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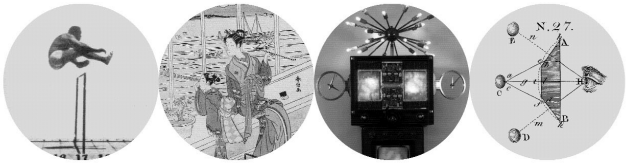

It's All About the *Fit*: The Hand, the Mobile Screenic Device and Tactile Vision

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Abstract
This article takes notice of the particular relationship, or *fit*, between the hand and the mobile screenic device (MSD). Starting with biomechanics and industrial design, it describes the active and responsive quality of this relationship, which enables a manner of seeing that is material and dynamic – tactile. Informed by Benjamin's notion of the tactile, it explains tactile vision as sensual and diffuse and potentially charged with the immediacy and contingency of the everyday. Ultimately, this article asserts that tactile vision, emerging out of *fit*, provides for a more visceral mode of experiencing the world.

Keywords
biomechanics • industrial design • mobile screenic device • tactile vision • Walter Benjamin

The year 1973 saw the introduction of the prototype for the handheld cellular phone, and the late 1980s the beginnings of pen computing, the basis for portable computer tablets. More recently, mobile phones, palm computing devices and handheld electronic organizers have been equipped with gaming and imaging capabilities and, in the process, have acquired color LCD (liquid crystal display) screens, for which reason I refer to them as mobile screenic devices (MSDs).[1] As these developments in handheld technologies have occurred, talk in and out of the academy has focused in large part on the social implications of the proliferation of handheld technologies, with particular attention directed at the mobile phone. Central to these ongoing debates are questions pertaining to the status of interpersonal relations and the blurring of public and private domains. Within these categories of concern, discussions address transformations in community and

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Mobile phone in hands (Sony Handycam, Mall of America, March 2003).

A mobile screenic device in the hand is often overlooked. I just happened to notice.

cooperation, reconfigurations of the codes of social interaction, the tendency toward public performance of private conversation, and the increasing confusion of work and leisure. Likewise, concerns regarding the perceived and impending strain these devices place on personal liberty and privacy have emerged, since such devices ensure that people are always locatable and, therefore, support and extend the effectiveness of existing panoptic processes.[2] But little attention, if any, has focused on the particular relationship that exists between users[3] and their MSDs; neither has the MSD as an object with a screen received notice, nor the MSD's function in relation to seeing.

Recent marketing rhetoric and images suggest that such consideration is relevant. Sprint's 'PCS Vision' campaign with its corresponding promotional image, in which a human eye peers out from the mobile phone's LCD screen, repositions the handheld as a seeing device, a move that brings the hand and eye into direct contact at the site of the MSD. Now *reaching out and touching someone*, to borrow from the Bell System/AT&T jingle that defined telephoning as a tactile engagement, extends to vision. Similarly, a November 2002 Sony Ericsson and CommuniCam attachment advertisement complemented its 'Catch the Moment' ad text with an image that shows a pair of hands, presumably belonging to a soccer spectator, holding a MSD with its screen displaying a soccer ball heading toward a goal. The MSD supplants the goalkeeper's hands in catching the ball, and subsequently relocates the act of catching to the site of the screen; as such, it reconfigures the act of catching, now in the hands of the spectator, as a mode of viewing. As in the case of the Sprint example, the 2002 Sony Ericsson ad presents the hand as integral to seeing. But if the hand is integral to, indeed active in, seeing – as I hope to show – then seeing itself must happen differently.

In order to formulate what comprises this different way of seeing, which involves the hand and the MSD in relation to the eyes, it is necessary to address how seeing is practiced generally. Much of the time the practice of seeing is divorced from the experience of seeing, insofar as people tend to focus on and value *what* they see, not *how* they see, which means that people engage seeing in a manner similar to viewing snapshots, as a succession of discrete images. They become distanced observers, whose vision is objectified and quantifiable and, therefore, manageable. Bergson (1998: 306) warned of the cinematographical nature of ordinary perception, insofar as it tends to engage a string of fixed views of what might be called reality-in-passing instead of the becoming of reality itself. Such perception is abstract and produces abstraction, i.e. representations of seeing. And while representations such as photographs can be placed in the hand and made proximate and tangible, they fail to engage the viewers, their hands, in the materiality of seeing. Such images instead perpetuate a conception that seeing can be and is to be contained and, subsequently, to become neat and sanitized. But is the actuality of seeing as tidy and detached as this? Is the experience of vision merely a diminished spectatorial scrolling, in which strings of images unfurl in front of us, framed for us but inaccessible to us? Is it not possible, even likely, that people engage practices of vision in a more material way? A

Mobile phone in hands (Sony Clié, March 2003, and Mall of America, March 2003).

I own four MSDs. Like those I observe, I find great pleasure – perhaps comfort – in holding these devices, my hands happy to experience their various surfaces and textures.

Mobile phone in hands (Sony Clié, UCI, February 2003).

return to the Sprint 'PCS Vision' campaign and the Sony Ericsson 'Catch the Moment' ad frames an initial response. In both instances, vision is activated by the hand and its engagement with a MSD: seeing becomes tactile and, therefore, is no longer limited to the eyes.

It is this notion of tactile vision, to be understood as a material and dynamic seeing involving eyes as well as hands and MSD, that I pursue in this article. In doing so, I identify the term *fit* to account for the particular relationship between a hand and a MSD, which opens onto a relation of interface through which vision becomes and remains tactile. I propose that the interaction of *fit* enables a more direct and vital mode of experiencing one's surroundings, which, while not directly about televisual space, is in conversation with it. Of course, it might seem easy to posit a connection between *fit* and televisual space; after all, the MSD is a screen-bearing device, which means it is possible to associate it with the television screen (as well as computer monitor), but it would be a mistake to do so. Televisual space is not simply a matter of the television screen and should not be confused with or reduced to what is presented on a television screen or where such a screen is located. Rather, it is possible to understand televisual space in terms of the relation that is produced between a screen and its surroundings (including the viewer) and/or the space that appears on the screen. Other screens participate in and qualify the *relation between* that constitutes televisual space. The MSD screen likewise participates but does so differently since it is handheld and mobile and, therefore, gains access to places beyond the reach of other screens. With MSD in hand, the most mundane and inconsequential of everyday places becomes the potential site for screenic engagement. Insofar as *fit* provides an opportunity for such engagement, it speaks to televisual space. However, because *fit* involves the physical and active relation between a hand and a MSD, it is something quite distinct from televisual space.

Fit:

Fit, as I use it here, draws upon the discourses of biomechanics and industrial design.[4] It proposes to define the particular relationship between the hand and the MSD as a happening, which occurs at the instant of contour when the hand forms to the MSD and the MSD *gives* to the hand. In which case, *fit* is not a condition or quality but a moment of acting in and through, a moment that reveals the potential for dynamic and reciprocal engagement. When hand and MSD articulate, the surfaces of the palm and the MSD mold each to the other, they interpenetrate. Thenar (thumb) and hypothenar (pinky) muscles cup the rounded edges of the MSD, which in turn sidles into the cradle of semi-flexed digits. The experience is tactilely pleasing, as hand and MSD fold into each other. Technically speaking, a 'blending of hand and wrist movements' allows 'the hand to mold itself to the shape of an object being palpated or grasped' (Bejjani and Landsmeer, 1989: 277). But, effectively, the hand and the device undergo a 'becoming one'. As Wilson (1999) explains in *The Hand: How Its Use Shapes the Brain, Language, and Human Culture*, becoming-one is an experience of bonding (p. 63) between the

(Sony Clié and Kodak digital camera, Volcano National Park, July 2003).

Two of the four MSDs that I use regularly are responsible for the images encountered in this article. One, a PDA; the other, a Handycam. The first I cradle in my left hand, which, in supination, allows my thumb to manipulate the jog knob and surreptitiously press the shutter release – both features located at the MSD's side for easy and continuous operation. I grip the second, the Handycam, in my right hand which maintains a moderately dorsiflexed position and deviates radially ever so slightly; my index finger extends briefly in a poised manner before flexing to engage the record button or snap a still image.

users (specifically, their hands) and a tool or device.[5] This bonding produces a 'mystical feel' that arises out of a 'combination of a good mechanical marriage and something in the nervous system'. Wilson describes becoming-one as entailing a certain intimacy and communication (p. 94), which is reminiscent of Grosz's (2001) notion of acquaintance, a concept that underlies my interpretation of *fit* insofar as it emphasizes the importance of intuition, intimate apprehension and interconnectivity between people and things.[6] So while the hand–MSD relationship is necessarily productive, i.e. of electronic communications or digital operations, something supplemental to production materializes between the hand and tool or device.

This relationship between hand and MSD is very unlike previous accounts of hands and technological devices, as provided by such figures as Benjamin ('Some Motifs in Baudelaire', 1985[1939]), Jean Baudrillard (*The System of Objects*, 2000[1968]), and Roland Barthes (*Camera Lucida*, 1981). Such accounts reduce the hand (albeit differently), enter it into discussions as a trace, a residue: the hand merely initiates a process that proceeds and concludes in the device; technology dominates the transaction.[7] It seems plausible to assert that this tendency – to assume the relative insignificance of the hand in relation to the mechanism it engages – speaks to a general underlying assumption of technological progress, which bears the overtones of technological determinism. To the degree that the hand appears in these accounts, it seems to demonstrate the effectiveness of technology, which results in the technology overshadowing the hand. And yet, the hand appears: in each case, the hand emerges at the margins of the technological process under discussion. It functions as a point of origin in a process that soon consumes it. On the one hand, this speaks to the (muted) relevance of the hand, albeit a particularly generic (and probably privileged) hand. On the other, it reveals a habit of overlooking the potential dynamic and physical interaction that might materialize between a hand and a device.

In pursuing the notion of *fit*, then, I hope to problematize more traditional views regarding people and technologies. Of course, the belief that technologies serve people who act upon and through them comes to mind. But in the happening of *fit*, intention of a person toward a MSD is not the point. Rather, the *fit* of a hand and a MSD transpires immediately and without volition, for the hand to purposely engage the MSD (or vice versa) presupposes a unidirectional, calculative relationship, not one of interconnectivity and bonding, acquaintance. In fact, it is the very involuntariness, if you will, of *fit* that enables such a dynamic happening between hand and MSD. Interesting to consider in this regard is the fact that increased transmission of haptic information occurs when tactile exploration is not motivated (Chapman et al., 1996: 331). In other words, tactile engagement that is not directed by volitional movement tends to produce an increase in somatosensory input.[8] Good design works to these ends, insofar as it aims at placing devices into hands in ways that do not require conscious effort or thought. In effect, as Norman (1990) discusses in *The Design of Everyday Things*, good design should place the hand; it should communicate through 'natural signals' (p. 4), to which the hand should respond easily and intuitively.[9] The Sony

Mobile phone imaging (Sony Handycam, Disneyland Paris, June 2003).

Not long ago, a T-Mobile television ad campaign ran, each commercial presenting a person suffering from a debilitating case of tunnel vision, that is, until he or she acquired a picture phone. With the MSD in hand, a cure: each was able to see the world fully, in all of its vibrant detail. The campaign ceased airing when the video phone became available.

Design Center perhaps exemplifies this philosophy, insofar as it pursues MSD designs that encourage 'unconscious "play"' (Kunkel, 1999: 79), in which the digits continue to engage the surfaces and dials of the device well after the desired function has been performed.[10] The fact that people frequently retain MSDs in their hands well after they have finished using them speaks to the success of handheld electronics designs, but it also illustrates the bonding and acquaintance of *fit*. Incidentally, MSD product names themselves attest to this dynamic exchange between hand and device. For example, both PalmPilot and Handspring suggest integration (compound nouns that merge hand/palm and device) and energy (latter portion of each word connoting action, or potential action). Even the metonymical 'handheld' functions in a similar way, the compound word labeling the device but simultaneously indicating a direct and material(izing) relation with the subject engaging the device. Similarly, 'personal digital assistant' (PDA) and the more recent 'communicator' connote relationships that are active and direct, interpersonal.

Fit, then, is an innervating exchange between hand and MSD. In articulating with the MSD, the hand–wrist complex is engaged in precision handling, which is a 'dynamic function with relatively little static holding' (Norkin and Levangie, 1992: 294). The MSD's texturing, size, and ergonomic shape motivate the hand to execute fine adjustments continuously as it engages in 'active touch'.[11] The introduction of digital design as well as new technopolymers has resulted in important developments in the material body of MSDs, which make them more responsive. Not only do many MSDs come in dynamic forms, i.e. soft curves and interesting contours, some devices now boast textures that are 'softer, more giving to the touch' (Lupton, 2002: 39). In some cases, surfaces called 'skins' can even 'sense the location and pressure of human touch', as Lupton mentions in 'Skin: New Design Organics' (2002: 40). Buttons themselves become important, as Montenegro indicates in his contribution to *Digital Design: New Frontiers for the Objects* (Martegani and Montenegro, 2001). He explains that buttons on mobile phones are 'isolated and emphasized' in order to '[establish] a relationship of interactive stimulation with the user' (p. 86). Of course, the requisite palm-size makes the MSD portable and, therefore, facilitates mobility; but it also accounts for the particular positioning, i.e. cradling, of the MSD in the hand, which augments manipulative range and increases options for precision handling (Wilson, 1999: 130).

MSD design pays particular attention to the thumb, taking advantage of the thumb's ability to abduct and rotate from the palm. In this position, the thumb is able to access and actively engage the various buttons, e.g. jog knob and volume dial, that appear at the side of the MSD. Kunkel (1999) indicates that the design of the jog knob, as appears on mobile phones and PDAs, allows the thumb to operate the device fully, freeing up the other hand for different tasks. But one-handed operation tends to mean left-handed operation, right-handedness being privileged in the placement of jog knobs and dials within easy reach of the left thumb. Likewise, the often asymmetrical contouring of MSD bodies, which best fits left hands, presupposes right-handedness. While one-handed operation is felicitous for *fit*, insofar as it

Tourist and PDA with camera attachment (Sony Handycom, Las Vegas, August 2002).

I see differently at times when I'm with my MSD. Perhaps it's a matter of noticing things incidentally. But then, in an instant, an image. In that moment, a flash of intrigue – a connection made, a realization. The image records into a 'thumbnail'.

Spectating woman with PDA (Sony Handycam, Mall of America, March 2003).

means a more responsive device, it runs the risk of reinforcing the assumed transparency of the notion of handedness. In addition to the normalizing assumption governing MSD design, which seemingly favors right-hand dominance, only those who can afford the price have access to these devices. Also at play are the particular subject positions available to MSD users, as constructed through marketing discourses and popular conceptions surrounding technological devices, e.g. the on-the-go businessman, the organized mom, the popular and in-touch teen, etc. Simply stated, *fit* is not all-inclusive. As such, it is vexed, even as it is dynamic.

Screenic Seeing

The soft and malleable meeting of hand and MSD in *fit* refuses the constricting tension that a grasp or clutch forces upon its object. Because *fit* is about the release and expansion of acquaintance, it intervenes in the flat and flattening vision that has become standard; it installs users within what they are seeing and thereby allows them to experience the transition, the interval that is seeing in its presencing (as opposed to being faced with an aggregate of discrete images). In other words, *fit* opens onto a different manner of seeing. The experience of *fit* coincides with the moment of contour; it emerges out of the articulation between the hand and the MSD, wherein the hand and device meet. Since *fit* presupposes a continuous merging, or becoming-one of hand and MSD, the experience is one that is dynamic and always happening. With regard to MSDs with imaging capabilities, this correspondence between *fit* and seeing often transpires in direct and explicit relation to the screen (whether it be an LCD screen of a digital camera or camcorder, or that of a PDA or mobile phone), a screen that is a distant relative to other image-bearing screens (including television and cinema screens). In this instance, vision is not a practice of seeing through, i.e. a window, but looking at, i.e. the screen.[12] And this shift from window-ed seeing to screenic seeing reconfigures one's relationship to that which is seen.[13] Whereas a window distances viewers from what they are looking at, the screen draws them toward the images that are displayed on the screen (not beyond it). In which case, window-ed seeing institutes a detached engagement, while screenic seeing encourages an experience of encounter. Vision, no longer a property of the window and its frame, becomes an extension of the screen. Likewise, that which is being viewed (and perhaps recorded) no longer exists separate from that which is framing it. The object, formerly located on the other side of the frame, converges or fuses with the screen, its physicality becoming the physicality of the screen. In this way, vision involves opacity, not transparency.[14] Screenic seeing acquires a sort of tangibility, a physicality of its own. In looking at the screen, the MSD user engages the screen and, subsequently, enters into a relationship with the screen. This relationship is material and unfolding; it does not involve containment but contingency. And yet, not all engagements with MSDs involve this opacity of screenic engagement, particularly since not all MSDs have imaging capabilities (and even if they did, not all people would make use of the feature). What I am

Tourist with two MSDs in hands (Sony Handycam, Disneyland Paris, June 2003).

Actually, I am not so concerned about the quality of image produced by my MSDs. In fact, I derive great pleasure from the graininess of these images. But perhaps that's the point. Perhaps the spontaneity of seeing is best depicted by an image that lacks high resolution. One might say that such images evoke a certain immediacy.

describing as tactile vision does not necessarily require a seeing that is directly associated with the MSD screen. Rather, tactile vision involves seeing that coincides with a hand engaging a MSD: the seeing that accompanies *fit* is seeing in which the hand (or maybe hands) always participates.

In their mutual contouring, the hand and MSD expand; in their acquaintance, they open onto something else, which subsequently influences vision. *Fit*, then, cannot be understood as a self-contained, although ongoing, experience, meaning that *fit* is never an end in itself. Instead, it dilates into something larger or more encompassing than itself; it opens onto what can be understood in terms of interface, the threshold at which users and their surroundings meet and interact. Thresholds, as liminal spaces, are permeable; they are without definitive borders, even though they function as the boundaries between spaces. Because *fit* instantiates a very permeating and material relationship between MSD users and their surroundings, it is a mechanism of interface. In those instances wherein the MSD user engages the screen, the surroundings onto which interface opens are integrally related to, if not an extension of, the MSD screen. However, *fit* is never separate or distinguishable from the interface onto which it opens, even though it marks the beginning of the experience. And *fit* must be maintained in order for interface to continue; consequently, it becomes one with the happening of interface.

Vision that transpires in relation to *fit* and as filtered through interface is seeing that is simultaneously distracted and sensual. Finger, hand and wrist muscles synergistically flex and extend, abduct and adduct accordingly in order to maintain the integrity of contour between the hand and MSD and, thereby, sustain *fit*. But to the extent that *fit* happens without intention, and without assistance from the eyes because the hand is familiar with the MSD, the eyes are freed from the task at hand and can look on surrounding scenes (as well as screens) and events. The acquaintance materializing *fit*, the spreading of hand and MSD into one another, expands into interface and permeates the eyes' engagement with the surroundings. In this way, vision is never really free of the hand, insofar as it is always infused by *fit*, but also because of the analogous geometry of movement between the eye and the shoulder. According to Wilson (1999), the shoulder and eye move synchronously in acts of pointing (p. 328, n.4), with which it is plausible to compare the wrist's positioning in screenic mode – slightly extended and ulnarly deviated (in supination).[15] Because of this correspondence between hand and eye, it is possible to read vision as tactile in a double sense. First, the automatic yet intimate[16] contouring between hand and MSD that coincides and is integral with a seeing that is, as a result, never fully concentrated, but rather tangential and diffuse, comprises a tactility of vision. But also, the work executed by the hands in relation to the MSD screen, i.e. engagements with the screenic content by way of jog knob, stylus or even finger, constitutes a literal manifestation of tactile vision; the hand is directly and actively involved in the seeing that the eyes practice, in relation to screen and surroundings. A material experience of vision results as hands, eyes, screen and surroundings interact and blend in syncopated fashion.

MSD in hand (Sony Clié, 'Joan's on Third' in Los Angeles, July 2003).

I, like the people I see, always have a MSD in my hand. Reasons? There's one, really: I tend to see better with a MSD in hand, insofar as I attend to my surroundings in a more complete way. But also, I can more readily image those things I see. It becomes an encounter.

Tactile Vision

Fit and the seeing of interface produce vision that is experienced contrapuntally and, therefore, can be understood as tactile. Benjamin's (1969[1935]) notion of the tactile is relevant to consider here because it provides an account of experience, 'a mode of participation' (p. 239), that emerges as a result of, and in response to, 'profound changes in apperception' wrought by technology (p. 240). In the 'Work of Art' essay, Benjamin uses tactile to refer to a type of experience that contrasts with the abstract but auratic nature of contemplation. In one sense, tactile experience is understood in terms of use and touch (p. 240). In this case, the tactile is associated with distraction. Benjamin explains: 'Tactile appropriation is accomplished not so much by attention as by habit ... The latter [optical reception], too, occurs much less through rapt attention than by noticing the object in incidental fashion' (p. 240). Here the tactile coincides with habit and, by extension, incidental noticing, both of which are marks of distraction.[17] In a 'state of distraction', somatic work and optical work are casual, though not disengaged, not passive. Instead, they are marked by an 'absent-minded' engagement (p. 241). Benjamin's reference to the process of appropriating architecture illustrates this: one experiences a building, takes it in, without attending to the experience itself; the experience merely happens – according to expectation, since one already knows buildings. There is an intimacy, reminiscent of Bamberger's concept of 'felt path' (see note 16). In this way, habit and looking that happens in an incidental fashion are indications of familiarity, which materializes in a bodily and perceptual blending with the surroundings.[18] These ideas of habit and the incidental aspect of seeing are applicable to the seeing of interface, since the seeing of interface is never focused, i.e. contemplative in the Benjaminian sense, but rather spreads out, across various images (of landscape and screen), as a result of and in tandem with the interpenetration of the hand and MSD.

However, another facet of Benjamin's notion of the tactile deserves attention here, precisely because it begins to resolve a seeming antagonism between distraction, as described earlier, and ***fit***. To some extent, distraction appears to lack, and therefore be at odds with, the vitality of acquaintance as well as duration (to which acquaintance is related), which are integral to ***fit*** and, by extension, interface. And yet, there is a vitality to the tactility of which Benjamin (1969[1935]) writes. As he explains, even as tactility is a quality of distraction, it also 'happen[s]' to one 'like a bullet' and, with respect to cinema, 'periodically assail[s] the spectator' (p. 238). Here distraction exists in coincidence with a volatilely somatic sort of experience, one which is visually constituted. This tactility is a product of as well as produces 'shock' (p. 238). In a later essay, Benjamin (1985[1939]) employs 'shock' to explain a particular mode of living marked by its being permeated by somatically visual stimuli. It is a mode of living that emerges as a result of technological advancement and finds example in pedestrians having to '[cast glances in all directions] in order to keep abreast of traffic signals' (p. 132). The camera (both cinematic and photographic) answers to this shock by producing the potential for another sort of shock, one that is experienced as disjunction,

PDA imaging (Sony Clié, Eiffel Tower, June 2003).

Perhaps it's not the place itself that matters. For when I engage my MSDs, any place becomes a site of possibility. I can experience the intensity of particularity whether I walk down a side street, stand in line at the grocery store or perch at the heights of a city.

which coincides with a flashing into recognition or awareness. In this way, as Hansen (1987) indicates in 'Benjamin, Cinema and Experience: "The Blue Flower in the Land of Technology"', 'shock may assume a strategic significance – as an artificial means of propelling the human body into moments of recognition' (p. 211). In its ability to expand space, extend motion and enlarge a perspective, the camera reveals, in a somatic and visual way, the unknown or unexpected that exists in the familiar (Benjamin, 1969[1935]: 236; 2001[1931]: 510). The shock of such images, according to Benjamin (2001[1931]) in 'Little History of Photography', 'paralyzes the associative mechanisms in the beholder' (p. 527), impeding the narrativizing processes that tend toward historicization.[19] Instead, the images happen to the beholder in a way that refuses narrativizing. As such, it bears a certain relation to Hansen's (1987) discussion of Proustian remembrance: 'Remembrance ... is incompatible with conscious remembering which tends to historicize ... not self-reflection, but an integral "actuality", a "bodily", to some degree absent-minded "presence of mind"' (p. 200). Remembrance is a happening that is experienced through the body and in relation to vision.[20]

To the degree that remembrance is an unconscious flash that is experienced as 'integral "actuality"', it seems similar to the 'something *lived*' of Bergson's (1998[1911]: 10) duration, which informs my notion of *fit*. But Benjamin (1985[1939]) was critical of Bergsonian *durée*; he found it problematic that *durée* was 'estranged from history' (p. 144), that it excised the weight and materiality of the past that makes possible the immediacy and fullness of contingency that is the experience of remembrance.[21] And yet, I propose that it is possible to reconcile Benjamin and Bergson (if only momentarily) in order to understand the experience of *fit* and the seeing of interface. Insofar as the experience of *fit* occurs as a temporality without linear, historical time, it is an experience of flowing and spreading, not one of focused concentration, which results in abstraction. It recalls Hansen's (1987) discussion of Benjamin's 'secularized, profane mode of experience', which she describes in terms of a 'purposeless purposeful drifting into the past which turns the city into a "mnemotechnic device"' (p. 194). According to Hansen's account, the *flâneur*'s drifting is the potential for remembrance, the flashing of recognition. It seems plausible to assert something analogous about the way in which users, MSD in hand, drift through their surroundings. The diffused, or distracted, engagement of these people, likewise, has potential for a flashing of recognition of sorts. For in the experience of *fit* and the seeing of interface lies the potential immediacy and contingency of the everyday.

Unlike the *flâneur* for whom the city as a whole is the potential for remembrance, users, MSD in hand, have a potential for the immediacy of the everyday because they see in relation to the MSD. It is in the interplay of the various images, which happen for and to these users in their distraction, that the incidental everyday can flash into the contingency of the everyday. Those things (including happenings and people) banal and ordinary and trivial, which comprise the everyday, materialize into contingency and immediacy at moments when the hand's engagement with MSD allows for a resonance in seeing. At such moments, the vibrancy and surprise of *now* bursts forth to

Sony Ericsson ad on Main Street (Sony Clié, Huntington Beach, December 2002).

I walk down Main Street frequently; it has become familiar to me. On Main, a payphone stall advertises a Sony Ericsson with imaging capabilities. The advertisement has been around for a while; I've seen it many times. One day it seems relevant; I record it as a series of images.

shatter the mundane, the routine. For example, it may be a matter of catching a moment of the everyday that typically would go unrecognized. Or, it may be a matter of *fit*, in opening onto interface, activating a seeing that enables one to glimpse the ordinary anew, perhaps as a result of a chance glance of the thumb or finger across a particular surface of the MSD at just the right moment. In such instances, the particularity of the everyday emerges to fascinate or startle or shock momentarily before dissipating into the experience of *fit* and returning to the seeing of interface. It is in this way that vision becomes tactile.

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Notes

1. In addition to mobile phones and personal digital assistants, I intend mobile screenic device (MSD) to refer to digital cameras and digital camcorders with color or standard LCD screens, as well as any other handheld electronics device with LCD screen, including handheld gaming devices, such as GameBoy. In employing the neologism, I emphasize the devices' integration of mobility and visuality, which becomes a characteristic of tactility. In this article, I will be addressing mobile phones and PDAs specifically.
2. Rheingold (2002) and Katz and Aakhus (2002) address many of these issues. Also relevant are the Sussex Technology Group (2001) and Kopomaa (2000).
3. I am not convinced that *user* is the most appropriate term. Neither is *spectator* nor *viewer*. I am not comfortable with the unidirectional aspect implied by these usually standard terms. In developing a notion of *fit*, I am invested in asserting the reciprocity between the hand and the MSD. To this end, 'people with their MSDs' might best serve my interests; however, rhetorical style must be considered, hence the more succinct, less rhetorically disruptive 'user'.
4. Although *Gray's Anatomy* and Frank H. Netter's *Atlas of Human Anatomy* inform my understanding of biomechanics in general, for the purposes of this article, I refer to work by Bejjani and Landsmeer (1989), Chapman et al. (1996), Norkin and Levangie (1992), and Wilson (1999). In attending to matters concerning industrial design, I cite Kunkel (1999), Lupton (2002), Martegani and Montenegro (2001), Norman (1990), and Papanek (2000). (In many ways, design, in general, and the more specific categories of digital design and industrial design are usefully considered in relation to each other; I have chosen to do so here.)
5. Wilson's (1999) work with musicians, puppeteers and machine operators informs his comments on 'becoming one'.
6. Grosz (2001) suggests:

> Instead of merely understanding the thing and the technologies it induces through intellect, perhaps we can also develop an acquaintance with things through intuition, that Bergsonian internal and intimate apprehension of the unique particularity of things, their constitutive interconnections, and the time within which things exist. (p. 183)

Acquaintance is not a pragmatic relationship, insofar as it does not aim for any objective or rational outcome, but a responsive one. It is this aspect of acquaintance that is fundamental to *fit*.

7. Benjamin (1985[1939]) associates the 'utilitarian object', i.e. the camera that permanently records events, with 'traces of the practised hand' (p. 145). Similarly, Baudrillard (2000[1968]) refers to the human body, and by extension the hand, as leaving only the 'signs of its presence to objects whose functioning, in any case, is independent from now on' (p. 53). In both instances, the hand relinquishes its direct and material effect to mechanized processes that continue to completion with only the slightest hint of the hand's involvement. In Barthes (1981), however, a substantive albeit small portion of the hand remains: the finger 'is linked to the trigger of the lens, to the metallic shifting of the plates (when the camera still has such things)' (p. 15).
8. Chapman et al. (1996) are quick to acknowledge the paradox in the fact that active, or exploratory, touch involves 'highly refined tactile abilities' (p. 346), while 'voluntary movement' involves 'movement-related gating of sensory transmission' (p. 330). They explain that it may be that 'much of the feedback generated during tactile discrimination with active touch may not contribute directly to sensory perception' (p. 346). Likewise, they remind us that

   > ... the motor strategies employed during active touch may, in a variety of ways, optimize sensory feedback by ... reducing movement speed at critical moments in an exploratory movement and so minimizing gating influences (Chapman et al., 1988), or by optimally orienting the digits so as to bring the most sensitive skin area into contact with the object being explored. (p. 347)

   It seems that the design of MSDs, intended to *fit* neatly in the palm, a position of increased sensory feedback (Norkin and Levangie, 1992: 273), elicits a sort of active touch that does not require active thinking but benefits from motor strategies involving manipulation of job knobs, etc.
9. Industrial designers are eager to reveal that in their designs they seek intuitive relationships between devices and hands. And yet, such intuitive relationships are premised on notions of '*natural design*' (Norman, 1990: 4) or a 'basic, underlying organic principle' (Papanek, 2000: 210), which find source in 'natural biological pattern[s]' (p. 26) as well as ergonomic studies. Such an investment in (and promotion of) the naturalness of design conceals the not-so-natural implications of a device that only functions naturally for certain hands.

   Biomechanics, likewise, turns to nature to explain the performance of the musculoskeletal system (belonging to an unmarked, generic body abstracted into specific mathematical proportions). For example, the flexing of the fingers is understood as operating according to the same logarithmic spiral found in the accretive shell of the chambered nautilus (Bejjani and Landsmeer, 1989: 275). Thus, when industrial design turns to ergonomics and, by extension biomechanics, it finds its predilection for the natural validated.

   On another note, it is important to acknowledge that with the introduction of digital design, nature proper has lost some of its hold as a source of inspiration and reference. The appealingly fluid and plastic forms made possible by such design practices, e.g. vortex formations and blobs, owe more to complex calculus and binary coding of computers than to the simple (so-called) and naturally occurring geometries found in nature.
10. Reference to a description of the Sony Discman, a relative to the MSDs under consideration here, is appropriate to the discussion at hand. Kunkel (1999)

indicates that the relationship between the hand and the Sony Discman is one of integration, fusion. Specifically, he differentiates between 'today's sports and lifestyle designs' and those electronics of the 1980s which 'were conceived as high-tech prosthetic devices, artificial appendages that allowed the user to greet the world as a champion' (p. 149). In addition, he employs verbs such as 'fuses' and 'are integrated', while he refers to the older devices, using the verb 'attached' (p. 149). Certainly, the shift from prosthetic attachment, which makes the device an extension of the person's body, to fusion, a process which integrates the person and the device, is indicative of a reconfigured relation between person and device which is relevant to *fit*.

11. Importantly, active touch coincides with the active work of the eye (Wilson, 1999: n. 10).
12. Here it is important to distinguish between the MSD screen and its distant cousins just mentioned. Both television and cinema present screens that offer views onto other worlds; in which case, television and cinema screens function as windows. MSD screens, as I interpret them, do not open onto other worlds but merge with the world as it happens. In the case of camcorders with LCD screens, the screenic unfolding of the world supplants the actual world; the experience, while material and dynamic, is that of simulacra.
13. In thinking about the distinction to be made between window-ed and screenic seeing, it is important to recall Anne Friedberg's (2003) discussions of windows and screens, as well as Paul Virilio's (1988) 'third window'. By extension, one might also consider Jean Baudrillard (1988[1987]), Beatriz Colomina (1992), Anna McCarthy (2001), Marshall McLuhan (2001[1964]) and Lynn Spigel (2001).
14. I am borrowing heavily from Brown's (2001) distinction between transparency and opacity, which he discusses briefly in 'Thing Theory'. As Brown explains, window-ed seeing proceeds according to conceptions of objectivity, wherein the observer looks through the object in order to arrive at details, facts, etc. However, seeing that involves looking *at*, or what I am calling screenic seeing, engages the viewer in the thingness of objects, which is the 'contingency' that 'discloses the physicality of things' (p. 4).
15. Even though Wilson (1999) speaks about the shoulder, it is important to recall that positioning of the hand requires the entire upper extremity, including the shoulder. Perhaps also important to note here is the comparative treatment by the brain of the sensitive portions of both the digits and the retina (Wilson, 1999: 97–8), such that when an object is actively and simultaneously explored tactilely and visually, the brain is doubly engaged in like processes.
16. Wilson (1999) cites Jeanne Bamberger who discusses a process called 'felt path', in which the internalizing of familiar activities is interpreted as 'our most intimate way of knowing' (see p. 347, n. 2). I contend that this intimate knowing is a way of understanding the acquaintance between hand and MSD operating in *fit*.
17. In a reading group/independent study on Walter Benjamin in Fall 2002, Friedberg suggested a correlation between multi-tasking and the distracted engagement produced by habit that Benjamin describes.
18. The notion of appropriation is a little problematic with respect to this discussion, since it alludes to a unidirectional engagement between the spectator and the building. However, the fact that appropriation is accomplished through distraction, which connotes diffusion, returns the engagement to a kind of balance. Therefore, it seems possible to proceed with the comparison between interface and distraction.

19. It is important to acknowledge media specificity here. While Benjamin (2001[1931]) writes about photographic images, I am writing about MSD imaging. (The same applies to 'shock' produced by cinematic images.) But I contend that an analogous stunning of the associative mechanism can occur for the person with MSD.
20. Remembrance is distinct from reminiscence. As Olalquiaga (1998) explains, 'Reminiscence is nostalgic and never really leaves the past, while ... remembrance must be anchored to the present' (p. 74). While remembrance manifests itself visually–somatically, reminiscence is left to narrativization, distanced retrospection.
21. Crary (2001), too, comments on Benjamin's reservations regarding Bergson in *Suspensions of Perception* (pp. 318, 327).

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