8. Touch/Space: The Haptic in 21st-Century Video Art

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Abstract

Through the conceptual framework of the haptic, this essay charts a striking motif in much recent video art: the co-presence of a hand touching the screen and a distinctly layered spatiality. Critically deploying various notions of the haptic culled from film and media theory and perceptual psychology, Sæther discusses Trisha Baga's low-tech 3D video *Flatlands* (2010) and Victoria Fu's immersive video installation *Belle Captive I* (2012) and expounds a contemporary haptic space that verges between planarity and volume, between the near and far, and that exceeds the frame to enfold us. As Sæther argues, the salience of this motif points to the split between human sense perception and the networked, computational operations of 21st-century media, and the attempt to grasp this split.

Keywords: Video art, haptic space, haptic touch, atmospheric media, Victoria Fu, Trisha Baga

In an influential 1995 article, Antonia Lant discerned how a new spatial language emerged in early cinema during the first decade of the 20th century.¹ Cinema around this time passed from the relative still images of tableau-based scenes defined by layered sets, shallow spaces, and textured flatness into a cinema of temporal and spatial continuity, depth, and dimensionality. As Lant demonstrated, this passage was marked by a curious co-presence between different representational modes, each with their particular rendition of spatiality. Thus 'drawing, bas-relief, incised images, printed textile undulation, [and] moving human figures' were frequently

1 Lant, 'Haptical Cinema'.

juxtaposed, as were planarity and volume, surface and depth, emergence and recession, resulting in what she describes as a ‘peculiar spatial ambiguity’.² With remarkable precision, Lant’s description of cinematic spatiality at a transitional moment over a hundred years ago fits equally well with 21st-century video art. Surveying such art, particularly since around 2010, one again encounters a ‘peculiar spatial ambiguity’ wherein the shallow and the deep, surface and depth, plane and volume are juxtaposed, intriguingly and often conflictingly so. Thus a ‘flat’ desktop icon of a movie file might be layered over a photograph of the deep space of the universe, as in the opening image of Camille Henrot’s acclaimed video *Grosse Fatigue* (2013). Or cardboard cutouts might be combined with flat-screen presentations of 3D printed objects of disparate anthropological origin, rotating against a green screen backdrop to flaunt their dimensionality, as in Mark Leckey’s installation *The Universal Addressability of Dumb Things* (2013). That Henrot and Leckey’s works were both exhibited at the Venice Biennale in 2013 attest to their traction in the art world.³

‘Haptical cinema’ is the term Lant gives to this spatially ambiguous instance of early cinema. She derived her notion of the haptic from 19th-century Austrian art historian Alois Riegl’s distinction between haptic and optic perception and spatiality, developed to discern a shift from Egyptian to Late Roman art.⁴ For Riegl, haptic qualities were associated with the close-range, tactile perception (*Nahsicht/nearsighted*) roused by the shallow spatiality of Egyptian art, while the optic—with its long-distance, disembodied vision (*Fernsicht/farsighted*)—was associated with the spatial depth and emerging perspective that developed in Late Roman art. ‘Haptical cinema’ is thus for Lant a cinema in which the plane and ‘flat’ spatiality of Egyptian art resurfaced in early cinema to mark the moment when it was about to explore a new spatial language of depth and dimensionality, and which drew attention to its own striking fluctuation between these different spatial modes.

Recent video art, too, charts the contours of a spatiality in emergence. This is a spatiality indigenous to digital screens in which software filters, desktop windows, and generic graphic effects pile upon each other at touching

2 Ibid., p. 73.

3 Several examples from art critique, discourse, and curating from the last few years also attest to the perceived tension between flatness and depth in recent moving-image art, including the thematic film and video programme titled ‘Flatness: Cinema after the Internet’ curated by Shama Kanna for the International Short Film Festival in Oberhausen in 2013, and ‘The Third Image – 3D Cinema as Experiment’ programmed for the same festival by Björn Speidel in 2015.

4 Riegl, *Late Roman Art Industry*; ‘Late Roman or Oriental’.

distance; in short, a kind of layered, incongruent, and proximate spatiality that pertains to a digital version of 'haptical cinema'.⁵ However, the haptic qualities Lant discerned in early cinema are here further amplified by the salient motif of hands that physically touch the screen image and cause it to change.⁶ Again and again, one encounters depictions of dismembered hands that tap, pinch, and swipe at the plane of the screen. These works thereby evoke a physical and lexical notion of the haptic understood as 'pertaining to the sense of touch' (OED), clearly impacted by the recent influx of touchscreen interfaces and their solicitation 'to touch in order to see', as Nanna Verhoeff has stated of touchscreens.⁷ In Riegl's distinction as well as in most subsequent iterations thereof, the sensation of touch is, in contrast, activated without direct, physical contact.⁸ Recent video art thus brings to the fore both an ongoing reconfiguration of on-screen spatiality in which the influx of haptic interfaces partake, and a tension between a metaphorical and a physical conception of the haptic as it has been applied in contemporary film and media theory. More specifically, such art charts an imbrication of the sensory capacity of touch with the spatiality of digital screens, and by extension, a relationship between the human sensorium and contemporary media machines that seems specific to the 21st century.

According to Mark B.N. Hansen, what sets 21st-century media apart from its predecessors is that, crudely summarized, with the digital computer as the general media platform, the circuits that link media and sensory perception and experience are interrupted. Crucial in this respect is the impossibility for the human sense ratio of perceiving what Wolfgang Ernst calls the 'technomathematical' operations of computers.⁹ Simply put, our sense perception cannot grasp the micro-tuned operations of computational media. For Hansen, this split between human sense perception and what he calls the 'non- (or proto-) phenomenological, fine-scale temporal computational processes' is ultimately what defines the newness of so-called new (digital)

5 I here rely on a notion of the screen forwarded by Anne Friedberg, who argues that 'the screen is not just a material object but also a material practice, which at once frames reality and represents a view of reality', and, significantly, 'a technology for representing space rather than a metaphor such as the window or a mirror', as summarized by Anne Jerslev. Jerslev, 'Screens and Time in David Lynch's *Inland Empire*', p. 2.

6 Importantly, the works are not themselves interactive or inviting the spectator to touch the work. Instead, they are installed like most works of contemporary artists' film and video—that is, either displayed on a flat screen or projected from front or back, in a black box or a white cube. Touching is here thus represented, and not experienced, by the beholder herself.

7 Verhoeff, *Mobile Screens*, p. 82.

8 Strauven, 'Early Cinema's Touchable Screens'.

9 Ernst, 'Media Archaeology as a Transatlantic Bridge', pp. 25–26.

media: 'the technical infrastructure of media is no longer homologous with its surface appearance'.¹⁰ Moreover, with mobile computational devices such as iPads and smartphones, the 21st century has witnessed the emergence of ubiquitous computational networks whereby the computer has been distributed 'into the lived environment', making media 'atmospheric'.¹¹ While on the one hand, computational media can open up an 'expanded domain of sensibility that can enhance human experience', on the other hand, humans must rely on technologies to perform operations to which we have no direct access.¹² This, in turn, marks 'the culmination of a certain human mastery over media', as Hansen states.¹³

Yet, with tangible screens and their intensified use of direct touch to operate the interface, this split between human sense perception and computational operations may appear less evident. Haptic computer interfaces, at least from the perspective of interface designers, 'are supposed to be able to activate users' tacit knowledge and everyday habits—including spatial orientation—while presenting the user with a surface cleansed from the computational complexity enabling them', as Timo Kaerlein has noted.¹⁴ Mobilization of the sense of touch thus lends a sense of familiarity, immediacy, and mastery to media processes that ultimately eludes the human sense ratio. This, in turn, opens up an experiential and sensorial paradox of a decidedly spatial nature. On the one hand, the manner in which mastery is experienced is simply by touching the sleek plane of the touchscreen, thereby repeatedly confirming its confined, material flatness. On the other hand, this act of touching opens up the profound and ungraspable depth of the computational environment with which we are entangled. What the haptic interface so strikingly dramatizes is thus, simply put, how 21st-century media draws human bodies and senses quite literally up close, while its computational operations simultaneously become ever more elusive for our sensorium. It is within this conundrum that so much recent video art intervenes.

In what follows, I examine the novel imbrication of touch—both physical and metaphorical—with the layered, incongruent spatiality brought forth in recent video art, seeing this imbrication as a distinctly contemporary

10 Hansen, 'New Media', p. 178. Hansen here builds on and updates the split between media surface and underlying code influentially introduced by Lev Manovich in his book *The Language of New Media*.

11 Hansen, *Feed Forward*, p. 39.

12 Ibid., p. 4.

13 Ibid.

14 Kaerlein, 'Aporias of the Touchscreen'.

manifestation of the haptic. In order to do so, I put to work different conceptions of the haptic sourced from film and media theory, supplemented by its use in early perceptual psychology. Rather than homing in on one definition, I draw on the variable usages of the term to grasp the complexity of the present entwinement of the sensory capacity of touch and spatial construction. Two video works serve as my cases: Victoria Fu's double-channel video projection *Belle Captive I* (2013) and Trisha Baga's 13D video installation *Flatlands 3D* (2010). Formally, the works span from the polished veneer of generic software and CGI to a seemingly analogue and fuzzy DIY aesthetic, but they share the proximate, layered spatiality of Lant's haptical cinema and depictions of acts of physical screen touching. As such, the works flaunt a distinct interface aesthetics wherein the screen and its image are figured as an interactive interface that translates between human input and computational data-processing.¹⁵ Whereas I see these videos as exemplary of a much larger body of work, the exact kind of touch and the manner in which touch is joined with layering are differently configured across the two videos, thereby providing an instructive pair of cases. What is crucial is the question of the degree to which touch is mobilized to master and control the imagery and objects it handles. Based on the discussion of the works, I conclude by outlining a set of sensory-spatial features that distinguishes the emergent haptics of 21st-century video art.

Haptic Spatiality

First, however, a few notes on how film and media theory has expounded the spatial dimension implied in the notion of the haptic. It was in his book *Late Roman Art Industry* (1985 [1901])—published precisely at the dawn of cinema—that Riegl introduced his distinction between a haptic and an optical mode of perception. As applied in this book, the haptic was associated with close-range, tactile perception (*Nahsicht/nearsighted*) and the optic with long-distance, disembodied vision (*Fernsicht/farsighted*).¹⁶

15 Søren Pold specifies that the purpose of an interface is to 'represent the data, the dataflow, and data structures of the computer to the human senses, while simultaneously setting up a frame for human input and interaction and translating this input back into the machine'. Pold, 'Interface Realisms', p. 2.

16 Riegl, *Late Roman Art Industry*. Riegl's book *Late Roman Art Industry* is regularly cited by scholars as the major source for his distinction between haptic and optical, among them Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*; Antonia Lant, 'Haptical Cinema'; and Laura U. Marks, *The Skin of the Film*. However, as Margaret Iversen and David Parisi have pointed

Riegl's teleological argument connected these habits of perception with the art forms of distinct historical epochs and their utilization of space and perspective. Haptic qualities thus characterized the shallow space (the space of low relief) and the impression of figures being concrete, material elements on a planar surface, creating a sense of solid object—thereby inviting touch—that he found to be typical of ancient Egyptian art. Optical qualities, on the other hand, described the rendition of deep, three-dimensional space and the perception of figures imbricated with (rather than being distinct from) this space as it was developed in Late Roman art. A binary scheme is thereby put in place between on the one hand, surface, planarity, proximity, nearsightedness, and materiality, and on the other, depth, volume, distance, farsightedness, and abstraction.

When subsequently taken up in film theory and analysis, however, Riegl's terms were altered with each new application. These alterations surely lead to some conceptual confusion, but as Lant has pointed out, the malleability of the terms also make them widely applicable.¹⁷ In fact, each terminological turn seems to have had its own specific value for delineating aspects of the specific imbrication of space and touch brought to the fore by recent video art. Walter Benjamin was the first to apply Riegl's scheme to the moving image, if somehow implicitly. His 1936 essay 'The Work of Art in the Age of Mechanical Reproduction' is a kind of foundational text regarding the historically contingent role of media technologies for the habituation, reorganization, and training of our sensory apparatus, articulated in decidedly spatial terms. Whereas he never used the term haptic, Benjamin in this essay—as is widely noted—draws on Riegl's terms to discern a collective shift in perception wrought by technologies of mechanical reproduction.¹⁸ This shift is wielded through a spatial opposition between optical 'contemplative

out, Riegl in fact never uses the term 'haptic' in that book but describes instead what he calls a tactile vision. It was in an article published the subsequent year, 'Late Roman or Oriental' (1902), that Riegl changed 'tactile' to 'haptic', referring to the recent introduction of the latter term in physiology, as noted by Parisi. In addition to being a more current term, the advantage of 'haptic' over 'tactile' for him was that the tactile was seen to imply 'an oppositional relation to the optic', whereas 'haptic' implied more of an interrelation. Iversen, *Alois Riegl*, p. 170; Parisi, 'Touch Machines', pp. 207–208. When I still refer to *Late Roman Art Industry* as the major source for Riegl's distinction, it is because it is in this work that he discerns in most detail the differences between the two modes of perception and spatial construction the term delineates.

17 Lant, 'Haptical Cinema', p. 67.

18 Benjamin, 'The Work of Art in the Age of Mechanical Reproduction', pp. 217–252. For discussions of the relationship between Benjamin's work and Riegl's scheme of haptic/optic perception, see for instance Hansen, 'Benjamin's Aura'; Lant, 'Haptical Cinema'; Bruno, *Atlas of Emotion*.

distance' and 'haptic nearness', as summarized by Miriam Hansen.¹⁹ For Benjamin, Dadaist art and, most effectively, cinema reflected a historically specific desire for closeness through what he sees as cinema's 'tactile quality', based on the acute physical impact on the viewer of cinema's 'changes of place and focus which periodically assail the spectator'.²⁰ Cinema, in short, is experienced as a bodily—and thus, for Benjamin, tactile—shock that trains the spectators' sensory apparatus to adapt to a technologically changed and changing environment.

Recent re-readings of Benjamin's 'Work of Art' essay further foreground the spatial dimension inherent in his theory of media, which is also a theory of the technologically induced reconfiguration of our sensorium. Tobias Wilke has for example forcefully demonstrated how Benjamin in his original manuscripts for the 'Work of Art' essay used the term *taktisch* (tactic) and not the *taktil* (tactile) that it subsequently was corrected to by the editors of his collected writings, published in German in 1974.²¹ What was lost in this philological adjustment, which has laid the ground for most English translations, was a conceptual ambiguity by which Benjamin deliberately integrates the *tactile* with the *tactic*—that is, touch is linked with the military term of strategic-spatial organization of forces to strike or to counter enemy attacks. What Wilke reclaims is thus how, for Benjamin, the embodied experience of touch was associated with an 'image of a spatial reorganization'.²² Not drawing on military terminology but rather on the current traction in media theory towards the elemental, Antonio Somaini (2016) has recently identified in Benjamin's essay a spatially extended, 'environmental' notion of medium as the milieu in which human perception 'occurs' and is 'organized'.²³ He traces this spatial-elemental conception of medium back to the notion of *diaphanes* in Aristotle's treatise *De Anima*;

19 Hansen, 'Benjamin's Aura', p. 352. However, as discussed shortly, Benjamin's favoured term in his original manuscripts was *taktisch* rather than tactile or haptic.

20 Ibid., p. 238.

21 Interestingly, Wilke notes that one of the reasons put forward by the editors for this philological intervention was to bring the term *taktisch* in congruence with Riegl's employment of the term in his *Late Roman Art Industry* (1901), a work that Benjamin's essay is commonly seen as strongly influenced by. In the reception of Riegl's work, however, the ambiguity of his original term is generally undermined in favour of an understanding of it as relating to the sense of touch rather than tactics, due partly to its oppositional entwinement with the optic and partly to Riegl's subsequent adjustment of the *taktisch* to *haptic* (which is commented upon also later in this chapter), to foreclose the ambiguity of the former term. Wilke, 'Tacti(cal)ity Reclaimed', p. 48.

22 Wilke, 'Tacti(cal)ity Reclaimed', pp. 42, 46.

23 Somaini, 'Walter Benjamin's Media Theory', pp. 9-25.

diaphanes being the transparent yet still felt intermediary substances that occupy the space between the human body and objects perceived. As such, the *diaphanes* serve as transmitters for perception: it is through their presence that perception is possible.²⁴ Air, water, smoke, clouds, and crystals are some examples of such diaphanous substances.²⁵ In spite of their obvious methodological and theoretical differences, both Wilke and Somaini foreground the spatial-perceptual reorganization at stake for Benjamin in ways that are keenly resonant with the resurgence of the haptic in recent video art.

A much later and very different reversal of Riegl's terms was introduced in film studies by film historian Noël Burch (1990). Employing the haptic as a distinctly spatial term, he traces the development of the 'bourgeois realism' that in his view came to dominate cinematic representation during the first three decades of the 20th century. For Burch, a key component in this representational mode was the evolution away from the contradiction between flatness and depth that he found had marked cinema in the first decade of this period, and towards the rendition of deep, realistic space through implementation of perspective and three-dimensional figuration. Defining this believable deep space was the experience of a spatial illusion of solid, graspable actors and objects that he deemed haptic. This was, in short, a cinematic space that demonstrated that 'it all can be entered and touched'—for Burch, a 'haptic space'.²⁶ Construction of space, the tension between surface and depth, and the impression of a represented object being touchable lay at the core of Burch's notion of the haptic, as it did for Riegl. But as Lant has criticized, the deep, realistic space that Burch considers haptic in Riegl's scheme does in fact define the optical mode.²⁷ Burch thus completely inverts the distinct spatial modes that Riegl's terms originally conveyed.

Lant's own notion of 'haptical cinema' takes seriously both the particular art historical discourse that Riegl endorsed and the particular spatial organization of Egyptian art that he discussed, as she retraces its features of textured flatness and a layered and shallow space in a set of films from the first decade of the 20th century. Here, layers of curtains, painted décor pieces, and superimpositions precluded the illusion of perspectival depth

24 Ibid.

25 Somaini, 'Walter Benjamin's Media Theory'; Krämer, *Medium, Messenger, Transmission*, p. 32.

26 Burch, 'Life to Those Shadows', p. 172.

27 Lant, 'Haptical Cinema', p. 71.

and produced a shallow and incongruent space. Early cinema abounded with pharaohs, sphinxes, and pyramids, and Lant uses these Egyptian motifs as a prism through which the emergence of a new spatial language of depth and volume in cinema can be clearly discerned: this was, as noted, a 'cinematic passage, from the still and planar to the moving, jarring, intruding, and voluminous'.²⁸ Based on what she sees as a fundamental bipolarity between cinematic flatness and depth, she develops a 'historically grounded model of film based on the plane of a non-perspectival space', as succinctly summarized by Giuliana Bruno.²⁹ Likewise, the haptic space posited in this essay rests on a historically situated model of contemporary screen media in which the flat and non-perspectival space of the early screen is both replayed and replaced by the post-perspectival space of the digital screens that pervade the 21st century, if now uncoupled from the Egyptian motif.³⁰

Both building on and departing from Lant is Laura U. Marks' widely influential notions of 'haptic images' and 'haptic visuality', which, as for Lant, are concepts that designate both a perceptual and spatial mode. Launched in a number of texts from the early 2000s, these notions designate an intimate relationship between viewer and image produced by degraded, grainy, blurry, or low-definition imagery, which perceptually may appear simply as abstraction or texture.³¹ Rather than inviting a look that 'plunges into depth', as Marks formulates it, haptic images draw attention to their material and surface qualities: the grains of the film, the lines of the analogue video tape, the pixels of digital video. Haptic images thus appeal to senses that they technically cannot represent, with touch in a privileged position: they are, in short, images that invite a kind of 'touching with the eyes'.³² Crucial for Marks is that the intimate relationship between viewer and image invited by such imagery implies an abdication of the mastery and control associated with optical/visual beholding: vision is engaged in acts of 'touching, not mastering'.³³

While each of the above has their specific take on the haptic, what these different accounts (with the exception of Benjamin's) of the tactile/haptic in film and media theory share is that, while they acknowledge and foreground embodied and multisensory cinematic experience, their conceptions of

28 Ibid., p. 72

29 Bruno, *Atlas of Emotion*, p. 250.

30 Anne Friedberg employs the term 'postperspectival' in her seminal book *The Virtual Window. From Alberti to Microsoft*, pp. 7, 22, 194-210.

31 Marks, *The Skin of the Film*, pp. 127-194; *Touch*.

32 Marks, 'Touching with the Eyes'.

33 Marks, *Touch*, p. xii.

touch and the haptic are still ‘folded into a model of visibility’ as David Parisi has remarked.³⁴ A predominantly visually grounded model of the haptic has proved to be a rich addition to film and media theory and analysis; it also productively accounts for relevant aspects of the video works under examination here. Yet this model falls short when considering the specificity of the new haptic space as charted in recent video art, since this is a space that also elicits acts of literal screen-touching. Perceptual psychology as well as recent studies of new media and, more specifically, digital, multisensory interfaces provide supplementary conceptions of touch and the haptic, since they tend to address precisely the practice of actual screen touching.³⁵ In general, ‘haptics’ and ‘the haptic’ are in this line of work used respectively to describe a particular sensory category or mode of sensory perception and/or as an adjective to describe qualities of new media technologies, environments, and works of art.³⁶ In the following, I therefore pursue a notion of the haptic that allows for the variety outlined above, finding productive dimensions across it. Still, Lant’s employment of the term for the spatial language of early cinema holds a pivotal position for grasping the specific entwinement of haptic space and touch encountered in so much recent video art, as does Marks’ notion of haptic visibility, updated to the sensorial requirements of the present. In turning to the works, I accordingly explore how layering (Lant) and blurring (Marks) play out and intertwine, as well as the exact types of touch evoked, seeing that it is in these very interrelations that the distinctiveness of the haptics of 21st-century video art is found.

Grasping Haptic Space: Stacked and Atmospheric

Victoria Fu’s double-channel video installation *Belle Captive I* (2013) effectively stages the tension between the optical-metaphorical and physical conceptions of the haptic, summoning a spatiality that both enacts and troubles the dyadic scheme between far and near, flat and deep, vision

34 Parisi, ‘Touch Machines’, p. 65.

35 Both the tactile and the haptic (frequently used interchangeably) are in these fields generally understood in their lexical sense—that is, as respectively, ‘perceptible to the touch, tangible’ and as ‘of the nature of, involving, or relating to the sense of touch’ (*OED*).

36 See for instance Paterson, *The Senses of Touch*, pp. 127–147. However, also in these contributions from new media and interface studies, metaphorical and polysemic notions of ‘touch’ figure frequently, yet these metaphors are grounded in the physical act of touching rather than the optical evocation of it.

and touch on which Riegl's legacy rests. Here Fu has sourced green-screen stock footage from the Internet. Originally created for commercial use, the footage shows a series of mundane objects and people performing everyday gestures and expressions. We see, for instance, a woman drinking a glass of water, a man flexing his back muscles, a parrot, a rotating tomato, a dog drinking water, the face of a smiling boy. Fu has then cropped, blurred, layered, and looped these elements in an editing programme. Further removing them from their original contexts, she has piled the imagery onto original 16mm film footage of sunsets, including textural distortions inherent in the analog medium, such as light flares and film grain. Regularly intervening in this imagery is a hand that swipes, taps, and pinches at the plane of the screen, attempting to instigate an action or change in the image. Installed, this imagery is projected on and beyond a freestanding wall, spilling over onto the back of the gallery. Blending with this is a second projection that fills the back and sidewalls of the gallery space, showing the same 16 mm sunset scenes but refracted through prisms.

In *Belle Captive I*, the layered, incongruent spatiality so pivotal to Lant's haptical cinema plays out in equal parts within the work's imagery and across the physical space of the gallery. Looking first at the imagery, it is as if each depicted element is isolated in its own spatial layer and relegated to strictly 'demarcated planar zones', to use Lant's own description.³⁷ Already within the first few seconds, this spatial construction becomes evident. The work's initial image is the artist's filmed sunsets: a series of passing hues of pink, purple, and yellow. Upon this background is inserted the upper half of the expressionless face of a young man, peeking over the lower edge of the image frame. A female hand enters the image to be layered upon the face, its fingers performing a pinching gesture. Yet, rather than shrinking the face, as expected from our habituation with codified touch screen gestures, the eyes narrow as if smiling. Here, three distinct planes layer up: the sunset background, the face that seems fully unbound from the background, and the hand that, while somehow interacting with the face, still operates on yet another spatial plane—that of the screen. These layers frequently change positions, thereby installing a sense of pulse and rhythm. Fu's own sunset recordings serve as the more or less stable backdrop upon which parts of faces, human bodies, plants, objects, insects, and animals amass and interchange. As in the Egyptomanian cinema that Lant explores, spherical objects recur—a tomato, an apple, a head—turning and rotating to display

37 Lant, 'Haptical Cinema', p. 55.

their surface variations as well as their volume.³⁸ Dimensionality is thereby pitted against the planarity of the screen, which is reinforced through the hand that recurrently touches its plane.

Seemingly paradoxically, dimensionality and depth are also assumed through flatness. Through the trope of layering, *Belle Captive I* builds depth through stacking distinctly 'demarcated planar zones' upon each other. A similar spatial logic of the screen was introduced in the 1970s and early 1980s with the development of the windowed graphical user interface of the computer. As Anne Friedberg has noted, the 'window' of the GUI is also a 'component of a mixed metaphor: a window and a desk'. As such, it is characterized by '[s]tacking windows on top of each other, piling documents in layers', whereby the 'space mapped onto the computer was both deep and flat'.³⁹ In *Belle Captive I*, this co-presence, and indeed co-constitution, of depth and flatness is further intensified. Rather than a perspectival ordering of near and far along a singular vanishing point, we here encounter a stratified space, wherein each layer seems to operate independently of each other with its own spatial codes and scales. Yet in *Belle Captive I*, these layers are nonetheless integrated so that they together establish a composite image that in its spatial organization pertains to the computational model of 'the stack'. Since the 1970s, in computer science, 'the stack' has served as the governing conceptual model for conceiving of 'interactions and dependencies between digital system components like protocols, data formats, or software' or, in short, for 'organizing processes and data', as summarized by Till Straube.⁴⁰ Hence, Fu's work reiterates in a pictorial language not only an aesthetics of the computer interface but also the (imperceptible) computational infrastructure that this interface depends on. Epitomizing this spatial logic of depth through flatness, and the planetary scaled through the infinitesimal, is the constant backdrop

38 Lant, 'Haptical Cinema'. Tom Gunning has also recently noted the importance of rounded and spherical objects for the establishing of depth and dimensionality in early cinema. Gunning, 'Rounding Out The Moving Image'.

39 Friedberg, *Virtual Window*, p. 227.

40 Straube, 'Stacked Spaces', p. 5. More recently, however, the conceptual model of the stack has migrated beyond the realm of 'communication standardization and technical specification to serve in media studies and the social sciences as a tool for critical analysis' of information and communication technologies and infrastructures. (Ibid.) Benjamin Bratton has, for example, with great influence employed the model of the stack to 'computing at large', positing the stack as 'geo-political megastructure organizing planetary space and society', while also using the stack as a tool for 'dissecting a vertically integrated, dynamic, heterogeneous assemblage' of metaphoric layers, such as the cloud, the interface, and the user (ibid.). Bratton, *The Stack*.

of Fu's pinkish sunsets. Appearing as ambient colour field images, they serve as default computer desktop backgrounds, evoking at once the awe-inspiring infinity of the heavens and the banal planarity of the computer screen.

Inherent in this doubleness of the heaven/desktop background is also a flattening that is not merely perceptual but extends to the ontological status of the entities featured in *Belle Captive I*. The living and the non-living—humans, animals, plants, and things—here all perform their miniscule, repetitive actions in their own rhythm, scale, and spatial layers: twisting and turning, smiling and waving, stretching and bending, drinking and blinking at their own accord, they almost literally enact the 'flat ontology' proposed by Manuel De Landa. As De Landa explains, a flat ontology is not grounded in a relational and hierarchical order in which each level represents a different ontological category but is 'made exclusively of unique singular individuals, differing in spatio-temporal scale but not in ontological status'.⁴¹ Hence, the bottom half of the tomato that we see rotating in the upper-left corner of the frame in the beginning of the work operates on par with the muscular, naked back of a man stretching left and right under layers of blurry greenery in the middle of the work, as do the bees that soon flank the right edge of the image, and the coffee beans that fill it just after. Any such ontological flatness appears to be further deflated by what Fu has described as the 'one-size-fits-all, generic flatness' of the green-screen captured 'individuals' that populate the corporate infosphere and beyond.⁴² Undergirded by networked flows of capital, this footage is produced to fit any kind of background and situation; bland, neutral, interchangeable, and transferrable as it is.

Through the work's installational features, *Belle Captive I* gives physical body to the spatial layers in a manner that enforces the work's interface aesthetics. With the imagery from the one projection exceeding the edges of the freestanding wall, a twisted and fractured version of the windowed graphical user interface of the computer screen is summoned. Whereas no desktop 'windows' are depicted in the work, the freestanding wall and the mismatching image projected onto it strikingly appear as such, evoking a pile of frame upon frame that effectively enacts the trope of stacked computer windows, as described by Friedberg.⁴³ Adding to the stack is the shadow thrown at the back of the gallery space by the freestanding

41 De Landa, *Intensive Science & Virtual Philosophy*, p. 47.

42 Fu, *Whitney Biennial 2014*.

43 Friedberg, *Virtual Window*, p. 227.

16. Victoria Fu, *Belle Captive I*, 2013. Video installation with sound, 06:00 loop. Exhibition view, Whitney Biennial. Whitney Museum of American Art, New York, 2014. Courtesy of the artist.

wall, which thus appears as yet another ‘window’. Walking around the installation, the ambiguity between deep and flat is further dramatized and indeed literalized, since our peeking around the freestanding wall effectively confirms it as such; a plane from which the projected image bounces back and overflows. Yet, this wall’s tangibility as an object and its distance from the back wall onto which much of the imagery spills provides spatial extension and, indeed, depth to the video installation. *Belle Captive I* thus subtly but efficiently negates the present imperative of the interfaced image to ‘fit to frame’, in Stephen Monteiro’s succinct phrase. As Monteiro expounds: ‘The image becomes eminently convertible in contemporary interfaces, there to be stretched, compressed and rotated to conform to all manner of screen frames in proliferation of formats and dimensions developed for any number of devices and browsers.’⁴⁴ In Fu’s work, in contrast, bodies, heads, creatures, and objects are consistently cropped—a forehead here, a snout there, then half a tomato—rather than stretched, mutated, or compressed to fit the frame. Likewise, the ratio of the projected imagery does not match the freestanding wall that serves as projection screen. Here the interface is simply not contained by the screen but profoundly exceeds its limits. In Fu’s work, the driving logic of the (haptic) interface towards immediacy is augmented and

44 Monteiro, ‘Fit to Frame’, p. 60.

played out across the physical space of the gallery.⁴⁵ Thus, the interface is turned into a pastel-coloured atmospheric environment whereby screen space is staged as simultaneously engulfing and as a panel for control; an informational abyss in which to lose oneself and a contained plane to directly manipulate—the Latin prefix ‘mani’, of course, referring to the hand.

The blurring that Fu has subjected the stock imagery to through software-based image processing and filters evokes the haptic visuality that Marks has theorized; that is, the ‘touching with the eyes’ invited by heavily textured or unsharp film or video images.⁴⁶ Sometimes the blur is slight, at other times profound to the extent that figure merges with ground and the imagery approaches full abstraction. For example, at one stage the unsharp white lilies of the top image layer fuse with the light blue sunset at the back, while the equally blurry stalks and dark greenery that spread from the flower across the image entangle with the shadowy areas of the naked back of a man as he stretches and bends his torso in an in-between image layer. Seconds later, a girl’s neck and clothing in the top layer are fully subsumed into the background as her features are dissolved by a zoom and her skin tone merges with the sunset behind. In parts of the work, ‘figures cannot be clearly distinguished, and layers of images move in an uncertain relation to the plane of the lens’, to reemploy Marks’ own description of a decidedly haptic film.⁴⁷

For the haptic qualities of *Belle Captive I*, the blurring has two implications. For one, it serves to soften the ‘demarcated planar zones’ that mark the work, establishing a frail continuity between its different spatial planes. Indistinct contours, zooms, colour fusion, and abstraction temper the differentiation between planes. Significantly, this allows the spatial planes to temporarily meld into each other, marking them as pliable and permeable but without erasing the governing spatial trope of layering. In addition, blurring here invites the intersubjective intimacy that Marks identifies with haptic visuality. Following Marks, a significant consequence of this intimacy is the abdication of optical mastery over the image, whereby ‘the viewer relinquishes her own sense of separateness from the image’.⁴⁸ In Fu’s work, the digitally filtered texturality of foliage and feathers, sculpture and snout,

45 As Kaerlein and others have made clear, interface design generally strives to fulfill the dream of the transparent interface. Kaerlein, ‘Aporias of the Touchscreen’.

46 Marks, *The Skin of the Film*, p. 175.

47 Ibid., p. 181. Marks here describes Seoungho Cho’s film *Identical Time* (1997).

48 Ibid., p. 183.

combined with the ambient and immersive qualities of the installation laid out in physical space, surely denies the viewer the distanced overview and possession that optical beholding allows. Emerging instead is a profound sense of our embodied entanglement with the computational environment in which we live, here partly brokered by the interface.

If the haptic visuality and proximity brought forth in *Belle Captive I* may signal the dismantling of optical mastery, this position is complicated when considering the precise nature of the acts of physical touching shown in the work. Here, the hand and its index finger repeatedly attempt to explore and interact with the entities depicted through touching them. The hand in *Belle Captive I* is more specifically featured as an organ of what James J. Gibson in his classic study of the psychology of touch termed active touch, i.e. 'self-produced movement that allows the perceiver to obtain objective information about the world'.⁴⁹ In this context, 'objective' refers to percepts that are experienced to be 'out in the world' rather than the 'subjective' sensations they produce in the subject, the objective and subjective however being conceived as poles on a continuum. It is this exploratory and manipulative mode of touch that in psychological terminology is generally termed haptic.⁵⁰ On the face of it, the hand that repeatedly touches and intervenes in the image apparently does so precisely to explore, control, and operate it. With formatted gestures known from haptic interfaces, it pinches to cause a face to smile, swipes to set the sculpture in motion, taps to shift a background image. Haptic visuality and haptic touch thus seem to be at odds. Mastery is optically dismantled only to be reinstalled haptically. Following the lure of the haptic interface, the acts of touching in Fu's work here seem to 'suggest tangibility where there is little to none', and thereby to install a sense of control over the profoundly inaccessible computational processes these touches instigate.⁵¹

Yet again at other times, nothing happens with these touches, or something does, but the outcome is quite unexpected. While the exceptionally blurry sculpted head in bronze responds to a finger-swipe at the plane of the screen by rotating, as if dragged into motion by the touch, a later swipe undoes this causal relationship between touch and response when a woman's torso stubbornly at first does not react to it, before then slowly starting to

49 Schiff and Heller, *The Psychology of Touch*, p. 7.

50 Tactile, on the other hand, is reserved for being touched, or what Gibson designated passive touch—"sensations" resulting from stimulation of passive skin receptors—and for situations when the skin is touched by an object and does not move around to explore. Schiff and Foulke, *Tactual Perception*, p. xi.

51 Kaerlein, 'Aporias of the Touchscreen'.

rotate but now in the opposite direction from the swipe. In these cases, a lack of haptic mastery of the image and its space is efficiently demonstrated. Towards the end, a yellow cockatoo sits in a human hand as a pointed index finger enters at the plane of the screen to repeatedly tap and swipe at the bird, with no result. Yet when a second hand enters to stroke the cockatoo, now seemingly beyond the plane of the screen, the bird promptly responds by biting at the hand. What this illustrates is that the world haptically explored in *Belle Captive I* is one that is fundamentally enfolded and unfolded by the screenic interface, conceived as a 'liminal threshold condition' that is as mutable as it is pervasive.⁵² In short, the haptic condition we encounter in *Belle Captive I* is one in which the sensory capacity of touch is mobilized to explore, manage, and control our data-rich surroundings, yet where the capacity of touch to work as such a tool is rendered profoundly unstable. Corresponding to this unstable sense of touch is a proximate space in which distinct spatial layers continuously verge on being dissolved through blurring and abstraction, drawing the spectator up close in the process. As is the case in haptic interfaces more generally, in Fu's work 'input and output spaces are no longer separated but rather converge', yet here this converged space expands beyond the plane of screen to fill the gallery space with its ambient pastel hues.⁵³ Fu's self-recorded sunsets thus, in an almost literal iteration, signals the condition of 'atmospheric media', posited by Hansen, wherein human agency is dispersed across and configured by the networked, computational media that make up our contemporary living environment.⁵⁴

Seizing Hyperhaptic Space: Pliable and Diaphanous

The atmospheric media condition evoked in Fu's work is further intensified in Trisha Baga's video installation *Flatlands 3D* (2010). *Flatlands 3D* is a nearly 17-minute-long, single-channel 3D video installation projected onto the back wall of an enclosed gallery space. Hands—and occasionally feet—that appear from the margins of the image frame to manipulate figures and objects on the image plane is a recurring motif also in Baga's work, consistently rendered in 3D. Here, this motif is layered upon home

52 Hookway, *Interface*, p. 5.

53 Herrlich, Walter-Franks and Malaka, 'Daten zum Anfassen', p. 135, quoted in Kaerlein, 'Aporias of the Touchscreen'.

54 Hansen, *Feed-Forward*, p. 5. See also Bruno, 'Screen as Object', for a brief historical genealogy of the atmospheric dimensions of projection in art.

video recordings of urban and cultural landscapes shot at different scales and angles, such as rain-wet streets, a highway landscape seen from a car window, grassy meadows, and an aerial view of a city by night, combined with generic found imagery and recordings from various interiors such as the artist's own studio, bars, and a sports hall. Throughout the work, these environments are perceived through (optical) filters and semi-transparent and reflective surfaces, including water, mirrors, windows, and screens, as well as effects indigenous to both 'old' and 'new' media: from the 'snow' of a noise-ridden analogue television set via a blue filter placed in front of a projector, to the spatial compositing indigenous to digital imaging. In contrast to the generic, smooth, and wholesale digital appearance of the stock footage and software effects featured in Fu's work, Baga's work has a distinct DIY aesthetic. Here digital automated techniques are combined with markedly manual ones, such as circulating a flashlight above a floor of scattered CDs to produce kaleidoscopic patterns of reflections. In front of the projection to the left is placed a disco ball, somewhat of a signature for the artist's video installations. As the ball catches light from the projector and scatters it around the gallery space, the light merges with 3D effects to create an immersive environment. While sharing with Fu's work the key features of layering, blurring, and acts of screen touching, the kinds of touch evoked and the nature of the space produced differ.

Flatlands 3D takes its title from Edwin Abbott's utopian short story *Flatland: A Romance of Many Dimensions*. Written in 1884, this social satire deals with a world whose inhabitants are shaped in two-dimensional, geometric forms and are subject to a strict, hierarchical caste system: women are lines, men are polygons with various numbers of sides, labourers are triangular, and so on. The narrator of the story is a square who dreams of visiting Lineland, which is inhabited by 'lustrous points', but ends up instead visiting Spaceland and Pointland. Baga's *Flatlands 3D* is not a direct adaptation. Her protagonist seems, for instance, to be a lustrous point—consistently rendered in 3D—that we follow throughout the work, whereas vibrantly coloured squares, triangles, and rectangles appear irregularly. Instead, Baga transports Abbott's play with dimensions to the setting of 21st-century media where the relationship between proximity and distance and planarity and depth as brokered by contemporary screens is undergoing substantial reconfigurations.

Like in Fu's work, layering is pivotal in *Flatlands 3D* and is a compositional principle that runs throughout the work. For example, about five minutes into the work, we see a landscape dominated by trees and foliage in the background, upon which is layered a butterfly in close-up. On top

17. Trisha Baga, *Flatlands*, 2010. Video, disco ball, 3D glasses red/cyan, 18:00, Dimensions variable. Courtesy of the artist and Greene Naftali, New York.

of that is superimposed another layer of the vibrantly coloured, geometric figures that recur throughout the work. A foot seen from above appears to step atop of this already composite image, both foot and figures rendered in 3D. As emphasized by Lant in her discussion of early ‘haptical cinema’ and seen in the discussion of Fu’s work, layering—whether of wooden décor or software filters—may produce a haptical quality through the densely textured imagery that results and its curious fluctuation between spatial depth and flatness. This is also the case here. In *Flatlands 3D*, flatness is repeatedly emphasized, in that each layer comprises a discrete spatial plane whereby perspectival depth in the resulting overall image is precluded. Planarity is further accentuated by the various depictions of acts of screen touching through which the image plane is figured as a level, responsive surface. A later sequence epitomizes this imbrication of planarity, proximity, and surface with responsiveness to touch. Here the 3D-rendered lustrous point that we follow through the work is momentarily framed by a black rectangle painted on a white wall, the wall being a paradigmatic example of a flat surface. Temporarily acting as a touchscreen, the rectangle is briefly tapped by the artist’s index finger, the lustrous point thus intermittently serving as an interface icon. Physical touch here confirms the flatness of the makeshift screen. Simultaneously, as identified in Fu’s work, this consistent layering of image planes necessarily implies a stacked and thereby deep space. This is the post-perspectival, stratified

space morphologically associated with the very 'materiality organizing principle of digital information'.⁵⁵

Baga's idiosyncratic deployment of 3D augments this layered co-existence of flat and deep and thereby also the work's hapticity. Her 3D technology of choice is the anaglyph, whereby each eye's image is encoded by glasses using filters of different (usually chromatically opposite) colours, typically that of red and cyan as the case is here. Already in the very first image of the work, a subtitle asks us to 'Please. Please. Put on your glasses.' Having done so, we are transposed into an enchanted universe full of 'intersecting objects, each encounter unfolding at its own pace', as described in one review.⁵⁶ Significantly, the artist consistently prioritizes negative parallax, i.e. the impression that objects appear closer than the plane of the screen and thus exist in the space between the screen and the viewer. Positive parallax, in contrast, elicits depth effects by deepening the space beyond the plane of the screen. Strikingly, the artist's hands and feet are consistently rendered in negative parallax as they irregularly intervene to interact with the image, thereby punningly literalizing the 'urge to touch' that 3D films routinely are seen to produce.

Among well-established negative parallax techniques are emergence effects, which produce the experience of entities protruding from or moving towards us from the plane of the screen. In 3D cinema, such effects have conventionally been playfully utilized to provoke shock and surprise, the paradigmatic case being an object being flung towards the viewer across the threshold of the screen, potentially triggering the sensory-motoric impulse to duck. In *Flatlands 3D*, we find no such things. Emergence effects are here instead subtly employed for ephemeral elements like the static 'snow' displayed on an analogue television set, (proper) snowflakes, rain drops, and light reflections that appear to 'float' across or from the screen to seemingly hit our bodies. In her signature DIY style, Baga is here employing 3D effects in line with recent mainstream 3D filmmaking, where digital image processing tools are employed to let computer-generated, fleeting objects 'gently glide through' the space of reception, as Kristen Whissel and others have pointed out.⁵⁷ Indeed, in *Flatlands 3D*, fleeting natural and

55 Forlano, 'Towards an Integrated Theory of the Cyber-Urban', p. 79. It should be remarked that Forlano in this article argues *against* a rhetoric of layers in discussing the organization of digital information.

56 Kerr, 'How to Understand the Pioneering Work of Trisha Baga'.

57 With reference to work on 3D cinema by Barbara Klinger and Ariel Rogers, Whissel discusses this development in digital 3D cinema's employment of emergence effects in her essay in this book.

medial elements fuse with the light reflections from the disco ball to saturate and fill the space between the plane of the screen and the viewer, thereby seemingly expanding the dimensionality of the image. It is as if space itself has acquired a volume of sorts, underscoring the lack of separation between figure and ground, media and environment.

Curiously both enhancing and punctuating the impression of depth and volume is Baga's consequent rendering of the vibrantly coloured, geometric figures in 3D, as these are—in line with her signature low-tech, do-it-yourself style—produced from pieces of cut paper. Lacking a third dimension, squares, rectangles, triangles, and points pervade and hover in front of the screen and expand screen space into the physical space of the gallery with still another layer. Yet these geometrical figures flaunt their two-dimensionality by occasionally flipping and turning, so that we catch glimpses of their 'profiles' as being literally paper-thin. Impressions of three-dimensionality and volumetric spatiality are thus contrasted, and the planimetric is underscored. The fact that Baga defies positive parallax and its depth effects, whereby objects are perceived as occupying space beyond the plane of the screen, also pushes our attention towards proximate space and the images' foreground.⁵⁸ In short, contrary to its mainstream use, in which 3D is generally employed to expand screen space both in front of and beyond the screen to maximize depth effects, Baga here deploys 3D to accentuate spatial flatness as much as depth, planarity instead of volume, proximity rather than distance. What results is an incongruent and proximate spatiality that reiterates the core tenet of Lant's notion of 'haptical cinema' in a contemporary screen vernacular.

Miriam Ross has convincingly argued that contemporary digital 3D films tend towards what she terms hyperhaptic visuality: an intensifying of the haptic perception that Marks finds in unclear, degraded, heavily textured, or pixelated imagery that draws attention to its materiality. Whereas digital 3D imagery in contrast is generally clear and defined, what in Ross' understanding causes its hapticity is that the images presented have 'no determined central plane and instead suggest a malleable and porous screen space'.⁵⁹ Through this process of 'making the framing of the screen violable and open to play', Ross notes, the 3D film places the viewer in a position

58 Positive parallax is commonly used in tandem with negative parallax and to render various kinds of 'deep' space. When used in this way, emergence effects generally produce an impression of spatial continuity and thereby (perspectival) depth, since we can follow objects as they approach us along the z-axis on both sides of the threshold of the screen. When this is not the case, the space in front of the screen and its surface qualities is given priority.

59 Ross, 'Hyperhaptic 3-D', p. 384.

of 'touching, not mastering' in Marks' phrase.⁶⁰ This observation also holds for Baga's deployment of digital 3D techniques through which screen space is unbound from a fixed plane and frame. However, *Flatlands 3D* adds texture and blur to its 3D imagery, thereby amplifying its hapticity further. Throughout the work, Baga repeatedly interlaces semi-transparent layers of, for example, patterned textiles such as pants and carpets; natural elements like a night sky, earth, and foliage; and a range of low-tech optical filters and effects. What results is precisely the kind of densely textured imagery that Marks has identified as haptic, and, accordingly, the demounting of visual beholding and mastery of the image.⁶¹ Perceptual hapticity is thereby further amplified: not only does the work's 3D effects induce a malleable and volumetric screen space that escapes containment by the frame, thereby soliciting the sense of touch, its textured qualities simultaneously draw attention to the material presence of the image.

Flatlands 3D in effect foregrounds the media saturation of our everyday milieus. Through its consistent merging of medial filters and artefacts with natural elements, the work summons an almost literal evocation of recent media theoretical conceptions of the elementality of media. As John Durham Peters has noted, natural elements such as air, earth, and water and the environments they constitute increasingly take on medial functions, while simultaneously digital devices, touchscreens among them, 'invite us to think of media as environmental, as part of the habitat'.⁶² Through their portability and computational capabilities, such devices provide access to various environments and are themselves part of and make up our lived environments. In this sense, media are as fundamental to our 21st-century environment as the four elements water, air, earth, and fire. Moreover, as Mark B.N. Hansen has argued through his notion of atmospheric media, with networked, computational processes increasingly being distributed into the lived environment, our own sensory perception is to an unprecedented degree entangled with medial processes operating at scales (both micro and macro) that elide direct perception, yet that imbricate human experience with such 'environmental networks'.⁶³ In Baga's installation, drops of rain, the 'snow' of the television screen, stars from the patterned carpet, and flakes of sleet protrude from the plane of the screen to intermingle with the light

60 Ibid; Marks, *Touch*, p. xii, quoted in Ross.

61 Indeed, Riegl served as a curator of carpets in his tenure at Österreichisches Museum für Kunst und Industrie, being a connoisseur of textures and textiles.

62 Peters, *Marvelous Clouds*, pp. 4-5.

63 Hansen, *Feed Forward*, pp. 38-39, 64-65.

reflected from the disco ball in the gallery space. This merging of medial and natural elements evokes the atmospheric qualities of contemporary media as described by Hansen and appears to enrapture us in the 'environmental networks' that affect our minds and bodies.

Flatlands 3D also depicts several instances of actual, physical touch. As is the case in Fu's work, these are instances of active, explorative, and thus haptic touch, if following the terminology of perceptual psychology. We see hands, and here also feet, in stereoscope intervening in the image to manipulate, explore, and move objects around. At one point, Baga's hands reach into the plane of the screen in attempting to move a plastic ruler superimposed upon a shot of the clear-blue sky, as if to measure it. In an early sequence, a sock-clad foot steps upon a floor-carpet patterned with stars and planets to adjust one of the colourful pieces of cut paper scattered across it. Later, her index finger intervenes in the image to (unsuccessfully) move a subtext from the bottom to the top of the image. Mundane and sublime, finite and infinite, material and immaterial, organic and inorganic objects and entities are handled on the same accord. As tongue-in-cheek as poetic, like in *Belle Captive I*, these instances of physical touch in *Flatlands 3D* are fundamentally ambiguous with respect to human mastery, striving for command over computational processes that vastly exceed human sensory capacities and agency.

Such instances of active and (seemingly) manipulating touch, however, are here supplemented with another mode of touch evoked experientially rather than depicted, yet that is equally defining for the 21st-century haptic condition charted in Baga's work. This is what David Katz in *The World of Touch* ([1925]1989), one of the foundational monographs in the psychology of touch, called 'film touch'.⁶⁴ Designating a particular kind of touch that results from the touch organ being immersed, it can be explained as the experience of 'drawing the hand through water or a thick liquid'.⁶⁵ Film touch, in short, refers to the sensation of touching not an object but a substance wherein the 'resistance the material offers the hand is experienced as elastic rather than stiff or rigid'.⁶⁶ In contrast with the determinate and

64 First published in German in 1925, Katz's book was first translated into English in 1989. Katz here introduced three modes of touch, modeled on an analogy with the visual perception of colours. In addition to film touch, the other two are surface touch and volume touch. Film touch is thereby the haptic equivalent of the visual impression of colours, what Katz calls 'film colour', produced when watching a projected film: the experience that colour cannot be precisely located in an object or surface and thus has no definite location in three-dimensional space.

65 Krueger, 'Tactual Perception in Historical Perspective', p. 35.

66 Ibid, p. 36.

bounded form of an object, film touch arises with an indeterminate form that lacks a rear boundary enclosing it but that displays a certain 'space-filling' thickness. As Katz explained: 'A strong (and sufficiently rapid) stream of air or liquid [...] produces a space-filling film touch or immersed touch.'⁶⁷ Resonant with Baga's work is precisely the impression of an indeterminate substance of sorts—the curious 3D-enhanced amalgamation of natural elements such as rain or sleet, with light reflections and medial filters—that fills the space around the artists' hand as it intervenes in the image and immerses our bodies in the exhibition space. Indeed, the elastic medial milieu that Baga produces is strikingly evocative of the *diaphanes* that Somaini identified in Benjamin's artwork essay; diaphanes, as we recall, being the vaporous substances that make (visual) perception occur in the first place. In *Flatlands 3D*, however, the diaphanes summoned are not only enabling visual perception but are also evoked haptically through establishing the impression of film touch.

Moreover, perceived as an indeterminate substance rather than an enclosed and defined object, film touch appearances do not secure a stable orientation in space. In *Flatlands 3D*, spatial disorientation is further advanced by the fact that Baga's imagery frequently combines views from above and frontal views on top of each other, thwarting our proprioceptive direction.⁶⁸ Early on, a star-spangled floor carpet seen from above is superimposed onto a starry night sky seen from below. Later, as we gaze at a series of cloud formations in the sky, a foot steps onto it and resets our spatial position. Already noted is also the seemingly 'malleable and porous screen space' installed by Baga's employment of 3D, which undercuts the demarcation between screen space and exhibition space and marks the plane of the screen as profoundly pliable. A diverse set of effects work together here to undermine the sense of a stable orientation point in relation to the screen and its spatial depictions. The distinctive co-constitution of (hyper-) haptic space and (film) touch found in Baga's video installation thereby

67 Katz paraphrased by Krueger. Ibid., p. 35.

68 As Anne Friedberg has noted, this mixing of a view from above with a frontal view within the same image is a staple of the windowed graphical user interface. Introduced together with this interface in the last half of 1970s was a 'mixed metaphor: a window and a desk', positioning the viewer simultaneously in front of and above what is seen. In Baga's installation, the same logic is at play but is now cut loose from the graphic renditions of framed windows and stacked documents, as well as the plane of the screen. Thereby this mixing of views becomes far more disorienting. Friedberg, *The Virtual Window*, p. 227. See also Miriam de Rosa and Wanda Strauven's essay 'Screenic (Re)orientations' in this volume for a discussion of the prevalence of this combination of desktop and window views in contemporary screen culture.

evokes Thomas Elsaesser's forceful argument that contemporary 3D cinema contributes to changing 'our sense of spatial and temporal orientation and our embodied relation to data-rich simulated environments'—albeit within a decidedly low-tech register.⁶⁹

Concluding Remarks

Shared by Fu's *Belle Captive I* and Baga's *Flatlands 3D* and numerous other video works from the present decade are three interrelated features that together chart the contours of a haptic mode specific to the 21st century, whereby touch and space are imbricated in novel ways.

The first and most obvious feature is the intensification of the formal trope of the layering of various image planes, found in the scenography of early cinema as well as the windowed graphical user interface introduced in the 1980s. Inherent in this trope is a non-perspectival spatiality in which layers appear as separate with only frail or no connections—spatially or pictorially—between them. When resurfacing in 21st-century video art, however, this trope points to the seemingly paradoxical incongruity between the blunt flatness of the screen as an object that—through the prevalence of haptic interfaces—begs to be touched, and its function as a portal to the unfathomable depth of the infoscape that it opens onto. Secondly, found in much recent video art is the blurred, textured appearance that in Marks' understanding evokes haptic vision and lack of mastery and, by extension, human agency over the mediatic operations. When installed as immersive installations that fill the gallery space, blurring and texture moreover contribute to summoning an atmospheric and saturated space that in turn evokes an elemental understanding of contemporary media as our habitats and milieus. Thirdly, the sense of touch is ambivalently figured in these works as on the one hand active, manipulating, and tentatively controlling the entities it touches, and on the other as dispersed, precarious, and unable to guarantee spatial orientation. Addressed in these works is hence the impression of control and mastery over micro-tuned and planetary scaled computational processes that perceptually profoundly escape us. At the same time, they also highlight the felt impact of these processes on our bodies—their 'space-filling' and atmospheric presence, appearing most distinctly in Baga's work as 'film touch'.

If Lant's 'haptical cinema' registered the passage from the plane to the volumetric in the representational language of early cinema, a similar

69 Elsaesser, 'The "Return" of 3-D', p. 221.

claim can be made for the haptic prevalence evident in so much video art since around 2010. What these works address is the process whereby computational processes take flight from the flatness of the (computer) screen and into data-rich environments and atmospheres they open onto and produce, and ultimately how we may find our bearings within this lived environment. It is in this way that the works examined here can be seen as *tactic* in Benjamin's original sense: they chart a 'regrouping of apperception' that both explores and strikes back at the simultaneous dismantling and intensification of our sense(s) of touch as installed by 21st-century media.

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