Blur: Rapid Eye Movement and the Visuality of Speed

We find ourselves in fact faced with the exposition of a world where IMAGE = MOVEMENT.
—Gilles Deleuze, *Cinema I: The Movement Image*

Speed itself is nothing apart from the world of three dimensions . . . but it has proved itself in one phase or another to be perhaps the most vital element in human welfare. Its command invests individuals with such a large measure of what seems to be power that, when it is compassed in a fresh and unexpected manner, as it has been by help of the motor-car, men are liable to the illusion that there is a singular bliss in mere speed by itself.
— *Times* (London), October 17, 1911

The boundaries between things are disappearing, the subject and the world are no longer separate, time seems to stand still.
—Ernst Mach, quoted in Paul Virilio, *The Vision Machine*

In 1917 Matisse painted *Le parebrise, sur la route de Villacoublay* (The Windshield, on the Road to Villacoublay), which shows a stretch of road seen from a car windscreen (figure 8).[1] It is a thoroughly unconventional painting of a standard impressionist subject. In retrospect, Matisse's impressionist painterly method has come to stand for aura-laden, formally composed sympathy for nature and affect; here, however, he makes clear that his viewpoint is ultramodern: an observation post invented by a new technology. From the car's interior, he looks out from a vantage point that suggests forces rather than affects, rigid lines rather than roughened edges, and, instead of a Benjaminian aura, the values of precision, the specifica-

FIGURE 8. Henri Matisse, *Le parebrise, sur la route de Villacoublay*, 1917. Oil on canvas, 15.25 × 22 in. The painting belongs to the Cleveland Museum of Art, bequest of L. C. MacBride. Courtesy of the estate of Henri Matisse.

tions of the engineer, and the welded connections of metallic constructions. He might as well have painted the sky, as the more consciously technophilic Robert Delaunay did, in *The Red Tower* (1911–12), through the girders of the Eiffel Tower.

Matisse's painting, as well as others, such as *Route a Calmart* (1916–17), results from drawings he made on a long car trip in 1916. The car journey excited him because he came to think of the windscreen as a "mobile balcony,"[2] a novel version of the fixed frames, such as windows and mirrors, he favored in many of his works. This painting shows the characteristic interest of his art in framing nature as view; here, rather than a balcony door frame in Nice, nature is framed by a car window. Yet the price of mobility in this painting is a radically unsettled quality. Nature is framed by technology, but not necessarily contained by it, for in the painting (a frame within a frame), the world of fields and hedges exists off to each side, disappearing toward the edge of the picture. It is as if no frame, once mobility becomes a factor, can contain: the aesthetic decision to allow us only part of a view is brought to the fore. Other strategies unsettle any assumption that this is an unmediated representation by the painter-viewer. The central scene of a framed road ahead is a stark exercise in classical perspective: this road, its

banks, and marshaled lines of trees all converge at a point in the distance that complements the viewing point of the artist and the viewer before the scene. Cutting across this receding progress, however, is a fragile but insistent line in the middle of the canvas. It is no more than the realist representation of the split in early windscreens made by two sheets of glass. It imposes on the neatly framed perspective, however, a line that corresponds to the line of the horizon in many conventional landscapes but occurs here close to the viewer, so that it jarringly cuts up and dislocates the view. It offers a precise alternative to the line of the horizon. (The real horizon line, only vaguely suggested in the painting, crosses the endpoint of the perspective higher in the scene.) Further, below the windscreen frame but within the picture, Matisse displays the top of another, prior drawing, possibly of the same scene: a shadow of the painting within the painting itself. What appeared at first as an uncomplicated scene of a landscape viewed through a windscreen emerges as a series of mediations on framing and painting whatever landscape one sees.

Le parebrise, sur la route de Villacoublay really shows us at least three paintings—the overall work, the scene framed by the windscreen, and the painting or drawing which juts into the picture at the bottom of the canvas. They each draw our attention to the multiple complexities involved in the act of looking, and of editing, through the framing of what one sees. And this self-consciousness is generated in the first place by the shock, for the painterly world of Matisse, of this specific viewpoint—from within the automobile. This in turn alerts us to the ultimate source of the painting's uncanny, restless quality. As the painting-within-the-painting rests against the car's heavy wooden steering wheel, we are made aware that the car's driver is missing from the scene. The driver and the painter (who is also missing but is presumably sitting in the back seat) are in a sense equated. And the car, as the absence of a driver makes clear, is not moving. The "mobility" which excited Matisse is denied him at the very moment of creation. One senses that it is the frustration generated by this immobility which energizes the work and makes an apparently simple landscape so strange and arresting. The unexpected congruence of nature and technology may be what renders the painting, considered formally, with its numerous arrangements of parallel straight lines, almost a premonition of Piet Mondrian's yellow, red, and blue grids in, for example, *Broadway Boogie Woogie* (1942–43), another painting about traffic. More unsettling: the stress on a mobile viewing post which now is forced to be *still*. It is as if the painting's

cross-slashed perspective, composed of its slipping subviews on each side (it is a triptych for the age of technology) and its smaller painting propped where the driver should be driving, posits itself as the final moment, in modern perception, of a gaze that can be wholly still. Its uncanny stillness begs us to consider how a scene in movement, at speed, might appear.

We have seen in chapter 3 how the car, as the most luxurious and expensive commodity, proffered itself not merely as an object to be acquired but also as a mechanism for the overcoming of its own commodity inertia, in that it granted the purchaser access to a radically new experience. Here we will examine the specifics of which this experience consists. By "experience" here I mean that which is apprehended by the body, through its senses, as a new or more intense sensation or affect (rather than that which is thought, as a new idea or paradigm). "Experience" in this definition is that which exceeds the deadening reification imposed by commodity fetishism, defined by Marx in chapter 1 of *Capital* as the state in which the relations between people are mediated by commodities and replaced by the relation between the subject and the commodity itself. Experience here is posited as a physically apprehended sensation that, by short-circuiting cognition (and hence consciousness) nevertheless potentially possesses a utopian or even political quality: in its novel excessiveness, it has the chance to carry the experiencing subject beyond the all-congealing network of commodification and toward a level where critical praxis might be possible. Such new versions of experience, enabled by the automobile as new technology, turn out to center in the first instance around vision and the sense of sight.

"Rapid motion through space elates one," as the young writer James Joyce in his short story "After the Race" observed.[3] The subject of this chapter is how people saw in new ways while they experienced this novel level of technically induced elation. To represent this new kind of seeing, painters, photographers, film directors, and others developed images that at times tentatively, at others bizarrely, worked to represent the reality of this new sensation. Seeing while physically moving at considerable speeds was not new: Wolfgang Schivelbusch has described the new kinds of looking possible, since the mid-nineteenth century, through a train window.[4] Both high and popular art forms were fascinated by the possibilities of looking at speed. Proust in *À la recherche du temps perdu* and Woolf in *Orlando* dwell on the delights of looking while journeying in the automobile. The Royal Academy painter and designer of car-racing trophies Hubert von Herkhomer claimed that "the pleasure [of motoring] . . . is seeing Nature as

I could in no other way see it . . . one picture after another delights my artistic eye."[5] At least from the moment that cars began to be enclosed and could move at average speeds of fourteen miles per hour and more, seeing through the windscreen of a moving car was considered a novel, even incredible, kind of experience.

The automobile offered the eye new challenges. This novelty was enhanced because of the parallels between the human gaze from a moving machine and the advances, during the same period, in new machineries of representation. If the still camera and still photography match the age of the railroads, then the movie camera and moving film match the era of the automobile. Further, just as people were getting their first opportunity to look from moving automobiles, high art began to take an intense interest in the possibilities of technology to enhance the human gaze. While this interest had numerous outcomes, from the Futurists' fascination with automobiles to Francis Picabia's 1915 portraits using automobile bolts and pistons for *291*, the journal founded by the photographer Alfred Stieglitz, cars and their culture also became an artistic subject. The apparently mundane act of looking either from the vantage point of a moving car or out of a car window became in the early twentieth century a characteristic gesture of a radical reevaluation of human looking aided by technology. This new look, in turn, was at the center of a reevaluation of the relations of the human body and machinery—particularly machines that moved bodies at speed.

Windscreen Teletopology

Matisse's painting comes from one of two new subgenres of images characteristic of the first years of the twentieth century, both of which owe their existence to the invention of the windscreen. First there were views from behind the window, of the world in front; conversely there arose another genre of views from outside the car through the screen to those seated within. The glance into the car, as we shall see, explored aspects of the driving classes as subjects; views through the windscreen from within offered a more radical opportunity. They could represent new ways of seeing made possible by the new velocities of motion—of the gaze in movement.

To reconstruct a windscreen teletopology, we need to recover the sense of shock felt by the first drivers. This shock has since been lost to us, as bodies and senses adapted to the perceptual challenges posed by the new technology. One might object that this initial shock was lessened because

automobiles only gradually came to be capable of the kinds of speeds at which the act of looking from a moving vehicle could be so strange as to be shocking. Numerous accounts of the road and countryside "whizzing by" however, not least by Henry Ford himself, suggest that even passengers in cars traveling at fifteen miles per hour felt the novelty of speed looking. Thus the act of seeing at fifty miles per hour, which people were soon being called on to perform, must at first, especially for the driver, have been nothing short of traumatic. This gaze-at-speed presented itself as a limit gaze: that is, as an effortful, stressful, and willful act at the margin of the humanly possible. This speed looking highlighted the limits of human vision, and even the fragility of the act of seeing. This jars with the Enlightenment certitude of the reality of the observed object, on which the long nineteenth-century tradition of realist representation, and scientific observation as a whole, had rested. (Before the windscreen and enclosed car, the elaborate goggles of the first drivers, masterpieces of Victorian mass production and among the earliest techno-bibelots, testify to how stressful this new looking was.) The car's windscreen, along with the still camera, the moving camera, and other technologies of the ocular which came into widespread use at the beginning of the twentieth century, were symptoms of a new phase of modernity where technologies pushed their users toward their perceptual limits. In doing so, they made those users question the value of their own corporeal perceptual efforts in assessing what constituted reality in space. Any presumed correspondence between the tangible or the visual and the actual could be put radically into question. To look while traveling at speed, as unsettled perceptual limit work, was to become aware that to believe one's eyes was increasingly untenable, and that what constituted the material real might be put into question as well.

This occurred first because the viewer through the windscreen of a speeding car was presented with an unprecedented succession and variety of scenes, a massive sensory overload of roads, nature, structures, people, written signs, others. With all this flashing before her, the viewer had the task of editing, choosing what was important, ignoring the rest, and re-stitching scenes into a narrative that would, in turn, make sense of the confusing mass of scenes that followed at every succeeding moment. This newly violent variety of looking was altogether excessive when compared to the certitudes of the look which composes its (single) scene by means of perspective. A perspective-composing look demands a contemplative time, dependent on the fixity (real or implied) of the viewer. This allows her to

locate, in the scene, a fixed point within it, which is the mirror image of her own presumed if unspoken fixed vantage point outside it. This fixity allows her to imagine herself, once the scene has now been composed in tacit relation to her own now-central subject position, as mistress of all she surveys. ("Everything I see is in principle within my reach, at least within reach of my sight, marked on the map of the 'I can,'" as Maurice Merleau-Ponty brilliantly summed up the logic of this unassumingly hegemonic perspective-directed gaze.)[6] To look while driving at speed, on the contrary, with the look which exists now at the limit point of the human possibility to see, was stressful, and could entertain no such certainties. Rather, what was needed was an editing system, and what was brought into play was a version, improvisational and always unsure, of sampling—that is, choosing here and there, in split-second successive decisions, what appears important before the eye makes contact with a new element in a new scene. For the anxious driver, for example, the solution might be to focus with a determined effort in creating a perspectival point on the road ahead, so that all detail to the left and right is edited out or survives as a mere blur. This blur, whatever the strategy used, will constitute the sign of the limit of visibility in speed viewing. Blur signifies that excess or waste scene that is excluded by the viewer-sampler. Through blur, this excess of the seen still intrudes itself and declares its presence as a kind of forced unconscious, and its message is that to observe at speed is always to run the risk that the scene(s) will decompose. Scenic overload so intense as to threaten scenic decomposition, all countered in the moving subject by an improvised sampling: this is the new, tentative quasi logistics of the automobile gaze.

To this desperately unpredictable, always potentially shocking protocol of the speed look there is added a further uncertainty, one alluded to even by Matisse, a painter intent on raising anxieties about the effects of the juxtaposition of interior and exterior space, when he painted the countryside from within the uncannily stationary interior of a closed car. This is the uncertainty, promulgated by the presence of the intervening windscreen, about whether anything beyond it has a material existence at all. Once the view is framed by the metal of the pillars, the possibility of recomposing it within the terms of a perspectival arrangement is granted, but this possibility turns out to be an illusion, given that, in a moving car, the view that is framed is being constantly altered. Yet this teasing possibility, which invites us to recompose the view as if it were a representation, thereby suggests to us that what is beyond the screen might *merely* be a representation—that is,

a virtuality with only a mimetic relation to the real. One might assume that this constant exposure to new scenes, which occurs when looking as one moves at speed, would move the subject closer to that which is seen, and so make the real more tangible. However, the reverse is what occurs, because, at least within the confines of a closed car, the viewer is at all times separated from what she sees and invited, by the framing of the windscreen and windows, to conceptualize the visible as a representation. This makes for a continual othering of that which is seen, an acknowledgment, simultaneous with the look, that what is seen is not part of the (moving) position which the self inhabits. The gaze through the windscreen is always unavoidably a heterotopic look, which harbors in this inevitable othering a suspicion that the framed scene is virtual rather than real. (At this point, remember Jacques Derrida's definition of *différance* as "archi-writing—this interval is what might be called spacing.")[7] In this gaze which presupposes différance, any certainty about the reality of what is seen is radically put into question, and the possibility that it might merely be a memory, or a mirage, or a dream, or any version of virtual image, is ever present. The windscreen then is very close to the movie screen and even the television screen.

The view through the windscreen of a moving car therefore turns out to be a radically bifurcated experience. On the one hand, the shock effect of multiple images that appear to rush up close and then zip by on either side seems to offer a new kind of sensory immediacy, a contact between the viewer and the scene that is more intense, because faster, than any previously imaginable. Paradoxically, however, the same view turns out to be constructed around a new kind of distancing, a glance that is always framed in advance, which offers the sensation of looking into a scene of which one is not a part. The windscreen, by denying the chance of other kinds of contact, suggests that the scene outside might exist only as a virtuality. These two notions—of intense closeness and of ethereal possible virtuality—are present at once as clashing, opposed elements of the viewer's experience of this novel gaze. Seeing, within this technologically prostheticized framework, in other words, is possible only within a dialectical structure, in which the claims of experiential immediacy and illusionary virtuality are counterpoised. These counterpoints correspond to speed's appeal to a newly intense experience on the one hand and the mass marketing of the car as desirable commodity on the other. The act of looking as intense exposure to multiple stimuli is at the center of the speed sensation as a radically new, pleasurable experience; the anxiety (and reassurance) that what is seen is

merely a simulation befits the fact that the car is a new kind of consumer commodity. It is a commodity which offers both to mediate all lived experience and distance it from what is felt at the same time as it appears to make experience more immediate.

These two trajectories, in turn, neatly map onto two famous, and contrasting, accounts of what it means to live in modernity. That the gaze from the auto offers a new level of intense, shocking visual experience makes it a star exhibit in the modern milieu described by Max Weber, that world of shocking, overstimulating, mechanical, hyperabstracted, and fatiguing urban life that is the lot of the modern city dweller. Georg Simmel, in "Metropolis and Mental Life," described, in terms easily applied to the experience of seeing from the automobile, how "the psychological basis for the metropolitan type of individual consists in the intensification of nervous stimulation which results from the swift and uninterrupted change of outer and inner stimuli . . . the sharp discontinuity in the grasp of a single glance, and the unexpectedness of onrushing impressions."[8] That Simmel here begins with vision in his adroit description of sensing in a speeded-up environment simply proves Martin Jay's contention that vision is the primary sense in modernity, even at the moment when the hectic quality of modern life was considered by Simmel and others to be placing more dignified versions of sensing under threat. Yet this anguished, nervy narrative of the low-level brutalities of urban life in the twentieth century existed side by side with a counterstory which dwelt on modernity's endless capacity, on the contrary, to suffuse its denizens in a dreamscape of narcotic images. This version is perhaps best exemplified by the notes of Walter Benjamin in *The Arcades Project*, in which, although he speaks of shock as that moment where people come into consciousness of the reality of the dreamscape in which they move, he sees modernity as the triumph of *Vergnugungsindustrie*, the pleasure industry, with the commodity, casting a new kind of mythic aura, as its cynosure. This is the forerunner of the "society of the spectacle" memorably anatomized by the situationist Guy Debord, for whom the spectacle as dreamscape is capitalism's ploy to reenchant the alienated existence of the bedazzled consumer, as a means to deny him any real agency:

> The more [the spectator] contemplates, the less he lives; the more he accepts recognizing himself in the dominant images of need, the less he understands his own existence and his own desires. The externality

of the spectacle in relation to the active man appears in the fact that his own gestures are no longer his, but those of another who represents them to him.[9]

When this bewitched spectatorship is the activity that precludes the subject's active agency, this version of the entrapment of the modern gaze on a virtuality, a dreamscape which disables subjectivity, would seem the opposite of the version proposed by Simmel of the hyperstimulated and, for Simmel, thereby more intelligent modern spectator.

These two accounts of modernist looking are not, however, mutually exclusive. To the extent that they are opposed, they lead to two contradictory accounts of a modernist, technologically enhanced gaze; the fascination of both with the novelty of the new milieu nevertheless renders their conclusions on the agency of the modernist subject surprisingly compatible. When Simmel describes how the urban cosmopolite, confronting repeated shocks, develops a hard carapace of dulling indifference, he comes close to imagining that varied, successive series of visual stimuli as a spectacle in Debord's negative sense. Conversely, when Benjamin describes in his essay "On Surrealism" how the "profane illumination" of the realm of dream images produces a level of such mass enervation that it leads to a communal bodily tension, his language of corporeal overstimulation is uncannily close to the more matter-of-fact urban sociology of Simmel.[10] The extent to which either writer works out what his account implies for any given subject's political agency has been hotly debated by commentators since; the need for a politics of the gaze is clearly an issue proposed, at least implicitly, in the writings of both. Likewise it suggests itself at once when we return to what could have been a prize exhibit for each author's method: the new act, apparently so simple, of looking out the window of a speeding car. The new speed gaze from the moving car brings each of these opposing versions of modernity into urgent, immediate confrontation.

This new gaze is both lived, physical experience and consumer pleasure at once. It is a vivid example both of Simmel's overstimulation and of Benjamin's reenchanted spectacle made possible by capitalism. Can a look at the ways in which this new gaze was described or represented suggest that one account is more valid than another? If they do so, what does this new look imply for the agency of the subject who enjoys this gaze? The speeding car offers the possibilities of a novel gaze that overcomes perspectival looking. Does this engender in the rider or passenger new possibilities

of action, that is, an agency that could properly be termed political; or does it immerse that subject more deeply in the dreamscape, offering merely an illusion of the freedom which car advertisers have from the first attached to this technology of personal speed? Or perhaps it is possible for the modernist subject to sustain a reaction to this new gaze as both hyperstimulation and narcotic dreamscape at once, playing one against the other, or zapping from one to the other, in a new grammar of perception which short-circuits evaluations of the authentic and inauthentic and proposes a new rhythm of sensation to navigate space and its multiple scenes. Here I consider a series of reactions at the time to speeded-up seeing in order to examine the versions of agency they imply.

Bergson through Futurism

The great philosopher of these vivid unsettlings of the visual by the new possibilities of movement, who theorized them at much the same time as they occurred, was Henri Bergson, just as his most brilliant reader, writing a half century later around the moment when electronic rather than merely mechanically aided looking and viewing had become commonplace, was Gilles Deleuze. Bergson's usefulness for our purposes comes from the way in which, particularly in his early work *Matter and Memory*, he retheorizes the human subject's sense of her occupation of space in light of the more complex relation between (mental) image and memory. New ways of looking, among them technologically enhanced means, had influenced Bergson in rethinking the "mental image," the notion of the "mind's eye."

In Bergson's work, Simmel's sociological mass observation, it might be said, is carried to its theoretical conclusions, to the point where the totality of the subject's perception of space is put into question. In the course of Bergson's discussions of the meaning of movement and flux, a whole new conception of space is implied. This reimagining of the notion of space in philosophy found its counterpart in the same period in a similar, and more popularly influential, review of what constitutes space in scientific terms, notably in the work of scientists such as Einstein and Bohr. If Bergson's philosophizing, however, begins as epistemology and becomes metaphysics, then the work of the artists he influenced, particularly the Futurists, shows its limitations as a means of reimagining the problem of whether the speed gaze is stimulation or dream immersion, whether it enhances the possibilities of active agency or haplessly submerges the subject deeper in the

Vergnugungsindustrie of capital. Some Futurist production reminds us of the profound political dangers of overzealous applied Bergsonism, in that it was used by the Futurists in their support of emerging and then triumphalist Italian Fascism. Nevertheless aspects of Futurist experimentation and research can be recuperated, I suggest, to teach us not only that a too-avid Simmelian reading of modernist stimulation can foster empty fantasies of power, but that the stimulations of the speed gaze can only be dealt with in relation to the materiality of the perceiving body, its sensations, and its dreams.

Bergson suggests that space can no longer be thought of as an abstract, always already existing ground or plane on or across which movement takes place, or as an empty surface which precedes the objects that occupy or traverse it. That conception of space is a useful abstraction produced by the logic of a particular protocol of looking and image making—a regime of visual composition which, for Bergson, is thoroughly questionable.[11] Claiming that "abstract space is, indeed, at bottom, nothing but the mental diagram of infinite divisibility,"[12] he posits instead the notion that it is movement which generates space. Movement, therefore, is not simply a progress through this abstract plane, which can be known only when mapped as a succession of momentarily held positions, but instead a play of tangibilities, especially images, a matter of pragmatic action rather than contemplative, static positions, and a fluctuation of emergence, intensities, extensity, and becoming, rather than a matter of Cartesian gridded space to be mapped or known.

Bergson reimagines space as an entity dynamically produced through motion rather than an abstraction that must always be thought to precede such motion; space, to use his own term, is *an unfolding*. His bravura account of its continuous creation is strikingly analogous to the epistemology of the contingent, often traumatic windscreen gaze that I described earlier. That gaze too unfolds new spaces continuously; reacts to some of them much more intensely than others; is always directed to action (in continuing the journey) rather than to static contemplation; values the continuous emergence of new scenes, sensations, reactions, and connections; and, given its radical contingency and unpredictability, seems primed to put any certitude about the spatial real into doubt altogether. In these terms, Bergson brilliantly disposes of the idea of "place"—which could be defined as the aura-laden glorification of one of those static points of contemplation on the old Cartesian grid. His celebration of this reimagined "unfolding"

space of an active, ultra-intense subjective perception is very much in keeping with any account of the relation between subject and space as this relation is being renegotiated once the subject becomes a viewer in a technological prosthesis which moves her physically as she looks.

Bergson's account is in keeping with a celebratory description of this new technologically driven gaze. He concludes his extraordinary exposition by claiming that what is needed to enable a proliferation of intensities is a return to the actuality of immediate, lived experience.[13] The philosopher, feminist, and theorist of space Elizabeth Grosz, in a compelling rereading of Bergson through what she terms (in a footnote) the "bastardized, anal reading" of his work by Gilles Deleuze,[14] chooses to depart from his thought at this point, instead designating a play of virtualities and actualities in search of the restoration of becoming (i.e., becoming other-than-itself) to both space and time.[15] This is indeed the point at which the Bergsonian analysis turns to advocacy and must be treated warily, for Bergson's account of how motion unfolds and actualizes space, while brilliantly evocative of the potential implications of shifting perception in the machine age away from the logic of what might be called homogeneous vision, only implies some greater immediacy and, to use my term up to this point, a more intense experience. His version pushes us to accept that the alternatives to the Cartesian gridded conception of space and hence movement are *necessarily* utopian, liberating, or in some sense elemental.

In the first, closely argued chapter of his Bergsonian analysis of film technique, *Cinema I: The Movement Image*, Gilles Deleuze makes two extraordinary claims for Bergson: first, that he transformed philosophy by turning it toward the issue of the new rather than the eternal, to ask, "How are the production and appearance of something new possible?" and second, that what Bergson aims to do is "to give modern science the metaphysic that corresponds to it, which it lacks as one half lacks the other."[16] Newness gets delineated, then, within the sphere of a metaphysics, and this metaphysics is focused on movement. As Deleuze explains succinctly at the outset, movement for Bergson is "distinct from the space covered, . . . is indivisible, or cannot be divided without changing quantitatively each time it is divided. . . . Movements are heterogeneous, irreducible among themselves" (1). Bergson's movement is not reducible to mapped instants in (conventionally conceptualized) space or time, for if you map it as two near-instantaneous points in space, as Deleuze notes gleefully, "It will always occur in the interval between the two, in other words behind your

back" (1). And this mobility which occurs "behind your back" is the famous Bergsonian *durée*, which is then thought of as a whole "which implies that movement expresses something more profound, which is the change in duration or in the whole. . . . To say that duration is change is part of the definition. . . . Now movement expresses a change in duration or in the whole. Movement is a translation in space. Now each time there is a translation of parts of space, there is also a quantitative change in a whole" (8).

Movement, conceptualized as the durée, is here nothing short of change, and hence, it appears, the engine of history itself. Yet this durée, as Deleuze also notes, is a metaphysics; he subsequently terms it "a spiritual reality" (11). As such, it can only act on *relations*—and relations are always external to the terms of objects themselves. Bergson's philosophical broaching of the new, then, while it appears to promise an account of how movement—especially fast movement, speed, velocity—can be the basis, first, for a reconceptualization of the spatial imperatives which underpin Enlightenment rationalism, and subsequently for a new account of historical development itself, needs to be treated with extreme circumspection by any critical theory which takes a materialist reading to be the goal of its intellectual investigation. For the materialist critic, the durée remains at best an unduly optimistic term to delineate the potential of movement and speed.

Bergson's *Matter and Memory* was published in 1896 and is thus almost contemporary with the appearance of the first commercially produced motorcars. Its "shifting of the soul this time from the brain to the motor" (the phrase is Paul Virilio's, from another context)[17] might be thought of in part as expressing the optimism regarding speed technologies implicit in that moment. It is in the writings of his most avid disciples, the Italian Futurists, and in particular the early manifestoes by F. T. Marinetti, especially the famous Futurist Manifesto, which appeared in *Le Figaro* on February 20, 1909, the assorted pieces published in France as *Le futurisme* in 1912, and the more cogently elaborated discussions of Umberto Boccioni, especially his *Technical Manifesto of Futurist Sculpture* of April 1912, however, that, famously, the automobile is the explicit symbol of the new speed culture, and fast movement's potential is celebrated not merely theoretically but also as a pragmatic and tangible experience. Futurism today is perhaps most remembered first for its brutal misogyny and second for the movement's reprehensible advocacy of Italian Fascism. What I wish to show here is that its members' initial, enthusiastic pre–World War I investigations, in moving from the theory which fascinated them to a working model of the

subject-artist's relation to technologies of speed, caused them to confront implications in the theory which, at best, betrayed its limitations as the basis for any kind of politics whatsoever and, at worst, displayed the ease of its deployment in favor of groups using brute force to seize power.

The Futurists' first assumption was that the force of movement and speed needed necessarily to be embodied. From the start, Marinetti was interested in speed not in the abstract, and not as an element "always behind your back," as Deleuze claims that Bergson represents movement, but only as it was embodied in the clamoring, active artist himself. The often ridiculed opening set piece of the Futurist Manifesto of 1909, where Marinetti and his friends are shown feverish in the face of "our ancestral ennui on opulent turkish carpets," which Rayner Banham assures us is not a pastiche of a decadent novel of the period,[18] far from being merely self-promoting, is the absolute prerequisite for the stark list of resolutions which follows. Showing the young artists' unease with their bourgeois milieu as a fever-inducing restlessness, and deploying a battery of frustrated action verbs—"awake all night . . . constellated . . . trampled . . . arguing to the limits . . . blackening . . . sweat . . . ferret"—as a means to kindle similar sensations of impatience in the reader, the manifesto's opening implies that the desire for movement at speed, rather than being aroused by the sight of "locomotives that hurl forward at insensate speed," was instead merely assuaged by such sights. That is, this desire for speed was already inherent in the artist as subject even before the new locomotives arrived to inspire him. For the Futurists, the durée is imported into the psyche and recast as a subjective trait. When the young Futurists become drivers of their automobiles, an activity described, appropriately for the period, in terms of riding a difficult horse, this speed is realized:

> We drew near to the snorting beasts and laid our hands on their burning breasts. Then I flung myself like a corpse on a bier across the seat of my machine, but sat up at once under the steering wheel, poised like a guillotine blade across my stomach.[19]

Here the verb change is crucial: the language of frustrated action—"I flung myself like a corpse"—which amply suggests a temptation to lapse into decadent languor, is renounced at the moment of contact with the car, which causes the Futurist to primly "sit up at once." Even here, however, it is the subject's own will which matters; Marinetti (perhaps inspired by another major influence, Walt Whitman) infuses Bergson's ideas with the

self-aggrandizing impetus of Nietzsche's will to power. Some years later, nevertheless, Marinetti, in one of the pieces published in *Le futurisme*, would repudiate Nietzsche's superman as the holder of an all-too-classical pedigree.[20] The verbs grow more active, the tone more declamatory, as the Manifesto progresses: the message is that the Futurist must embody speed, then use it. This Futurist artist is quintessentially a driver of an automobile, turning the speed he embodies into a force for revolutionary change. Compare a relief sculpture of 1884 by the proto-Futurist Milanese painter and sculptor Medardo Rosso, *Impressione d'omnibus*, for example, with Marinetti's rapturous account of his friend's driving at dawn.[21] In Rosso's work, the four omnibus passengers who are represented, even if a Rodin-like roughness in the rendering suggests the blurring effect of people glimpsed only for a moment, are all shown as stiff with the boredom of modern mechanized life even if they are traveling at (relative) speed: the person carried at speed, rather than the driver, is, it appears, truly powerless. Marinetti's young racers, in contrast, actively and furiously wrestle with their powerful cars as a means to realize their energized selves. In taking into their own bodies the speed that marks their subjectivity (they live most fully when speeding), they display speed as a force. Thus for the Futurists, speed was "spiritual" (to use Deleuze's term regarding the notion of movement in Bergson) only when it was a force, that is, a form of violence which, embodied in each of them, aggrandized each personally. The Futurists' self-centered realism about speed transforms the transcendental tendency in Bergson into a Nietzschean program of will to power achievable by harnessing new technologies of personal speed. Their texts teach us that movement will first be experienced as embodied, and as a force which transforms the subject's energy into new and unprecedented power.

The second immediate lesson of early Futurist writings and experiments is a more general version of the first: if speed is embodied as force, then it invariably inheres in, and is only exhibited through, matter — often through the medium of the human or animal body. Speed's inevitable materiality seems a Futurist given. It is thus appropriate that the finest Futurist artist, Umberto Boccioni, was a sculptor, one who in works ranging from his much-discussed *Forme uniche della continuità nello spazio* (Unique Forms of Continuity in Space) of 1913 to his now destroyed *Espansione spiraliza de muscoli in movimento* (Spiral Expansion of Muscles in Movement) of 1912,[22] and in his careful, complex readings of Bergson ("Absolute Motion + Relative Motion = Dynamism," 1914),[23] was obsessed with the perception of

dynamic movement, but only as it could be discerned in moving objects, or, almost invariably, in moving bodies. Typically, a Boccioni sculpture displays a form, such as a human body, contorted and tweaked along a diverse series of planes. These diverse planes suggest force vectors that cut out beyond the form itself to intersect with every plane in space outside it; note, however, that its strange vectorality works for the viewer only because she implicitly compares it to a realist body that is, as it were, hidden in the folds of this de-composed and abstracted flesh. Boccioni followed Rodin in believing that sculptors should work to represent the movement of a figure between two poses; it was in representing this version of the durée that the artist betters the photographer, who, as in the case of the pioneering "movement studies" of Eadweard Muybridge and Étienne-Jules Marey, can in fact only "capture" movement as a succession of still images.[24] Movement imagined in this way is a force within a material figure. In this sense, Boccioni's work resembles the early accounts of car speeds by observers on the roadside, astounded by this new force hurtling by.

The career of Giacomo Balla, the most notable Futurist painter, moves from portrayals of people, swallows, small dogs, and machines at speed toward more fully abstract versions of speed sensation. His *Penetrazioni dinamiche d'automobile* (Dynamic Penetrations of an Automobile) of 1913 (figure 9) might be taken as a limit point of the representation of realist forms in his work: here the speeding automobile is barely discernible as a thin outline veering off to the left of the canvas amid a rich torrent of heavily shaded force vector lines which, meeting at sharp angles, denote speed force. Look closely: an initial set of lines, more symmetrically posed, meets at what turns out to be the focus of the painting: a point corresponding to the center of the car's steering wheel. Even in this almost abstracted representation of speed's force, speed is embodied in a physical form. Likewise it is a mistake to see Balla's more thoroughly abstracted speed representations, such as his *Spessori d'atmosphera*, painted in the same year, as abstractions in the sense in which that term is used, for example, about the sculptures of Russian Constructivists of the same period such as Vladimir Tatlin, or the paintings of El Lissitzky. Despite the intensely suggestive series of circles and succession of parabolas of this work (one of four made to illustrate a promotional text by Boccioni, *Pittura scultura futuriste*, all of the originals now lost), which registers the blur of speed superbly, these precise painterly gestures were themselves the result of obsessive and exhaustive experiments by the artist into how the perception of speed

FIGURE 9. Giacomo Balla, *Penetrazione dinamiche d'automobile*, 1913. Courtesy of the artist's estate.

can be represented—in this case, into how speed effects the perception of light. They are representations of specific forms, however attenuated: the painterly task is still the making visible, as accurately as the brush can, of forces whose energy emanates from material objects. These are studies of the limits of perception which it is necessary to reach to see speed; they resolutely focus on a dynamic, but still existing, materiality.

One might claim, then, that despite the bombast and determined self-promotion of the manifestoes, there is a relative lack of theoretical or representational ambition in Futurist writing or artistic production: the group could only theorize speed as a force embodied in a human subject, and only represent it as a force embodied in the material world. But if their project appears now as a narrowly and, as Futurist political affiliations would show, dangerously modified Bergsonism, one may assert that the artists' attempt to "apply" the philosopher's ideas, and their easy marriage of them to Nietzschean and Whitmanesque versions of selfhood, mainly exposed the limitations of the transcendental thrust of Bergson's notion of the durée. The Futurist Manifesto and paintings perform the valuable task, for our purposes, of returning the issue of movement at speed to the experience of this movement by the human body, and of insisting that the representation of such speed effects can only take place as forces in relation to ob-

jects, matter, and the material world in general. At the limit point of Balla's painterly investigations, moreover, we see him arrive at an examination of the ways in which such new experience of the material world is knowable through seeing; his task too is an attempt at a new teletopology for the mechanical era.

This sensation, as the frantic idealism of both the philosopher and Futurists indicates, was consciously available, however, only as a limit experience: ready to slide into the transcendental realm, on the one hand, or manifest itself as physical force — so that it could be dangerously available for the most brutal and retrograde populist politics — on the other. That is: Simmelian trauma as the basic experience of modernity was recast by the Futurists, in the case of the subject's interaction with new technologies of speed and with the motorcar in particular, as force that enhanced individual will to power; the Benjaminian version of modernity as dream immersion, likewise, is recast in Bergsonian mode as a more or less spiritual delineation of the relations between moving objects. If we place Bergson and the Futurists in their historical contexts and imagine the effect of their respective polemics against the background of a new barrage of mostly more lowbrow discourses — advertisements, comic books, car magazines — about the new technologies of personal speed and their effects in this period, then we can see that both were avant-garde in bringing the issue of movement and speed into their respective fields. Each could only articulate movement as a limit discourse, one on the cusp of consciousness and the expressible, one liable at all times to an expressiveness that challenged the experiential.

Articulating Blur

This limit discourse of speed was, in relation to vision, balanced on a further paradox: while movement at speed promised that one would see more — a multiplicity of scenes replacing other scenes in an endless parade — the short time available to look at any one scene meant that the faster one moved, the less one saw. Hence *blur*, the effective erasure of the visible, became the dominant trope for representing the sensation of what was seen at speed, from a car, in the years between Bergson's *Matter and Memory* and the Futurist Manifesto. While Bergson in philosophy and the Futurists in painting, sculpture, and polemics were recasting the issue of speed as, respectively, a new antimaterialism and a new applied Nietzschean and reactionary protopolitics, a mass of artists, reporters, and writers were

intuiting their own versions of how what is seen at speed might be represented. For them, as we shall see, variations on blur could annotate a hierarchy of responses to, and perceptions registered in, speed seeing, in ways which could make the new activity of driving seem both a "romance," old-fashioned, embedded in nostalgic narratives of quest, heroism, and status, and a shockingly modern, up-to-the-minute practice in which nothing less modern than new kinds of perception could be sensed and understood. Many of these artists and writers were employed to promote the fascination with what came to be known as automobilism and as such had a vested interest in casting it as a romance. What is noticeable, however, is that the romance narratives (as in, say, the account of an endurance race or in the cloying copy of car advertising) almost always give way to excited attempts to render speed as an altogether new experience — and especially to show the novelty of seeing at comparatively great speeds.

In these renditions — as one would expect in any accounts where the limits of the available resources to describe any sensuous experience have been reached — versions of synesthesia proliferate. Accounts based on one sense are plundered to convey the newly intense experience of the other one in question. Such transfers are also short-circuited, however, by a paradox of speed seeing: while one apparently sees more, the fastness of multiple exposures means that in fact one sees less. Into this representational impasse, where what apparently is available is an excessiveness (of images) but what in fact is opened up is a sense of lack (of those massed scenes unseen), artists and writers imported varied accounts of how a new kind of prosthetic seeing operates, how this new kind of seeing recalibrates the relation of the eye to the other sense organs as well as to memory, emotion, and thinking, and how, in this recalibration, reordered models of the human subject as agent were being thrown up. This subject as agent might not lapse into either the repeatedly shocked figure described by Simmel or the modernist dream-sleeper evoked by Benjamin but would juggle shocking image changes and the effects of overexposure with dream-inducing images. This varied work of looking would be orchestrated in a synesthetic complex which could radically recast the prostheticized subject.

Such a figure could not be teased out in terms of old romance narratives. Those action dramas, as in the case of pre-Conradian colonial adventurer novels such as H. Rider Haggard's *Allan Quatermain* (1887) and John Buchan's *The Half-Hearted* (1900), depended utterly on the dominance of the eye: the explorer-hero of the imperial romance would be master of all

he beheld. The new romance heroes of the postimperialist moment were instead the athletes and mechanics who carried human speed capacities to their limits; for them, the eye was a guidance and direction system (like radar) rather than a precursor and sign of territorial possession. In this regard, there is a suggestive moment in an essay by the author Wyndham Lewis, critic and imitator of the Futurists in Britain, when he discusses what, with perverse and characteristically Futurist bombast, he calls "the Romance of War." Speaking of how, when first brought to the front in 1914, he could see nothing but felt keenly the "romance" of the battle, he comments: "The truth is, of course, that it is not what you see at all, that makes an event romantic to you, but what you *feel*."[25] Lewis here expresses the dilemma not only of war painters but of the artists and writers representing car culture as well, even as he declares the way beyond it: when the eye confronts a lack, the other senses—and the emotions, he implies—rush into the vacuum created. This in turn—and here he is much less forthcoming—begets a new kind of romance, where the tatters of the old tropes of pluck, gamesmanship, and derring-do maintain a precarious and stilted twilight existence as the threadbare emblems of earlier heroisms alongside a new order of synesthetic perception which prioritizes the optimal arrangement of the human body's observations and responses and a monomaniacal self-monitoring in order that the speed attained can itself be overcome. The older narrative machineries could no longer arrange in any recognizable comfort the onrush of images that confronted, for example, the automobile driver; new arrangements, new ways of processing the seen in relation to other kinds of sensing, feeling, and thinking, were incrementally developed so that speed seeing could be understood. Realist narrative proved unequal to representing these new complexes of sensations, its focus on succession and the progress of linear time too sedate for an experience which was to be held only for a moment. Images—pictures, paintings, sketches—which delineate spaces rather than temporalities turn out to be more symptomatic in charting the change in sensory powers. Before speed was described, it was shown. "History decomposes," as Walter Benjamin put it, "into images, not narrratives."[26]

One reason for the relative lack of narratives of speed was a new focus on the present instant, the here and now. This focus was matched by new technologies of representation to record the new sensation of speed—the most important being the camera with a shutter speed fast enough to record a moving object. One can see how this worked in the finest of the early cars-

in-motion photographs, those of the French photographer Jacques Henri Lartigue between 1905 and 1912. Lartigue is routinely praised in histories of photography as the originator of the "snapshot aesthetic." As he began to use a hand-held camera in place of his earlier tripod-mounted one precisely to enable him to capture the new sensation of seeing speeding cars, here clearly is a case of car-as-technology itself almost demanding creative innovation in another technologically enabled art form.

In Lartigue's most famous shot, of a car in the Grand Prix of the Automobile Club of France in 1912 (figure 10), for example, the residual romance narrative still holds sway: in the tensed, hunched shoulders and gripping hands of the driver, we have the image of the explorer-adventurer par excellence. In fact, the image's most daring artistic gesture, its drastic cropping so that the front half of the car is cut out of the photograph, focuses us all the more on the driver-adventurer rather than on his automobile. Nevertheless this cropping also signals the inability of any image, even of a camera shot as bold and original as this one, to contain or represent a speeding car in full. The instant, the cropping insists, is all; if it is not "captured," then the car and its speeding glory have escaped. This photograph, the cropping makes clear, is a limit-image. Within the half of the nonexisting diptych that Lartigue supplies us here, paradoxically the car itself appears quite still. However, this stillness is focused on the tense hand gripping the steering wheel: the effort of the hero of the romance of speed, in other words, is the photo's most still point of all.

Presenting this particular imaging of speed, Lartigue's photo is very close to Balla's *Penetrazioni dinamiche d'automobile* of a year later (except that there the car, also cut in half, points in the opposite direction); both are hampered in fully showing the speed effect because they are representing a speeding object from the point of a stationary spectator rather than from the viewpoint of the driver himself. The still spectator, even one with a movable hand-held camera, must, as it were, find his counterpoint in the vehicle's driver, whom he then must also show, mirroring himself, as a still point, without blur. Using the same focus on stillness as the vortex of suggestions of movement, Balla can show a vehicle's movement as abstracted arcs and planes, but only as arcs that radiate from the relatively realistically portrayed car and steering wheel itself. One might claim that an older version of human agency—the heroic idea that the subject is in charge of the speeding technology—is what stills the point at which the hero's hands come in contact with the steering wheel here: the ruling idea is that

FIGURE 10. Jacques-Henri Lartigue, *A Competitor in the Grand Prix of the Automobile Club of France, 1912*. Courtesy of Friends of J.-H. Lartigue, Paris.

human control is what matters. It is also the technology of the camera's eye, however, that is the maker of this point of stillness. The camera eye, faster than the human eye, captures an instant, which it then renders as still. Ultimately the snapshot is unable to show speed as such. How speed *is* shown in Lartigue's photo is through the contrast of the still car body and driver with a series, first, of blurred and second, of angled, elements: the roadway, which exists as a swish of lines in the bottom third of the photo, four or five shadowy spectators, the two poles or trees are shown as blurred. The spectators, poles, and even the car's rear right wheel are shown at an angle; they seem to trail backwards. The blur is the result of the camera eye's focus on the moving element, the car, which—in opposition to what a viewer's own eye perceives—it shows here as still.

If, for the viewer of the photograph, the still car stands for the single, "captured" instant, then its blurred elements—which to a human viewer of the race, conversely, would be the clearly visible, because stationary, ones—stand for time as more than an instant, time as duration. It is by a savage and preemptive reversal of actual human perception, then, that

the camera produces the image of speed. In this mode, the camera image suggests that those elements which we see as blurred are not important, are only background to be dismissed, in favor of a vivid focus on speed experienced in a moment. Such a focus on the instant—which was taken up by artists such as Robert and Sonia Delaunay with their theory of "simultaneism" in Paris in the same years—reads speed as the intense experience of every single instant. The camera's technology of seeing presents the point of most intense speed as the point of visual clarity, that is, as its most wholly unmediated realism. In the snapshot, clarity stands for movement captured in an instant. The new technology of speed perception could only present its viewers with speed as a force lived in the moment; thus it bolstered the notion that speed could offer an intense, because moment-to-moment, experience.

This particular reversal of the logic of human perception also suggests that this focus on the instant dematerializes time. Time, duration, is the element represented in the photo by the blurred roadway and the rest. (The durée is indeed here always behind one's back.) Nevertheless the photo's point of clarity—car body and driver—its realism, catches the eye only because it contrasts so blatantly with the blur in the rest of the image. In a still photo of a stationary car, for example, such clarity would be omnipresent and unremarkable. Overcoming the blur of time to savor the clarity of the split second—all enabled by another machine—becomes the pro-speed message of this logics of technological perception.

This is enhanced in Lartigue's photograph by what one critic has termed "the strange leftward tilt of spectators and poles."[27] This angularity, achieved because, experimenting, Lartigue jolted his camera during the shot, sets up a series of vectors in the photo—for example, where the lines of the imaginary bases of the poles meet the line of the uprushing ground—which resemble the Futurist marking of arcs and angles to represent sensed speed. They create a series of arrow points in the composition, all of which point the way to the car's forward movement. They mimic, and reverse, the forward thrust of the human or animal torso in racing mode because here the human figures reach backward while the car leaps forward; in this way, they too represent a residue and the demise, however formalized, of the old narrative of speed as heroic endeavor. But they also make for a distortion, a knocking sideways of the poles and figures already blurred: these figures, merely standing to look, are registered now as shadowlike rather than material. Each person, as a figure of the spectator, is a mirror version

within the photo of ourselves. We find the reflection of ourselves within the photo disconcertingly askew, mockingly half-erased into shades. Our passive looking, as well, is mocked here, while the one who experiences the speed, the heroic figure accorded the intense point of clarity, is alone granted the respect of realistic depiction.

Cast between these opposites, close to the center of the photo, is an evocative, uncompromisingly ungainly bundle of circular forms—the spare tires, the tank emblazoned with the number six, the moving wheel itself. This wheel, with the smudge of light at its center, which is both half-blurred and half-tilted, like most of this vorticist composition, struggles between the photo's mass of blur and its particle of clarity, suggesting a raw, undefined technology that is merely functional and wholly at the service of speed. The wheel as pure speed is also a reflection of the camera eye, looking back coldly. It manages to be blurred, tilted, and clear at once, as it looks into the lens of the camera. The people, speed's viewers, and even the driver, speed's servant, are all peripheral to this central wheel as eye, and whether shown through realism or stilted blur, the point is that they can merely work to keep up with the "pure" speed of the technology itself. In this image, in which the wheel-eye faces the camera eye, one technology is shown as congruent with the other. It is the surface speed technology itself, that wheel in complicity with the camera eye, that steals the photograph.

We, as viewers, disconcerted before the cropped car and the dizzily tilted vortex of the wheel eye, can, it is implied, hardly see technology's speed: we are exposed as unequal to it, needing to reach further levels of intensity, and of tenseness, to appreciate it. Given, then, that images of technological speed would advertise the human viewer's inadequacy, it was inevitable from its earliest depictions that any simple romance narrative of the speeder as hero would fall away. In the work of early commercial artists, such as Ernest Montaut (1878–1909), who has been credited with pioneering many of the devices conventionally used since to convey automobile speed in images, from blurring backgrounds to bending the car bodies and showing the front wheels larger than the rear ones, as well as using "speed lines" to indicate the vehicle's swoosh through the air,[28] it was the machine, not the driver's heroic form, that was the star. This was speed as a force beyond Simmelian trauma: it was the force of the machine at work.

The logic of the car and its driver, however, as opposed to that of the train and its passengers, was that the human subject would prove equal to—and, more, exert power over—the machine. The motorcar, in other

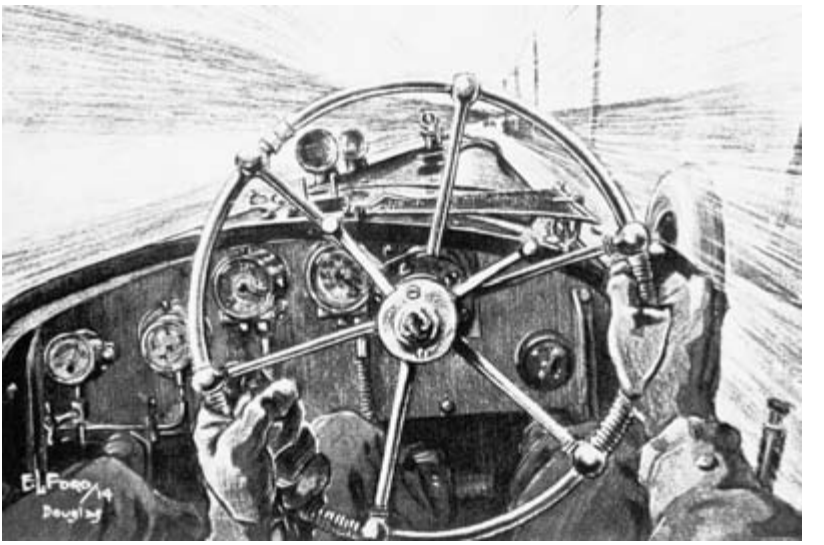

FIGURE 11. Ernest Ford, "Climbing Snaefell: A Driver's Outlook (All he sees is a little strip of road 100 yards ahead)," *The Motor* magazine, 1914. D. B. Tubbs describes this as "a vivid impression of a Vauxhall at the 1914 Tourist Trophy in the Isle of Man."

words, would enter into a symbiotic relation, as machine, with the human subject and, in doing so, would render that subject more machinelike, less likely to be traumatized by technology, less likely to be carried beyond the levels that his senses can comfortably perceive. We can see the logic of this being worked out in the copy and the drawings in the early car-racing magazines and "motoring papers"; in Britain, these included *The Motor*, *The Autocar*, and *The Car*. One dramatic kind of image, instead of showing a racing car from the viewpoint of a roadside spectator, gave the view of the road as seen by the car's driver. A vivid example by Ernest L. Ford, showing such a view from a Vauxhall in the 1914 Tourist Trophy in the Isle of Man, is captioned "Climbing Snaefell: A Driver's Outlook (All he sees is a little strip of road 100 yards ahead)" (figure 11).[29] Beyond the tightly gripped steering wheel there is barely more to be seen than a vortex of swoosh lines. Here, when the viewer of the drawing identifies with the driver, the driver's tensed hands and the way speed severely limits the field of his vision signify the desperate struggle of the human subject in extremis to match the technological wizardry he apparently controls.

One of the most famous of this generation of commercial, magazine, and poster car artists was the Frenchman René Vincent, who worked for

L'illustration and for Michelin and Citroën into the 1930s. In much of his work the human figure is rendered smaller and smaller and at times forgone altogether. For Vincent, the surging car, ready to fly off the road resplendent in its technical force, is king.[30] By this point, representing the thrill of driving is given up in place of a hymn to technology as a Benjaminian dream. The car posters of Vincent and others were often designed for billboards, a new form of advertising itself meant to be seen for an instant by people driving by. The cars portrayed on the billboards are commodities, yes, but commodities that exist not only as objects but as forces. Such forces, the image implies, overcome the inertia of the commodity and allow it—seen for an instant, a vortex of arrows and blur—literally to melt into the air. They promise to make the spectator overcome altogether any lingering sense of the inadequacy and anomie generated in the face of the commodity form. In the popular art of the car in the decades after Lartigue, the Futurists, and other experimentalists, we see a gradual desertion of the representation of human inadequacy before the machine, as the art deco artists come to glory in the dream force of the machine itself.

In the same years, however, one can trace the persistence of images of drivers ensconced within cars as a kind of armature. In these scenes we are asked to look not with the driver out through his windscreen but rather in through the windscreen at the face behind the hands gripping the wheel. This genre of car images was also pioneered by advertising, where consumers not only needed to be tempted by images of the car as dream commodity but at times also to have comforting versions of themselves as drivers reflected back at them from poster or page. These head-on shots are never simply images of the driver as hero in the old romance mode. For one thing, the perspective often places the viewer in an ambiguous, threatened position: that of facing the dangerous oncoming vehicle. Second, some of the most striking images are thoroughly abstract, such as A. M. Cassandre's poster for the Triplex-Sicherheitsglas company of windshield makers of 1930, which in a burst of unabashed and brilliant cubist portraiture shows an abstracted, helmeted head and two blank eyes behind a rectangular sheet of glass above a massive steering wheel (figure 12).[31] When the images conform to realist conventions, they often show the driver as uncannily remote, as in a painting by A. E. Marty for a Citroën poster, *The Citroën Woman in the Place Vendome* (1924) (figure 13).[32] Here the stylized headlights, half-seen steering wheel, side windows of the car, and even the woman's eyes compose an abstracting pattern of half circles. This is a pop version of the

FIGURE 12. A. M. Cassandre, *Triplex*, 1931. Colored lithograph, 47 × 31.5 in. Courtesy of the Cassandre Estate, © Mouron.Cassandre (www.cassandre.fr).

FIGURE 13. A. E. Marty, *The Citroën Woman in the Place Vendome*, 1924. The painting was used for a Citroën poster. Courtesy of the artist's estate.

cascading discs of Robert Delaunay's painting *Homage to Bleriot* (1914), in which the aviator's aircraft is celebrated in a flurry of discs and circles inspired by the circle of the propeller. In Marty's painting, this renders the woman's face immaterial, remote, and abstracted too. Marty's image also evokes the genre's most striking novelty: many of the drivers are women. As the new driver, the New Woman has replaced the heroic male.

There has never been a shortage of women as objects of the male gaze in images of cars intended for a male audience: one of the most vivid early images of the speed force of a motor vehicle, an advertisement for the Automobiles Richard-Brasier, Gagnates de la Coupe Gordon Bennett 1904, signed by C. Bellery des Fontaines, places a strangely androgynous figure, presumably a woman, as part figurehead, part speed ghost, before the engine grill of a car itself reaching from a ghostly ocean.[33] Car "bodies" and

women's bodies, in some of the most blatant uses of the female body as lure, have, since the moment when mass advertising and the mass-produced automobile were both invented, been displayed side by side. To this cornucopia of male heterosexist kitsch and the blatant exploitation of women, the image of the woman as driver, especially as seen through a windscreen and from a viewpoint where the car she drives presumably is close to bearing down on the viewer, presents a subtle challenge. In painting the driver (rather than the passenger) as female, it offered an image of the new woman as the proud possessor of a new, cool, subjectivity. Popular "car art" in particular played a major role in fashioning the twenties "new woman."

This figure of woman in the driver's seat was seized on by women eager to represent themselves as newly empowered. The iconic image here is Tamara de Lempicka's noted *Autoportrait*, commissioned in the mid-twenties for a cover of the German woman's magazine *Die Dame* (figure 14). In this forceful work, the conventional blurred lines that had been used by Rene Vincent, George Ham, and others to signify automobile speed, and which could not help but infuse their subjects with suggestions of ethereality, were replaced by a cubist arrangement of triangles and triangular vectors to imply smooth, deliberate, and engineered movement. Within this movement machine, the woman—whose face occupies no more than the top right one-sixteenth of the canvas—empowers herself by wrapping her body in the armor of the amply delineated massiveness of the machine's metal covering. In this work's perspective of the sideways glance, moreover, the viewer is positioned as a pedestrian standing by the side of the car (or possibly as the driver of another vehicle), looking at the driver from outside. She for her part looks neither at the road ahead nor at the viewer. This is the epitome of the Weimar *Sportlerin*: beneath her helmet cap, her look, really, is a kind of sneer. Here is the new woman as driver: independent, wealthy (driving her own large car), *au fait* with, and part of, moderne angularity and scale. Painted from the side but *in situ*, the car makes her a warrior. And mass culture duly noted its accord between speeding and its version of the New Woman: the term *fast* came into vogue in the twenties for this version of modern femininity.

And yet . . . the Sportlerin's averted eyes, far from being riveted by the new demands of speed, looking neither into the distance nor into the future, rather seem languorous with older memories of other seductions cast in the monotonous and repetitive cadences of leisure. This self-portrait was commissioned, note, for the cover of a magazine, for a relatively new kind

FIGURE 14. Tamara de Lempicka, *Autoportrait*. Courtesy of the artist's estate.

of pop-cultural document that worked to recast its women readers to themselves as consumers of commodities and so could not help but commodify and objectify women themselves. This cover art advertises both car and woman as desirable commodities, the formidable allure of one reinforcing the other, so that the heightening of the forbidding qualities of both is mostly a ruse to englamour them further, within a fashionably masochistic matrix, as objects to be desired. Compare this painting to the Lartigue photograph: the rotating wheel-eye, oscillating before the viewer's gaze, which centers Lartigue's photo is replaced here by an elegantly nonaerodynamic rectangular door handle. This device, secret but central in the broad expanses of empty space at the bottom of the picture, turns the issue of representation away from how one looks and sees (as in Lartigue) to how one enters and whether one can. Behind her locked door, at her car window, this fast Sportlerin remains, despite the steps made in the emancipation of women and their assumption of new roles, still the courtesan in her boudoir. Or rather, a representation which evidently aims to show a new kind of powerful woman turns out to be still trapped within the codes of a visual narrative which had for centuries shown women as entrapped and objectified.

This image is comparable also to the mass of even more bombastic Futurist car art: it too could only show technology as grand in a new way by displaying it as an attribute of the human body, so that it co-opted car technology to show the power of the male body just as de Lempicka does the female. Like her, in doing so, it found itself trapped in conventional narratives of (in its case male) adventurous purpose. The Futurist work stands, in the practice of representation, for the failure of Bergsonian idealism when it came to be turned into images that could not, it appeared, make their point fully without reference to bodies—and then could not help but glorify those bodies in terms that were lamentably pre-Bergsonian. So too de Lempicka's self-portrait, along with other more popular images that worked to celebrate the New Woman as car driver, could not help but short-circuit the more ambitious representational tasks of the new pop-cultural images of the car—to render up before our eyes the architectonic shifts of a whole new visual experience—in an all-too-jolly representation of the new woman, images which turn out to be much less radical than they seem. As any materialist theory of historical development is aware, new forms of production, artistic and otherwise, contain within them broad traces of previous forms (so that the first cars resembled horse-drawn carriages, for

example). In the work of middlebrow artists like de Lempicka, however, it is as if the avidly pursued aim to render speed is sabotaged when they insist, first, on showing how speed technology's strength can be measured with reference to the power of the human body and, second, on displaying with shopworn narratives of gender empowerment the glamour of corporeal speed. When such new power as the human subject as driver might possess turns out to be cast within representational narratives of embodied movement which predate the new technology, the images, for all their gleaming chrome and swoosh of speed, turn out to be old-fashioned paintings of human exceptionalism or determination. Bodies, again, betray: the trace of past formations in these images of the new is borne on the human body itself.

Car art, in other words, to be truly new, had to jettison older models of representation of the human subject or leave them out altogether: this latter strategy, indeed, is the shocking novelty of Matisse's car painting. The most revolutionary car art was that which refused to depict a human figure, but without denying his or her existence; on the contrary, she was, as it were, brought back into the painting from around the margin and placed in front of it as the heavily implied viewer. Again, Matisse's *Le parebrise, sur la route de Villacoublay* of 1917 stands as a lesson here. When the image is what the driver sees, the viewer and driver are one, and both are dematerialized because they are outside the picture. This suggests that the power of the new technology in calling up in its users a novel regimen of sensation could not be shown through older generic images of the moving human form, but could acutely be suggested by showing a space in which the human figure was somehow uncannily absent. A body, in Deleuzian terms again, "without organs." Showing the space around the implied body to suggest a missing body, however, is not to announce a quasi-apocalyptic "death of the subject," or a subject puffed out like a candle flame by the superpower of speed technology. Instead it challenges the implied viewer in order to call up, in the problematic act of looking, a new, more complex notion of the relation of new intensities of sensing, especially that of sight, to a sense of self. By removing the human figure from the picture and thus denying the viewer the relatively easy task of sympathetic self-identification (or otherwise) which could be accomplished by endowing that figure with older narratives of empowerment or servitude, the figureless image asks us to invent a new kind of self-consciousness and sense of selfhood that could jibe more coherently with the new sensing protocols of technology-enabled speed.

Such work, in turn, has to be portrayed as pleasurable to incite viewers beyond the worn certainties of the old narratives. It is the traces of such pleasures and promises that we will search for next.

Adrenaline, Technoscopics, Tension, and the Ganzfeld

The most important contribution to our knowledge of the active principle of the suprarenal gland . . . is from Dr. Jokichi Takamine who has isolated the blood-pressure-raising principle of the gland in a stable and pure crystalline form. . . . To this body . . . he has given the name "Adrenaline."
—*American Journal of Physiology* 5, (1901): 457

When you drive in Paris at night, what do you see? Red lights, green and yellow ones. I wanted to show those elements, but without necessarily situating them the way they are in reality. More like the way they appear in memory? Red stains, green yellow gleams passing by. I wanted to refabricate a sensation using the elements that compose it.
—Jean Luc Godard, *Jean Luc Godard par Jean Luc Godard*

The value of the Futurist and pop-culture images of early cars and drivers may be to show that we can never imagine a body with organs, or an eye without a body, for very long. What a look at the celebratory images of the car as would-be adventurous toy in mass culture proves is that the tendency of many of these representations toward showing the human body only succeeds in lumbering them with the old baggage of conventional narratives of human figuration. Thus it might seem that car images without bodies—whether in Matisse's *Le parebrise, sur la route de Villacoublay* or in Ernest L. Ford's magazine drawing of what the driver of the Vauxhall in the 1914 Isle of Man Tourist Trophy could see from behind the car windscreen—might offer the best chance of imagining any new regime of seeing to which speed gives rise. They excise from the image conventional tales of ambition and "drive" with which a portrayal of a forward-leaning driver might have encumbered their pictures. Unlike the very possibly passengerless car of Virginia Woolf's *Mrs. Dalloway*—another car that lacks a body—they focus on what the unseen driver herself would see while driving with concentration. They suggest the eye of a presumptive driver by showing us a version of what she sees or would see. In doing so, they conceptualize the seeing eye as dismembered, as not needing the viewer's body. Over against

them, the heroic images from pop culture, which cannot quite let the body disappear and instead fix it in a way that paralleled the advances of stop-motion photography, insist that this disembodying of the eye is impossible, that it can exist merely as a representation's conceit. They insist on the importance of the symbiotic relation between the human body and the car and insist that it is only in mediating this relation that the eye can function. In this insistence, I suggest, pop culture once again trumped high culture in its understanding of new technology. The problem with these Futurist and pop-cultural bodies in cars, however, was that they tended to still be shown within old (or Nietzschean) paradigms of heroic human endeavor. They showed bodies of heroes. What had to be achieved (and what was perhaps intuited by images that omitted the human body in representations of the car) was a new paradigm for imagining human energy in the face of technology. Human energy, however, was also being thoroughly reconceptualized at this very moment.

In St. Petersburg, the first statue of Lenin which many travelers to the city saw showed him standing atop an armored car. (Appropriately, both for the changes sketched in this study as well as for Russian history, the statue stood before the Finland Station.) Discussing this statue, the poet Joseph Brodsky comments:

> The very idea of carving an armored car out of stone smacks of a certain psychological acceleration, of the sculptor being a bit ahead of his time. As far as I know, this is the only monument to a man on an armored car that exists in the world. In this respect alone, it is the symbol of a new society. The old society used to be represented by men on horseback.[34]

In the twentieth century, a stone car replaces the stone horse that elevated and commemorated the heroes of earlier regimes. The new hero is elevated atop an automobile. The pathos that draws the poet's drollery — the immobile stone car deadening forever the very speed for which the car might be valued — draws our attention, nevertheless, to the fact that the car's scale defers to, and refuses to surpass, the scale of the human body. Part of the appeal of the car in offering the power of speed to individual subjects is that its scale aimed to match their bodies. In the earliest years of car production, as cars stopped resembling the outmoded carriages whose dimensions had been planned around those of the horse, cars grew lower and smaller. Soon, the faster the car, the smaller it was likely to be. The design of cars as objects was devoted to imagining how the car body might wrap elegantly and con-

veniently around the human bodies within it. The new science of ergonomics developed around car design; the curves of seats and dashboards followed the body's curves, while the car body's own curves mimicked those of the most beautifully stylized human bodies. This was not a machinery that awed with its massiveness, as with the electric turbines and steel mills of the 1920s, nor was it a technology whose miniature quality delighted, as with the transistors of a half century later. Rather, the car was scaled to the human body, suggesting in its human scale that it might be a partner to it, deferring to human height, reach, and comfort. It implied that its mechanical power worked in tandem with the bodies' locomotion.

While hand and gear shift, foot and brake lever, appeared synchronized, it was in the interface between the human eye and the car as viewing mechanism that the mutual dependence of machine and body was most evident, and most fraught with tension. There have in the twentieth century been a remarkable series of theorizations of human and mechanic seeing (magisterially surveyed in Martin Jay's *Downcast Eyes*). These culminated in Guy Debord's exposé of the power of spectacles of capitalism in *Society of the Spectacle* and Michel Foucault's mapping of the omnipresent disciplinary gaze of panoptic modernity in his *Discipline and Punish*. This rush to theorize the gaze makes clear that the new mechanical kinds of looking, in suggesting that there was much more to be seen, and that there were scales and speeds of seeing beyond what the human eye was used to, had an effect on human consciousness as unsettling as had earlier discoveries in optics such as the telescope. This unsettling, we may speculate, may even have threatened the standard Enlightenment assumption that the eye is the primary sense, the sense to be trusted unequivocally. I suggest that when, at the turn of the century, the automobile brought on the possibility of speed vision, a vision which had been presaged by the view from the train window, in a machine which obviously was not a camera (although it was soon rigged as a camera mount), it posed a new, radical challenge to this sense of the primacy of human vision. It did so in ways that went beyond those of any camera, which after all was controlled by its user, and it did so for masses of people. This challenge was suggested by the car's scale. One might think of the car as a huge camera, in which, as in the camera obscura of the Renaissance, the human viewer had to climb inside. When the movement-speed of the car-as-camera took over, the instrumental relation between human user and seeing machine, which left the human subject in control, was less evident. Further, there was no end product to be studied, no photograph,

no moving film: the view from the windows and in the multiple mirrors of the closed car presented itself as process — a process like streaming video. This camera obscura in motion pushed human perception to its limits: a thrilling stress test of the driver's vision. Driving, moreover, made clear that this stress would be shared by the other senses as well.

Jonathan Crary, in *Techniques of the Observer* (1990), discusses how nineteenth-century advances in the understanding of physiological optics, that is, of how the eyes work in the human body, which in turn were influenced by the invention of the camera and other technological aids to sight, laid the foundations for the disavowal of conventional perspective which became the hallmark of modernist representation, not least in photography itself. He notes that as the eye's powers were developed, studied, and explored, the eye was separated from the other senses and considered in isolation, and this "autonomization of sight . . . was the historical condition for the rebuilding of the observer fitted for the tasks of 'spectacular' consumption."[35] The new scientific and technological regimes of the eye and its accessories, in other words, laid the foundation for the particular kind of desiring gaze — the gaze of the consumer on the magical commodity — which was becoming the crucial glance that could make all the dreams come true in modern capitalism. Many of the new technologies, perhaps especially the movie camera, and their associated discourses worked to isolate the sense of sight from the other senses.

Consider for a moment the movie as the early-twentieth-century endpoint of this development: film's — especially silent film's — telling of stories to the eye only was complemented by the strange heterotopia of the movie theater, where groups of people sat in (apparent) isolation in a darkened room, their eyes alone held by the light dancing off a screen, their other senses left in abeyance. However, when one considers how sight was newly deployed by the driver of the motorcar, invented at the same historical moment, the case for the isolation of sight seems much more open. Far from dismissing or dulling the other senses, what the moving automobile did was to demand that the driver deploy her whole body, and every one of her senses, beginning with the sense of sight. The eye sees a pedestrian race across a dangerous curve looming ahead; the foot presses hard on the brake, and the hand shifts gears. The unpredictable, continuously altering scene that is taken in by the driver's eye — that scene of close-ups, zooms, and long-distance shots, with its multitude of changing elements so numerous and varied that the driver's eye must constantly edit — then turns out to be

so exhilarating and stressful at once that the whole body behind the eyes must be brought into play to keep the viewer in control of the situation and make it safe for further viewing. The turn to the body in representations of driving, whether for self-glorification in a twist of the old heroic style, as with the Futurists, or for advertising enticement, as in the case of the new car advertisements, brings home to us the notion that the delighted eye within the moving automobile must always be backed up by a body. It brings home to us, in other words, the truth that was being progressively elided, as Crary brilliantly shows, by the other new envisioning technologies, especially film, which had dissociated the eye from the other senses of the body.

We have already examined how the car's curves and its embrace of the newest kind of ornament showed it off as the paramount commodity and the alluring object par excellence to catch the deepest-pocketed consumers' desiring eye. The car also offered itself, in driving, as a route beyond the inevitable frustrations of consumerist desire, in that it granted an enhanced physical, that is, embodied, experience. As it turned out, this experience centered in the first place on the satisfactions, excitements, and challenges offered to the sense of sight. But while much modernist innovation in the area of optics, as Crary points out, enhanced sight but also autonomized it, separated it from the other senses and abstracted it, the sight excitements offered to the driver, *au contraire*, made it clear that sight could function only in relation to the body as a whole, and particularly in relation to the body's mechanical powers. In the driver's seat, one's movements were certainly limited: note that car seat design has been much more innovative than (even as it inspired) the modernist chair design for office and home by Le Corbusier, Eileen Gray, and Ludwig Mies van der Rohe in the twenties and thirties. This seated driver was not, however, a passive consumer; instead, eye was called on constantly to coordinate with muscle, particularly with the senses of hearing and touch, if the reality of the experience was to be felt safely and to the full, when the machine's power lent itself to the frailer mechanics of human mobility. In this pleasurable, continuously variable work, in contrast to passive consumption that employed only the autonomized gaze, what was demanded, as eye relayed its message to muscle and coordinated the reactions of the other senses, was *alertness*. Alertness took on a new valence as arbiter of the best of life itself in this period.

In 1901, exactly at the historical moment we are discussing, Dr. Jokichi Takamine isolated adrenaline as the blood-pressure-raising substance pro-

duced by the pituitary gland. In the accounts of the clinical effects observable in the human body of the increased production of adrenaline, the older adventure narratives of human action compete with a tentative emerging discourse which would delineate the signs and jiggings of a "normal" alertness in the excited human body. The older narratives centered on the well-known account of "fight or flight": confronted with a threatening situation, the story went, the human organism, its system primed to excitement with a fresh and instantaneous dose of adrenaline, would choose her newfound energy either to struggle or to flee. This story plants a rationalist belief in the availability of choice even in the trickiest of situations, at the heart of a moment in the Darwinian narrative of species struggle. (It also implies a pre-Bergsonian sense of space in which to make this choice.) The newly discovered body substance gets to be placed at the service of quick, but reasoned, choice. Adrenaline allows you to choose faster. Notably, in this narrative adrenaline is read as an aid to speed, both as physical movement ("fight . . .") and as mental agility (the speed of human response). Choice need not anymore be the result of the kind of contemplation (now reckoned, comparatively, as slow) that makes rational thought thrive; choice, with adrenaline, can now be instantaneous. This instantaneousness also renders the choice intuitive, however, and the notion of human intuition, a quasi-spiritual feeling which had always had its adherents among the champions of sensibility, in the theorists of the sublime, and in the romantic poets, might now seem to be reinserted in the medico-scientific narrative of human response. Almost, but not quite: adrenaline, as it came to be described, diluted feeling (which, like contemplation, was best indulged in slowly, at leisure) in favor of a marshaled alertness, a decision-making speed that killed any kind of slowing-down doubt in favor of physical-body-evidenced decisiveness. What was going on in accounts of new discoveries such as adrenaline was a subtle, improvised, but nonetheless radical imaginative rewiring of the human sensory and decision-making processes with a narrative which idealized instant and decisive response. The best person was henceforth to be not the one who thought out the choice rationally to make the best decision, or felt its possible consequences most intensely with the most profound feeling, but the one who left the least possible time between seeing, choosing, and acting, whose response was speediest.

The car, coming to the roads at the same moment in which adrenaline was discovered, became the test machine in which human subjects were examined for the speed of their reflexes in response to a succession of varied

stimuli. It became the vehicle in which one could test one's own reflexes in these terms, enjoy the test, and derive pleasure from speeding up the rate of one's responses. This enhancement of the coordination of eye and limbs did not occur only in car culture at this moment; the precise management of human movement was becoming an obsession in a number of fields. Taylorism, the quasi science that pushed for more-efficient workplaces through the micromanagement of human motion, conducted numerous studies of how the human body as machine might be harnessed more simply to do more work. The soon-to-be-vast new scientific discipline of psychology was populated by figures such as George W. Beard, A.M., M.D., whose *A Practical Treatise on Nervous Exhaustion (Neurasthenia), Its Symptoms, Nature, Sequences, and Treatment* was reprinted five times in New York between 1888 and 1905. If alertness and instant coordination of the eye and limb were to be the most valued traits of the human agent as machine, then neurasthenia, or "nervous prostration," could result when this coordination was practiced too much and too intensely. Dr. Beard's first criterion for a diagnosis of nervous exhaustion also focused on the way in which this disease, like its cause, was speedy: "The symptoms of organic disease are usually fixed and stable, while very many of those of neurasthenia and allied states are fleeting, transient, metastatic and recurrent."[36]

The cardiac "palpitations, twitching of the muscles, spinal tenderness, weakness of the eyes, insomnia . . . and involuntary emissions" were all readily understandable as the overexertions effected by the human organism to make itself react faster in tandem with its speed machines. These symptoms were the body signaling to its owner that it could not compete with the speed of the machine. In neurasthenia, Beard claimed, reflex action increased: the limb reacted before the eye saw, and the key claim of rational choice was surrendered altogether. Taylor dreamed of even more smooth coordination of eye and limbs, and Beard warned of reaching the limit where such coordination broke down because it was too fast to be bearable. Later Gestalt therapists would focus on a moment when external movement became for the eye (as opposed to the whole organism) simply too fast to be discernible. They charted a moment when the viewer would break down the sight barrier and behold, instead of distinct objects, a murky haze named the Ganzfeld by the psychologist Wolfgang Metzger in *Optische Untersuchung am Ganzfeld*. (This research would be taken up again in the age of Mach 2 supersonic speeds and space travel.) This could lead

to a "complete disappearance of vision for short periods of time," a sensual journey not into blindness but beyond the limits of the gaze.[37]

These dreams of a speedier body put to better use, fears of the effects on that body of such speed, and notation of the moment when speed overwhelms the eye before the mind can send its message to the limbs, along with a plentitude of other discourses,[38] mark the emergence of what Hillel Schwartz has termed the "distinction between the body one *is* and the body one *has*."[39] It is a new concept of the body as motion machine, a concept developed by considering that body in contrast to the new speed machines. The apparent collusion of human body and car meant that the automobile became a chamber in which the human body as machine might be subjected to self-experiment, pushed to its limits, taught to enjoy being as fast as the machine itself. The car was a unique new machine that offered to the body much prosthetic power and left that power in the hands and feet of the body itself. This power was mediated by, and controlled with, the human eye. Watching the road ahead, reading alertly the endless array of signs on the broad and featureless masterpieces of modernist engineering that were the motorways (and it is remarkable how much written signage is necessary to direct the motorway driver), editing out the extraneous and unnecessary, avoiding seeing the swoosh on each side by focusing on an ever-changing spot ahead, never going quite so fast that one breaks the sight barrier and enters the Ganzfeld but pushing to higher speeds to enjoy the sensation of eye and limbs under stress: these were the joys of automobile nervousness. Deploying human and machine power to complement both, the driver's look flashes in staccato-jazzy nervous-glance rhythm. This is the quintessential modernist gaze. It alerts the body to a new level of nervous energy and presides over a new regime of looking that, far from dissociating the eye from a sensuous existence, hails the entire body to energize itself with the eye's energy. This is a new corporeal regime where eyes and bodies in tandem with machines are called on to be fully alert. The distractible eye maintains its focus by coordinating the reactions of the other senses and the propulsion of the limbs, all to brace the body over the machine.

The eye in speeding is shown so much more: in one car journey, it sees more scenes which change more often than in any film, and in return the eye must energize the body to continue the force of the spell of this envisioning. In debates about the nature of work, especially about the new Fordist assembly line, this frantic activity was often seen as tragedy; think, for ex-

ample, of the overworked subaltern laborers tending the subterranean machines in Fritz Lang's film *Metropolis*. In the car, however—in the realm of relative autonomy, and often leisure—the machine-body was thought of, when it was considered at all, as empowering, easy, a comforting stimulation. The speeding, closed automobile, with eyes staring from its windows straight ahead, sold vision of a new demanding kind as a fine alertness. Driving, as quintessential new everyday activity invented in the modernist moment, modeled alertness as a behavior pattern that would not only delight and reanimate the eye itself but cast its magic luster, in the form of that new energizing adrenaline, through the limbs and other senses. The driver's alertness outfitted her as a subject for whom both fight and flight—the options of the ultrafast, struggling human—could, as she moved forward to progress while fleeing dull slowness, be one and the same, decision and desire.