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In Your Face:

Physiognomy, Photography, and the Gnostic Mission of Early Film

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Béla Balázs, writing in the 1920s, declared, “At present a new discovery, a new machine, is at work to turn the attention of men back to a visual culture and give them new faces.”¹ This claim exemplifies an almost forgotten utopian tradition of film theory, one that saw cinema not only as a new art form or a new language, but as a new instrument of knowledge. For theorists such as Balázs, the motion picture camera had the ability not only to capture reality, but to penetrate it as a new instrument of the visible which had a revelatory mission. We could call this potential for uncovering new visual knowledge the gnostic (from gnosis, knowledge) mission of cinema. For Balázs and other utopian theorists, the gnostic potential of the cinema was especially evident in the conjunction of the cinematic device of the close-up and the subject of the human face:

It is the “microphysiognomics” of the close-up that have given us this subtle play of feature, almost imperceptible yet also so convincing. The invisible face behind the visible has made its appearance. . . .²

One could find parallel quotes from other utopian theorists of the 1920s (as well as parallel ideas in Benjamin’s somewhat later essay, “The Work of Art in the Age of Mechanical Reproduction”), such as Vertov (“a shot of the banker will only be true if we can tear the mask from him, if behind the mask we can see the thief”) or Jean Epstein (“I am

sure . . . that if a high speed film were made of an accused person during his interrogation, then beyond his words, the truth would appear, unique, evident, written out”).³ [End Page 1]

I would like to use this detour into film theory to highlight something about the origins of cinema and this overdetermined fascination with the close-up and the human face. In earlier canonical accounts of film history, the close-up transformed cinema from a mere means of reproduction into a unique art form, a transformation often attributed to D. W. Griffith. Not only is this account discredited on factual grounds (Griffith did not invent the close-up, and in fact it occurs rather infrequently in the films he made for the Biograph Company, which are generally seen as the foundation of his later film style), it also obscures the complex archeology of the facial close-up in early cinema.⁴ A close examination of this archeology underscores the key role that the gnostic view of cinema played in both the invention and the form of early cinema.

Behind the gnostic impulse that motivates the invention and the practice of early cinema lurk ambiguous relations woven among visibility, technology, knowledge, representation, and entertainment in modern culture. Uncovering the role that capturing the face played in both cinema and its antecedents traces a saraband between seeing and knowing within the new visual terrain opened up by photographic technology, which could not only reproduce human eyesight but exceed it. At the center of this figure lies the expressive human face whose relation to knowledge and communication forms a central preoccupation of Western culture, serving as a pivot between individuality and typicality, expression and destiny, body and soul. The attempt to bring photography, and especially motion photography, to bear on this most polysemous of human objects reveals a crisis in understanding visual representation beneath a proclaimed confidence.

It is well known that close framings of human faces appear at the origin of cinema. The early Edison kinoscope films *Fred Ott's Sneeze* (shot in 1894) and the *May Irwin Kiss* (1896) frame figures at the waist in a manner that clearly emphasizes the transformations of their faces as they perform simple biological actions. Even earlier, one of the first cinematic or protocinematic apparatuses was fashioned by George Demeny in 1891 precisely to obtain a moving image of the human face (and especially the mouth as it spoke) in order to aid in teaching deaf children to speak.⁵ The Edison and Demeny motion pictures may seem to diverge sharply in purpose and audience (education versus entertainment; a small, specialized audience versus a mass one), but I would claim that they are in fact dialectically interrelated. Early cinema, whether designed as entertainment, pedagogical tool, or instrument of scientific investigation, maintained an important relation to the gnostic impulse, although often operating as parody.

The gradual perfection of still photography stimulated the pursuit of visual phenomena that might otherwise slip below the threshold of conscious observation and opened up new possibilities of visual knowledge. A continual attempt to make photography ever more sensitive to the ephemeral and instantaneous events of physical nature was a major

motivation for cinema's invention and perfection. Early cinema owes its gradual technical realization to this gnostic impulse driving the work of Muybridge, Marey, Londe, Demenÿ, and others. Beyond the technical invention of **[End Page 2]** photography, the origin of this impulse lies in a redefinition of the role of visual evidence and new methods for investigating the visual world. The successive ways the human face was categorized, investigated, and visualized in the pursuit of knowledge provides one way of tracing this gnostic impulse through to the cinema.



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Figure 1.

Close-up of Mae Marsh from D. W. Griffith's film *Intolerance*, 1916.

But the study of the face possesses its own history, as well as its own ambivalent relation to systems and methods of knowledge. Balázs's term "microphysiologies" invokes (with the added precision of "micro") the somewhat antiquated term "physiognomy," a science of facial classification that had been basically discredited by the twentieth century.⁶ In many ways the decline of this pseudo-evidence paralleled the growth in new methods of visual observation, such as photography. Physiognomy has its roots in texts from antiquity attributed to Aristotle and Pythagoras which trace the relation between physical appearance and character, a practice which ultimately derives from magical forms of interpretation and divination such as chiromancy. It finds its most influential formulation in the work of Giovanni Battista della Porta at the end of the sixteenth century in which the shape of the elements of the human face were interpreted by a series of analogies to animals, the elements, and the stars within a neoplatonic cosmic system. In this system of resemblances and affinities, the human face took on meaning by a series of metaphors which joined man's physical appearance to the powers which rule his soul and destiny via emblematic animals (e.g., facial resemblance to a lion indicates strength and hot temper) as well as the astral and planetary influences of astrology. As an exemplar of magical thinking, physiognomy worked on the basis of visual resemblance, tracing, as Foucault describes it, similitudes as "visual marks of invisible analogies."⁷

At the beginning of the modern age (and under the direct influence of Descartes), physiognomy became reinterpreted as a guide to visual representation in the arts, detouring from a means of knowing man's destiny to a system of aesthetic signification. The work of Charles Le Brun, first painter to Louis XIV, *Conférence sur l'expression* [End Page 3] *générale et particulière* from 1688 which assembled physiognomic principles as a method for the proper way for painters to portray emotion and character through facial expression, dealt both with facial structure, the traditional domain of physiognomy, and the more transient passions, the domain of facial expression rather than type. His discussion of the passions is modeled on Descartes's last work, *The Passions of the Soul* (1649), providing drawings for each of the simple and complex passions as Descartes had outline them, understanding his task in terms of Cartesian relations between mind and body: "Whatever causes passion in the soul creates also some action in the body. It is necessary to know which are the actions of the body that express those passions and what action is."⁸ In doing this, however, he placed himself in unacknowledged opposition to Descartes's own declaration that facial expressions are difficult to discern as signs of the passions and, being easily feigned, are often misleading.⁹ Le Brun's discussion of physiognomy, the structure of the face as a sign of character rather than as expression of passion, further developed traditional analogies between human faces and those of animals and the qualities they represented (see **Fig. 2**). As Patrizia Magli says, "In his links with ancient traditions, and in his merging them with more innovative trends, Le Brun both fell behind and preceded his own times."¹⁰



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Figure 2.

Physiognomic studies by Charles Le Brun, 1668, comparing the facial form and character of animals and man.

Physiognomy entered into the age of reason and sensibility (and strongly influenced both realist and romantic aesthetics of the nineteenth century) through the famous *Physiognomische Fragmente* of the Swiss theologian Johann Caspar Lavater, first published in 1775.¹¹ Basically a further systematization of the ancient tradition, Lavater's work no longer approached physiognomy as divination, but, developing Le Brun's understanding of body as the expression of the soul, presented the science as a means of deciphering the mysterious inner world through bodily signs.

Existing on the other side of Descartes's split between the mind and body, the Romantics believed Lavater's physiognomy reunited mind and body in an act of symbolic reading, as Novalis's notes on physiognomy reveal: "The religious essence of physiognomy. The divine and infinitely meaningful hieroglyphs of each human body The way in which these hieroglyphs have their occasional moments of revelation" (*PEN*, 102). The Romantics also recognized Lavater's method as revealing the unique qualities of each individual physiognomy, analyzing each face as a combination of individual elements rather than as a master table of analogies. Lavater's physiognomy exerted as much influence on aesthetics as on scientific discourse, and was **[End Page 4]** directly responsible for the increased popularity of the silhouette as a mode of representation. Not only did the silhouette accurately capture the facial profile so important in Lavater's method, its indexical process of production—directly tracing the shadow of its subject—announced the importance of new visual technologies in sciences of observation, directly anticipating photography. ¹²

While the tradition of physiognomy is complex, one can see a consistent drift in its conceptions as it moves from traditional systems of occult knowledge to a modern discourse with at least pretenses to being a science. Physiognomy became less of a system by which one reads an individual's fate inscribed in facial features through cosmic and symbolic analogies than a means of observation in which the face is mobile and expressive, revealing a person's accumulated history as much as predetermined fate (Lavater emphasized that a person's way of life could affect his physical appearance). ¹³ Features no longer embodied the coded writing of destiny. They spoke the language of emotion conveyed through expressions, the changeable signifiers of varying moods. The facial traits which reflected character served less as predictions of a person's future than as traces left by their profession or way of life, less occult symbols than the residue of a scientific logic of cause and effect. For instance, the French editor of Lavater, Dr. Moreau de la Sarthe, described the physiognomics of professions as a reflections of habitual behavior:

Skillful and very experienced surgeons have in their physiognomy a particular dominant trait, which comes from a habitual movement of raising the upper lip—which can be attributed the effort they make to resist the impression caused by the sight of suffering and pain which they have before their eyes during major operations. ¹⁴

But however systematized and rationalized, physiognomy still carried a promise of knowledge that verged on the occult. Since our reactions to faces seem immediate and untutored, physiognomy exemplified the Romantic concept of universal hieroglyphic language, more intuitive than analytical, a signifier that, far from being arbitrary, still carried the surplus value of visual similarity. It is no coincidence that one of the few attempts at film theory that preceded Balázs's, that of Vachel Lindsay, declared cinema to be a "hieroglyphic" art. ¹⁵

Physiognomy became a popular social science in nineteenth century Paris, where it provided a visual means to order the diverse and anonymous masses that surrounded the urban dweller. These typologies of observation greatly affected the novels of Balázs and the caricatures of Daumier and Grandville. ¹⁶ It was suggested that choosing a wife or hiring a servant should never be undertaken without the aid of physiognomic analysis. The physiognomic studies of Lavater and his disciples became transformed into the “physiologies” which appeared as a sort of literary fad in the 1840s. Somewhat broadening the physiognomies into a description of specific manners and lifestyles, these physiologies outlined the various “types” of Parisians, through a somewhat ironical “scientific” observation (*ACH*, 31–9). As Walter Benjamin has indicated, these physiologies attempted to reduce classes and professions to stable and recognizable stereotypes, reassuring to a petty bourgeois world view: **[End Page 5]**

The long series of eccentric or simple attractive or severe figures which the physiologies presented to the public in character sketches had one thing in common: they were harmless and of perfect bonhomie. Such a view of one’s fellow man was so remote from experience that there were bound to be uncommonly weighty motives for it. ¹⁷

Weighty indeed. The physiologies were a last gasp of a confidence in one’s ability to sort people into types that not only were stable but easily recognizable, an attempt that gained urgency as the fluid contours of a modern world made such methods of classification increasingly difficult. Balzac, who authored several physiologies, nonetheless was aware of the new precariousness of sort people into general types. He bewailed the fact that whereas previously, “the caste system gave each person a physiognomy which was more important than the individual; today the individual gets his physiognomy from himself” (*AHC*, 29–30).

2. The Illegible Face: Photography, Individuality, and Madness

We owe to M. Londe, the chemist of Salpêtrière, the following anecdote. . . . [Blanche] Wit[man] was in a state of [hypnotic] somnambulism, and [Londe] showed her a photograph of a view of the Pyrenees with donkeys climbing one side, and told her, “Look, this is your portrait; you are absolutely naked.” On coming out of the trance the patient saw by chance the photograph and, furious, to see herself there represented in a “state of nature,” threw herself upon it and destroyed it. ¹⁸

If the future of such social physiognomy as social science was doomed by the dissolving of the visual signs of caste, profession, and type (or their slipping below the threshold of the immediately recognizable), the extremely individualizing processes of photography allowed for a new positivist science of observation of the face and its expressions. The physiologies were accompanied by the growth in the art of caricatures, which were frequently used to illustrate them. But with the advent of photography the human face

became less a realm described in generalities (such as Moreau's description of surgeons) than a zone of intense scrutiny on an individual basis. An anonymous British author writing on physiognomy in 1861 saw the progress of the science as lying precisely in its use of photographs:

It is equally true that with such portraits and engravings of portraits as we have had, it has been utterly impossible to get beyond the nebulous science of a Lavater. We required the photograph. . . . It must be remembered that to give a general likeness is one of the easiest strokes of art. With a half-a-dozen lines the image is complete, as anyone may see in the million wood-engravings of the day; while at the same time it would be difficult to gather from these rough sketches, where two dots go for eyes and a scratch for a mouth, what is the precise anatomy of any one feature. So while we can accept as in the main truthful the portraits that have come down to us, it is impossible to place perfect reliance on any particular lineament. ¹⁹

In this new method of investigation of the face, rooted in individual faces and their transient momentary expressions, photography served as the optimal tool of investigation. From this new empirical perspective, physiognomy no longer served primarily **[End Page 6]** as a guide to aesthetic representation, but demanded the accuracy of new mechanical modes of image-making. ²⁰

A seminal figure in this research was G. B. Duchenne de Boulogne. Duchenne was a founder of neurology in France, the teacher and master of Jean-Martin Charcot. ²¹ Duchenne's pioneering work in the classification of neurological disorders was often based on his innovative use of electricity to stimulate directly muscles and nerves. His use of new technology for medical purposes also extended to photography, as he began in the 1850s to photograph the debilitating results of neurological diseases. He combined electricity and photography in his investigation of the mechanism of human facial expression which was published in 1862. Duchenne wished first of all to accurately map out the muscles of the human face which created the common expressions of emotion. Direct application of electrodes to the faces of human subjects allowed Duchenne to cause involuntary contractions of facial muscles. In this way Duchenne literally sculpted expression or grimaces on to the faces of his subjects. Photography could fix these momentary contractions and allow them to be studied at leisure, to be scrutinized and compared.

Duchenne's distance from the earlier physiognomies comes from both his positivist scientific ambitions and his use of modern technology. Instead of a permanent physical imprint of fate or character he sought to understand the face in motion, describing facial expressions as a mobile muscular phenomenon. This interest in motion set him apart from Le Brun who, as Duchenne stated, "represented the diverse aspects of facial expression produced by the emotions but without worrying about their laws of motion," as well as from Lavater who "entirely omitted the study of facial expression in movement" (*MHFE*, 4). ²² This interest in the phenomenon of **[End Page 7]** motion and the belief that the physical

effects of motion had laws indicate Duchenne's place within a modern line of scientific investigation that would lead directly to the invention of the cinema. What had seemed contingent and below the threshold of knowledge for the earlier physiognomists was precisely suited to the possibilities of new technology. The electrode could affect a facial muscle in isolation while photography could capture a facial contraction that was much too brief to be otherwise recorded (see **Fig. 3**). As Duchenne put it:



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Figure 3.

Duchenne de Boulogne demonstrating his electrode-induced expressions, 1862.

Skillful artists have tried in vain to represent the faces of my subjects; for the contractions provoked by the electrical currents are of too short a duration for an exact reproduction of the expressive lines that develop on the face to be drawn or painted. Only photography, as truthful as a mirror, could attain such a desirable perfection.

[*MHFE*, 36]

Since Duchenne's major goal was to identify the muscles and motor nerves in the face and their role in a variety of expressions, he literally tried to reveal the "invisible face behind the visible." Yet for Duchenne, following the Cartesian tradition, facial expression had another interior—the spirit. "The spirit is thus the source of expression. It activates the muscles that portray our emotions on the face with characteristic patterns" (*MHFE*, 1). But in Duchenne's experiments the spirit as the motive force of facial expressions was replaced by the electrode that caused the face involuntarily to "speak the language of emotions and

the sentiments” (*MHFE*, 1). However artificial such expressions might be when electrically induced for purposes of demonstration and investigation, Duchenne had no doubt that he was investigating a language that was universal and God-given:

In the face our Creator was not concerned with mechanical necessity. He was able in his wisdom or—please pardon this manner of speaking—in pursuing a divine fantasy, to put any particular muscles into action, one alone or several muscles together, when he wished the characteristic signs of the emotions, even the most fleeting, to be written briefly on man’s face. Once this language of facial expression was created, it sufficed for him to give all human beings the instinctive faculty of always expressing their sentiments by contracting the same muscles. This rendered the language universal and immutable.

[*MHFE*, 19]

But if Duchenne represents a modern scientist devoted to empirical observation through the use of modern technology rather than a traditional physiognomist tracing mystical signatures and resemblances, the strong tie between the study of the face and the codes of aesthetic representation continue to compel aspects of his work. Duchenne hoped to reformulate Le Brun’s work and provide artists with documentary proof the visual language of the human emotions.²³ He divided the photographic plates that illustrated his these into “Scientific” and “Aesthetic” sections. In place of his predominantly male models imaged in the scientific section, the aesthetic section makes use exclusively of a female model, while the close framing of the face frequently gives way to dramatic tableaux in which the female model is posed in costume with props. **[End Page 8]**

Duchenne glosses these images with narrative situations that might explain or specify the emotions he evokes with his electrode. If somewhat less aggressive in their framing and less agonized in their facial contortions, these images seem even more bizarre as the electrode and its manipulator intervene into the stages sets and poses of genre painting. The photographs display disturbing tensions between the conventional sentiments and narrative of the poses and scenarios and a nightmarish scene of a meta-narrative of control and technological manipulation which the intervening electrode indicates. Further complicating his simple narratives, Duchenne deconstructs the unified effect of the facial expression by attempt to create distinct expressions within different zones of the face. For instance, he describes plate 80:

The young lady photographed in this figure is visiting a poor family; we recognize, from her tender laughter (cover the left side of the face) or from her kind smile (cover the right side of the face) that she is touched by the misery and suffering of this unhappy family, and that this sentiment has inspired an act of charity.

[*MHFE*, 118]

Although Duchenne frequently apologizes for the lack of aesthetic value and physical beauty of his older male model who appears frequently in the scientific section of the work, he never explains why he exclusively uses a female model (whom he describes as neither pretty nor ugly and mentions was nearly blind) in the aesthetic section.²⁴ Undoubtedly a belief that a female model would be more pleasing to viewers corresponded with his desire in this section “to please those who possess ‘a sense of beauty’” (*MHFE*, 102). However, more deeply imbedded cultural conceptions of gender clearly operate here, relating the female model not only the aesthetic, but to an atmosphere of drama and mystery created by the use of the fictional settings and narrative scenarios in this section. Although his experiments in electrically creating different expressions on each side of the face appeared in the scientific section as well, here it becomes a nearly constant practice, as if the conjunction of a woman model and drama led naturally into a succession of facial expressions and moods. For instance, his gloss on plate 77 describes not only diverse expressions but a typology of female desire: “Earthly love at right and celestial love at left. Ecstasy of human love, by covering the left half of the face; gentle rapture of divine love (ecstasy of St. Teresa), by covering the opposite side” (*MHFE*, 104–5).

This division of the sides of the face into separate expressions became for Duchenne a means of expressing the ambivalence of a dramatic scene, as in his extraordinarily revealing discussion of plate 78 (see **Fig. 4**), which he elaborates with a complete drama:



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Figure 4.

Duchenne’s ‘little comedy’: an aesthetic study of female expression.

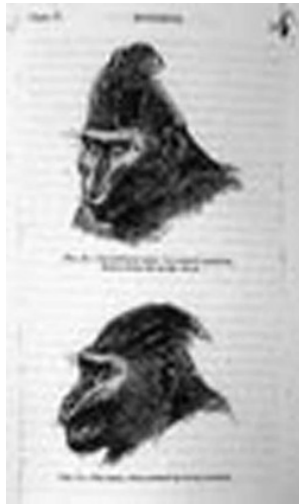
In Plate 78 I wanted to show a little comedy, a scene of coquetry, a gentleman surprises a lady while she is dressing. On seeing him, her stance and her look become disapproving (cover the bottom half of her face). Nevertheless, we note her nudity, which instead of covering she seems to reveal with a certain affectation. It is the mannered pose of her hand, which supports a rather overtly revealed bosom. All this betrays her coquetry. The young man was becoming more audacious, but the words “get out” pronounced in a **[End Page 9]** scornful way by the girl, stop him in his enterprise (see only the left side of the lower half of her face). The mocking laughter that accompanies the amorous rejection (see the right side of the lower half of the face) we believe to mean, “Conceited ass.” Perhaps she says also, much lower: “The fool, if he had dared . . .”

[MHFE, 111-2]

For Duchenne the face was an extremely flexible medium on which the spirit writes a translatable message of emotions in a language created by God himself. However, his investigation via an arbitrary stimulation of the diverse muscles of the face could also produce the face as a sort of collage in which contrasting emotions occupied different zones of the face. Duchenne also found that he could produce non-grammatical expressions which he termed grimaces, “where it was hard, sometimes nearly impossible, to make any meaningful interpretation” (MHFE, 17). Such grimaces serve only as the noise within his system of facial expression in which a mask of muscles sculpts the invisible impulses of the spirit. But the very bizarre nature of Duchenne’s aesthetic section may betray anxiety at the arbitrary expressions he has induced on the face by substituting electrical impulses for the passions of the soul. Narrative scenography imposes itself as a means of containing (though not dispelling) his own intervention, as if familiar situations and cultural clichés of feminine roles provided a context of ideologically reassuring recognizability necessary to allow the viewer to see these shocking demonstrations of the human face as the play of muscles as part of a visible “natural language.” In any case, it would seem **[End Page 10]** that Charcot learned the effectiveness of staging a scenography of female performers under the dominance of a male “operator” from his master.

Charles Darwin drew heavily on Duchenne in his 1872 study of *The Expression of the Emotions in Man and Animals*. He particularly praised the use of photography in the investigation of facial expression: “I have found photographs made by instantaneous process the best means, as allowing more deliberation.”²⁵ However, he strongly rejected as contrary to the principles of his theory of evolution, any claim that expressions were a language designed by the Creator in order to allow humans to communicate, as Duchenne had believed. Darwin tried to explain the communicative aspects and the forms of expressions through recourse to a deeper history than the personal one of habit or profession. Expression provided a link between men and animals (see **Fig. 5**). “With mankind some expressions, such as the bristling of the hair under the influence of extreme

terror, or the uncovering of the teeth under that of furious rage, can hardly be understood, except on the belief that man once existed in a much lower and animal-like condition” (EEMA, 12).



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Figure 5.

Simian expressions from Darwin’s *The Expression of the Emotions in Man and Animals*, 1872.

Darwin was probably unaware of the irony of this return to the most ancient form of physiognomy, the comparison between humans and animals. However, Darwin’s method was historical and evolutionary rather than analogical, discovering, like most nineteenth century systems of thought, the traces of the long duree of history on the forms of nature, rather than the timeless semantic tables of resemblance that guided della Porta and even Le Brun’s physiognomy. But Darwin also sought the survival of this evolutionary past in the present through a different sort of analogy. If the investigation of expression led directly to the extensive evolutionary past of man, he felt it essential to investigate not only man’s animal ancestors, but also human subjects whom he believed might be closer to this ancestry due to their distance from civilizing influences, such as the observation of infants—and of the insane—and of different races of man (EEMA, 13). Darwin’s investigation sought to strip the face of its civilized mask of convention and reveal a language of expression which derived from the struggle for survival and various forms of adaptation to environmental or physical forces. But to understand the laws of the human face a new importance accorded to faces that were somehow alien to “normal” human behavior. A science [End Page 11] of deviant faces took on a new importance, in contrast to physiognomy’s traditional search for the typical and ideal.

Facial photographs held a special place in the treatment of the insane, with Hugh W. Diamond pioneering the use of photographic portraits in both the study and treatment of the insane. The photographs which Diamond took at the Surrey County Lunatic Asylum in the 1850s were used not only in his public lectures on mental illness but in the therapy of patients using “the effect they [the photographs] produced upon the patients themselves” to help the progress of their cure (*FOM*, 21). Diamond’s associate Dr. John Conolly discussed these photographs in 1858 in an article entitled “Case Studies from the Physiognomy of the Insane,” in which he portrayed these faces as traces of a battle between original character and the physical effects of mental aberration. The idea of a physiognomy of the insane had already been described in 1838 by J. E. D. Esquirol who made whose of drawings of mental patients in order to trace similarities between them (*FOM*, 25–72). As Conolly’s essay shows, this was a system of description still indebted to the ancient forms of analogy and metaphor, but inflected by a modern concern for individual case history, clearly showing the influence of Lavater. ²⁶ Describing a pathetic case of what he termed “suicidal melancholy,” he portrayed the face as a battleground of emotional struggles:

The features are unrefined; but the wide and high head indicates intellectual qualities that cultivation might have improved; so as to control perhaps a now dominating ideality. The copious and disheveled hair, which we feel sure must be black mingled with grey, is parted with no care, but straggles in sympathy with the tortured brain. Those many and curved wrinkles in the brow are not wrinkles of ordinary trouble. The raised and equally curved eyebrows; the large melancholy, and the uplifted eyes, declare that the sense is fixed on some image of fear, which no other eye can detect; and the intensity of the prevalent emotion is forcibly expressed in all the other parts of the face. The upper eyelids disappear; the lower are strongly depressed; the muscles of the cheeks are drawn down, the lower lip being, as it were, spasmodically acted upon, showing nearly all the front teeth of the lower jaw. The chin has been scratched and scarred by her own fingernails. The very ears seem starting forward. Everything bespeaks terror.

[*FOM*, 37]

The face photographed becomes a text to be read by the male doctor employing a bewildering variety of interpretive means, ranging from deviation from norms of behavior (the unparted hair), to traces of past behavior (the scarred chin), through a range of analogies (the hair which “straggles in sympathy with the tortured brain”) to a general sort of allegorical method which sees the face as “bespeaking terror.” These faces stand primarily as deviant faces, horrifying visual evidence of the mental sufferings the subjects have undergone. Diamond underscored these aspects in assembling in one plate four photographs of a woman in different stages of illness and cure, in which the variety of expression seems perhaps less remarkable than the variety of clothing which clearly differentiates the deviant expressions from the controlled face of convention (see **Fig. 6**).



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Figure 6.

Engraving from photographs by Hugh Diamond of stages in a woman mental patient's cure, 1858.

Succeeding decades saw a general adoption of photography for medical and scientific purposes (the *Revue photographique des Hopitaux de Paris*, for instance, was [End Page 12] established in 1869), and towards the end of the century increasingly short exposure time allowed a relation between photography and the recording of motion for scientific purposes that moved asymptotically towards the invention of cinema.²⁷ Undoubtedly the most famous and complex use of photography to record facial movement and expression came from Jean-Martin Charcot and the *Iconographie photographique de la Salpêtrière*. In 1878 Charcot, the head physician of the Salpêtrière (a Parisian charity hospital for women), had installed there a Photographic Service complete with a glass roofed studio, and a photographic laboratory (*IH*, 47).²⁸ Albert Londe, who was placed in charge of the Photographic Service in 1884, lauded the gnostic possibilities of photography, describing the latest photographic plate as “the true retina of the scientist,” a means of seeing that could, in fact, be more sensitive than the human eye (*IH*, 35). Charcot’s greatest fame came from his description and treatment of hysteria. Documenting the behavior of hysterics was especially important since this elusive diseases exhibited a scenario of behavior rather than clearly isolatable physical symptoms (leading frequently to the claim that hysterics are simply malingerers who “mimicked” the symptoms of others to gain attention [*IH*, 36, 39]).²⁹ Charcot claimed to have discovered predictable patterns to this behavior (such as the succession of different physical actions in a consistent order which made up the hysterical fit), giving the disease a character that could be analyzed and diagnosed.

Observation was essential to the diagnosis of hysteria and photography increases this power of observation as well as providing its faithful record. Charcot had actually **[End Page 13]** compared his method to that of photography, declaring: “. . . in truth I am absolutely nothing but a photographer; I inscribe what I see.”³⁰ In diagnostic use medical photography mediated between the patient’s individual body and the general characteristics of the disease. Determining this general aspect, or *facies*, of a disease called for a specific use of photography. As Londe explained:

To determine the *facies* belonging to each disease, to each illness, to place it before the eyes of all, this is what photography is capable of. In certain doubtful or uncertain cases, comparing photographs taken in diverse places or at quite different times allows one to be sure of the identity of the illness of diverse patients whom one has not had under one’s care at the same time. This has been accomplished with great success by M. Charcot and the *facies* belonging to this or that illness of the central nervous system is now well-known.³¹

Visual demonstration as well as diagnosis played a key role in Charcot’s investigation of hysteria. Both were evident at his famous public “Tuesday Lessons” in which women patients and their symptoms were paraded before an audience made up of interns, doctors (such as the Viennese physician Sigmund Freud—who later overturned Charcot’s theory of hysteria—attending the lectures on a travel grant) and invited members of high society (including such luminaries as Henri Bergson, Emile Durkheim, Guy de Maupassant and Sarah Bernhardt).³² In these sessions Charcot not only displayed the symptoms of his female patients, but experimentally influenced their behavior through hypnosis, drugs, or various forms of physical manipulation (including, during photographic sessions, sudden exposure to a magnesium flash, as Ulrich Baer has stressed).³³

But the *facies* revealed by these means of investigation and observation was the paradoxical typicality of the deviant. Charcot used hypnosis to provoke effects similar to those his teacher Duchenne had induced by electrical current, occasionally invoking contradictory impulses within a patient so that “the subject found herself in some way divided in two” (*IH*, 228). Charcot also on occasion used electrodes to effect his hysterics, but found that such force was unnecessary to provoke facial contractions. Slight pressure from a simple metal rod would produce the same sorts of facial contractions Duchenne had induced by more powerful means.³⁴ Sudden loud noises, flashes of electrical light, or dramatic gestures on the part of the doctor could produce extraordinary physical results, from cataleptic postures to violent seizures.

The extremely theatrical nature of Charcot’s demonstrations and treatments, as well as his use of hypnosis, led to widespread suspicion and criticism of his methods and conclusions. Charcot’s critics portrayed him as the histrionic impresario of his mimicking hysterics, inducing symptoms through suggestion and training his subjects (knowingly or unwittingly) to perform for himself and his invited audiences.³⁵ The collapse of Charcot’s view of hysteria led to alternate scenarios, most obviously that of psychoanalysis, and one

can see Charcot's highly visualized and dramatic performances as an attempt to give this paradoxical disease a recognizable visual face, an attempt, on the cusp of modernity, to tie once more the act of seeing to the act of knowing. **[End Page 14]**

The role of photography in all of this is perhaps more complex than previous treatments, such as Didi-Huberman's, have indicated, as insightful as they have been. Charcot's patients and their symptoms were paraded before the camera as well as before interns and the public. These photographs were published in the three volumes of the *Iconographie photographique de la Salpêtrière* in 1876, 1877 and 1879. After a significant hiatus, the photographic series reappeared in a new format in 1888 as *Nouvelle Iconographie de la Salpêtrière*. These photographs include a number of facial close-ups, although framing including the posture and contortions of the full body predominates. However, in contrast to Diamond and other earlier photographers of mental illness there is no attempt to create a physiognomy of madness here. The *facies* of hysteria demands a specific etiology of an elusive disease. The contorted faces of women were fit into a pattern which made hysteria conceivable as a disease and visibly recognizable. Londe described the importance of facial close-up photography (see **Fig. 7**) in capturing the characteristics of the disease:



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Figure 7.

Illustration of facial contortions of hysteric patient from the *Iconographie photographique de la Salpêtrière*.

Certain modifications of the face which by themselves were not recognized as constituting in isolation a clear indication of a particular illness took on a very great importance when they were found over and over in similar sufferers. Unless one happened by chance to have patients show the same expressions at the same time, they might go unnoticed. However, with close-up photographs of them, one can make comparisons between a number of examples and deduce the typical modifications of different aspects.

[IH, 52]

Londe here perhaps knowingly recalls Bertillon's system of criminal photography which allowed the photographs of suspects and convicts to be compared in terms of physical characteristics and the identity of malefactors be established. However, as [End Page 15] in the case of Bertillon, we see that the satisfaction of pure visual recognition remains elusive. No one photograph could finger the guilty party or portray the *facies* of the disease. The act of recognition relies on comparison, and knowledge resides not in the single photograph, but within a vast photographic archives, cross indexed by systems of classification. ³⁶

The recent biographers of Albert Londe, Denis Bernard and André Gunthert have questioned Charcot's personal devotion to photography as a method of medical investigation. They point out that the *Iconographie* was instigated by Desiré Bourneville and that its hiatus coincided with Bourneville's departure from Salpêtrière for Bicetre in 1879. ³⁷ They also claim Bourneville rather than Charcot was the driving force behind photography at Salpêtrière, and that the photographic service as well as the *Iconographie* fell into stagnation until Londe took charge in 1884. ³⁸ From this perspective, Charcot's self-identification with the photographer may indicate he felt his own gaze was sufficient as the major device of visual investigation, rather than the photograph. As Bernard and Gunthert indicate, "The gaze (*regard*) and the image are not synonymous" (*IRAL*, 111). Photographic sessions at Salpêtrière took place without Charcot present, and the "most serious rival of the photographic plate remained the clinician's gaze" (*IRAL*, 62).

Londe, a devoted advocate of medical photography (whose book on the subject was published in 1893), understood that a photograph, in order to become scientific had be placed within a system. ³⁹ Each photograph had to find its place within a series. Besides the comparisons that a physician could make by rummaging through the *Iconographie*, Londe also explored the possibilities of serial photography to indicate the succession of actions typical of hysterical attacks. The need to obtain successive photographs led Londe to photographic inventions which brought him to the cusp of cinema, including a number of multi-lens cameras, capable of taking a series of separate images in rapid succession. His crowning apparatus possessed twelve lenses and was therefore able to take at brief intervals twelve images of an ongoing action. ⁴⁰ Such images inscribed a temporal progression into photography. Still photography in the late nineteenth century had gained a scientific and gnostic role not only through its iconic resemblance and indexical

reliability, but through its increasing mastery of the increments of time and its ability to freeze an instantaneous event, such as a sudden facial expression or the convulsions of an hysteric's limbs. The ambition of nineteenth century science to discover not only the characteristic lineaments of the face as interpreted by physiognomy, but the laws of motion and the temporal processes of the body and the face led directly to the technical invention of the cinema.

As a leader in bringing photography (and especially scientific and medical photography) to the attention of the public, Londe knew the motion analysis photographs of Eadweard Muybridge and the chronophotography of Etienne Jules Marey very well. A pioneer in the development of instantaneous photography, Londe was an enthusiast about the scientific possibilities of new photographic techniques.⁴¹ Not only chronophotography (the taking of series of stills in rapid succession to analyze the phases of a motion), but stereoscopic three dimensional photography were [End Page 16] employed by Londe to capture the symptoms of medical patients.⁴² In his drive to master the analysis of space and time through photography Londe seems to have created a counterforce to his subjects' bodies out of control—attempting to master on the level of technology what defied orderly behavior. But, like Marey, he, at least initially, found the *Cinematographe*, the device for projecting motion pictures to create an illusion of movement, a mere novelty bereft of scientific interest.⁴³ In place of photographic processes which could fix and analyze temporal processes in order to reveal phenomenon otherwise difficult to perceive, motion pictures seem simply to reproduce the experience of the normal eye witness.⁴⁴

For Londe, scientific photography mastered its visual subject, moving beyond the simple resemblance and illusion of motion that Lumière's *Cinematographe* offered. Through still photography's control of time, the hysteric fit was frozen, delivered to the physician's gaze with movement tamed. We find here, at the moment of the invention of cinema, a dilemma which thwarts any simple tracing of a linear progression in film's genealogy. The gnostic impulse pushes towards cinema's control of time and motion, but also expresses suspicions of its illusory potential. At this critical point, the bifurcation between cinema as a device of mass entertainment and its use as a scientific tool becomes evident, as the conflict between Marey and his assistant Demeny dramatized. However, one should not assume too quickly an absolute separation. The two impulses continue to infect each other, indicating less a parting of the ways based on principle than a crisis of representation based on the illusory power of technological imagery and a new mimesis of time. Cinema's destiny as a modern technological popular medium derives from this conflict, and continues to show its effects for at least its first decade.

How then are we to understand Londe turning his experimental photography on nonscientific subjects, photographing acrobats from the Hippodrome in stereo in 1887 and the tight rope walking act of Mlle. Barenco of the Nouveau Cirque in 1893 (see **Fig. 8**)?⁴⁵ Clearly such subjects were ideal for demonstrating the new powers of photography to capture action. The twelve images of la Barenco demonstrate her delicate control of balance in a manner that the naked eye, absorbed in the ongoing moment-to-moment

drama of her act, might not catch. But the sequence also anticipates the strong link that early cinema, as a popular art, will forge with vaudeville, circus and the attractions of popular culture.



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Figure 8.

Albert Londe's chronophotographs of Mlle. Barenco's balancing act, 1893.

If Marey and Muybridge stand as the best known and most influential of cinema's scientific progenitors, the focus of chronophotography on the face owes more to the experiments of Marey's assistant Georges Demenÿ whose attempt to bring the motion picture into the realm of show business (even before the Lumière brothers), led to the loss of his position as a researcher. Discussing his cinematic work some years later, Demenÿ still presented himself as a savant rather than a showman, claiming that for him, "the cinema was only a means of study momentarily rendering me the same service that a microscope provides for the anatomist."⁴⁶ Demenÿ served as Marey's *preparateur* and trusted assistant from 1881, when he had approached the renown physiologist and investigator of the science of movement about the application [End Page 17] of Marey's methods to a system of gymnastic training Demenÿ had been perfecting.⁴⁷ Demenÿ oversaw the construction and subsequent functioning of Marey's *Station Physiologique*. In 1891 Marey turned over to him a project brought to the physiologist by the director of the National Deaf Mute Institute to study the physical mechanics of speech. The director hoped that a series of chronophotographs showing the positions of lips and tongue during speech might aid deaf mutes learning to lip read and, hopefully, to speak.⁴⁸

For this project Demenÿ substituted a much closer camera position than had been customary for Marey's chronophotographic studies of the body in motion, framing speaking subjects above mid-chest. However, since the aim was not only analytical but synthetic—helping deaf mutes to imitate the processes of speech as well as observe them—devising a means of presenting these photographs in such a manner as to reconstitute

their motion became a primary issue in a way it not been for Marey's earlier motion studies. Attempting to create the illusion of a human face in motion, speaking, brought Demeny even closer to the cinema than Londe had ventured. While both Muybridge and Marey had also employed various means of reconstituting motion [End Page 18] from their analytical photographs, Demeny was certainly a pioneer in the production of motion pictures, even if his technology was heavily indebted to his mentor. He cut and pasted the images captured on the chronophotographic strips around the edge of a circular wheel based on an earlier "philosophical toy" for the production of the illusion of motion, the phenakistiscope (*PT*, 176). Two initial series of images were produced, both with Demeny himself (his eyes closed from the blinding light necessary for the brief exposure) speaking the emblematic phrases, "I Love You" and "Vive la France!" (See **Fig. 9**.) When this device was presented to the public in 1892 (three years before the *Cinematographe* and a year before the first public demonstration of Edison's kinetoscope), it generated a fervent interest which overwhelmed the pedagogical purposes for which it was designed.



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Figure 9.

Projected image of George Demeny's phonoscope, showing Demeny speaking.

Demeny, long concerned about financial security, hoped that this interest in his moving photographs could be exploited commercially. He patented his apparatus, which he called the "phonoscope," demonstrated it at the 1892 Photographic Exposition, and was approached by carnival operators with offers to exploit it as an entertainment device. For Demeny, however, the possibilities of the phonoscope were firmly linked to the image it provided of the human face in motion. He described his new invention as a "living portrait," saying, "The future will replace the static photograph, fixed in its frame, with the animated portrait that will be given life [End Page 19] with the turn of a wheel. The expression of

physiognomy will be presented as the voice is preserved by the phonograph” (*PT*, 180). The living portrait, Demeny believed, would deliver the traditional family portrait from an effect of mummification, allowing it “to live again like a veritable apparition” (*HCC*, 168).

Although the device which presented the moving image was of Demeny’s design (although based on the traditional phenakistiscope), the chronophotographic camera which took the images was Marey’s invention and a growing conflict over the commercial exploitation of the phonoscope led to a bitter rupture between the savant and his protegee. While the issue here revolved around what Marey perceived as Demeny’s appropriation of his work, the prospect of marketing chronophotography as a fairground attraction undoubtedly further annoyed Marey. Marey’s deep and abiding suspicion of the fallibility of human vision was even more intense than Londe’s and his lack of interest in the illusion of motion strongly expresses the scientific disdain of motion pictures as betrayals of the possibilities of scientific photography.⁴⁹ Demeny continued to attempt to make a commercial success of his invention and, adapting it to flexible film, designed both a camera and a projector, setting up his own studio where he filmed living portraits as well as other subjects. After approaching the Lumières about a partnership and getting a cold response, Demeny eventually sold the rights to his patents to Louis Gaumont and returned to his first passion, gymnastic and physical training.⁵⁰

We find among the films that Demeny shot before the dissolving of his company, cataloged by Laurent Mannoni, one which Mannoni entitles “Demeny making a grimace.” Mannoni adds this brief speculative description, “An illustration perhaps intended to represent two different human expressions, as Le Brun had done in the 17th Century in his work *The Expression of the Passions*.”⁵¹ Demeny’s interest in the motion picture of the face, clearly embraced not only the “living portrait” but the investigation of expression that extends from Della Porta, to the grimaces of the facial expression films to come.

3. The Grimace of Curiosity and Motion Pictures

Take this kinetoscopic record of a sneeze, a topic intended to excite a smile, and let us rise higher.⁵²

—Barnet Philips

(see **Fig. 10**)



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Figure 10.

The penultimate moment from James Williamson's film *The Big Swallow*, 1901.

Given the seeming interruption of the scientific tradition with the triumph of actual motion pictures, can we assert that early cinema still owes something to the gnostic impulse? While the cinematic devices of Edison and the Lumière brothers owe a great deal to the technical path traced by their scientific predecessors, does the illusion of cinema invert and betray their own anti-illusionary impulse, as Marey and Londe suspected? Does the synthesis of motion supply nothing but a parlor trick, limited to a dubious entertainment value, and bereft of scientific interest because it relies on a simple visual mimesis, rather than the scientific possibilities of [End Page 20] analysis and manipulation of time and motion? While the road in the development of cinema does fork here, the interchanges between the gnostic impulse and entertainment continue to assert themselves, something that becomes clearer if we maintain our broader view of the gnostic impulse as preceding modern science and inherent in such metaphor-based systems as physiognomy.

The scientific impulses that gave birth to modern science derive from a more primal curiosity, that *curiositas* which was condemned as a sin against the faith by St. Augustine in the third century, a fascination with the unusual which the theologian saw as the root of both a sideshow theatricality and unseemly concern with the nature of God's universe, in other words, the root of both popular entertainment and scientific investigation.

Because of this disease of curiosity monsters and anything out of the ordinary are put on display in our theaters. From the same motives men proceed to investigate the workings of nature which is beyond our ken—things which it does no good to know and which men only want to know for the sake of knowing. ⁵³

The monumental work of Hans Blumenberg has traced the gradual overturning of this theological stricture and the eventual [End Page 21] validation of curiosity as a positive force and power of man in the sixteenth and seventeenth centuries, supplying one of the major transformations in the legitimation of a modern secular world. ⁵⁴ In the more

immediate era of modernity, the nineteenth and twentieth centuries, the exploiting and exercising of such curiosity outside of the disciplines of actual science constituted a major impulse of popular entertainment, and operated explicitly in the presentation of motion pictures as an show business novelty. While the pseudo-educational and scientific claims of Barnum's nineteenth-century museum of curiosities were partly a response to American puritanical suspicion of entertainment, they also tapped a growing popular curiosity about scientific and technological innovations. While claims of scientific value could serve as camouflage for simple forms of popular entertainment, a peculiarly modern exploitation of curiosity may also introduce new regimes of aesthetic appreciation, ones which conflict sharply with traditional modes of contemplation and absorption, revealing parallels with modernist attacks on traditional aesthetics. Therefore, we need to question how thoroughly illusionistic the earliest exhibition of motion pictures were, and in what ways they may have continued the scientific probing of illusionistic coherence, but now for the sake of curiosity rather than coherent knowledge.

Londe and Demeny found their photographic experiments intersecting with the world of popular entertainments. And certainly part of the fascination with Charcot's "Tuesday Lessons" came less from their scientific demonstrations than from the complex scenography of attractions—erotic, sadistic, and simply curious—that Charcot evokes from his women patients. In fact, one of Charcot's critics, Leon Daudet, even described the sessions as Grand Guignol.⁵⁵ But more is at issue here than an unmasking of the motivations behind scientific display. Curiosity indicates an audience that remains skeptical, capable of devising his or her own explanation of the phenomenon before them.

It was precisely this skeptical but curious spectator that Barnum wished to attract to his museum, employing what Neil Harris has called an "operational aesthetic."⁵⁶ According to Harris the operational aesthetic draws viewers who want not only to see a marvel, but to understand and speculate on how it works. An impresario technique tailored to an age of technology and its fascinations, this aesthetic both excites and satisfies curiosity and supplies a very different aesthetic experience from that of traditional art forms. It was precisely such curiosity that drew the first spectators to the premieres of motion pictures devices. They came to see a new technology demonstrated, and they received it with discussions of how it was achieved. Thus the first exhibitions of the *Cinématographe*, the Vitascope, or the Biograph, while certainly part of modern show business, were not as divorced from their scientific progenitors as might at first appear. It is as though the two aspects of Augustine's *curiositas*, the investigation of nature and the fascination in novelties, had been rejoined in a peculiarly modern gnostic impulse.

It should come as no surprise, then, that motion pictures of faces, films consisting entirely of facial close-ups, formed an important genre of early film, dating, as I indicated earlier, from the very first attempts at motion pictures undertaken by Edison [End Page 22] and Demeny. These first experiments became in cinema's first decade a genre known as "facial expression" films, which display very clearly this early motion picture aesthetic founded on curiosity.⁵⁷ In line with the operational aesthetic, such films demonstrated to

early audiences cinema's ability to capture complex and detailed motions. Although Fred Ott's sneeze and May Irwin and John Rice's kiss were ordinary everyday actions, captured on film they became subjects of curiosity. The close framing of these brief films endowed them with a sense of physical proximity that was particularly startling given the actions portrayed, inviting scrutiny and delivering surprise. While the ideology of the close-up in later narrative cinema invited emotional intimacy, the physical closeness of these early images seem rather to be confrontation and comical.

Once these images had emerged from the confines of Edison's kinoscope (a peepshow device into which each viewer peered to see small moving images through a magnifying lens) and were projected on the screen, the new possibility of gigantism added to their unfamiliarity. The huge enlargement of the close-up was advertised as an attraction of facial expression films, as in this announcement from 1902 by the English film company Hepworth for their film *Comic Grimacer*. "A human face shown the full size of the screen is always a comic and interesting sight."⁵⁸ If this sort of novelty satisfied the curiosity of popular culture, it could stick in the throats of traditional genteel culture whose modes of aesthetic representation seemed to be upset by such unsublimated attention to the human face. The editor of the Chicago literary journal *The Chap Book* in 1896 sputtered after seeing the *May Irwin-John Rice Kiss* projected on the screen. "When only life size it was pronounced beastly. But that was nothing to the present sight. Magnified to Gargantuan proportions and repeated three times over it is utterly disgusting."⁵⁹ The Rabelaisian reference here may be more significant than the author intended. Early facial close-ups, whether in single shot facial expression films or serving as emblematic shots in early multi-shot films, frequently show the mouth in action, eating, slobbering, kissing, guffawing and generally partaking of the carnivalesque pleasure of the open orifice in a most unseemly manner. As with Charcot, the camera once again aimed at bodies out of control, but with a very different viewing perspective in mind. Rather than supplying the intimate moments that furnish narrative emphasis or reveal psychology, as is typical of close-ups in later cinema, close-ups in early cinema display monsters and giants, their mouths swallowing and chewing, before viewers who are fascinated (and sometimes repulsed) by the new revelations of such unusual sights. In their very physicality and lack of aesthetic sublimation, such images are closer to the images of scientific facial photography than to the romantic close-ups of shimmering movie stars in later cinema. Thus the simple illusionism that motion pictures seemed to afford could also be experienced as a new mode of perception, as motion reconstituted and defamiliarized by the technology of enlargement. Clearly motion pictures breached new modes of representation.

But if such images seem to subject the human face to an enlargement that relates more to scientific scrutiny than to enraptured absorption, we must not lose sight of **[End Page 23]** the comic nature of these close-ups, quite at odds with the sober discourse of scientific investigation. The popular curiosity that delights in these odd and marvelous expressions and facial behavior does part company with the use of photography as a means of investigation and operates more like a parody of the gnostic impulse. In their delight in the ridiculous and nonsensical, the uncivilized aspects of the body, the contortions rather than

the expressions of the face, early facial expression films derive from a long clowning traditions of grimaces which stretches from medieval jesters through circus traditions to nineteenth century vaudeville. Seen within this tradition, we can understand the way these early close-ups not only denied access to the psychology of characters but celebrated the very meaninglessness of their swiftly changing grimaces, overturning the gnostic attempt to endow the face with meaning, whether through occult resemblances or photographic scrutiny of its phases.

The grimaces that Duchenne exiled from his system become in these films the major motivation for the facial play. Enlarged enormously, such grimaces became even more grotesque than any performer in the circus or the *caf'conc* could manage, a true carnival of flesh brought to visual acuity through modern technology. In these films the face cavorts on an open playing field, freed from any relation to narrative or drama or any labor of conventional signification. The performer faces the camera and viewer directly and goes through a succession of expression dazzling in their range and rapidity.

Of course the evolution of popular traditions of grimace humor and of scientific investigations in the era of modernity did not take place in hermetically separated realms. Daudet could compare Charcot's demonstration to the Grand Guignol, while at that Parisian theater of horrors, André de Lorde took the *Leçons de Mardi* as the subject for his grim drama *Une leçon à la Salpêtrière*, in which a hysteric patient tosses acid in the face of an intern who has been sadistically torturing her, after her accusations have been dismissed as hysteric symptoms.⁶⁰ And as Rae Beth Gordon has shown, the performance styles that were used by such turn-of-the-century *caf'conc*' *grimaciers* as Paulus were compared by fans such as J. K. Huysman to the hysterics of Charcot, who may even have served as models for such performers.⁶¹ In tracing the intersections between scientific investigation and the curiosity of popular culture in the emergence of cinema at the end of the nineteenth century, I want not only to relate these two traditions, but to uncover a dialogue between them, centered on the semantically loaded and unceasingly ambiguous representation of the human face. In this encounter, the popular tradition has something to say to the scientific, as well as vice versa.

Unlike his predecessor Duchenne (who rested secure in his belief in a God-given language of facial expression from which grimaces were excluded), Charcot did investigate facial contortions (and perhaps this is why he strikes us as so modern), seeking behind their chaos for the *facies* of hysteria. Within the amphitheater of his clinic and in the studio of the Photographic Service, his female patients' facial gymnastics were presented to the public. His women patients were doubly victims, subject **[End Page 24]** both to the symptoms of their disease and the control and manipulation of their doctors, who provided, as Didi-Huberman and others have shown, the *mise-en-scène* of both the Tuesday lessons and the photographs of the *Iconographie*.

But in the early facial expression films such grimaces explode any framework of interpretation, seeking only the curiosity and the laughter of onlookers. Films such as Edison's 1902 *Facial Expressions* or his 1903 *Goo Goo Eyes* seem to fulfill Didi-Huberman's fantasy about Charcot's "star" patient Augustine, in which her impulse toward "making a scene" might subvert Charcot's effort to create a *mise-en-scène*. In her performances, Didi-Huberman declares, Augustine shows "the mastery not of an autocrat, but of an acrobat" (*IH*, 247–8).⁶² Similarly, in Edison's films the female performers contort their faces endlessly in a dazzling display of dexterity and absurdity, invoking amusement, curiosity, occasional revulsion, and ultimately a certain admiration for their novel skill as facial performers.

Clearly we must resist the impulse to see the images presented by such early films simply as fulfillments of a utopian desire that defies narrative order and scientific symptomology in pursuit of an ethos of pure play and physical transformation, a mode of representation using mimesis to subvert cultural logic. As products of popular culture, these films are deeply complicit in the stereotypes of patriarchal, racist, and economically exploitative ideologies, and the marks of these systems are clearly legible in their imagery. However, they also contain, like the dream world of commodity culture evoked by Walter Benjamin, the seeds of utopian urges.⁶³ Utopian possibilities are opened by early cinema's non-narrative configurations of time and its direct confrontation of the viewer with images that seem familiar and yet are also uncanny. If the history of the close-up ultimately extends to the nearly religious absorption in the mystery of the human countenance, the sort that Roland Barthes expresses in his rapture over the face of Garbo, we can see its origins in a very different gnostic impulse, a curiosity about the meanings of the face and an attempt to assert mastery over it through the analysis and classification of its muscle structure, its evolutionary derivation, and its forms of deviance.⁶⁴ The desire to know the face in its most transitory and bizarre manifestations was stimulated by the use of photography; but that desire, in turn, also stimulated the development of photography itself, spurring it to increasing technical mastery over time and motion, prodding it toward the actual invention of motion pictures. Paradoxically, once the illusion of motion was technically feasible, emphasis could shift from the dominating eye of the scientist to the skill of the performer as the facial close-up became an arena for grotesque grimaces and goo goo eyes, a delight facial play.

The face had formerly served as a guarantor of meaning and significance, a mode of communication that exceeded any conventional or cultural system of exchange; but modern science and medicine first dissolved this guarantor into pure physical materiality or a welter of chaotic symptoms. Yet as the techniques of photography attempted to penetrate this apparent chaos and discover new patterns of regularity, the popular art of early cinema again allowed this investigation to dissolve into **[End Page 25]** curiosity and amusement, rehearsing an encounter with representation that the techniques of aesthetic modernism would replay on a different level, borrowing, as Surrealism in particular acknowledged, a great deal from its popular predecessors.

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Footnotes

1. Bola Bales, *Theory of Film: Character and Growth of a New Art*, trans. Edith Boone (New York: Dover Books, 1970), 40. For insightful treatments of Bales's concept of physiognomy in cinema see Gertrude Koch, "Bola Bales: The Physiognomy of Things," *New German Critique* 40 (winter 1987): 167–78; Sabine Hake, *The Cinema's Third Machine: Writing on Film in Germany, 1907–1933* (Lincoln: University of Nebraska Press, 1993), 212–46; and especially Jacques Aumont, *Du visage au Cinema* (Paris: Editions de l'Etoile, 1992), 77–110. Aumont's brilliant treatment of the face in silent film brings the concerns of this essay into the context of European film culture in the 1920s, especially in the work of Balázs and Jean Epstein.

2. Bales, *Theory of Film*, 76.

3. Dziga Vertov, "The Writings of Dziga Vertov," in *Film Culture Reader*, ed. P. Adams Sitney (New York: Praeger Publishers, 1970), 367; Jean Epstein, "The Soul in Slow Motion," *Paris Midi Ciné* (11 May 1928).

4. On these issues see my *D. W. Griffith and the Origins of American Narrative Film* (Champaign: University of Illinois Press, 1991).

5. Marta Braun, *Picturing Time: The Work of Etienne-Jules Marey (1830–1904)* (Chicago: University of Chicago Press, 1992), 176–80; hereafter abbreviated *PT*.

6. Good accounts of physiognomy can be found in Patrizia Magli, "The Face and the Soul," in *Fragments for a History of the Human Body: Part Two*, ed. Michael Feher (New York: Zone, 1989), 86–127; Jurgis Baltrusaitis, "Animal Physiognomy," in *Aberrations: An Essay on the Legend of Forms* trans. Richard Miller (Cambridge: MIT Press, 1989), 1–57; Graeme Tytler, *Physiognomy in the European Novel* (Princeton: Princeton University Press, 1982), hereafter abbreviated *PEN*; and Lynn Thorndike, *A History of Magic and Experimental Science*, vol. 8 (New York: Columbia University Press, 1958), 448–75.

7. Michel Foucault, *The Order of Things An Archaeology of the Human Sciences* (New York: Random House, 1970), 26.

8. Charles Le Brun, *A Method to Learn to Design the Passions* (Los Angeles: University of California Press, 1980), 13. This is a reprint of a 1734 translation, including an abridgement of *Treatment of Physiognomy* by John Williams.

9. René Descartes, "Passions of the Soul," *The Philosophical Writings of Descartes*, vol. 1 (Cambridge: Cambridge University Press, 1985), 325–404.

10. Magli, "The Face and the Soul," 119; see her entire study, together with Baltrusaitis, "Animal Physiognomy," for treatments of animal imagery in Le Brun and reproductions of his illustrations.

11. See *PEN*, 35–81.

12. See *PEN*, 57–9.

13. See *PEN*, 70.

14. Quoted in Judith Wechsler, *A Human Comedy: Physiognomy and Caricature in 19th Century Paris* (Chicago: University of Chicago Press, 1982), 25–6; hereafter abbreviated *AHC*.

15. Vachel Lindsay, *The Art of the Moving Picture* (New York: Macmillan and Company, 1922), "Hieroglyphics," 199–216.

16. See *AHC*, 11–17, 20–31, 69–79, 93–5.

17. Walter Benjamin, *Charles Baudelaire: A Lyric Poet in the Era of High Capitalism* (London: New Left Books, 1973), 32.

18. Alfred Binet, *La psychologie du raisonnement. Recherches experimentales sur l'hypnotisme* (Paris: Alcan, 1886), 56; quoted in Denis Bernard and André Gunthert, *L'Instant rêvé. Albert Londe* (Nîmes: Jacqueline Chambon-Trois, 1993), 131; hereafter abbreviated *IRAL*.

19. Quoted in Sander Gilman, ed., *The Face of Madness: Hugh Diamond and the Origins of Psychiatric Photography*, 15–16; hereafter abbreviated *FOM*.

20. On the concept of the medical gaze, see Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A. M. Sheridan Smith (New York: Vintage Books, 1975), 107–73.

21. G. B. Duchenne de Boulogne, *The Mechanism of Human Facial Expression*, ed. and trans. R. Andrew Cuthbertson (Cambridge: Cambridge University Press, 1990).

22. Of course Duchenne was not the first to consider the mobile aspect of the face, even if he was the first to use technological means—photography—to capture it—hence his crucial importance to my argument. Le Brun’s distinction between the Passions and Physiognomy accented the difference between structure and expression and Lavater’s great critic Lichtenberg based himself in this distinction as well (*PEN*, 77). I thank Mikhail Yampolski for pointing this out to me, along with other oversimplifications of an earlier draft. Although Duchenne speaks of having taken some of the photographs himself, they were taken by Adrien Tournachon, the brother of Felix Tournachon the famed photographer known by his pseudonym, Nadar. See Maria Morris Hombourg, et al., *Nadar* (New York: Metropolitan Museum of Art, 1995), 223.

23. See *MHFE*, 102–3. It is interesting to note that this is part of a long tradition of French physiologists who write works that apply their discoveries to artistic practice, such as Charcot’s *Les Démoniaques dans l’art* (1887) and Marey and Demeny’s *Du mouvement de l’homme* (1893), intended, as Marta Braun reports, to be “an artist’s handbook” (*PT*, 268).

24. See *MHFE*, 101, 105.

25. Charles Darwin, *The Expression of the Emotions in Man and Animals* (Chicago: University of Chicago Press, 1965), 147; hereafter abbreviated *EEMA*.

26. The importance of the construction of the individual body and identity for modern conception is traced in Foucault, *The Birth of the Clinic*, especially 170; Alan Sekula’s important article, “The Body and the Archive,” *October* 39 (winter 1986): 3–64; and my essay, “Tracing the Individual Body: Photography, Detectives, and Early Cinema,” in *Cinema and the Invention of Modern Life*, eds. Leo Charney and Vanessa R. Schwartz (Berkeley: University of California Press), 42–71.

27. Georges Didi-Huberman, *L’Invention de l’hystérie: Charcot et l’iconographie photographique de la Salpêtrière* (Paris: Macula, 1982), 276; hereafter abbreviated *IH*.

28. Sander Gilman quotes a contemporary review of the *Iconographie photographique de la Salpêtrière* which appeared in *Progrès médical* in 1879, declaring the camera as necessary to the study of hysteria as the microscope to histology (Sander Gilman, “The Image of the Hysteric,” in Gilman et al., *Hysteria Beyond Freud* [Berkeley: University of California Press, 1993], 352).

29. See also Ruth Harris, *Murder and Madness: Medicine, Law and Society in the Fin-de-Siècle* (Oxford: Clarendon Press, 1989), 165.

30. Quoted in Ulrich Baer, “Photography and Hysteria: Toward a Poetics of the Flash,” *Yale Journal of Criticism* 7 (spring 1994): 48; hereafter abbreviated “PAH.”

31. *IH*, 51. I might note here that photographic scientists have not fared well in recent discussions of hysteria by literary scholars. See Felicia McCarren, “The ‘Symptomatic Act’ Circa 1900: Hysteria, Hypnosis, Electricity, Dance,” *Critical Inquiry* 21 (summer 1995): 769, who describes Duchenne as Charcot’s laboratory technician; Baer, “PAH,” 48, 53, 64, who gives Londe’s first name as Alfred; and Sander Gilman, “The Image of the Hysteric,” 44, who reproduces a cropped version of André Brouillet’s famous painting, *Une Leçon clinique à la Salpêtrière* (1886)—a copy of it hung in Freud’s office—but a version that omits Londe. (The error is presumably unintentional, since Gilman discusses other details of the painting which are also omitted in the cropped version.) In the complete painting, Londe sits in the foreground on the far left, his white apron and arms akimbo differentiating him from the other auditors. See the engraving based on Brouillet’s painting in Bernard and Gunthert, *L’Instant rêvé. Albert Londe*, 44.

32. Martha Noel Evans, *Fits and Starts: A Genealogy of Hysteria in Modern France* (Ithaca: Cornell University Press, 1991), 21.

33. See “PAH,” 63–6.

34. See *IH*, 197–200.

35. Ruth Harris, *Murder*, 58.

36. On Bertillon see Sekula, “Body and Archive,” and Gunning, “Tracing the Individual Body.”

37. See *IRAL*, 100.

38. See *IRAL*, 112–13.

39. Albert Londe, *La Photographie médicale. Applications aux sciences médicales et physiologiques* (Paris: Gauthier-Villars, 1893).

40. See *IRAL*, 125–7.

41. See *IRAL*, 125–7. On the role of instantaneous photography in the development of the cinema see my “‘Animated Pictures’: Tales of Cinema’s Forgotten Future,” *Michigan Quarterly Review* 34 (fall 1995): 465–85.

42. See *IRAL*, 121–35.

43. See *IRAL*, 153–4.

44. See *HHC*, 153–4.

45. See *IRAL*, 144–5, 160.

46. Georges Demeny, “Deboires d’un inventeur,” in Marcel L’Herbier, ed., *Intelligence du Cinématographe* (Paris: Correa, 1946), 46.

47. See *PT*, 68–70.

48. See *PT*, 175.

49. See *PT*, 182–3. For Marey’s attitude toward the *cinématographe* and projected motion pictures generally, see *PT*, 195–6, and *HCC*, 144. I discuss his lack of enthusiasm more extensively in “Animated Pictures” 476–9.

50. See *PT*, 182–6. Demeny’s work as a chronophotographer and his apparatuses and business deals have been detailed by the exemplary scholar Laurent Mannoni in “Glissements progressifs vers la plaisir: remarques sur l’oeuvre chronographique de Marey et Demeny,” *1895* 18 (summer 1895): 11–52. Mannoni launches the audacious and fascinating theory that Demeny’s negotiation with the Lumière may have culminated in the theft of certain of his technical ideas by the Lumière for the perfection of the *cinématographe* (“Glissements progressifs,” 35).

51. Mannoni, “Glissements progressifs,” 41. In his major work on early cinema, *Le grand art de la lumière et de l’ombre: archéologie du cinéma* (Paris: Nathan Université, 1994), 311, Mannoni reveals that Georges Demeny’s brother was the friend of Arthur Rimbaud, Paul Demeny, to whom the famous “Lettre au voyant” was addressed in 1871.

52. Barnet Philips, “The Record of a Sneeze,” *Harper’s Weekly* (24 March 1894).

53. *The Confessions of St. Augustine*, trans. Rex Warner (New York: New American Library, 1963), 246.

54. Hans Blumenberg, *The Legitimacy of the Modern Age*, trans. Robert M. Wallace (Cambridge: MIT Press, 1985), especially 229–596.

55. See *IRAL*, 114.

56. Neil Harris, *Humbug: The Art of P. T. Barnum* (Chicago: University of Chicago Press, 1973), 57.

57. On the relation between the tradition of *curiositas* and the early film style that I term “the cinema of attractions,” see my essay, “An Aesthetic of Astonishment: Early Cinema and the (In)Credulous Spectator,” in *Viewing Positions: Ways of Seeing Film*, ed. Linda Williams (New Brunswick: Rutgers University Press, 1994), 114–33.

58. Rachel Low, *The History of the British Film*, vol. 1, 1896–1906 (George Allen and Unwin, 1948), 76.

59. *The Chap Book*, 15 June 1896, quoted in Terry Ramsaye, *A Million and One Nights: A History of the Motion Picture* (New York: Simon and Schuster, 1926), 259.

60. André de Lorde and Alfred Binet, *Une leçon à la Salpêtrière*, in André de Lorde, *Théâtre d’épouvante* (Paris: Charpentier et Fasquelle, 1909), 1–81. The coauthor, Binet, is the famous neurologist who also recounts Lorde’s anecdote about photographing Blanche Witman; see the epigraph to part two of this essay.

61. Rae Beth Gordon, “Le Caf’conc’ et l’hystérie,” *Romantisme* 64 (January–March 1989): 53–66.

62. That the performer dressed as a woman in *Goo Goo Eyes* has sometimes been identified as a man only increases our sense of the carnivalesque in these films, the ambiguous physiognomy of gender found in both popular entertainment and hysteria.

63. On these utopian dimensions in Benjamin, see Susan Buck-Morss, “Mythic Nature: Wish Image,” in her *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge, Mass.: MIT Press, 1989), 110–58.

64. Roland Barthes, “The Face of Garbo,” in his *Mythologies*, ed. and trans. Annette Laver (New York: Hill and Wange, 1977), 56–7.

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