" her/his experience of

viewing is meant to produce some form of positive knowledge, beyond the information communicated by a film's narrative. There is a set of more or less standardized rules and procedures that allow this knowledge to be articulated, communicated and brought into a given epistemological horizon. The contract that transforms visual reception to knowledge and information has been made explicit, has been installed in the viewing subject by means of disciplinary work on her/his senses, her/his behavior, her/his "technique" prior and distinct from the actual experience of watching the particular film and distinct from interactions with other media. It has been constructed as a normative protocol of reading such as the training film studies students or oncologists receive. Much of this training has been geared towards the reduction of complexity and the installation of strategic gazes.

Thus the member of the air force reconnaissance unit, who screens the footage taken over enemy territory, is not asked for a description of the beauty of nature he encounters in this footage; nor for an essay about the aesthetics of abstraction in aerial photography. His gaze is trained to produce signatures of troops, military equipment and installations. To reduce the complexity of the image he has been disciplined by training to read signs in a pre-determined way. There are most likely manuals, curricula, institutions of education that teach this particular mode of reading. To some extent the mode of reading is implemented in the technical equipment itself – such as automatic devices that record time, location and spatial identifiers. A particular medium of inscription may be used, such as infrared film, that transforms differences in the emission of heat into visual information. Whatever visual pleasure this spectator may derive from his experience of viewing, there is no place for it in the registers of knowledge, his work is designed to produce. The register of pleasure is most likely displaced into a code of professional conduct. While the beauty of the bullet in extreme slow motion, the path it slices into the gelatin mass of a suddenly liquified air may not escape the engineer, who has the task to gather the data needed for the construction of bullet proof steel, the dispositive of her/his strategic viewing cannot be interested in this beauty but will produce correlatives of speed, strength and other physical qualities compatible to computable relations between the elements in a closed system.¹⁷

By means of this institutionally determined and rigidly controlled closed circuit of production and reception, scientific cinema of this sort may well exhibit one of its defining differences to popular forms – namely that it institutionally secures dispositives of "preferred reading" in the sense of Stuart Hall's ground-breaking conception.¹⁸ Perhaps one of the defining features of the "Non-public spectacle" would be the discursive and disciplinary structure that is geared towards the exclusion of negotiated or oppositional readings, that is geared then towards an "ideal of communication," where the circulation of messages remains firmly under the tight and flawless control of a rigorous and disciplined normative code. While popular media can never secure this, the very basis of professionally trained spectatorship seems to be designed to exclude all but preferred readings. Which could describe the process of "corruption" once material made for professional gazes becomes part of popular spectacle or a mode of professional spectatorship that works within a different register of producing knowledge – precisely that its reading may not be determined any longer, may be "misunderstood" and "abused" to challenge and ultimately damage the ways it generates "ideal communication." This not only echoes the suspicions Marey articulated about the use of the traditions of pictorial representation for the presentation of scientific data;¹⁹ it could also

address whom else but cinema studies with the challenge to embark on yet another endeavor of abduction – since the institutionalized modes of revelation by means of empiricist “ideal communication” have hardly died with cinema’s instant success as public spectacle.

- 1 Many a cultural movement, suspicious and impatient of the very popularity of film, such as the German Film Reform Movement in the teens of the 20th Century, the film theories of the Soviet Revolution as embodied in writings so different as Dziga Vertov’s and Sergei Eisenstein’s or later the various documentary movements have implicitly argued this plot and claimed their own designs for cinema the more in keeping with its “true” heritage.
- 2 L. Williams, *Hard Core: Power, Pleasure, and the “Frenzy of the Visible”* (Berkeley: University of California Press, 1989), p. 37.
- 3 See M. Weise, *Medizinische Kinematographie* (Dresden: Steinkopff, 1919), p. 125. Weise reports that Doyen claimed to use the cinematographic records of his surgery to review his own performance and thus optimize his technique. Why these films were made public then and could thus become early sensations of horror, awaits an explanation. A film made in 1908 depicting Dr. Doyen during the performance of an amputation is part of the compilation *Origins of Scientific Cinema. Vol III: Early Applications* (D/F/I, V. Tosi, 1994).
- 4 Adorno/Horkheimer’s notorious chapter on the “Culture Industries” in: Th. W. Adorno, M. Horkheimer, *Die Dialektik der Aufklärung* (Frankfurt: Suhrkamp, 1994 [1947]) certainly being one of the most forcefully told tales of degeneration told about popular cinema in this context.
- 5 And most pressingly needed to be seen not only in the context of physiology replacing anatomy as the key medical science in the 19th century but also in the context of increasing industrialization, that entailed a more and more detailed division of labor that prepared the ground to concepts like Frederik Winslow Taylor’s *Principles of Scientific Management* which used chronophotographic motion studies for the analysis of work flow.
- 6 Although historians like B. Salt, *Film Style and Technology: History and Analysis* (London: Starword, 1993 [1983]) have done their best to reveal this scandalous mistreatment as entirely groundless misunderstandings.
- 7 Williams, *Hard Core: Power, Pleasure, and the “Frenzy of the Visible,”* cit., pp. 34-57.
- 8 Tosi, *op. cit.*
- 9 M. McLuhan, *Understanding Media* (New York: Signet, 1964), p. 249
- 10 J.-L. Comolli, “Machines of the Visible,” in T. de Lauretis, S. Heath (eds.), *The Cinematic Apparatus* (London: St. Martin’s Press, 1980), pp. 121-122.
- 11 Comolli, “Machines of the Visible”, cit., p. 122.
- 12 L. Cartwright, *Screening the Body. Tracing Medicine’s Visual Culture* (Minneapolis: University of Minnesota Press, 1995), p. 6
- 13 *Ibid.*
- 14 B. Duden, *Disembodying Women: Perspectives on Pregnancy and the Unborn* (Cambridge: Harvard University Press, 1993).
- 15 U. Hick, *Geschichte der optischen Medien* (München: Fink Verlag, 1999). In a mode analogous to J. Crary, *Techniques of the Observer* (Cambridge: Cambridge University Press, 1990), Hick traces historical shifts in the conception of visual perception. Yet – as opposed to Crary – posits the emergence of early cinema as the vantage point of her study.

- 16 Understandably narrative cinema has reserved professional film watching for professionals of the cinema industry. The screening room of the studio has quite frequently been a location in filmic narrative such as the sequences at the beginning of *Citizen Kane* (O. Welles, 1941), *Sullivan's Travels* (P. Sturges, 1941) or *La Nuit Américaine* (Fr. Truffaut, 1973).
- 17 Which of course is not to say, that a popular film like *The Matrix* (A. Wachowsky, 1999) cannot be interested in presenting its spectators the experience of bullets in slow-motion cinematography for pleasure.
- 18 S. Hall, *Encoding-Decoding* (1973), CCCS Stenciled Papers, no. 74 (London: Hutchinson, 1980), pp. 128-138.
- 19 See Cartwright, *Screening the Body. Tracing Medicine's Visual Culture*, cit., pp. 33-39.