

## 2010 Issue No. 18 — The Face and Technology

## Faces, Interfaces, Screens: Relational Ontologies of Framing, Attention and Distraction

By Ingrid Richardson

This paper considers the prevalence of screens in day-to-day life – from the televisual and cinematic to the many computer and mobile screens encountered in both domestic and public spaces – and suggests that each of these encounters has its own corporeal and interfacial modality. More specifically, the discussion will explore the relational and frontal ontologies of the face and the screen interface, focusing on the specific body-technology relations to emerge from our corporeal or somatic incorporation of television, computers and mobile screens. In particular, I will suggest that our engagement with media screens at a perceptual and corporeal level can be theorised by way of a phenomenological method that is supplemented by a critical understanding of the various ontological tropes and "body-metaphors" that are deeply embedded in our experience of screen interfaces. This focus on the perceptual and metaphorical aspects of the body-screen – and more specifically, face-screen – relation, can provide some insights into the historical and ontological affinity between faces, windows, frames and screens, and the complex ways we "turn" to them with varying degrees of attention and distraction. Finally, I aim to show how this affinity is challenged at a fundamental ontic and perceptual level by our experience of contemporary new media and mobile screens.

In its phenomenological focus, drawing from the work of Maurice Merleau-Ponty and post-phenomenologist Don Ihde, my approach is framed within the broad premise that every human-technology relation is also a body-tool relation, and as such every merger with technology invokes certain kinds of being-in-the-world, and particular ways of knowing and making that world. Such a perspective considers the screen interface as quite literally an aspect of our corporeal schematics; that is, through routine use screens have become part of the dynamic arrangement of our embodied experience. A corollary to this approach is the notion that our engagement with screens and interfaces is medium specific, such that each screen modality – whether televisual, computer or mobile – effects a different mode of embodiment, a different way of "having a body."

In Merleau-Ponty's perceptual and what I would call *artifactual* epistemology, the corporeal schema, or our lived experience of perceptual reach and bodily boundaries, is always-already "extendible" through artifacts and technologies. Tools are not conceived as merely perceptual attachments or extensions, but rather our corporeal schemata dilate to make room for instrumentality. This coupling of tools and bodies is effectively articulated by the term intercorporeality, a word that describes the irreducible relation between technics, embodiment, knowledge and perception. As Merleau-Ponty famously claimed, the body "applies itself to space like a hand to an instrument" (*Primacy of Perception* 5), an "application" that depends as much on

the specificities of perception and bodily movement as it does on the materiality of the tool-in-use. It is our somatic *openness* to the "stuff" of our environment that allows us to incorporate technologies and equipment into our own corporeal organisation.

Yet the incorporation of screens into our corporeal schemata is also determined in part by cultural, environmental, spatial and historical specificities – by the habitudes of practice that have developed within the contextures of everyday life. Thus, for example, as television theorists such as David Morley have argued, "television" and "home" have redefined each other (Morley, in Jenks). Early conventional television architecturally transformed the living area of the home into a "viewing space," requiring modifications to how the body was habitually positioned and mobilised, while over the past decade the proliferation of televisual entertainment technologies within the home has effected new ways of carpentering the built environment, to literally "make room" for new media spaces, by way of open-plan design or the designation of a cinematic "niche" for the home theatre or entertainment centre. As media theorists Silverstone and Hirsch suggest, the actual location of the TV set has implications for our embodied and spatial experience of both the interface and immediate environment, including our placement and proximity among other viewers and domestic objects. Such studies have shown that the televisual medium dynamically *transforms* the environment of reception and the embodied experience of domestic screen perception.

More recently, a number of mobile phone theorists have provided deep ethnographic and comparative analyses of mobile phone cultures and practices, and the way that the mobile screen, as a media content, gaming and communications interface, is deployed (and embodied) differently in countries such as Japan, China, Korea and Australia (Hjorth; Choi; Bell). As Choi notes, drawing on the work of Ting-Toomey and Kurogi, there are significant cultural disparities in the performance of self – and the correlative "face-negotiation" strategies required – that become embedded in mobile media cultures and mobile phone practices. Thus, for example, in Japan, there is an explicit distinction between *honne* – "true feelings" that are kept to oneself – and tatemae - one's public face, while in Korea, nunchi - the ability to "read" and interpret others' faces and social cues - is regarded as an essential skill. Choi argues that such face-negotiations and customs (among other techno-cultural specificities), are intrinsic to mobile phone use, revealed by both the subtle and more palpable cultural differences evident in the everyday "work" of image sharing, texting and gaming. Although cultural differences pertaining to screen engagement is not the purview of this paper, there remains much interpretive analysis to be done identifying such disparities in the micro-practices of mobile phone embodiment, and the way both collective and personalised mobile media practices are in fact a complex coalescence of cultural, cognitive, material and somatic factors.

As Don Ihde suggests, the body-technology relation is our fundamental ontological condition, yet each of these relations that define and transform our techno-perceptual experience is *non-neutral*, specific to context and culture. In his analysis of our prolific visualising technologies – from domestic, personal and public screens to highly sophisticated scientific apparatuses – Ihde documents how the body and instrument form a temporary collusive entity that apprehends or handles the world in specific ways. In each case, he writes, the mediation must be made to "fit" the body, and in particular there exists a consonance between the device and our "face-to-face capacities":

The mediated presence $\hat{a} \in |$  must fit, be made close to my actual body position and sight. $\hat{a} \in |$  What is seen must be seen from or within my visual field, from the apparent distance in which discrimination can occur regarding depth, etc., just as in face-to-face relations. But the range of what can be brought into this proximity is transformed by means of the instrument. (*Technology and the Lifeworld* 72)

Ihde's analysis allows us to consider the ways in which different media and screen interfaces

effect different kinds of perceptual and communicative reach, though for the most part our apprehension and orientation to the interface is determined by the need to see and therefore "face" it. As I will suggest, however, while our perceptual engagement with screen interfaces is often predicated on this face-to-face configuration, contemporary televisual and mobile screens frequently work to confound or at least problematise this relation.

This distinction between various body-screen modalities explicitly acknowledges the concept of medium specificity, a term originating from the work of technological determinists Marshall McLuhan (Understanding Media) and Harold Innis (Bias of Communication). Medium specificity describes the fact that specific media have specific spatial, temporal and socio-cultural effects, determining particular conditions of possibility for the way meaning is made. While Innis is concerned with the historical breadth and evolving political effects of communications technologies on cultural formation and social organisation, McLuhan claims that all media are extensions of the body: they alter our sensory access to the world, determining and organising our experience, our forms of knowledge, indeed the very structure of perception. In McLuhan's understanding of medium specificity, each communication medium works to "fix" particular sensory ratios, stipulating forms of knowledge and orchestrating the structure of perception by "attuning" our sensory equipment to absorb reality in medium-specific ways (Carey284). While acknowledging McLuhan's insights, rather than use the idea of "sensory ratio" I would describe the screen-body coupling in more relational terms as *technosomatic involvement*, a concept which can recognise the medium-specific ordering of sense-perception and bodily orientation, but goes beyond the confines of "sensory ratios" applied to specific media, to include the way in which the body-media relation is also moored by sedimented cultural habits, body-metaphors and tropes surrounding our engagement with screens, and the impact of the situated or built environment upon that engagement.

Thus, for example, we often refer to the difference between our engagement with conventional broadcast television screens and interactive computer screens in terms of how we choose to position the body when attending to the screen; that is, when watching television we "lean back" in contrast to the "lean forward" body posture demanded of interactive screen media, where there is an imperative to face the screen more proximally and directly. This describes the variable embodied orientation we have towards different kinds of media interfaces, and the immersive investment of the eyes, ears and hands required of interactive screens. That is, the location of screens and bodies in the built environment, and the dimensionality, functionality and interfacial specificities of such screens, partially determines our degrees of attention, practices of viewing, the spatial arrangements of screen engagement, and one's mode of technosomatic involvement and facial posturing within it. In what follows, I will futher explore the body's involvement with screen media as quite literally mediatropic, suggesting that both body and screen are imbricated in a number of complex ontological and embodiment metaphors. If we remember that the combining form *-trope* indicates an affinitive turn towards something, then screen interfaces can be said to have had significant "tropological" effects on our corporeal schematics; our modes of embodiment "turn towards" specific technologies and media interfaces. When we use the expression "glued to the screen," for instance, we interpret our eyes as facial and sensory limbs entering into an intimate and tele-tactile relationship with the screen. Indeed, the explicit goal of media designers in general is to render the screen "sticky" as a measure of viewer adhesion (Manovich 161).

The embeddedness of corporeal metaphors in our perception and experience of the world is investigated in some detail by George Lakoff and Mark Johnson in their two collaborative works *Metaphors We Live By* and *Philosophy in the Flesh*. Lakoff and Johnson claim that a range of embodiment and ontological metaphors are embedded in all our experiences. They categorise these metaphors as ontological metaphors  $\hat{a} \in \mathcal{C}$  or more specifically as entity, substance and container metaphors. They write:

We experience ourselves as entities, separate from the rest of the world  $\hat{a} \in \mathbb{C}''$  as containers with an inside and an outside. We also experience things external to us as entities  $\hat{a} \in \mathbb{C}''$  often also as containers with insides and outsides. We experience ourselves as being made up of substances  $\hat{a} \in \mathbb{C}''$  e.g., flesh and bone  $\hat{a} \in \mathbb{C}''$  and external objects as being made up of various kind of substances  $\hat{a} \in \mathbb{C}''$  wood, stone, metal, etc. (*Metaphors 58*)

In identifying the crucial work of metaphor upon the body in *The Production of Space*, Lefebvre suggests that metaphors are not simply figures of speech, but rather they decipher the world into that which is "sayable" or "susceptible to figuration"; in so doing, acts of metaphorisation take as their point of departure a "body metamorphosed" (Lefebvre 139-140). Thus all bodies are caught within a complex web of analogies and conceptual metaphors. Metaphors, then, are the extension of our corporeality into the world: only that which can be *metaphorised qua embodiment*  $\hat{a}\in$ " interpreted in terms of our complex body-model  $\hat{a}\in$ " is realised or *made real*. The way in which Lakoff and Johnson consider the figural and material projection of our bodies in-the-world is also conceptually akin to the Merleau-Pontian phenomenology of being which posits a plastic and changeable relationship between body-subject and the equipmental environment.

For Lakoff and Johnson, humans (and animals in general) have a front and a back, or a face and behind, and we embed this ontology or understanding of being-in-the-world into the constitution of spaces and objects in our worldly environment (*Philosophy in the Flesh* 34). There are many instances of this frontal ontology in our use of technologies and the way in which we navigate them. For example, the standard GUI on a computer screen such as Windows Explorer is configured in such a way that we experience our progression through directories as forward and back, in and out, up and down. These common navigational and browser spatialities, along with other body metaphors adapted to virtual spaces are clearly and quite simply based in our bodies' engagement with the world. Importantly, although not of apparent relevance to Lakoff and Johnson, these somatological schemas are not just outcomes of physiology, they are also culturally specific, and vary from culture to culture (Hefferon). [1] Yet it seems that in a more general sense, as humans we project fronts and backs onto objects, and habitually designate the "face" as the aspect with which we interact, because we ourselves face them. Lakoff and Johnson write:

The concepts *front* and *back* are body-based. They make sense only for beings with fronts and backs. If all beings on this planet were uniform stationary spheres floating in some medium and perceiving equally in all directions, they would have no concepts of *front* and *back*. But we are not like this at all. Our bodies are symmetric in some ways and not in others. We have faces and move in the direction in which we see. Our bodies define a set of fundamental spatial orientations that we use not only in orienting ourselves, but in perceiving the relationship of one object to another. (*Philosophy in the Flesh* 34)

Clearly most of our communication technologies are oriented in this way, and moreover, even when their purpose is not to provide visual images, they more often than not still have "faces" from which to read information displays. While there is no doubt that we have a primarily "frontal" relationship with the screen, this is not to say that we have no association with the "backs" of such devices, although these interactions are for the most part brief and functional, that is, for the purpose of connection, or negotiating an effective relationship with the front. We thus have an affinity with the body of the screen simply by virtue of the fact that human bodies and screens have "fronts" and "backs" and "face" each other. It is this screen-face consonance which perhaps best explains the phenomenon of parasociality, and the common behaviour of reacting towards televisions and computers "as if" the latter represent "real people" and "real places" (Reeves and Nass). [2] Indeed, the similitude of the TV and computer box with the human head or eyes (see figures below) is another clear example of this perceived consonance at work.



Computer Head wallpaper for the Blackberry Storm [3]



Image from Weinberg-Clark photography client website [4]



Image from Security Reality website [5]

This front-to-front relationship is one that we have with screens in general. In most if not all cases the screen is a frame of limited dimensions within our own physical space, while the body's frontal relationship with the apparatus varies between media depending on what Manovich calls "viewing regimes" (96). With cinema, for example, the viewer is at the outset fully frontal to the exclusion of all diversions, focusing entirely on the screen. In the optimum situation the boundary or interface between body and cinematic apparatus dissolves, a merger which manifests a change in orientation from being "in front of" to being "within," an effect which is achieved by several factors: the size of the screen, the darkness of the theatre, and not least by surround sound. Frontto-front orientations are therefore not achieved by vision alone; in many situations, when facing a moving image we would expect that sound would also approach us from this direction, but the effect of surround or stereophonic sound is to embrace the body in such a way that the frontal relationship with the screen is at least partially compromised. In the case of television  $\hat{a} \in$ " with perhaps the home theatre an exception  $\hat{a} \in$ " the face-to-face relationship between the body and the set is somewhat more informal and less disciplined; viewers can look away to the familiarity of their domestic surroundings, move about or leave the room, or they can be visually and aurally attentive or inattentive to varying degrees, by muting the sound, zapping through channels, talking on the phone or conversing with co-watchers, and reading or engaging in other activities. In other words, the facial and sensory dedication we apply to media screens varies according to the mode of technosomatic involvement demanded by both the interface and the cultural, experiential and material contextures.

Thus although in a general sense as-bodies we clearly have a frontal and gravitational ontology that impacts upon the way in which we perceive and navigate screens, the emergent body-tool relation we have with mobile screens has seen a number of adjustments to this corporeal schematic. For example, the various postures surrounding mobile phone photography, the practice of "sharing" one's screen with others, or more simply developing habitual skills, such as becoming adept at texting while walking. In these cases the often dedicated frontal orientation we have towards larger screens becomes compromised both by our own mobility, the size and resolution of the screen, and the interrupted nature of mobile phone use. In their study "Everyday Practices with Mobile Video Telephony" Kenton O'Hara, Alison Black and Matthew Lipson [6] examine the medium specificity of video phoning, revealing that a different set of somatic adjustments is needed.

Of most interest in O'Hara et al's study is the ergonomic incompatibility between moving bodies and mobile video phones, and the often uncomfortable fit between facial and visual attention, voice/video communication, macromobility (walking) and micromobility (adjusting the position and orientation of the phone). For example, using the videophone feature requires a return to a more visually determined face-to-face orientation with the screen, i.e. holding the phone out at arm's length with the screen directly – and fixedly – in front of the face. This necessitates use of the speaker phone, such that both the screen display and the usually private voice communication becomes public (875-876). In some cases this means that the proper boundaries between public and private cannot be maintained - both in terms of intruding voices and images into another's personal space (on a bus, for example), and in terms of exposing *both* sides of one's own private communication by varying the customary (aural) and intimate somatic mode of mobile phone communication. O'Hara et al note that while recipients of a video call could put the phone down and use the hands-free speaker "it was considered rude" to create a visual asymmetry between speakers such that they were no longer communicating screenfaceto-screenface (878). For these reasons participants in their study used videophoning only in particular situations – for the most part, video calls were made when the phone would be "shared" amongst a group of friends, or for consolidating "special relationships" that required dedicated face-to-face time even when not co-present (873). In other words, unlike the casual brevity of the text message or spontaneity of voice calls, it would seem videophoning is often designated for calls of some import that require a more *deliberate* attentiveness to one's somatic involvement, and the displaying of one's face to another.

Another interesting entry-point into the body- and face-screen relation is by considering one of the more common metaphors of the screen  $\hat{a} \in \mathbb{Z}$  that of the frame or "window-on-the-world." The ontological and cultural significance of the window and the frame cannot be overstated; as Anne Friedberg comments, the frame is perceived as "the decisive structure of what is at stake" (*The Virtual Window* 14), while for Vivian Sobchack it is both a "lived logic" and itself "an organ of perception" (*Address of the Eye* 134, cited in Friedberg 16). The comparison between screen and window as framing devices is easily made and understood  $\hat{a} \in \mathbb{Z}$ " the frames of window and screen are similarly rectangular, they can be similarly interpreted as membranes between "inside" and "outside," and what one sees through the frame is a portion of the world in space and time (in the case of television, for example, this is often aimed towards a "realistic" depiction of a place/event in a parody of the scene-through-a-window). It is worth examining in some detail the portrayal of

the screen as frame or window, and how such a rendering clearly instantiates a particular kind of relationship to the body, its orientation, and its somatic involvement with / in the medium.

The window-on-the-world is a trope emergent from linear perspective. In the space of linear perspective the observer looks at the world as if through a window. The "tropological effect" of linear perspectival vision and the "window-on-the-world" can be characterised by the way visibility and light have come to stand for truth, belief and knowability. The corporeal effect here is clearly one which elevates visual perception and the eyes as those organs which can most accurately deliver the truth of something. As Romanyshyn argues, this put the hegemony of the eye firmly in place, such that "Alberti's window, which begins as an artistic device, thus becomes a style of thought, a cultural perception, a way of imagining the worldâ€<sup>+</sup> The window as membrane becomes the boundary, the place where the world is divided into exterior and interior domains" (Romanyshyn 69). Romanyshyn insists, then, that the window of perspectival vision set up an ontological boundary and distance between the space of the observer and the space of the observed. Significantly, in the case of Alberti's window (see figure below), the viewer's bodily movement is restricted or even absented by the device, in that the grid needs to remain directly between the scene and the line of sight: the body is at the service of vision and facial orientation; it is an eye-body, with every other perceptual register absent.



Alberti's Grid - c.1450 [7] In technosomatic terms, we might consider the window, frame and screen as perceptually inter-familiar, exhibiting a kind of ontological consonance; that is, as Friedberg notes, like the window, the screen and its frame "holds a view in place"; it becomes, like the window, a transformative aperture in architectural space, altering the materiality of our built environment and opening surfaces up to a new kind of conceptual and metaphoric "ventilation" (Friedberg 1). The screen-as-window, then, sets up a particular kind of corporeal trope: to look out a window and to view a screen, at the imperative of the eyes and face one's body must be turned towards the apparatus. As such, to remain visually attached the body is rendered immobile. Indeed for Manovich, this fixedness typifies a bodily inertia and sensory deprivation that has been and remains a predisposition of "the Western screen-based apparatus" in general (Manovich 104). This tendency can be traced from Alberti's perspectival window and Renaissance monocular perspective, through to Kepler's *camera obscura*, nineteenth century *camera lucida* and contemporary cinema: in all of these interfaces, he argues, the body is fixed in space (Manovich 104-105). Although the dynamic screens of cinema and television might be said to virtually transport the viewer, Manovich argues that this mobility is had at the cost of the "institutionalised immobility" of the body of the spectator (107), in the form of the silent seated rows of movie-goers or the domestic couch-reclining TV viewer. [8] Importantly, this distinction between the virtually mobile or tele-active eye-body and the stationary physical body is made by way of the screen-as-window metaphor. Within this metaphor the eyes alone must remain mobile, to traverse and visually "handle" the surface space of the screen, while the face and body are held

captive by the eyes' attachment. The rectilinear dimensions of the media window â€" and its immobilisation of the body in front of the screen â€" is an instance of the epistemological containment of knowledge in perspectival vision, today most familiar through the ubiquitous frame of the screen. Thus by tracing a lineage from Alberti's window to contemporary screen technologies such as television and cinema, we can see the *medium specificity* of our understanding, our spatial and somatic perception, and what is often termed our frontal ontology.

While it is the case that the frontal or frame-ontology of windowed perception remains as one of the most tenacious interfacial tropes influencing our understanding of contemporary media today, I would argue that Manovich both overstates and oversimplifies the resemblance between cinematic and domestic or personalised screen interfaces (such as television, computer and mobile media device). Indeed, he suggests that our relationship to the screen has remained static – that the fictional window of the filmic interface and its technosomatic requirements can be simply translated into the datascape window of the computer screen. Although we may move from a public cinematic space to a domestic space, or from a large screen to a smaller and more isolated personal screen, our fundamental orientation to the interface and its framing properties has, for Manovich, remained unchanged.

Yet if we are to understand the technosomatic specificities of contemporary screen engagement, we need to develop a more nuanced or granular interpretation of such experiences, with particular insight into the altered somatic, haptic and facial relations to emerge from our engagement with smaller and sometimes portable screens. As Friedberg and others have suggested, the perspectival tropes of window and frame cannot be applied unproblematically to the computer. In particular, the computer screen is "fractured" and layered, providing a multiple windowed format that remakes our "visual vernacular" (Friedberg 3), invoking what Ihde (*Postphenomenology*) calls a *plurivisual* mode of perceptual engagement.

There is no doubt that both our tele-somatic and physically embodied relation to the personal computer screen is quite different to our experience of both traditional televisual and cinematic screens in terms of proximity, orientation and mobility, and not least because we are no longer "lean-back" spectators or observers but "lean-forward" users. In particular, our face-to-face relation to the computer and mobile screen is intimate, up close, and involves the negotiation and manipulation of a networked screen-space via the keyboard, mouse, touchscreen or other device (Friedberg 231), setting up both a "distributed presence" and an interactive circuit of eyes, ears, hands and interface with a range of "handy" peripheral devices. Moreover, laptops and handhelds can be carried with us, in our hands, pockets or bags or on our laps, effectively mobilising the body- and face-screen relations into the workspace, pedestrian space, vehicular space and the numerous public spaces of the urban environment. As Toni Robertson points out, many new kinds of digital media depend on the phenomena of human motility and mobility, such that we ourselves become their "intimate mobile hosts."

Nevertheless, it seems that what has remained consistent through all these screen modalities is the mediatrope of the window, vis- $\tilde{A}$  -vis the model of the frame and its frontal ontology. Friedberg writes: "the metaphor of the window has retained a key stake in the technological framing of the visual field. The Windows interface is a postcinematic visual system, but the viewer-turned-user remains in front of (*verstellen*) a perpendicular frame" (Friedberg 232). Yet I would argue that the vacillating degree of attention and distraction particular to many contemporary screens – particularly mobile handheld screens – problematises the frame ontology and the perception, eye-behaviour and facially determined body posture proper to the window metaphor. Indeed, I have already noted that televisual screens often work to confound the focused attention usually ascribed to the screen-body relation; the televisual eye is frequently distracted, both by the exo-televisual environment – the activities and communicative acts that disrupt the practice of dedicated watching – and in the latent lateral but ever-ready possibilities of remote control devices and multiple channels. Rarely is TV enveloped by a zone of inattention  $\hat{a} \in$ "

it is always-already surrounded by other domestic objects and zones of practice within the collectively realised domestic spaces and spatial topography of the home. In what follows I will explore this departure further in terms of the oscillating technosomatic registers of attention, inattention and distraction enacted when engaging with small mobile screens, and suggest that such engagement undermines both the facial dedication of the immobilised body deemed typical of our embodied relation to larger screens, and consequently the frontal ontology of window and the frame.

In considering the technosomatic registers of attention and distraction particular to the screen-body relation, it is useful to determine some general ontological properties of what Introna and Ilharco call "screen-ness." In contemporary life screens are often a primary focus of our attention and concern: they literally display that which is relevant or worthy of notice. This property of relevance has little to do with the specific content of any particular screen display; it rather indicates:

a particular involvement in-the-world in which we dwell and within which screens come to be screens. It is not up to anyone of us to decide on the already presumed relevance of screens; that is what a screen is  $\hat{a} \in \mathcal{C}$  a framing of relevance, a call for attention, a making apparent of a way of living. (Introna & Ilharco 227)

Introna and Ilharco suggest that screens of all kinds enter our involvement-in-the-world at the moment we turn them on, at which point we reposition our attention and "sit down, quit  $\hat{a} \in$ " physically or cognitively  $\hat{a} \in$ " other activities we may have been performing, and watch the screen" (225). Yet this "frontal" relationship which is typical of our engagement with most screens  $\hat{a} \in$ " where the mediums of cinema, television and computer can be said to discipline the body more or less into a face-to-face interaction  $\hat{a} \in$ " is thoroughly disintegrated by the mobile media screen. Our interaction with mobile screens is rarely marked by such dedicated attentiveness; indeed, our "turning towards" them is usually momentary (checking for a text or missed call) or at most can be measured in minutes.

Eugénie Shinkle offers an interpretation of our "turning to" screen media across a spectrum of attention, inattention and distraction, allowing us to consider screens outside of the strictures of relevance suggested by Introna and Ilharco. She argues that media and communication technologies institute "material parameters," proportions of attention and inattention, by which we measure varying degrees of "perceptual reach" from objects and others in the world. She writes:

[T]echnologies are material parameters in the world, embodied praxes $\hat{a} \in :$ . Functioning as an embodied agent in the world requires attention  $\hat{a} \in :$  maintaining objects within the confines of perceptual reach, holding them at the "correct distance." At the same time, however, it also calls for a certain kind of *inattention*  $\hat{a} \in :$  a persistent openness to the world, a subsidiary awareness that is different from reflection as such. Inattention is not the same thing as distraction  $\hat{a} \in :$  a scattering or absence of attention  $\hat{a} \in :$  rather, it refers to the different distances at which we hold the rest of the perceptual field, including the body. (*Gardens, Games and the Anamorphic Subject*)

Thus different types of body-technology relations set up different medium specific proportions of attention and inattention, including (in)attention to one's own body. In the case of perspectival vision, Shinkle suggests, the working or perceiving body is concealed in the interface, as the subject is rendered a disembodied eye/I; by contrast, and against the notion that the body is an immobilized eye-body in its engagement with contemporary screens, we could argue that the face-screen, hand-eye-ear-mouse-screen interface or the hand-eye-ear-remote control arrangement work as the preferred modalities of televisual, computer and mobile screen use. In particular, our

use of handheld screens when we are on-the-move further complexifies the body-tool corporeal schema particular to screen and televisual media; our relationship with the mobile phone as a multi-sensory device which can be used either as a dedicated aural *or* visual medium, for example, can effectively shift eye-behaviour from a continual fixed-ness on the screen to a sporadic, oscillating and context-dependent mode of viewing. In such circumstances the dedicated frontal orientation we have towards screens becomes compromised by our own mobility, the screen size and resolution, and the interrupted nature of mobile phone use.

There are many examples of the ways that mobile media screens challenge conventional screen-body and screen-face relations, including image-sharing practices, location-based and casual gaming, the practice of posting text or image content to urban screens, or simply the more mundane activities of talking and texting. In an environment of proliferating handsets it is relevant to examine the perceptual specificity of our interactions with, and experiences of, the mobile phone, and the ways in which the prioritisation of modes of use (listening to music, watching TV, film-making and editing, photography, web browsing, gaming, video-phoning, texting and media-messaging) reflect different relationships between users, bodies, content, handsets, and the physical environment or spatial context. Indeed, if each new mobile media device can be considered in Merleau-Ponty's (Phenomenology of Perception) terms a "fresh instrument" which dilates our corporeal being accordingly, are we learning a new range of collective bodily skills, spatial perceptions, postures and habits? Although in a general sense we may have a frontal and gravitational ontology that impacts upon the way in which we perceive and navigate screens, the emergent body-tool relation we have with mobile screens has seen adjustments to this corporeal schematic; mobile phone photography, for instance, could be said to have impacted on the nature of face-to-face communication across both screen and co-present interactions.

It has been noted that the mobile camera phone has altered everyday photographic practices in terms of its informal status as a camera and perpetual photo-readiness, enabling the capture of immediate and often intimate objects and events (Okabe and Ito). Users will often share photos just taken or received with others in face-to-face interaction, by physically showing or passing around one's phone to friends, rather than sending them through the mobile phone network. This practice effectively creates a hybridised mode of communication that cuts across mediated and co-present or face-to-face contexts. Indeed, mobile media is increasingly cross-platform, such that the mobile device can be used to browse the web, check email, post messages to screens in cafes and pubs around the world (see, for example Wiffiti [9]), or more recently, the Twitter [10] phenomenon allows the mobile user to either contribute to or access an "ambient flow of information" – primarily via "what-are-you-doing?" updates concerning friends, coworkers or celebrities. Each new mobile application, it seems, works to further coalesce urban, online and mobile screens, effecting increasingly hybridized, networked, distributed and mediated modalities of interaction.

Mobile media also elicit variable levels of attention and inattention that shift between actual and telepresent space, partially depending on the demands of the immediate environment and the extent to which the interface becomes ready-to-hand in a Heideggerian sense (i.e. its function and usability recede from explicit awareness). Thus one's own technosoma may "behave" in ways that accord with (or deviate from) consensual and recognised modes of being-on-the-phone, such as stopping, bowing the head to conceal the face and reduce audibility, shielding one's mouth with the hand to define a provisional private space, or deliberately not altering one's trajectory or visual/facial orientation, and directing one's gaze into the middle distance, as is the case with the more blatant Bluetooth pedestrian. To borrow from Erving Goffman's useful analysis of pedestrian traffic, in such responses the mobile phone pedestrian articulates a specific and recognised type of "gestural prefigurement" or "body-gloss," which intentionally displays to others a state of being-on-the-phone (*Relations in Public* 31-32). The various postures and

embodied actions particular to mobile phone use in public places, and the correlative dynamics of attention-inattention, are quite specific to the body-mobile relation which has emerged throughout the last decade. Here, the typical "phone-face" we customarily adopt when on the phone (eyes looking into the middle distance, with attention focused on the interiority of one's aural sensory perception) becomes also a public face with which the gestural body is aligned, a face-and-body that says "I'm on the phone." Similarly, the activity of casual gaming or noodling with one's mobile media device while waiting for a friend or at a bus stop becomes another way of managing one's alone-ness in public spaces, enacting a particular kind of "face-work" in Goffman's (Interaction Ritual) sense, while at the same time maintaining an "environmental knowing," or crucial peripheral awareness of one's spatial surroundings in readiness for the busy-ness of life to resume. The transient and non-dedicated attentiveness required by the small screen and casual game – you can "switch off" but "not totally" – allows the user to avert their gaze from others and so cooperate in the tacit social agreement of non-interaction among strangers. As I have suggested, the micromobilities of the body here quite literally enact a mobilespecific *mediatrope* – inclined metaphorically, corporeally, communicatively and gesturally towards the mobile media device.

On a macro-perceptual scale, location-based games integrate play and game interaction into the patterns of quotidian life and peripatetic movement. In location-based gaming ventures such as Mogi [11] in Japan and Cipher Cities [12] in Brisbane, Australia, pedestrian gamers integrate their game-play with their everyday trajectories through the city as they hunt and trade virtual objects, build do-it-yourself mobile adventures in their own neighborhood or familiar streetscape, and message other active users. Such games create a network or connective sensibility in which the mobile phone, web, community of participants and built environment merge, and potentially work to seamlessly combine the corporeal schematics of actual and virtual spaces as they are actively negotiated on-the-move. Friedberg (173) comments that the visual systems of the pedestrian viewer and the cinema or television viewer are entirely different – the first is itinerant and in-the-world, requiring "bodily, haptic, phenomenological perception" whereas for the second the "itinerary becomes framed," and the body's immobility is "compensated for" by the moving images on the screen. In contrast, the mobile phone – and in particular, location-based gaming practices – effect a new technosomatic arrangement which brings together the peripatetic mobility of the user, the mobility of that which is framed, and the mobility of the frame itself. Here, the face-to-face or frontal ontology of the screen is quite literally minimised, and the face-screen relation is intermittent and partial; attentive, inattentive and distracted in varying degrees, and absorbed within the broader technosomatic arrangements of the urban environment.

Given the increasing prevalence of screens in everyday life, it is critical that we understand the corporeal dynamics of contemporary screen use, the historical legacy of the larger screen, and especially the more recent technosomatic effects of the now ubiquitous mobile device. Throughout this paper I have considered the various body-metaphors attributable to screens, and the problematic assumption that the window and frame are perceptually homologous to either the televisual, computer or itinerant small screen. The "telic inclination" of the screen is not uniform, linear or continuous, or necessarily determined by the perspectival trope and its demands for a fixed face-to-face relationship. With a more nuanced phenomenological analysis of the micro-practices surrounding our experience of contemporary screens, we can more effectively interpret the way mobile devices in particular modify our communicative and playful practices, remediate our experience of media content, and insinuate themselves into our ways of beingin-the-world. The mobile media device, to a degree at least as significant as the cinematic, televisual and computer screen, presents a significant shift in the relational ontology of body and technology. This relation is perhaps more intimate, ever-present and affective than any we have thus far experienced. In a very fundamental way the mobile interface modifies what we pay attention to, what we "turn to" and face (and turn away from) in the everyday lifeworld, and the modalities and *durée* of that attentiveness. What we need, then, are ways of thinking through new body-screen metaphors that more effectively capture the distracted, discontinuous, motile, peripatetic and tangible nature of mobile media engagement.

In this paper I have sought to provide a history, method and context for such interpretive work. As theorists such as Don Ihde and Anne Friedberg have pointed out, ways of encountering the world, both mediated and unmediated, entail conventions of sense-perception and collective corporeal habits that are not innate or given, but culturally, materially and somatically specific. Each new interfacial modality stipulates its own gathering of *soma* and *technique*, its own technosomatic routines. In this light, I have suggested that our contemporary media experience unhinges preceding face- and body-screen couplings. That is, the particular technosomatic configurations of screen experience across televisual, computer and mobile interfaces, when critically examined in terms of their medium specific effects, can offer some insight into how such effects work to confound and reshape historically sedimented face-to-interface conventions.

Ingrid Richardson is Senior Lecturer in the Faculty of Creative Technologies and Media at Murdoch University. Her broader research interests include philosophy of science and technology, new and interactive media theory, phenomenology, visual ethnography, haptics and embodied interaction. She has published book chapters and journal articles on the cultural and corporeal effects of mobile media, video phoning, digital and mobile games, blogging, urban screens, virtual reality, biomedical imaging, and technologies for sustainability. More recently, Ingrid's published research has focused on the way mobile media have infiltrated and impacted upon screen cultures in everyday life.

## Endnotes

- 1. Culturally specific body-orientations are often instilled at a very young age; for example, in contrast to the dominant Western habit of facing a new-born baby toward the holder, "Kaluli mothers tend to face babies outwards so that they can be seen by and see others that are part of the social group," habituating a particular orientation to both the maternal and wider environment (Woodhead *et al.* cited in Donald and Richardson).
- 2. The social and behavioral aspects of this affinity between humans and television (and more generally computers and new communications media) is explored in some detail by Reeves and Nass in their study *The Media Equation*.
- 3. See http://bbstormwallpapers.com/2008/12/04/computer-head-wallpaper
- 4. See http://www.weinberg-clark.com
- 5. See http://securityreality.wordpress.com/2009/03/30/real-world-network-security-and-hacking-1st-edition/
- 6. O'Hara et al studied 21 participants (13 male and 8 female) in the UK over five weeks.
- 7. See Russell Naughton (2003) "Drawing Aids to Perspective" http://www.acmi.net.au /AIC/DRAWING\_MACHINES.html
- 8. Interestingly, Manovich claims that this condition of the body's immobility can also be traced through the history of communication: "In ancient Greece, communication was understood as an oral dialogue between people. It was also assumed that physical movement stimulated dialogue and the process of thinking… In the Middle ages, a shift

occurred from dialogue between subjects to communication between a subject and an information storage device, that is, a book. A medieval book chained to a table can be considered a precursor to the screen that "fixes" its subject in space" (Manovich 104-105, note 48). The mobile phone and video phone, although mobilising the communicator according to the imperatives of push media (the desire for perpetual connectivity), are devices that perhaps return us to the practice of walking and talking.

- 9. See http://www.wiffiti.com/
- 10. See http://twitter.com/
- 11. See http://www.mogimogi.com/
- 12. See http://ciphercities.com/

## Works Cited

- Bell, Genevieve. "The age of the thumb: A cultural reading of mobile technologies in Asia." *Knowledge, Technology and Policy* 19, 2 (2006): 41-57.
- Carey, James. "Harold Adams Innis and Marshall McLuhan." In R. Rosenthal (ed) *McLuhan: Pro and Con*. Baltimore: Pelican Baltimore, 1969: 270-308.
- Choi, Jaz Hee-jeong. "Approaching the Mobile Culture of East Asia." *M/C Journal* 10.1 (2007). http://journal.media-culture.org.au/0703/01-choi.php accessed 11/05/10.
- Donald, Stephi and Richardson, Ingrid. "The English Project." *Inter/Sections: the Journal of Global Communications and Culture Special Issue: Phenomenological and Hermeneutic Contributions to the Study of Global Communication and Culture.* June (2002).
- Friedberg, Anne. *The Virtual Window: From Alberti to Microsoft*. Cambridge, Mass.: MIT Press, 2006.
- Goffman, Erving. *Interaction Ritual: Essays on Face-to-Face Behavior*. New York: Pantheon Books, 1967.
- ---. Relations in Public: Microstudies of the Public Order. Middlesex: Penguin Books, 1972.
- Hefferon, E. *Container Agent Space*. Honours Dissertation, Murdoch University, Western Australia, 2002.
- Heidegger, Martin. *The Question Concerning Technology and Other Essays*. New York: Garland Publishing, Inc., 1977.
- Hjorth, Larissa. "Locating Mobility: Practices of co-presence and the persistence of the postal metaphor in SMS/ MMS mobile phone customization in Melbourne." *Fibreculture Journal* 6 (2005) http://journal.fibreculture.org/issue6/issue6\_hjorth.html.

Ihde, Don. Bodies in Technology. Minneapolis: University of Minnesota, 2002.

- ---. Postphenomenology: Essays in the Postmodern Context. Evanston, Illinois: Northwestern UP, 1993.
- ---. Technology and the Lifeworld: From Garden to Earth. Bloomington: Indiana University

Press, 1990.

- Innis, Harold. The Bias of Communication. Toronto: University of Toronto Press, 1964.
- Introna, Lucas D. & Ilharco, Fernando M. "The ontological screening of contemporary life: a phenomenological analysis of screens." *European Journal of Information Systems* 13 (2004): 221-234.
- Jenks, C. (ed.) Visual Culture. London: Routledge, 1995.
- Lakoff, George, and Johnson, Mark. *Metaphors We Live By*, Chicago and London: Chicago University Press, 1980.
- ---. *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought.* New York:Basic Books, 1999.
- Lefebvre, Henri. *The Production of Space*. Trans. Donald Nicholson-Smith. Malden, MA: Editions Anthropos, 1974, 1991.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man*. London:Routledge, 1964.
- Manovich, Lev. The Language of New Media, Cambridge, Mass.: MIT Press, 2001.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. London: Routledge and Kegan Paul, 1962.
- ---. The Primacy of Perception, And Other Essays on Phenomenological Psychology, the Philosophy of Art, History and Politics. Illinois: Northwestern University Press, 1964.
- ---. The Visible and the Invisible, Illinois: Northwestern University Press, 1968.
- O'Hara, Kenton, Black, Alison and Lipson, Matthew. "Everyday Practices with Mobile Video Telephony." *CHI 2006 Proceedings, Everyday Use of Mobiles,* April 22-27, 2006, Montréal, Québec, Canada.
- Okabe, Daisuke and Ito, Mizuko. "Personal, portable, pedestrian images." *receiver* 13 (2005) http://www.receiver.vodafone.com/archive
- Reeves, B. and Nass, C. *The Media Equation: How People Treat Computers, Television and New Media Like Real People and Places,* Cambridge and New York: Cambridge University Press, 1996.
- Robertson, Toni. "The Stamp of Movement in Human Action." Working paper, University of Technology Sydney, 2005. http://research.it.uts.edu.au/idwop /downloads/RobertsonMovement.pdf accessed October 30 2008.

Romanyshyn, Robert. D. Technology as Symptom and Dream. London: Routledge, 1989.

- Shinkle, Eugénie. "Gardens, games and the anamorphic subject: tracing the body in the virtual landscape." *Digital Arts Conference::streaming worlds*, May 19-23, 2003, Melbourne, Australia.
- Silverstone, R. and Hirsch, E. (eds.) *Consuming Technologies: media and information in domestic spaces*. London: Routledge, 1992.

Sobchack, Vivian. The address of the eye: a phenomenology of film experience. Princeton, NJ:

Princeton University Press, 1992.

Ting-Toomey, Stella, and Atsuko Kurogi. "Facework Competence in Intercultural Conflict: An Updated Face-Negotiation Theory." *International Journal of Intercultural Relations* 22 (1998): 187-225.