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"... when the direction of the force acting on the body is changed.":

THE MOVING IMAGE

by Mary Ann Doane

I

There is a scene in *Letter from an Unknown Woman* (1948) which is frequently singled out as a metacinematic moment. Lisa and Stefan, in the course of their extremely short-lived time together, visit a carnival attraction which involves sitting together in a simulated train compartment as a series of painted scenes depicting nationally specific landscapes is rolled by outside an artificial window. At one point in the scene, the forward progression of the landscapes is halted and Stefan is forced to emerge from the compartment and buy more tickets so that he and Lisa, as he tells the ticket-seller, can "revisit the scenes of our youth." His emergence from the compartment draws attention to the old man who rides a bicycle in order to provide the power for the image producing machine. The metacinematic nature of this moment lies in the revelation of an apparatus which simulates not only a train but the cinema as well, in its simple provision of an image which *moves*. The railway passenger, like the cinema spectator, is subjected to a succession of images mediated by a frame. Similarly the cinema, in opening onto another space—a new or "other" place—takes the spectator somewhere he/she has never been before (or, obeying the compulsion to repeat, back to revisit familiar scenes). Whatever its particular fiction, the film produces a pleasure akin to that of the travelogue.[1]

Perhaps this explains the persistent fascination of the classical cinema with trains and railroad stations, its narrative fixation upon moments of arrival and departure. Lisa's twice suffered loss of the object of desire (Stefan, her son) is encapsulated both times as the departure of a train (there are similar moments in *Since You Went Away* [1944] and *Now Voyager* [1942], the flickering effect of light and shadow reflected from the departing train onto the woman's face as a reinscription of the alternation of presence and absence which supports cinematic signification). Just as the half-opened door seems to condense onto a single figure the semantic value of narrative's hermeneutic codification (provoking the question, "What is behind the door?"), the train embodies its proairetic codification, its sequencing as a movement from here to there, its assumption of a causal connection the "coupling" of discrete actions and events, the ultimate termination, terminus, terminal as closure. The invention of the railroad train in the early 19th century, as Wolfgang Schivelbusch demonstrates in an extensive study, effects a reorganization of the modern perception of space and time—a re-

Letter from an Unknown Woman *(1948): the moving image and the metacinematic moment.*

organization which is, peculiarly, entirely compatible with that required by filmic narrative, for it activates the spatial and temporal ellipsis, the annihilation of the space and the time "in-between" events. Schivelbusch himself finds more than an analogy here:

... on one hand, the railroad opens up new spaces that were not as easily accessible before; on the other, it does so by destroying space, namely, the space between points. That in-between space, or travel space, which it was possible to 'savor' while using the slow, work-intensive eotechnical form of transport, disappears on the railroads. The railroad knows only points of departure and destination . . . . In the filmic perception—i.e., the perception of montage, the juxtaposition of the most disparate images into one unit—the new reality of annihilated in-between spaces finds its clearest expression: the film brings things closer to the viewer as well as closer together.[2]

Schivelbusch invokes the work of Benjamin to support his claim that just as the film, the art of reproduction *par excellence*, destroys the "aura" of individual objects, the train annihilates the "aura" of the spatial/geographical location, its isolation and hence its individuality.[3]

Thus, the train is not simply a faster means of transportation. It is a crucial element in a chain of new technologies and machines (including photography, the cinema, and television as well as the automobile and the airplane) which profoundly affect perception. It heralds no less than a technological restructuration of the relation between the traveler/spectator, vision, and space. Vision becomes, as Schivelbusch points out, "panoramic." The velocity of the train dissolves the foreground, the pre-industrial basis of the relation between traveler and landscape. Because the

traveler had previously seen himself/herself as a part of the foreground, joined to the landscape, the speed of the train radically *dis*places that traveler, allotting to him/her a kind of non-space of anonymity. The traveler is "removed from that 'total space' which combines proximity and distance" and is separated from the space of perception by an "almost immaterial barrier," in the same way that glass architecture transforms the viewer into a non-inhabitant of the

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space which he/she can nevertheless see.4 Such a process positions the traveler more properly as a spectator: "Panoramic perception, in contrast to traditional perception, no longer belongs to the same space as the perceived objects: the traveler sees the objects, landscapes, etc. *through* the apparatus which moves him through the world."5

The train, and the cinema as well, thus contribute to the detachment or dissociation of the subject from the space of perception—what might be termed a despatialization of subjectivity effected by modern technology. Because the train and "panoramic perception" appear to destabilize and fundamentally alter the terms of understanding of subjectivity and perception, effecting a crucial realignment of subject and image, the train becomes a figure of fascination not only for the cinematic but also for the philosophical and scientific imaginations. The classical cinema, through a regularization of vision and the subject's relation to the screen, reasserts and institutionalizes the despatialization of subjectivity. Yet, there are other discourses as well which take up the obsession and attempt either to theorize or rewrite the relation between the subject, vision, and space: psychoanalysis, in its insistence upon the alienating effects of identification with an image; that segment of experimental psychology which concerns itself with "visual spatialization"; and a contemporary avant-garde cinema which sets itself up in opposition to the regularizing effects of the classical cinema. These discourses represent, in part, the effects at the level of theory, the reverberations as it were, of a

technological restructuration of subjectivity and perception. The purpose of this essay is to trace, in these three discourses, the repercussions of an obsession with the subject's positionality in relation to an image.


II

Three disparate but related train scenarios:

1) A black and white shot of a train platform. The only mediation between spectator/camera and the content of the image appears to be the film frame. The shot is held while on the soundtrack a voice reads one of Freud's analyses from *The Interpretation of Dreams*. After a few seconds the existence of a windowpane separating the camera lens from the object and the fact that the camera is situated in a train car are revealed by the movement of the train out of the station, a movement which temporarily de-stabilizes the spectatorial position on the scene. A camera set up on the platform on the other side of the window presents a mirror image of the camera on the train. The dream analyzed on the soundtrack is attributed to a patient whose father had died six years earlier and its absurdity aligned with the representation of the father as alive. In the dream, the derailing of a train causes the father's head to be "compressed from side to side." This compression, as Freud's unravelling of the dream thoughts demonstrates, could be traced to a judgment about the mimetic value of a bust commissioned from a sculptor who had never seen the father. The trajectory of the analysis leads Freud to speculate about the relation between representation and represented object with respect to both the bust and photography. He concludes: "The absurdity of this dream was thus no more than the result of a piece of carelessness in verbal expression which failed to distinguish the bust and the photograph from the actual person. We might any of us say (looking at a picture): 'There's something wrong with Father, don't you think?' " It is at this point in the film that the train begins its movement. (This first scenario is a partial description of the last shot of Joanna Kiernan's film *Dream-Work* [1980]).6

2) The psychoanalyst sits in a train compartment. When the train is subjected to a particularly violent movement, the door of the adjoining washing-cabinet swings open and a man whose appearance the psychoanalyst dislikes seems ready to enter the compartment by mistake. Jumping up, the psychoanalyst

recognizes that the ugly man is his own image reflected in a mirror and he experiences this momentary deception as uncanny. (From a footnote to Freud's essay, "The 'Uncanny'.")[7]

3) The physicist and the philosopher of science, Ernst Mach,[8] also cited by Freud in the same footnote of "The 'Uncanny' " as a disliker of his own image, glances out the window of the train as his car travels around a curve and notices that the scenery appears to tilt over. Fascinated by this illusory phenomenon, he attempts to duplicate it in the laboratory by having himself driven around a circular track in an enclosed cardboard box. As the box is accelerated it appears to Mach to tilt over more and more. The circular movement results in a modification of the direction of the felt gravitational force acting on the body and therefore affects the subject's perception of what is upright. Mach concludes, as a result of the experiments conducted on himself, that orientation toward the upright is based primarily upon bodily or postural experiences and not upon a relation to the visual field. Seventy-five years later, in 1950, H. A. Witkin, an American experimental psychologist, writes a scientific article entitled "Perception of the Upright When the Direction of the Force Acting on the Body is Changed"—an article which cites this perceptual experience of Mach as a kind of Ur-narrative authorizing Witkin's own series of experiments. Witkin constructs a rotating room apparatus, very similar to that of Mach—a kind of train without windows, in his attempt to ascertain the relative contributions of postural/bodily experiences and dependence on the visual field to the determination of what is upright. Witkin's results demonstrate that Mach, generalizing from only his own experience, fixated on an extreme point of what is in fact a very broad spectrum of individual differences in the relative extent of dependency on the body or vision as a standard for locating the upright. Statistics prove, according to Witkin, that on the whole, dependency upon the visual field is more significant despite degrees of individual difference.[9] He will later organize these differences in particularly interesting ways.

Aside from the fact that all three scenarios take place on a train, they each exhibit a fascination with appearances which are deceiving, mobilizing the *trompe l'oeil* as a structuring device. The relations between the first two scenarios are, perhaps, the most explicit. The first scenario contains the barest articulation—the minimal number of elements: a frame, an
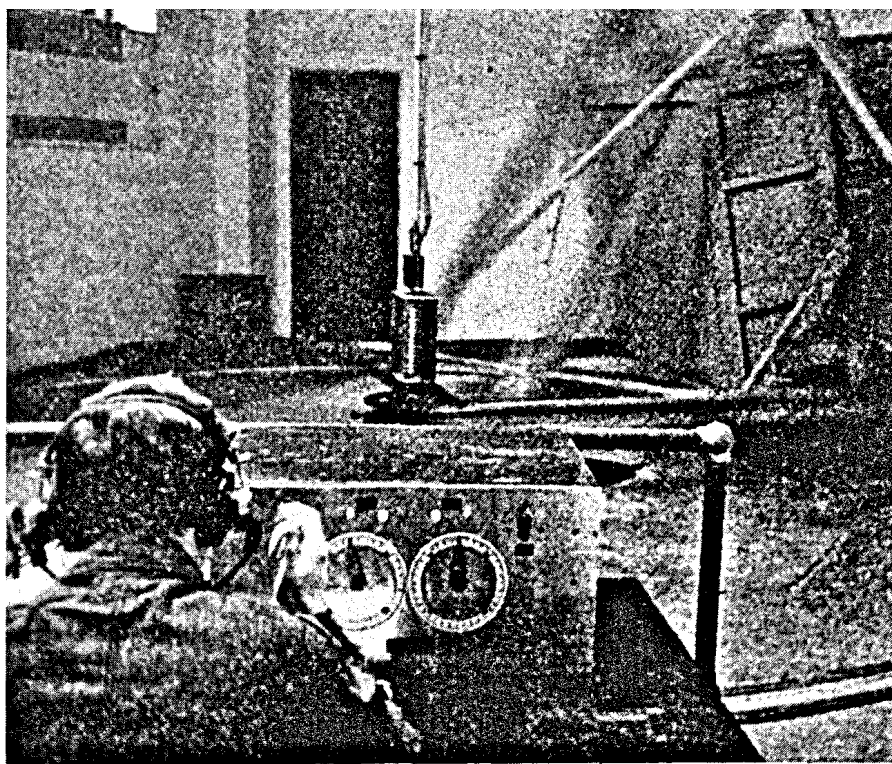
Witkin's experiment: the rotating-room experiment

image, movement, a threshold (the pane of glass), the voice expounding the principles of mimesis and its bottom line—a carelessness in wording. Furthermore, the absent author represented by the reading voiceover—Freud—is both character in and author of the second scenario. The third scenario delineates the fictional origin of a discourse which strives to be both author-less and character-less—a scientific discourse. The undoubtedly overly ambitious goal of this essay is to examine certain connections between these three types of discourse: a contemporary independent avant-garde cinema insofar as it appeals to psychoanalysis as a pre-text for its signifying activities in an attempt to restructure the relation between spectator and image, psychoanalysis itself insofar as it is dependent upon the registers of narrativity and visual imagery, and experimental psychology in its attempt to articulate the "scientific" laws connecting vision, space and the body.

Freud relegates the determination of the uncanny effect of his particular *trompe l'oeil* (apprehending a mirror image as real) to that other scene—the unconscious. In the subsequent theorization of a split subjectivity which Lacan so ardently pursues—in which Freud's dislike of his own image during his rather late experience of the mirror phase can be

easily linked to the aggressivity characteristic of the imaginary register—the *trompe l'oeil* is a structuring element of subjectivity. The distinctions between fiction and the real, internal and external, subject and object are established in relation to an image of the self which is, ultimately, alienating. Within the discourse of psychoanalysis, the *trompe l'oeil* is internal to the construction of subjectivity. In the discourses of science and the cinema, on the other hand, the *trompe l'oeil* can only be defined as external, accidental in relation to subjectivity. The *trompe l'oeil* is constituted as a threat which must be contained. For Jean-Louis Comolli, this scenario describes a pre-history and a history of the alliance between the cinema and a scientific discourse on perception.

Comolli argues that the cinema can be understood as a compensation at the level of ideology for the scientific obsession with evidence that the eye can be fooled, that it no longer offers a guarantee of epistemological security. Photography provides the major challenge to the supremacy of the human eye, mechanizing and hence displacing/replacing the power attributed to the eye. At the same time that photography strengthens confidence in perspective and analogy (the eye's "principles of representation"), it also promotes "a crisis of confidence in the organ of vision which till then had reigned over all representation as its official standard scientifically." The renewal and intensification in the late 19th century of an obsession with optical illusions and the instruments which exploit them is a symptom of this crisis of confidence. And, according to Comolli's account,

the doubt on the scientific level in some sense provoked a compensating and cushioning reaction on the level of ideology, so that the inscription of the doubt and deficiency was systematically compensated for by the inscription of the normality and centrality of the eye. It is in this sense that we can agree with Marcelin Pleynet that the code of the perspectiva artificialis *has acted as a repressive system.*[10]

Because the *trompe l'oeil* constituted a threat, it was necessary to break down the adherence to the visual field and to systematically organize relations to that field in ways which required a machinery, a technology. The cinema (and, in fact, all systems for the reproduction of images—photography and television included) introduces a separation between vision and the individual subject through mechanization and the easy collusion of science and technique. It allows for the possibility of thinking vision through structures

which exceed but nevertheless corroborate individual subjectivity. Vision, which had formerly quite clearly "belonged" to the individual subject, is expropriated by the machine. Mainstream cinema, in both its very form and its privileging of narrative, contributed to what Comolli describes as the historical and ideological necessity of a "perspective and analogous representation of the world (the photographic image can't be argued with, it shows the real in its truth) . . . ."[11] As a machine for stabilizing the relation to the visual field, the cinema is an institutionalized

The cinema introduces a separation between vision and the individual subject through mechanization.

control of the *trompe l'oeil*. Sporadic critiques of the cinema or television as socially harmful are the leakages, the excesses which escape that controlled modulation of the "trick."

But why is the *trompe l'oeil* threatening? Or, more accurately perhaps, why does it operate simultaneously as fascination and threat? From the psychoanalytic point of view, the *trompe l'oeil* exhibits without mediation or modification the splitting of the subject —the subject's lack of presence to itself, by foregrounding the image's potential to mislead. The eye, as a metonymy of the "I" of subjectivity is "taken in." The first image which "fools" the human subject is its own, the mirror reflecting an unfamiliarly unified and coherent body—a more secure image in which the subject would prefer to reside, the first glimpse of subjectivity thus constituting itself on the basis of an alienating identification which is not acknowledged as such. Yet, in the *trompe l'oeil* in art, the eye is "taken in" or deceived only momentarily, the entire aesthetic effect being dependent upon the eventual recognition that the painting is, in fact, a painting. While "*trompe l'oeil*, i.e., 'that which deceives the eye,' strives relentlessly to achieve perfect duplication of reality to the point of *de*lusion or 'trickery' cannot endure very long, so that the ultimate result will indeed be precisely 'to impress . . . with a demonstration of technical virtuosity.' "[12] While the deception of the eye is in process, however, the *trompe l'oeil* elicits the desire to touch, to transgress the barrier between spectator and image

(as one art critic points out, its objects are "teasingly tangible"[13]). The eventual revelation of its status as deception or pretense is jolting because it demonstrates that the eye/"I" does not possess an unshakeable position of knowledge.

There is a sense, then, in which the *trompe l'oeil* effects a hyperbolization of the positioning of the spectator in illusionistic or realistic artistic practices. Realism in representation always requires the spectator to adopt the stance of the fetishist, weighing simultaneously the belief that the represented matter conveys the truth of the real and the knowledge that the representation is only a representation. The *trompe l'oeil*, on the other hand, operates a separation in time of the two components of fetishism, belief and knowledge, so that the contradiction between the two is more apparent. This delaying of "knowledge" as a secondary temporal effect is demonstrated by one of the "rules" of the *trompe l'oeil* aesthetic which demands that the frame contain but in no instance cut off the elements of the printing: " ... the composition of a *trompe l'oeil* should exist strictly within the limits of the frame—that is to say that there should not be any cutting off by the frame of any of the objects as can happen in a still-life. For instance a shelf of objects which may be exquisitely painted will not deceive the eye if the ends are cut off abruptly by the frame."[14] Acknowledgment of the frame must clearly succeed the moment when the eye is "taken in." The ultimate recognition of the frame in *trompe l'oeil* thus produces a shock or a jolt which is uncharacteristic of realism or illusionism.[15] It is for this reason that Lacan produces the neologism *dompte-regard*, as a parallel to *trompe l'oeil*: " ... there is in painting a certain *dompte-regard*, a taming of the gaze, that is to say, that he who looks is always led by the painting to lay down his gaze ...."[16] Realist painting involves a process of taming or reassuring while the *trompe l'oeil* on the one hand fascinates or thrills and on the other threatens.

The threat of the *trompe l'oeil* lies in the fact that it is constituted as the undoing of a psychical defense. For fetishism, in psychoanalytic theory, binding together knowledge and belief, acts as a defense against a castration which signifies to the subject his own structuring lack, a fundamental splitting of subjectivity. Similarly, fetishism in the cinema holds at bay this trauma of lack or absence, producing a coherent subject-spectator. In the *trompe l'oeil*, however,
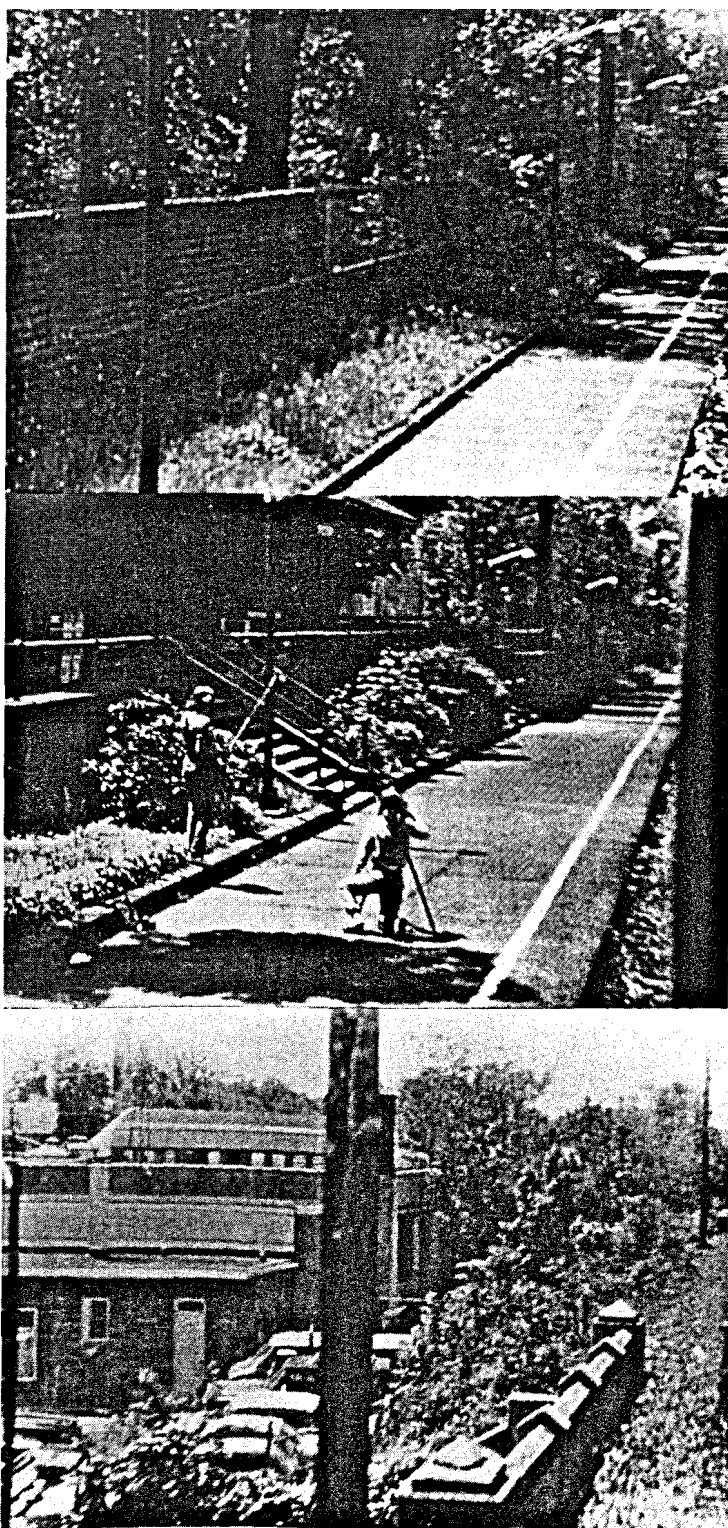
Dream-Work *(1980): containing the barest articulation.*

fetishism as a defense is broken down into its elements and analyzed, forcing a gap between knowledge and belief, indicating the re-emergence of lack and unveiling the subject's unity as fundamentally contradictory. This is why the cinema operates as an institutionalized control of the effects of *trompe l'oeil*.

Yet the apparent neutrality and undifferentiation—in relation to sexual politics—of this description is misleading. For the splitting of subjectivity in psychoanalysis is given meaning (or holds meaning in the balance) not through sight in general but by means of a quite specific sight—that of the female body as representation of castration. For the masculine subject, the most threatening sight of all, the woman, is the *trompe l'oeil par excellence*.[17] The absence she represents can only be a trick against which the masculine subject must constantly be on guard. The use of the concept of fetishism in film theory (whether applied to technique, special effects, or the impression of the real) acquiesces to a view of the cinema itself as a defense against femininity—quite apart from any relay of looks within the diegesis and quite apart from specific representations of the female body. For the psychical threat which the cinema as an institution allays is inextricably bound up with the construction of sexual difference.

III

Is the avant-garde cinema any different with respect to this aspect of phallocentric mechanisms? For independent films are not, of course, independent of the technological base of the cinema. Classical cinema diminishes and controls the threat of the *trompe l'oeil* by making the image central to its reality, by constituting itself on a large scale as a trick of the eye with a deeper more profound truth which justifies the trick. And because it is the eye which is threatened and not the ear, sound is subordinated to image. Outside its positioning within a specific economic circuit of distribution and exhibition, a film presents itself to us as avant-garde in the measure to which the image is seen as inadequate to the real (in terms of any notion of immediacy) or displaced from its classical function as narrative support. As an investigation of the repressed of the dominant cinema, the avant-garde film explores the extent of the image's deception. In all but the most lyrical of avant-gardes the task is to interrogate the integrity of the image rather than to preserve it. Far from feeling threatened by the *trompe l'oeil*, the independent avant-garde film explores its multiple ramifications.

Nevertheless, there is a sense in which a contemporary independent cinema and its theorization resuscitate, in a different way, a fear which is historically linked with the *trompe l'oeil*. The fear elicits defensive signifying strategies which are, however, the underside of those of the classical narrative text. There is a certain metonymic slippage here between vision, the image, the eye, and the "I" of subjectivity. In the terms of Comolli's argument, the cinema as an institution is a response to the fact that human vision is threatened by its mechanization. Because

The contemporary avant-garde could be described as a proliferation of means of avoiding the snare of image.

vision is an extremely important register of the credibility of the subject's knowledge, because it has acted as a guarantee of the subject's centeredness and unity, a strict codification of imagistic systems of signification was necessary. Much of the work of the contemporary independent cinema is, however, predicated upon a slippage—a movement from the idea that vision is threatened from without to the notion that vision is in itself threatening. It is the image itself which is a lure and a trap. The threat of the image is located in what is specified as its automatic attribute of immediacy—a closeness to the real which can only be illusory. In other words, a fear of the *trompe l'oeil*, of the image which may deceive, which is undependable, is transformed into a fear of the image which is somehow inherently, even naturally deceptive. An ontology of the image slips in and the deception of the image is naturalized. Of course, this idea is not new. Plato and other philosophers have warned against the deceptiveness of perception and the illusory nature of painting—as a mere appearance of an appearance, copy of a copy. Yet, this tendency in the conceptualization of vision and imagery is undergoing a strong resuscitation at the moment, and it is a revival which clearly hopes to differentiate between itself and idealism.

Such a localization of the image as danger and threat is given substantial support by psychoanalytical theory, particularly in its conceptualization of the imaginary register—a register frequently conflated with that of the image. One can, for instance, cite

Lacan's claim that, "In this matter of the visible, everything is a trap . . . . "[18] Lacan's use of such terms as "trap," "capture," and "lure" in his discussion of visual imagery situates the question of the subject's relation to an image as the problem of defining the borderline between two realities—that of the animal and that of the human. Roland Barthes, forgetting momentarily that Lacan specifies the relation to the mirror as a boundary between the chimpanzee and the "little man," invokes a "zoological horizon" in his discussion of the imaginary: "The image-system (l'imaginaire), total assumption of the image, exists in animals (though the symbolic does not), since they head straight for the trap, whether sexual or hostile, which is set for them."[19] Yet, in the case of the mimetic image, the question of the extent to which human beings and animals are "lured" and whether or not they are "fooled" in quite the same way becomes much more complex, as Lacan attempts to demonstrate by invoking the story of Zeuxis and Parrhasios. Challenged by his rival, Parrhasios, Zeuxis drew a painting of grapes which attracted birds who attempted to peck at them. But when Zeuxis demanded that Parrhasios draw aside the veil which covered his painting, he was shocked to find that the veil itself was painted. Lacan uses the story to establish a distinction between the "natural function of the lure" and that of trompe l'oeil: " . . . if one wishes to deceive a man, what one presents to him is the painting of a veil, that is to say, something that incites him to ask what is behind it."[20] Absence not presence informs the human involvement with the image and Parrhasios' painting invokes the fundamental dimension of lack and desire.

Nevertheless, despite Lacan's construction of an opposition between the lure and the trompe l'oeil, contemporary filmmakers and theorists of the avant-garde have been quick to isolate the function of the image as that of the lure, describing it as entrapping, fascinating, captivating. From this perspective, the work of an alternative cinema must be a work against these properties of the image. Far from a promotion of "heading straight for the trap," the contemporary avant-garde could be described as a proliferation of means of avoiding the snare of the image. The image which threatens to capture and immobilize the spectator must constantly be held at bay, for there is always the danger that the spectator may lose himself/herself in that image.

This is, of course, a bit of an overstatement of the problem and is ultimately more true of the theoriza-

tion of the independent cinema than of the independent cinema itself, which cannot help but resort to the image in the construction of its discourse. Nevertheless, the theory and the fear which it embodies do have their effects. Constance Penley, in arguing against the minimalist structural cinema of Peter Gidal and Malcolm LeGrice, presents a precise and very articulate statement of a widespread understanding—linked with the theorization of the cinematic signifier as imaginary and hence associated with the realm of the lure. Penley's formulation casts serious doubt on Vertov's notion of a "politics of perception."

In terms of a political filmmaking practice, a practice whose emphasis is on transformation rather than transgression, is there any way to eliminate the imaginary relation between spectator and screen? . . . There is perhaps only one way to complicate this particular (imaginary) relation: language can offer us an oblique route through the image; it can 'unstick' us a little from the screen as Barthes would say. The films of Godard have systematically taken into account this work of language on image, as have those of Straub and Huillet and Laura Mulvey and Peter Wollen. Images have very little analytical power in themselves; their power of fascination and identification is too strong. This is why there must always be a commentary on the image simultaneously with the commentary of and with them.[21]

This suspicion of the image is not carried over to the technico-sensory unity of sound—although it too can

> **There is a certain metonymic slippage between vision, the image, the eye, and the "I" of subjectivity.**

partake of the imaginary. Nor does the approach question the way in which language is inhabited by the imaginary. Rather than promoting the regulation of a deceptive image by language, it might be better to attempt an understanding of how many of these films concern themselves with what Peter Wollen refers to as the "interface between image and word."[22]

Yet, in many ways it is apparent that the independent cinema has taken this demand to "unstick" the spec-

tator from the screen quite seriously. It has done so primarily through a recourse to other already highly formalized and regulated discourses—in particular, psychoanalysis. In Surrealism, psychoanalysis was used to provide a logic, a syntax (even though this takes form as an anti-logic, or anti-syntax). In contemporary independent cinema, psychoanalysis is mobilized as a text—a text which is necessary to mediate the spectator's relation to a dangerous image, a "sticky" image. While it is quite hazardous and ultimately inaccurate to generalize about *an* independent cinema as a homogeneous entity (a "unity"

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which in fact conceals a diversity of filmmaking practices), there is nevertheless a marked tendency in many contemporary independent films to resort to psychoanalysis as a mediating language. Examples—which vary greatly in the extent and type of references to psychoanalysis—include: *Dream-Work, Sigmund Freud's Dora* (1980), *Raw Nerves: A Lacanian Thriller* (1980), *Journeys from Berlin/ 1971* (1980), *Riddles of the Sphinx* (1977), and *The Story of Anna O.* (1979). *Journeys from Berlin/1971* radically circumscribes the limits of psychoanalysis in its discourse, inscribing the transformation by means of which the dialogical becomes the monological in a sustained relation to the camera/spectator which redefines the psychoanalytic session. Films like *Dora* and *The Story of Anna O.*, on the other hand, are structurally dependent upon the form of the case history—whether or not they embody a critique of the psychoanalytic writing of the woman. The project of *Raw Nerves* consists of extracting narrativity from the Lacanian drama and subjecting it to a textual play. While psychoanalysis is often mobilized specifically in conjunction with an analysis of sexual difference (*Dora, Riddles of the Sphinx*), this is not always the case.

This sustained activation of intertextuality, the strategy of multiplying discourses, operates as a defense against the homogeneity of realism and its presumption of an innocent, transparent image. It is a strategy which is not foreign to psychoanalysis itself. Freud mediates an inevitably problematic contact with the

unconscious through a sporadic but consistent appeal to literature as a privileged site of its access. This is not, however, because the unconscious is composed of images but because its principles are linguistic through and through.

In some independent avant-garde films the use of psychoanalysis to mediate a relation to the image is quite literal in that the division of labor between image and sound corresponds to the extreme reduction whereby the image is designated imaginary lure and language becomes the sole realm of the symbolic. Think of the extent to which the "voice of Freud" figures in films like *Dream-Work* and *Dora* for instance. Nevertheless, the recourse to psychoanalysis is clearly an overdetermined configuration. While part of the film-work involves the importation of the seemingly heterogeneous discourse of psychoanalysis, there is also a claim that this discourse *is* only *seemingly* heterogeneous to that of the cinema—witness the constantly cited coincidence of the births of psychoanalysis and the cinema as well as the demonstrations of a convergence of psychical mechanisms in the function of spectatorship. The contemporary fascination of psychoanalysis is also indissolubly linked with its status as a kind of image-repertoire—a treasury of images and scenarios—even narratives—which can be invoked at will, redistributed and rearranged and whose very process of citation seems to insure a buffer against any potential ideological complicity. The imaginary is re-inserted at another level—psychoanalysis becomes cinema's new imaginary. It allows this cinema to qualify images and narrative while still exploiting their structure.

IV

Whether it is the eye which is described as deceptive (as manifested in the fear of *trompe l'oeil* against which the classical cinema defends itself) or the image (as a lure which the avant-garde cinema either critiques or mediates)—the idea is the same: to regulate and secure access to the visual field. But the cinema is also clearly not the only institution which has a stake in the organization of modes of seeing. Upon the birth of the cinema, science did not cease its investigation of the effects and determinations of *trompe l'oeil*. But while the cinema effected a synthesis of vision and of movement, science was interested in their breakdown and analysis (as, for instance, in the work of Marey and Muybridge). Marey claimed that "animated photographs," i.e., the cinema, could "remove none of the illusions" of our eyes: "The real

Riddles of the Sphinx *(1977): "... the strategy of multiplying discourses ..."*

value of a scientific method is the way that it compensates for the inadequacy of our senses and corrects their errors."[23] The third scenario presented at the outset of this paper outlines one tendency in this extended project to "compensate for" and "correct" the errors of our senses. The narrative of Ernst Mach, a narrative of pure observation—the chance glance of a man out the window of a train which appears to confirm the neutrality and indifference of science, its impartiality—motivates and authorizes a series of investigations by an experimental psychologist, Witkin. Witkin's project is the mapping and thus constraining of the inadequacy of vision—its susceptibility to the *trompe l'oeil*.

Experimental psychology, because it assumes a unity of consciousness as an attribute of the subject, is a discourse which for most theorists is diametrically opposed to psychoanalysis. From the point of view of psychoanalysis, experimental psychology is complicit with the defensive, unifying function of the ego—a function which constantly seeks to conceal from the subject its own fundamental splitting, the fact of the unconscious. Another problem with the purportedly "scientific" investigations of experimental psychology is that the subject is treated as pure object. The dialogical relation of psychoanalysis is reduced to the monological and effects of anticipation on the part of the subject—the engagement of another subjectivity, in short—can never be taken fully into account. There is always a remainder, a margin, in a discourse which assumes a certain fullness. While psychoanalysis

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> *susceptibility to the* trompe l'oeil.

is not without its own dreams of scientificity, it has the decided advantage of situating the desire of the analyst as a crucial element in the process of theorizing.[24] Nevertheless, and despite such marked differences between the two types of discourse, it is also interesting, and far less frequent an enterprise, to note their convergences. For both discourses, in their attempts to map the relations between vision, space and subjectivity, reinscribe a certain understanding of the sexual differentiation of processes of looking. In this sense, both can be read symptomatically as privi-

leged theoretical rationalizations of a broader cultural positioning of the feminine and the masculine. Witkin's project, with its quite divergent assumptions about subjectivity and what constitutes a science, converges with psychoanalysis on this issue.

Witkin developed and popularized a number of tests and experiments which came to be classified under the general rubric of "spatial visualization." The experiment inspired by Mach's story, because it involved mimicking the effect of a train ride, necessitated a fairly complex technological apparatus whereby the subject was situated in a closed car which was rotated along a circular track at two different speeds. During this process, the subject was asked to adjust a rod in the car to the true vertical and horizontal. Because the rod was covered with luminous paint, it was possible for the experimenter to remove the visual field (provided by the corners of the car, outlined with white tape and two framed pictures hung on the front wall of the car) simply by turning off the lights. In a second series of experiments, the subject was asked to adjust either the chair or the box itself to the true upright position. This apparatus allowed Witkin to dissociate what he posited as the two determinants of perception of the upright: 1) visual space (which is "filled with proper verticals and horizontals" which "provide a basis for judging the direction of the upright"[25]) and 2) the gravitational pull on the body. When the subject is rotated by the apparatus, the effective force on the body is changed—it is calculated as the resultant of the lateral centrifugal force and the downward gravitational force. Earlier experiments effected a change in the visual field simply by tilting the only visual frame available to the subject for the determination of the vertical and the horizontal. Unlike Mach who tested only himself, Witkin found that his subjects depended much more heavily on the visual field in the determination of the upright than on bodily sensations.

But he "found" much more. Granted an overall significantly greater dependency on the visual field, there was a very wide range of individual differences in relative dependency on that field. Witkin found a satisfactory means of organizing these differences by aligning them with the "most indisputable" difference of all—sexual difference. It is not until the second article ("Further Studies of Perception of the Upright When the Direction of the Force Acting on the Body Is Changed") that the decision is made to correlate individual differences with sexual differ-

ences—apparently insuring retrospectively the sexual neutrality of the very categories of description, the separation of perception into its two components— visual space and the body. Witkin concluded that "women rely less on bodily experiences, or adhere more strongly to the standard offered by the visual field, in determining the upright."[26] Interestingly, this formulation allows women to be more accurate than men in the train-simulation experiments which effect a change in the force acting on the body. But Witkin and others multiplied the number and kinds

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of experiments which claimed a kinship in their testing of what were called visual-spatial skills: the rod and frame test where the frame is tilted, imbedded figure tests, experiments on bodily steadiness in the face of an unstable visual field, and tests of the relative dependency on visual and auditory phenomena. In almost all of these areas, the purportedly demonstrable over-adherence of women to the visual field puts them at a disadvantage in relation to any norm of accuracy. Men's relatively greater dependence upon the body as a standard puts them at a disadvantage only in very limited and highly regulated situations—in trains which travel in circles. The image is indeed a lure in this context. Women, like animals, seem to head straight for the trap, whether sexual or hostile, which is set for them.

In an article entitled "Sex Differences in Perception," Witkin attempted to synthesize and interpret his findings in terms which are particularly revealing. While most subjects "go along with" the visual field, women "go along" with it further than men. In a test in which the subject was required to straighten his/her body when the room was tilted, women tilted themselves farther in the direction of the field than did men—they manifested a tendency to align their bodies with the visual field. Witkin concludes: "Thus, women, in their perception of body position also, tended to be more strongly influenced by the surrounding field and to give less credit to bodily sensations than men."[27] In the rod and frame tests "women tended to adjust the rod in accordance with the position of the frame to a greater extent than did men, and they proved less able to involve the body in making their adjustments."[28] Glued to their surroundings, unable even to take their own bodies into account, women are at the mercy of an unstable visual field. What this demonstrates, for Witkin, is that women are unable to make distinctions, to differentiate, and ultimately, to be as analytical in their perception as men. This is why women cannot read maps.

As one feminist biologist points out, "When all else fails, spatial visualization is the one arena cited again and again as a clearcut example of how the members of each sex think differently."[29] Spatial visualization is an extremely malleable concept—it can and does authorize a variety of repressive operations without appearing to be overtly sexist. It is flexible enough to be linked not only with general intelligence and analytical ability (or the lack thereof) but with conformity and passivity as well.[30] Michèle Le Doeuff describes the claim to authority made by a scientific discourse: "Here, an author speaks in the name of facts; his discourse, which thus boasts an extrinsic criterion of legitimacy (as indeed religious discourse had done), can thereby occult its own discursive operation, and so proceed to dogmatise as it chooses."[31] She delineates the chiasma which is proper to the "spatial imagination": sexual difference does not reside in the genitals but everywhere else—in the brain, the senses, the nervous system, etc. A contemporary scientific discourse finds that the inevitable psychosexual brain differences are manifested in the area of *spatial* aptitude because

'spatial aptitudes' are a vague enough datum ('seeing in three dimensions') to be said to operate everywhere. An inequality of this order can have an indefinitely wide domain of application, in everyday life (driving a car, reading a map) as much as in work (the whole of mechanical industry; scientific education too; the professions of architecture, engineering, art). And as space means the right-hand hemisphere and the right-hand hemisphere means creation, if your daughter doesn't compose music you can blame space for that as well . . . . A mere hump or lobe, or some single convolution of the cerebral cortex would not have been enough. It was not sufficient to invoke some 'narrowly specialized' handicap; it had to be some general dimension of existence. Hence, a whole hemisphere . . . . The practical consequences are easily arrived at: if small girls are less gifted at mastering spatial relationships, one would be wise to keep them at home.[32]

Agoraphobia is only the most extreme instance of such a construction of the feminine just as anorexia is symptomatic of a cultural denegation of the female body—its wished for disappearance. More pertinently for this study, the woman's purported lack of skills in the area of visual spatialization— her overadherence to the visual field—would seem to indicate that she is more susceptible to the *trompe l'oeil*. Far from being a better spectator of the cinema, adhering more closely to the image she is more likely to be "taken in" by it.

The discourse of experimental psychology is, on this point, fully compatible with that of psychoanalysis. For experimental psychology relegates women once again, and in its own fashion, to the realm of the imaginary. The terms of Witkin's experiment presuppose a division in the subject's relation to perception which is articulated with sexual difference only apparently "after the fact." The paradigm which informs the structuration of the experiment opposes the body to visual space, distance (from the image) to closeness, and an internal frame of reference to an external frame of reference (the actual terms used by the experimenters are "field independent" and "field dependent"). The woman "goes along with" the visual field—if the image sways, she sways. Her deficiency is pinpointed as an inability to differentiate—space is all enveloping and the limits of her own subjectivity are not acknowledged. In short, she is incapable of dealing with difference—the analytical category *par excellence*. In the terms of another discourse, she has a negative entry into the Symbolic—is denied access to the distancing effects of Symbolic operations. Experimental psychology gives to the male a more rational, more discursive control of the image—the ability to balance knowledge and belief (in vision) which is characteristic of fetishism. In the experiments conducted by Witkin, the man, unlike the woman, uses his own body (and its felt gravitational pull) as a standard of judgment—it is fully representable within discursive operations. The male body "has that which lends itself to the phallic symbol";[33] the female body, an undifferentiated presence, denies her access to the processes of representation. Gravity and the phallus are in collusion. Two theories which maintain entirely antithetical understandings of subjectivity cooperate in the assignment of a place to the woman—a standard relation to vision, the body, and space.

From this perspective, it is quite problematic to refuse or invalidate Vertov's "politics of perception"

based on psychoanalytic ideas concerning the lure of the image, its insufficiency. For, a politics of perception is already in process whether we acknowledge it or not. Visual space is continually being outlined, territorialized, divided along sexual lines. Women have not only the specific space which is their allotment (the home, the kitchen) but a *relation* to space which is assigned to them. And it is this relation which is ultimately more oppressive—because it covers, controls, secures, oversees in advance all

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possibilities. What is elided in the strategy of fastening upon the image as lure, as non-analytical in itself, is the sexual specificity of such a description. The image *is* a lure to the extent that it draws one closer, but fetishism allows the male spectator to maintain a distance. Classical cinema controls the possibility of *trompe l'oeil* by institutionalizing it and simultaneously invoking fetishistic mechanisms. To protect the spectator (whether through critique or mediation) against the "deceptive" image is to redouble fetishistic mechanisms, not to escape them. In the hopes of increasing knowledge at the expense of a regressive belief (the two being apparently locked together in a restrictive economy), this theory can only further the cause of a knowledge which is phallocentric. The figurative matrix generated by the alliance of closeness with belief and distance with knowledge involves the transformation of an epistemology into spatial terms. If it is true that one has to start from where women are or, perhaps more accurately, from the place to which they have been assigned—instead of immediately assuming an elsewhere—this strategy can only leave them behind.

It might, perhaps, be more useful to encourage work on the possible modes of transformation of the relation to space in film. As Stephen Heath points out, in the narrative film space is organized, ruled, and regulated by the notion of "place." "Space becomes place" and the "point of that conversion" is the frame, its limits and certainty legalized by an academy ratio: "What is crucial is the conversion of seen

Jeanne Dielman, 23 Quai du Commerce, 1080 Bruxelles *(1975): elided moments and the woman's story.*

into scene, the holding of signifier on signified: the frame, composed, centered, narrated, is the point of that conversion."[34] The frame is thus the crucial site for a narrative work on space. It is difficult to imagine, however, a relation to space which would be independent of the coherency and stability of the notion of place—its narrativizing effects: "every picture tells a story." In an article entitled "Place Names," Julia Kristeva attempts to delineate the attributes of that threshold which marks the transformation of space (the field of laughter as a non-differentiated semiosis invoking a participation of the body) into place (named and hence rationalized, symbolized through the mediation of the Father):

Chronologically and logically long before the mirror stage (where the Same sees itself altered through the well-known opening that constitutes it as representation, sign, and death), the semiotic disposition makes its start as riant spaciousness . . . . We note that beginning with the 'first point of psychic organization,' light-giving marker or mother's face, which produced laughter along with the first vocalizations, the future speaker is led to separate such points into objects (transitional at first, then simply objects) and add to them no longer laughter but phonation—*archetype of the morpheme, condensation of the sentence. As if* the laughter that makes up space had become, with the help of maturation and repression, a 'place name.'[35]

While the image is implicated in the recognition/misrecognition of self, visual space is also framed (transformed into a series of "this's" and "that's") and contributes to the very possibility of recognition, nameability. The use of "this" and "that" in language precedes the recourse to "I" and "me." It is as

though it were absolutely crucial to outline a space which the "I"—not yet formulated—could subsequently inhabit. Positionality—not necessarily the visual image in itself—is the coagulant of identity.

Work on the transformation of identities—sexual identities included—will thus necessarily involve a reworking of the relations between space and place. A redefinition of narrative, forcing it to conform to another logic, will affirm the ambiguity of its central signifying dictum—"to take place." The phrase "to

> ## Work on the transformation of identities involves a reworking of the relations between space and place.

take place" points toward a dialectic of passivity and activity—connoting both "that which happens" and the seizure of a position.

The pleasure generated by the final shot of Joanna Kiernan's film, a pleasure in some ways peripheral to the project of the film as a whole—its leakage or excess—lies in its articulation of movement, process, and the stasis of recognition. It is the movement of the train/camera which makes the image fully recognizable, locatable, readable. The pleasure in non-recognition, in the subject's displacement, is by definition momentary, temporary. It is only retrospectively, from a position of stability (paradoxically moving), which itself may be upset at any moment, that the pleasure is possible. And this is accomplished through a disphasure of the two frames—the frame of the film, the frame of the train window. From inside the train, where women finally have the advantage, the train figures differently. It is no longer the privileged trope of the classical narrative, embodiment of a masculine imperative to dominate space, fetishizing moments of arrival and departure in the service of a proiaretic chain linking car to car and cause to effect. Taking one from here to there no longer rationalizes narrative—is no longer the elision of an absent space and time. (A film like *Jeanne Dielman* is explicit on this point: the elided moments of traditional narrative are constitutive of the woman's story.) The narrative train of Freud, Mach, and of Witkin—the site of philosophical, psychological, and psychoanalytic speculation about perception,

WIDE ANGLE

the self, and sexual difference—becomes, contradictorily, the site of both *trompe l'oeil* and its recognition/affirmation—a mimesis which is no longer threatening.

NOTES

This essay is a rewritten version of a paper delivered at the conference, "Cinema Histories, Cinema Practices II." I am particularly grateful for specific comments and suggestions made by Peter Brunette, Linda Williams, Robert Scholes and Peter Wollen.

[1]The compatibility of cinematic perception and that of railway travel is perhaps most effectively represented in a phenomenon of the primitive cinema—*Hale's Tours and Scenes of the World*, a show which "took the form of an artificial railway car whose operation combined auditory, tactile, visual, and ambulatory sensations to provide a remarkably convincing illusion of railway travel." Spectators were seated in a stationary train car as motion pictures which had been filmed from the cowcatcher of a moving train were projected onto a screen at the front of the car. Sound effects simulating the clickety-clack of railway wheels were provided as well as an artificially produced rush of air and a mechanism whereby the car could be swayed from side to side. The movies projected depicted popular American tourist sites—e.g. Pike's Peak, Niagara Falls, Chicago, the Black Hills—as well as foreign scenes from Argentina, Switzerland, Ireland, etc. The show ran in the U. S. from approximately 1904-1906, internationally until about 1912. See Raymond Fielding, "Hale's Tours: Ultrarealism In the Pre-1910 Motion Picture," *Cinema Journal*, 10, No. 1 (Fall 1970), 34-47.

[2]Wolfgang Schivelbusch, *The Railway Journey: Trains and Travel in the 19th Century*, trans. Anselm Hollo (New York: Urizen, 1977), pp. 44, 48.

[3]See Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," *Illuminations*, trans. Harry Zohn (New York: Schocken, 1969), pp. 217-52.

[4]Schivelbusch, p. 65. Schivelbusch's claim about the institution of a "panoramic perception" is buttressed by the names given to two film attractions exhibited at the 1900 Paris Exposition—*Cineorama* and *Maréorama*—which depicted, respectively, views from a balloon and views of the sea one might have from the bridge of a ship. See Fielding, pp. 36-37.

[5]Schivelbusch, p. 66. Although Schivelbusch's analysis might appear to involved a form of technological determinism, his discourse does not represent the train as the result of a purely neutral scientific discovery which is subsequently measured by its effects. Rather, "panoramic perception of objects, panoramic ways of relating to objects, make their appearance in connection with, and based upon, the accelerated circulation of commodities" of a capitalist society (p. 186). Ultimately, the train's reorganization of perception cannot be separated from that of glass architecture or the department store.

[6]The quotes are from *The Interpretation of Dreams*, trans. James Strachey (New York: Avon, 1965), pp. 461-63.

[7]*On Creativity and the Unconscious*, ed. Benjamin Nelson (New York: Harper & Row, Publishers, 1958), p. 156. It would seem appropriate here to also note that Freud suffered

from a persistent phobia of travelling by train. See Ernest Jones, *The Life and Work of Sigmund Freud*, edited and abridged by Lionel Trilling and Steven Marcus (New York: Basic Books, 1961), pp. 11, 198-99.

[8]Ernst Mach was professor of physics and the philosophy of science, first in Prague (1865-96) and subsequently in Vienna (1895-1902). "He criticized the crude positivism of his day from a sophisticated neo-Kantian position. Thus mechanistic and materialist theories were attacked by denying their underlying assumptions of the existence of matter and 'substance.' This eventually led him towards philosophical subjectivism .... " (from "Notes to the English Edition" of George Lukacs, *History and Class Consciousness*, trans. Rodney Livingstone (Cambridge: The MIT Press, 1971), p. 351. Mach, quoted only sporadically by Freud, criticized by Lenin (in *Materialism and Empirico-criticism*), and resuscitated by experimental psychology, is a pivotal figure of intellectual history. See also H. Stuart Hughes, *Consciousness and Society: The Reorientation of European Social Thought 1890-1930* (New York: Vintage, 1958), pp. 105-09.

[9]See "Perception of the Upright When the Direction of the Force Acting on the Body is Changed," *Journal of Experimental Psychology*, 40 (1950), 93-106. I am grateful to David Tafler and Philip Rosen and, in a different context, Anne Fausto-Sterling, for alerting me to the existence of these studies by H. A. Witkin on perception and sexual difference.

[10]Jean-Louis Comolli, "Technique and Ideology: Camera, Perspective, Depth of Field," British Film Institute translation, p. 1.13.

[11]*Ibid*.

[12]M. L. d'Otrange Mastai, *Illusion in Art: Trompe l'oeil, A History of Pictorial Illusionism* (London: Martin Secker & Warburg Limited, 1976), pp. 8 and 13. Although art critics frequently maintain that the use of the term *"trompe l'oeil"* should be limited to the art form it was coined to identify— a kind of precisionistic still-life painting first popular in the seventeenth century (Mastai, p. 8)—art critics themselves frequently overstep this boundary, applying it to such diverse practices as Ancient Greek painting, "magic realism," and a contemporary hyper-realism. See also Martin Battersby, *Trompe l'oeil: The Eye Deceived* (London: Academy Editions, 1974).

[13]Battersby, p. 20.

[14]*Ibid*., p. 20. See also Mastai, p. 19.

[15]This delineation of the spectatorial effects of *trompe l'oeil* goes some way toward explaining André Bazin's construction of an opposition between *trompe l'oeil* and realism wherein the first is a lie, the second truth. While *trompe l'oeil* aims to fully deceive the subject, if only momentarily, realism depends upon the simultaneity of knowledge and belief and eschews this full deception. See *What Is Cinema?*, Vol. I, trans. Hugh Gray (Berkeley: Univ. of California Press, 1967), p. 19.

[16]*The Four Fundamental Concepts of Psycho-Analysis*, trans. Alan Sheridan (Hammondsworth, England: Penguin Books Ltd., 1979), p. 109.

[17]While the *trompe l'oeil* undermines the power of one epistemologically central organ—the eye, the image of the woman as castrated threatens the potency of another—the phallus.

[18]*The Four Fundamental Concepts of Psycho-Analysis*, p. 93.

[19]*Roland Barthes by Roland Barthes*, trans. Richard Howard (New York: Hill and Wang, 1977), p. 105.

[20]*The Four Fundamental Concepts of Psycho-Analysis*, pp. 111-12. Lacan is explicit in distinguishing between the human and animal relations to the imaginary: "Only the subject—the human subject, the subject of the desire that is the essence of man—is not, unlike the animal, entirely caught up in this imaginary capture. He maps himself in it. How? In so far as he isolates the function of the screen and plays with it." (p. 107).

[21]"The Avant-Garde and Its Imaginary," *Camera Obscura*, No. 2 (1977) p. 25.

[22]"The Field of Language in Film," *October* No. 17 (Summer 1981), p. 54.

[23]Quoted in Comolli, p. 1.14.

[24]Nevertheless, at this particular historical conjuncture, there is a sense in which experimental psychology has more ideological currency as a theoretical discourse on subjectivity than psychoanalysis. Hence it would seem even more crucial to submit it to a symptomatic reading, particularly insofar as it attempts to articulate the relations between vision, space, the body, and sexual difference.

[25]Witkin, "Perception of the Upright When the Direction of the Force Acting on the Body is Changed," p. 93.

[26]Witkin, "Further Studies of Perception of the Upright When the Direction of the Force Acting on the Body is Changed," *Journal of Experimental Psychology*, 43 (1952), 17.

[27]Witkin, "Sex Differences in Perception," *New York Academy of Sciences—Transactions*, Ser. 2, Vol. 12 (1949-50), p. 23.

[28]*Ibid*., p. 24.

[29]Anne Fausto-Sterling, *Biological Constructions of the Female: Scientific Fantasies, Political Facts*, unpublished manuscript.

[30]*Ibid*.

[31]Michèle Le Doeuff, "Pierre Roussel's Chiasmas: from imaginary knowledge to the learned imagination," trans. Colin Gordon, *Ideology and Consciousness*, No. 9 (Winter 1981/82), p. 50.

[32]*Ibid*., pp. 59-60.

[33]Parveen Adams, "Representation and Sexuality," *m/f*, No. 1 (1978), p. 66.

[34]*Questions of Cinema* (London: Macmillan, 1981), p. 37.

[35]*Desire in Language*, trans. Leon S. Roudiez (New York: Columbia Univ. Press, 1980), pp. 283, 287.

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