Breaking Acts of Dance: Capturing, Tracing, and Figuring

–– Laura Karreman (UTRECHT UNIVERSITY)
ORCID: 0009-0002-5214-9213

–– Nanna Verhoeff (UTRECHT UNIVERSITY)
ORCID: 0000-0003-1293-4794

This text is inspired by several encounters. Firstly, our encounter with an artwork that combines dance, digital code, and projection. Secondly, our scholarly encounter with each other as scholars of performance studies and screen studies in thinking with this work about the meeting of dance and new technologies. From such combined and layered encounters—between dance and projection, between public art and scholarly reflection, and between complementary theoretical perspectives—in the following, we propose a set of conceptual contours to think about dance, technology, and also the street, as the site of encounter. These we develop through our combined perspectives on dance, performance, and motion capture (Laura) and on urban screens, media architecture, and projection art (Nanna), and our shared interest in developing theoretical concepts and methodological tools for thinking with art. Specifically, we are interested in how art works invite us to analyze the ways in which they respond to the world around us—how they reflect (on) perspectives on this world and propose specific ideas about the world through

their specific engagement with it. From our collaborative thinking with dance and technology about dance and technology, we take up the work's invitation to conceptualize its reflexive potential— in both senses of the word: as medium and as method. Thinking about the specificity of its working with the concepts of capturing, tracing and figuring, and of its site-specificity with hodos, meaning both "street" and "way" (Verhoeff, Urban Screens 2024), we ask how the work artistically and theoretically (and thereby also critically) speaks about the impact of new technologies on contemporary culture and society. And more specifically, how does it do so, precisely, on the level of the street?

Keywords: breakdance, urban projection art, dance capture, tracing, figuring

In March 2023, Laura was the first of us to encounter the work of Australian urban media designer Wendy Yu in Melbourne during the opening of the new dance festival FRAME. Presented by the Centre for Projection Art, the event Body-Cites: Conversation Series #2 took place at the Brunswick Mechanical Institute. For its inauguration as a new dance festival, FRAME hosted a conversation between artists Wendy Yu and Megan Beckwith, who both experiment with digital animations of dance performance in their work, chaired by Carol Brown—choreographer and Head of Dance at the Victoria College of the Arts.

During this event, one iteration of Yu's projection art series *Acts of Holding Dance* was projected onto the screen at the back of the space (fig. 1). The work is visually spectacular. It shows six vertical columns with a breakdancer dancing at the top of each column. As the dancer (Joe Newton Keough) goes through his moves—each column features different sets of the same dancer—an animated graphic trace feeds downward from the places where he makes contact with the ground, producing a continuous sequence of anamorphic swirls. The six projected dance figures unfold in ever-changing shapes. In

other works that belong to this series, Yu has worked with different dancers, and different numbers of dancers. She has also worked with single and multiple columns, and worked both with black-and-white projections and projections with color. The projections belonging to the *Acts of Holding Dance* series have been projected in public urban spaces on the walls of tall buildings (fig. 2), but have also been presented in indoor exhibition spaces. Throughout our text, we will refer to different works within this series.

In the curated conversation at the Brunswick Mechanical Institute as well as in a later interview with Laura, Yu traced the background of her creative act of making the work. After graduating as a dancer and choreographer with a Bachelor of Fine Arts at the University of Melbourne, Yu became more aware of her interest in immersive and new media art. She did a residency to investigate this, starting with connecting dancers via interactive touch interfaces which produced sounds. During an internship in Berlin, she joined creative coding communities and meetups, which helped her acquire programming skills. She then made the move to connect her programming to projection work, holding dance as her major focus and inspiration. Yu's growing interest in urban media spaces and projection led to a residency at the Centre of Projection Art in Melbourne, during which she was challenged to design a work for a long vertical shaft attached to the façade of a building. This particular projection site in Melbourne invited her to design movement graphics for a dance work that emphasized this vertical orientation. Her choice to work with breakdancers was also meaningfully inspired by her graduate research into how local communities of dance can be literally and figuratively—in multiple senses of that word, as we will argue below—elevated through projection design.

Yu's thesis for her MA of Interaction Design and Electronic Arts at the University of Sydney explored how breakdance communities could be represented through public projection art. Based on interviews and fieldwork she conducted in breakdance communities in Sydney, Yu concluded that a prototype made with 3D motion capture created a dilemma. On the one hand dancers within the community could still recognize which avatar belonged to which dancer because of their signature ways of entering the floor through dropping and posing. On the other hand, such motion-capture-based avatars could not do justice to the importance of individual style in breakdance. Curat-

Figure 1: From left to right: Wendy Yu, Carol Brown, and Megan Beckwith at FRAME biennial dance festival. Projection: *Acts of Holding Dance* with Joe Newton Keough. Brunswick Mechanical Institute, 2023. (c) Laura Karreman.

ing your physical appearance with, for example, battle gear—what b-dancers wear to breakdance competitions—is a significant part of a dancer's identity and part of breakdance culture, which is lost in the stripped but figural representation of motion capture.

This loss is one of many losses that are an inspiring and generative force in Yu's creative work. The title of Yu's projection art series, *Acts of Holding Dance*, refers to Anna McDonald's PhD thesis *Acts of Holding: Dance, Time and Loss* (2019). In her research, McDonald connects the ephemerality of dance to a sense of mourning. McDonald's work is a recent contribution to a central academic debate in dance and performance studies that reflects on the relationship between performance and time. In this debate, different positions are taken on with regard to ways in which dance can be captured and transmitted or, conversely, must be understood as necessarily resisting any form of documentation. In the field of dance studies, the standpoint that is represented by McDonald can also be recognized in previous observations by well-known dance and performance scholars such as: "Dancing exists at a perpetual vanishing point" (Siegel), and "Performance's being…becomes itself through disappearance" (Phelan). Such views have been identified by performance scholar and dance dramaturg André Lepecki as being part of the "choreographic-melancholic project of modernity"(130), since they stress a "*melancholic affect* in relationship to the dance-event" (128; emphasis in original), rendering "the dancer always already an absent presence in the field of the gaze, somewhere between body and ghost, a flash suspended between past and future" (125). In opposition to this dance ontology, Lepecki proposes ways in which dance could move away from this "melancholic entrapment at the vanishing point" (131), by drawing attention to different understandings of temporality and proposing alternative affects.

As an aim for her residency at the Centre for Projection Art, Yu thought about how she could convey the sensation of loss resulting from the improvisational nature of breaking through visual and material output. For example, for the work that was projected at the event at Brunswick Mechanical Institute, Yu worked with dancer Joe Newton Keogh, asking him to improvise along with the score prompt. Yu recalls: "I really wanted to capture a dance that he has been working on himself as an iterative performer, and a very compulsive dance creator. By capturing this, I produced a print of

the dance that has passed. These prints can then be displayed, but also acquired by collectors."[1]

Beside this fascination with time in the relation of improvisation, capture, and materialization that we recognize in Yu's work and words, she reflects on working with light and the temporal considerations; therein:

> Light and projection are always clashing. You need strong projectors in order to create a clear image, and low outside light to make it visible. It is best to project works with nautical twilight. Every time I document my work, I try to do it in nautical twilight. It is good to still have some color in the sky. When it is completely dark, the projection is visible, but it is less engaging. (Yu)

Nautical light refers to a deep dusk, when the sun is 12 degrees below the horizon and a dim bluish sky is still visible, as are stars and bright planets. This type of light is bound to planetary time. The timing of large projections on building façades thus fundamentally affects their effects (and affects) for urban spectators.

On one level, we can think with the work by considering how the temporality and materiality of dance in relation to urban projection art produces particular forms of spectatorship. On another level we can discern socio-economic empowering potentials for the artists involved. With her work of capturing and transmitting dance, via both printed objects and light-based spectacles, Yu has also converted her works to NFTs that she sells through her website. She has sold her work to festivals and presented her works in and on buildings. She has been commissioned by several cities to work with local breakdancer communities and produce artifacts of their dance to be projected in their local municipalities. In two commissions, these works were even significantly projected on the walls of Federal Reserve Bank buildings. "The fact that we were able to elevate local breakdancers and place them and their practice onto these federal buildings made them feel more recognized by the city," Yu stresses.

Breaking (in Sydney)

Wendy Yu's projects in the projection series Acts of Holding Dance are based on video portraits from several members of 143 Liverpool Street Familia (143 LSF). This Sydney hip hop dance crew has been active since 2005 and was "named after the address of the building in the Sydney CBD whose forecourt [is utilized] for practice" (Gunn and Scannell 54). Currently, Sydney 143 LSF (pronounced "one-four-three") is one of multiple dance crews in Greater Sydney, and part of a breaking scene that "is constituted of participants from a range of socio-economic and cultural backgrounds," many of them being "first or second-generation migrants with Asian heritage" (Gunn, Deterritorializing Gender 12-13).

Hip hop culture emerged in the South Bronx of New York City in the late 1970s, a creative collision of expression of African American, Afro-diasporic, and Latino youth cultures. Hiphopographer James G. Spady notes that this Hip Hop Cultural Revolution was spurred on by the Civil Rights, Black Power, and Black Arts movements in the 1960s, and "the anti-colonial struggle of the fifties, sixties and seventies" (Spady, Lean Back 489). Rap lyrics arose from African American orality and narration (Spady, Mapping and Re-Membering 127), and breakdance was informed by Afro-Brazilian capoeira, which combines martial arts, acrobatics, dance, music, and game elements. Dance scholar Thomas DeFrantz describes the early form of breakdancing as follows:

> Breakdancing began as a form of fighting, a mixture of physically demanding movements which exploited the daredevil prowess of their performers, and stylized punching and kicking movements directed at an opponent. A descendant of Capoeira, the Brazilian form of martial arts disguised as dance, breaking developed as the original movement aspect of rap music when breakdancers filled the musical breaks between records mixed by disc-jockeys. (DeFrantz 74-75)

Sydney was the first city in Australia in which hip hop culture gained a significant following in the early 1980s. According to Ian Maxwell, whose book Phat Beats, Dope Rhymes: Hip

Hop Down Under Comin' Upper (1997) is an investigation of Sydney's hip hop scene in the early 1990s, the "standard narrative" of the encounter of African American hip hop with young Australians identified US-based, music manager and fashion designer Malcolm McLaren's music video Buffalo Gals (1983) as a crucial event. Maxwell relates that "for audiences in Sydney, what apparently most stood out about this clip was not the music, but, at least in the first instance, the break-dancing, and then the graffiti art that formed the background against which the dancing was shot" (Maxwell 51). The clip thus effectively introduced an Australian audience to all three practices at once that initially constituted hip hop culture: "breaking, rapping, and writing" (Maxwell 51), where the latter—writing—refers to graffiti. The recently introduced technology of VHS video recorders enabled recordings of the clip to be made, so that it could be watched and rewound, enabling viewers to study and learn the breakdancing moves featured in the clip.

Inspired by these and other hip-hop based media arts outputs (Mitchell 124), which were mainly coming from New York and East Coast US at this time, several breakdancing crews began to emerge in Sydney over the course of the 1980s and engage in so-called battles: "breakers going head-to-head in contests, the winner being whoever could produce the most astonishing move" (Maxwell 231). Their members were predominantly male and represented heterogeneous cultural and socio-economic backgrounds. Even though some narrators have identified the Western suburbs of Sydney as the working-class origin of Sydney's hip hop scene, Symonds and others have noted that this distinction is not so clear-cut and that, from its beginnings, the scene included members from both working-class as well as middle-class backgrounds. By the end of the 1980s, Sydney had established its own position in the "Global Hip Hop Nation" (Meghelli). Recently, there has been increased scholarly attention for the appeal of American hip hop to Australia's first nations' youth, and the Aboriginal hip hop practices that have emerged from this (Stavrias; Mitchell; Dowsett), as well as for the participation of women (b-girls) in breakdancing crews (Gunn; Aprahamian).

Thinking (with) the Work

These multiple and layered encounters with and within the work of Yu are an important starting point for us to bring together several questions around dance and technology on the street level. Analyzing Yu's work, for us, implies that we take the facets and forms of encounter very seriously—as a situated and situating meeting with its spectators, as reflexive of its own specificity and workings, and as pointing towards the affordances of these aspects. In this sense, we take the work as more than itself, pointing in multiple directions. Moreover, we take it as our interlocutor in thinking about some fundamental questions about the intersection of creative-theoretical perspectives on materiality, technology, and spectatorship in both art and scholarship, and a critical perspective on the social and cultural meaning of both technology and art in (co-)shaping our world.

How to do this thinking with the work? In the following we propose a set of theoretical concepts that articulate ways of looking and thinking beyond the specificity of Wendy Yu's work. We want to emphasize that these concepts are temporary tools, activated and (re-)conceptualized in the encounter with objects and phenomena and providing, in philosopher Donna Haraway's words, responsive and *situated knowledges* (1988). This relational understanding of concepts enables objects to "speak back", as per cultural analyst Mieke Bal.[2] In line with Bal, who in turn, is invoking art historian Hubert Damish (Bois et al.), we consider the objects we think with—here specifically Wendy Yu's projection art and the breakdancing recordings she works with—as *theoretical objects*: as objects that speak to us in a theoretical key. That is, they raise questions for the theorist to reflect upon. Moreover, they address explicitly on their own status as such an object to think with. This implies that *Acts of Holding Dance* is not so much our analytical case or case study. Taking the work as a theoretical object involves an approach that does not think of the object to demonstrate what is the case, but rather, to think *with* the object and allow it to guide us in finding out and theorizing what is, *actually*, the case. The concepts articulated here are not intended as fixed parameters, but as generative nodes activated in the encounter with the work, and as proposals for thinking beyond the work and this text. With this text, then, we seek to also demonstrate this method of *concepting* with art.[3]

Capturing

The word capture has different meanings. It can refer to a gesture of seizing, taking hold, or arrest. This somewhat negative idea of capture implies an authoritative subject and may also involve a quality of aggression or overpowering. In a more positive sense, capture can be used to describe the attempt to represent, encapsulate, or express something in a life-like or accurate way. Furthermore, in an applied sense, capture is also often used in relation to the mediatization of live arts and performance practices, for example in so-called motion capture— the process in which movement of human or non-human actors is recorded and transposed into motion capture data that describes the three-dimensional trajectory of a moving body's movement in submillimeter detail.

The double meaning of capture provides insight into the way in which practices of dance capture have been problematized. Critics comment that through the selection and taking hold of specific elements of dance in such works many elements that are understood to be vital to the meaning and practice of dance—such as embodied expression, affect and intention—are downplayed or erased. Activated as a theoretical concept, the performative notion of capturing, allows us to think of this double-sidedness and somewhat paradoxical thrust of technology as both an affordance of, and resistance to, mediatization. Both allowing for transmission (i.e., projection), yet also fixating and breaking—here, figuratively—the continuity of liveness and the encapsulation that (break)dance, as both a participatory and spectatorial performative art, entails.

Yu's *Acts of Holding Dance* series is an example of the creative use of digital dance capture. As such, it demonstrates how digital technologies can be employed in dance practice, mediation, and research. Over the past two decades, the dance field has manifested itself as an experimental playground in which dance practitioners, designers, and dance researchers explore the opportunities of emergent digital technologies for the creation, transmission, documentation, and representation of dance. A key voice in this area, choreographer William Forsythe, has been an important instigator in the need to articulate and publish expert knowledge about dance practice through his projects *Improvisation Technologies* (1999), *Synchronous Objects for One Flat Thing, reproduced* (2009), and the digital scores

of *Motion Bank* (2010-2013). Forsythe has termed the results of the above-mentioned projects "choreographic objects", describing the choreographic object as "an alternative site for the understanding" of choreographic principles (92). His research in this area was instigated by the question: "What else, besides the body, could physical thinking look like?" (91).

Choreographic objects transpose choreographic ideas into a different mode that allows for a closer examination of choreographic ideas because of their abstraction of the ephemeral, bodily based event that the dance performance constitutes. Elsewhere, Laura has argued that the impetus to create such objects comes not only from creative exploration, but is also elicited by austerity measures in the arts and the accompanying pressures to reach new audiences and acquire adequate funding and recognition (Karreman 58). In this sense, the creation of choreographic objects can be understood as part of "strategies of self-visualization" that the dance field has deliberately created to appeal to the values of knowledge economies by demonstrating how dance thinks (Karreman 58). A central aim of this endeavor is to show how singular performance knowledge and experience in dance may be made explicit in order to show their relevance to other professional fields. In accordance with this, social anthropologist James Leach identified the way in which these choreographic objects "look for feedback" in other spheres as their defining characteristic (13). He defines choreographic objects as "prototype socio-technical essays", proposing that they are "prototypes of new relational forms: experiments in building new groups, new constituencies and new audiences" (3).

How do these ideas tie in with the work of Yu? Yu notes that she herself has also been inspired by Forsythe's initiatives in this area (Beckwith et al.). Indeed, the individual iterations of *Acts of Holding Dance* can very well be understood as choreographic objects in how they present breaking practices through a new representational and relational mode, employ digital capturing and animation technologies to do so, and create conditions to reach new audiences by presenting the work in public urban settings with a high visibility.

As with all choreographic objects, Yu's work prompts the question of what ideas and design choices were involved in the translation, or, more precisely, the transmediation process of a specific dance

practice into a new medium and representational mode—in this case: a series of urban media art, or projection art, presented in public spaces. Tools that Yu has used to create this work are digital technologies, which include digital video technologies, graphic design software and coding, and projection technologies. The combination of these technologies constitutes a specific *apparatus* of capture. Building on Michel Foucault's notion of "dispositif", Giorgio Agamben defines an apparatus as "literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions, or discourses of living beings" and points out that "[t]he apparatus always has a concrete strategic function and is always located in a power relation" (14).

This critical notion of an apparatus invites us to reflect on how exactly *Acts of Holding Dance* performs breakdance through its specific mode of capturing. The projection subverts the traditional breakdance setting in multiple ways. The work breaks open the cypher—the name for the circle created by a group of dancers to demarcate a stage for a performing dancer. By moving them from their circular stage to a vertical column, Yu's projections reveal individual dancers in a different way. In a concomitant gesture, the dancers are also lifted from street level and put on display high up on the walls of buildings in urban areas. These projections excel in conveying the virtuosity of dancers' individual performance style and technique, and in celebrating the colorful fashion of these dancers. However, in this capturing of breakdance, several key features of this dance practice necessarily remain hidden. Most importantly, this is the environment from which this dance form emerges, which consists of a community—which may be made up of several competing crews—music performance (rapping or emceeing, turntabling or deejaying), and the iterative dance creation that emerges from this particular dynamic. Then, on the one hand, Yu's work can be understood as a successful "prototype of a new relational form" (Leach 3) in how it has created new stages for breaking as an art form that has been able to reach new audiences. On the other hand, this form of capturing inevitably also runs the risk of abstracting a highly developed dance practice from its multi-faceted performance context. Viewed from this perspective, the looped sequences of dancers in the projections may also be understood as potentially going against the grain of hip hop culture's defining spirit of resistance and protest against being singled out, pinned down, or captured in any sort of way.

Tracing

Beside this paradox or ambivalence of capturing dance—Yu's projections are also hybrid images of dance in the sense that they simultaneously produce what we can call two visual modes. On the top of the projection, we can see the (photorealistic) video image of a breakdancer. Below, in a painterly flow, an abstract animation tumbles down, fed by the dancer's image above. The border dividing these two visual modes is blurred, and therefore difficult to determine precisely. However, it is clear that the viewer is invited to interpret the animation as a continuous trace of the dance, produced by the body's contact points with the floor. Since breaking, as a dance form, stands out precisely because of its highly dynamic relationship with the ground, the animation shape-shifts rapidly. Furthermore, since breakers specialize in certain moves and develop their own styles of doing these moves, these dance traces also differ significantly between dancers.

Using the terminology that semiotician Charles S. Peirce introduced in his taxonomy of signs, this trace can be understood as both an iconic sign, as well as an indexical sign. It is iconic, because it bears a certain resemblance to the referent: we can recognize the colors of the dancers' outfit in the swirl, as well as their body parts—even as they become distorted in the animation process. It also possesses qualities of an indexical sign because the trace has a dynamical and spatial connection with the referent it is drawing on, and the similarity with the object is limited, due to its abstraction. The combination of these two semiotic layers in this animation has a powerful effect. On the one hand, its iconicity strengthens our belief in the causal relationship between the dancers and the traces. It brings us in touch with the empirical reality of the image: the animation appears when the dancer touches the ground. The indexical quality of the animation adds another layer. It does not lose sight of the photorealistic referent that yielded these images: the abstract swirls of color and the disjointed limbs that are stretched out in vertical blazes, highlighting different qualities of the dance. The binding effect of the index between the past (as the point of origin of the trace) and the present—in the entangled situatedness of the trace in the here-and-now—is perhaps heightened by what appears to be the emergence of the trace before our very eyes.[4]

Figure 3: Wendy Yu's *Acts of Holding Dance: Rachael|Cypher* (2022). Still from *https://culturevault.com/assets/228. (c) Wendy Yu.*

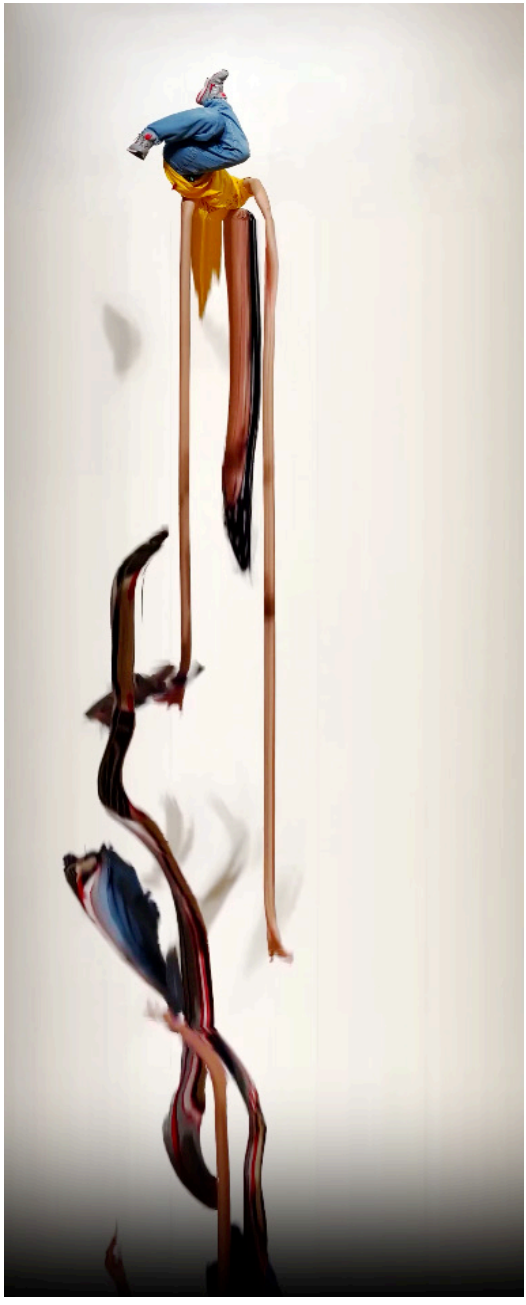

Fig. 4. Wendy Yu's *Acts of Holding Dance: Kohey|Footwork* (2022). Still from https://culturevault.com/assets/230. (c) Wendy Yu.

Figure 5: Kellom Tomlinson, *The Art of Dancing, explained by Reading and Figures* (London 1735), book I, Plate XIII, "The 1st movement of the Chaconne". Engraving by H. Fletcher. Image taken from Laurence Louppe, ed. 1994. *Traces of Dance: Drawings and Notations of Choreographers*. Paris: Editions Dis Voir.

Figure 6: Kellom Tomlinson, *The Art of Dancing, explained by Reading and Figures* (London 1735), book II, Plate XIV, "The regular order of the Minuet Continued". Engraving by H. Fletcher. Image taken from Laurence Louppe, ed. 1994. *Traces of Dance: Drawings and Notations of Choreographers*. Paris: Editions Dis Voir.

While these traces disappear fairly quickly as they flow downwards and out of the frame, these animations do manage to hold the dance a little longer. In *Rachael|Cypher* (fig. 3) the subsequent punctuated traces of her hands and feet touching the ground bring us in touch with the rhythm of Rachael's flare, and how she physically supports

this move. Similarly, in *Kohey|Footwork* (fig. 4), the black, stretched-out blaze that emerges from Kohey's cross-legged headstand freeze emphasizes the prolonged contact of Kohey's head with the ground.

These examples show how the animation in these works makes the dance more legible by adding a kinesthetic layer. Through visualizing the movement qualities, rhythm, and flow of the dance in these traces, the viewers acquire a more profound sensory perception of the movement. These animations can be understood as "phenomenal dance images", a notion by Nigel Stewart who used it to describe:

> [E]xpressive figures [that] elicit in me an aesthetic response, which re-enacts the aesthetic response to [dance] movement…whether I am reader, spectator, notator, or dancer, "I" (the subject) have to embody "It" (the object) by becoming kinaesthetically conscious of the object. (Stewart 49)

Following a similar phenomenological interpretation, mathematician and philosopher Brian Rotman's notion of "gesturo-haptic writing" (2008) also seems apt here, since the image invites us to conceive of the body as a writing instrument that leaves traces behind in a three-dimensional space, helping us to imagine the experiential perspective of the performer.

The underlying dramaturgical device that Yu employs in her projection works is not (all) new. Many projects that use motion capture and motion graphics to represent and animate dancing bodies employ a similar approach—such as the above-mentioned projects *Synchronous Objects* and *Motion Bank*. It has appeared to such an extent in digital scores and dance documentation that it can be discerned as a trope that can be described with the conceptual metaphor of the "dancing-drawing body" (Karreman 185-190). This imagery visualizes a dancing body as a drawing instrument that leaves traces behind when moving through space.

It is important to note that this metaphor predates digital dance capture and can be recognized from early on in the history of dance notation. Consider for instance the drawings in Kellom Tomlinson, *The Art of Dancing* (1735) (fig. 5 and 6).

In these pictures, Tomlinson includes different channels of information, including text, music notation, dance notation, and realistic illustrations of 18th century dancers. The symbolic dance notation depicted here is Beauchamp-Feuillet notation, developed at the end of the 17th century to record Baroque dances. This notation mostly focused on the trajectory of the dancers' feet on the floor, which left much unknown about the many other elements of the dance, including upper body movements, rhythm, and other movement qualities.

Even if Tomlinson's drawings may obscure part of the notation, they add a rich interpretative layer to the score by adding detailed drawings of the dancers' posture and styles. Like Yu's projections, these images, are also multiple in their semiotic dimension. As opposed to Yu, Tomlinson combines an iconic sign (the dancer as referent) mainly with a symbolic sign, namely dance notation. However, the path of the dance notation on the floor still provides an indexical trace, which we also recognize in Yu's projections. Furthermore, the particular aesthetic of the colorful swirls in Yu's work and the public locus of their projection also conjure associations with graffiti art—also referred to as writing or graph—as one of the main pillars of hip hop culture.[5] Just as tags in graffiti can be understood as a form of creative expression, and as signatures that represent singular artist identities, the graphic animations in the *Acts of Holding Dance* series can also be interpreted as identity-laden traces that give voice and presence to dance artists in the city. As two examples of graphic and lyrical forms of dance notation, thus both Yu's and Tomlinson's works engage the viewer through their kinesthetic appeal that is the result of their smart use of the dancing-drawing body metaphor.

Figuring

From this dancing-drawing body metaphor, the third concept that we want to propose is *figuring*.[6] With figuring we refer to the creative act of producing form for thought, and vice versa, thought for form. This progressive form of the verb—like capturing and tracing—emphasizes the performativity of the work. Whereas the concept of *figuration* often refers to a fixed result of figuring acts or practices, with figuring we want to emphasize the emergent form-process. Figuring as a progressive form underscores the creative act with which figures as thought-images are imagined, designed, and performed

as a form of *taking shape*. Moreover, the progressive form gestures towards its emergent as well as its presencing process. Also, figuring acts do not necessarily take part in setting up a traditional opposition between the *figurative* versus the *abstract*, as two distinct categories of representation. Moreover—and related to this point—discarding such a binary makes the concept move away from the opposition of figurative and abstraction as based on verisimilitude and representational realism. Thereby we also take leave of the anthropomorphic standard of the figure or figuration as having a human-like shape. Similarly, the proposed understanding of figuring is not steeped in the logic of binary opposition between the *literal* and the *figurative*. This one comes from linguistics—specifically rhetoric—where it is used to distinguish metaphoric from non-metaphoric, or literal usages of words. Finally, figuring does not necessarily and foremost produce figures in the sense of characters, referring to the human, humanoid, or anthropomorphic actant in fiction.

The understanding of figuring in relation to Yu's work with dance, code, and projection—and, perhaps more generally, in relation to time-based arts—comes closer to, although does not fully coincide with, Gilles Deleuze's "time-image" and Jean-François Lyotard's notion of "the figural". Kinship with Deleuze's time-image can be found in the notion of the figure as already encapsulating the question of what the form harbors in conceptual terms. For the concept of the figural as proposed by Lyotard, it is best to heed media philosopher David N. Rodowick's lucid account of Lyotard's concept. He presents it as a proposal to deconstruct the opposition between word and image, and between philosophy and aesthetic. Instead of opposition, Lyotard elaborates the figural as a central concept for analyzing language and, for Rodowick, also specifically for digital audiovisual images. These are not seen as (pre-figured) fixed sign structures, but as temporally oriented (audio)visual *events*. This view points at a meaning of the experiential that exceeds discourse and the semiotic. Rodowick invokes Lyotard's recognition of the force or movement of figuration when he writes:

> In homage to Lyotard, I can thus present a first definition of the figural as a force that erodes the distinction between letter and line: "The letter is a closed, invariant line; the line is the opening of the letter that is closed, perhaps, elsewhere or on the other side. Open the letter and you have image,

scene, magic. Enclose the image and you have emblem, symbol, and letter". (Rodowick 1-2; quoting Lyotard 268)

The analyst can, therefore, approach the image not so much a representation indexically pointing to a past, but instead to unpack the image as a figuration of its (potential) futurity (Verhoeff 2012). Taking up this multi-directional temporality, or inter-mediacy, as foundational to an understanding of the figural through the practice-based notion of figuring acts, here we activate before all else the processual and performative connotations of the verb to figure. This emphasizes the act before—in connection with the process during, after, and beyond—the (encounter with) figurings.

Figuring as an enactment or performance of the figure can be recognized in shapes and drawings such as the silhouette, circle, line, arrow, bracket, or matrix. Such geometric forms can similarly be both expressive of, and simultaneously yield, emerging thought. These figurings express and produce the spatiotemporal dynamic structures and (emergent) relational constellations within which human subjectivity is produced. As a concept for the bond between acts of creativity and the production of thought, figuring is therefore our proposal to think with shapes or forms that prescribe and inscribe thought in form. For these forms draw out emerging possibilities for seeing and thinking, and for transforming relations as they are already programmed in shapes, lines, or forms.

Both anthropomorphic and geometric figures are capable of making, articulating, or suggesting thoughts, ideas, concepts. This brings to the fore how philosophy, cultural theory, and creative practices such as design, scenography, architecture, and installation may share a double-sided creative and conceptual impetus. To give abstract thought shape or form as a creative-philosophical act, is to materialize thought: to make thought possible and make it happen. Moreover, to approach or take a specific shape or form *as* figuring, is to conceptualize it—to accept the shape or form as a concept to think with.

Acts of Holding Dance is particularly relevant for the distinction—with the help of David N. Rodowick—between, on the one hand, the conventional notion of *the figure* as fixed form, not-abstract and based on anthropomorphic recognition (of the dancer), and, on the

other, *the figural* (of the dance) as a temporal event, a process and effect of mediation. Yu's installations comprise of the composition of often multiple parallel columns, featuring dancers at the top of each column engaged in an improvised breakdance routine. While this breaking is projected in a loop, from each dancing figure streams of colors flow down their column, as if the dancers are leaking paint. It is hard to describe the spellbinding visual effect of these mesmerizing and disorienting images.

A lot is going on in Yu's works: dancers circle, tumble, jump, and seemingly defy gravity. For onlookers below, the blown-up projections high up on the façades skew proportions and perspectives reveal even more. The vertical direction of the colorful, abstract downward flows decenters the dancers' core as the center of movement. This disorients what the viewers see while looking up from street level, forcing them to search for a vantage point of their perspective and the origin of the figures' movements, all while they are unable to clearly determine what is up, down, left, and right. This disorientation is, of course, the point—as is the elevation. We can speak of figures here in reference to the dancers' recognizable, but also disorienting, human-shaped bodily representations. Such a use of the figure in these images is clearly not intended to reaffirm the opposition through abstraction or the non-human, as was a point of critique discussed above. There, Rodowick's insistence on force and movement in his rendering of Lyotard's conception of the figural provides a specific perspective on these verticalized break-dancers and the streams of digital paint they emanate.

By means of creative coding design, Yu has drawn beautifully animated visual extensions and transformations of the dancers' bodies. She did so by capturing and tracing their physical movements and extending these movements by animating the dancers' bodies. Their limbs seem to stream away from recognizable, individual dancing human figures transform into four-dimensional moving and morphing abstract figurings of more-than-human techno-bodies. Defying their original transitory states, the digital images of dancing bodies can now be(come) looped and infinitely figuring and re-figuring. Visually, they appear to drift, fold and merge into a multimedia and multichannel shapeshifting, streams of dance. Watching these screen images in live and site-specific projection, spectators can be enticed to read the image both horizontally—discerning each

of the five dancing figures lined up next to each other—and vertically. This verticality results as a figuring-effect of the figuring and trans-figuring streams of color, and of the spectator's simultaneous tracking of these movements, by looking up and down with one's eyes. Simultaneously, going in and out of recognition and tradition, spectators easily follow cinematic cues of horizontal framing, as they shift to the verticality and multi-format forms of framing of urban media art.

Projecting Dance on Street Level

What can we take from this combination of capturing and tracing in figuring in the way that Wendy Yu's work brings acts of dance back to the level of the street? What does the work do by projecting breaking onto the city's facades? Or, as we could phrase it, what is the work doing in the realm of the *hodos*?

Ancient Greek terminology is frequently deployed as providing concepts for specific domains within urban societies and ecologies. Think of *demos* (the public), *oikos* (home), *agora* (market), *polis* (city), or *gaia* (earth). In line with such invocations, Nanna has elsewhere proposed to adopt *hodos* to denote the street or "street level" of urban living (Verhoeff 2024). Etymologically, hodos (ὁδός) means threshold, road, or street, but importantly also "journey" or "way" —in the combination of a "way to get somewhere" and a "way of thinking". This double meaning also becomes clear in the compound-word *methodos* (μέθοδος), which connects "meta" (pursuit) with "hodos" (way) as the "way towards". Hodos as a concept, therefore, not only refers to the street as a location, or a level on which we locate "public space", but also, and more specifically, to the situatedness of urban experiences, relations, and practices that emerge from and in this location, as we traverse public space, *along the way*. *Hodos* as between locus and trajectory, between "street" and "way", then, articulates a performative perspective on the city as a scenographic grid on which we move, act, and connect, or navigate. It acts as more than a word, because, by also harboring such a performative perspective, the concept of hodos fundamentally connects the street with the method.[7]

Such a situated and performative perspective on hodos is particularly relevant when we think of how urban interventions work—whether they are practical and pedestrian—such as, for example, the signage during the recent COVID pandemic on the pavement for social distancing, or as activist or artistic. It helps us think about how these interventions work with and respond to the street-level of urban living. In interventions that work from an inherently *temporary*, that is, a time-based, impermanent, and thus mobile and dynamic situatedness within the mediatized infrastructures of our public space, we can recognize experimental—and hence, also obviously provisional—strategies deployed in experimental artistic projects. Such projects work to make visible and thereby debatable; for example by exploring alternatives or by repurposing, rescaling, repositioning, or reterritorializing the technological assemblages that shape our habitats and habits. In other interventions that are more practical and mundane, we may recognize similar strategies, albeit for a different purpose.

This view of urban interventions connects *hodos* to *methodos*: the situated, street-level of the "method" of urban intervention. Urban interventions, as temporary and experimental—in the widest sense of the word—in various ways offer specific perspectives on the city from such a situated perspective. That perspective harbors a transformative potential from both a creative and a critical stance. As mundane and sometimes regulatory practices point to a futurity of directly intervening in standard routes or behaviors to steer towards new ones, artistic works often also point back to, and reflect on, such practices precisely by breaking in and doing differently. With such a firmly situated "hodological", experimental engagement with (and in) the contours—as figurative demarcations and performative incentives—of public space for our experiences and actions in it, critical artistic and/or activist work is radically different from any sort of external, dismissive form of critique. With inquisitive responses to the challenges and questions of urban publicness in our time, we see various urban interventions on the street level. We can consider these as not only descriptively "urban" positions or locations of their work, but also fundamentally as strategies for a perhaps more productive form of relating and reflecting on the potentials of this space and its own possible role within it. Moreover, through its situatedness in public space, the hodological object positions its public as collaborators or participants invited to be part of a (self-)reflexive process.

This change of status—from distant object to situated interlocutor—performed by the hodological object also affects the observer/researcher and her methods. For us this entails picking up the methodological question of the concepts proposed by us in response to the work. In short, how does the site-specific working of hodos put a particular spin on the performative principles of capturing, tracing, and figuring in Yu's work?

Throughout our text, we have come to interpret the project of *Acts of Holding Dance* as both choreographic object and urban intervention. For onlookers at street level, the work connects past, present, and future in relation to this specific locality. It is rooted in the past by capturing the performances of local breakdancers, revealing and celebrating the virtuosity of their performance style and technique, thereby creating rare documentary traces of an art form that is characterized by its iterative and improvisatory performance practice. It is also based in the past, because the work acts as a tribute to the local cultural legacy of breakdancing, which deserves more study and scholarly attention. It lives in the present because the dancing-drawing figures in Yu's projections trigger an instant kinesthetic appeal in viewers, which makes them stop in their tracks, making them feel the connection of their own feet to the ground as they contemplate the complex and continuously evolving dancer-ground relationship displayed on the wall above them. And it is future because these projections act as a point of indexical connection with places and practices that onlookers may have been unfamiliar with, but that are located in the city that they too inhabit. This is how *hodos* materializes through this work: it opens up alternative ways to navigate the city, it enables new encounters, and it breaks open potential future acts of dance.

Acknowledgments
Laura's research for this article was partly made possible by an Erasmus+ Teaching Mobility grant that enabled an exchange with Swinburne University of Technology, Melbourne, from February to March 2023.

Works cited

Agamben, Giorgio. "*What is an Apparatus?" and Other Essays*. Translated by David Kishik and Stefan Pedarella, Stanford University Press, 2009.

Aprahamian, Serouj. "'There Were Females That Danced Too': Uncovering the Role of Women in Breaking History." *Dance Research Journal*, vol. 52, no. 2, 2020, pp. 41-58.

Bal, Mieke. "Imaging Madness: Inter-Ships." *InPrint*, vol. 2, no. 1, 2013, pp. 51-70.

Beckwith, Megan, Carol Brown, and Wendy Yu. "Body-Cites: Conversation Series #2." *Frame Biennial Dance Festival*, Melbourne, 25 March 2023. Audio recording by Laura Karreman.

Bleeker, Maaike, Stefan Werning, and Nanna Verhoeff. "Sensing Data: Encountering Data Sonifications, Materializations, and Interactives as Knowledge Objects. "*Digital Culture Meets Data: Critical Perspectives*, special issue of *Convergence: The International Journal of Research into New Media Technologies*, vol. 26, no. 5-6, pp. 1088-1107, doi, org/10.1177/1354856520938601.

Bois, Yves-Alain, Denis Hollier, Rosalind Krauss, and Hubert Damisch. "A Conversation with Hubert Damisch." *October*, vol. 85, 1998, pp. 3-17.

DeFrantz, Thomas F. "The Black Beat Made Visible: Hip Hop Dance and Body Power." *Of the Presence of the Body: Essays on Dance and Performance Theory*, edited by André Lepecki, Wesleyan University Press, 2004, pp. 64-81.

Doane, Mary Ann. "The Indexical and the Concept of Medium Specificity." *differences: A Journal of Feminist Cultural Studies,* vol. 18, no. 1, 2007, pp. 128-152.

Dowsett, Sudiipta Shamalii. "Sampling Ceremony: Hip-Hop Workshops and Intergenerational Cultural Production in the Central Australian Desert." *The Asia Pacific Journal of Anthropology*, vol. 22, no. 2-3, 2021, pp. 184-202.

Forsythe, William. "Choreographic Objects." *William Forsythe and the Practice of Choreography. It Starts at Any Point*, edited by Steven Spier, Routledge, 2011, pp. 90-92.

Gunn, Rachael, and John Scannell. "Overcoming the Hip-Hop Habitus." *Shifting Sounds: Musical Flow.* International Association for the Study of Popular Music Conference, 2013, pp. 53-61.

---. "'Don't Worry, It's Just a Girl!' Negotiating and Challenging Gendered Assumptions in Sydney's Breakdancing Scene." *Journal of World Popular Music*, vol. 3, no. 1, 2016, pp. 54–74.

---. *Deterritorializing Gender in Sydney's Breakdancing Scene: A B-girl's Experience of B-boying*. PhD dissertation, 2017. Macquarie University, PhD dissertation.

Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Women, Science, and Technology*, vol. 14, no. 3, 1988, pp 455-472.

Karreman, Laura. *The Motion Capture Imaginary: Digital Renderings of Dance Knowledge*. 2017. Ghent University, PhD dissertation.

Leach, James. "Choreographic Objects, Contemporary Dance, Digital Creations and Prototyping Social Visibility." *Journal of Cultural Economy*, vol. 7, no. 4, 2013, pp. 1-18.

Lepecki, André. *Exhausting Dance: Performance and the Politics of Movement*. Routledge, 2006.

Liddell, Henry George, Robert Scott, and Henry Stuart Jones. *The Greek-English Lexicon*. Oxford University Press, 1940.

Louppe, Laurence, editor. *Traces of Dance: Drawings and Notations of Choreographers*. Editions Dis Voir, 1994.

Lyotard, Jean-François. *Discourse. Figure*. University of Minnesota Press, 1971.

Maxwell, Ian. *Phat Beats, Dope Rhymes: Hip Hop Down Under Comin' Upper*. Wesleyan University Press, 2003.

Meghelli, Samir. "The Making of a Global Hip Hop 'Nation, From the Bronx to the Banlieues: An Oral History with Sidney Duteil." *The Black Arts Quarterly*, vol. 12, no. 1, 2007, pp. 21-26.

Mitchell, Tony. "Blackfellas Rapping, Breaking and Writing: A Short History of Aboriginal Hip Hop." *Aboriginal History*, vol. 30, 2006, pp. 124-137.

Peirce, Charles S. *Logic as Semiotic: The Theory of Signs*. *Philosophical Writings of Peirce*, edited by Justus Buchler, Dover Publications, 1955.

Rodowick, David N. *Reading the Figural, or, Philosophy after the New Media.* Duke University Press, 2001.

Rotman, Brian. *Becoming Beside Ourselves: The Alphabet, Ghosts, and Distributed Human Being*. Duke University Press, 2008.

Siegel, Marcia. *At the Vanishing Point: A Critic Looks at Dance*. Saturday Review Press, 1972.

---. "Lean Back: Remembering Religion, Culture, History and Fame in the Hip Hop Global Community." *Feeding the Soul Black Music, Black Thought*, edited by Diane Turner, Third World Press, 2011, pp. 486-511.

Spady, James G. "Mapping and Re-Membering Hip Hop History, Hiphopography and African Diasporic History." *Western Journal of Black Studies*, vol. 37, no. 2, 2013, pp. 126-157.

Stavrias, George. "Droppin' Conscious Beats and Flows: Aboriginal Hip Hop and Youth Identity." *Australian Aboriginal Studies*, vol. 2, 2005, pp. 44-54.

Stewart, Nigel. "Re-Languaging the Body: Phenomenological Description and the Dance Image." *Performance Research*, vol. 3, no. 2, 1998, pp. 42-53.

Symonds, Michael. "Imagined Colonies: On the Social Construction of Sydney's Western Suburbs." *Communal/Plural*, vol. 1, 1993, pp. 63-72.

Tomlinson, Kellom. *The Art of Dancing, Explained by Reading and Figures*. London, 1735.

van der Tuin, Iris, and Nanna Verhoeff. *Critical Concepts for the Creative Humanities*. Rowman and Littlefield, 2022.

Verhoeff, Nanna. *Urban Screens: Situations, Practices, Concepts*. Amsterdam University Press, forthcoming 2024.

---. *Mobile Screens: The Visual Regime of Navigation*. Amsterdam University Press, 2012.

Yu, Wendy. Interview by Laura Karreman. 27 Mar. 2023, Melbourne. Audio recording.

Notes

1 This and other direct quotes from Yu are from a conversation between the artist and Laura held in Melbourne (Yu).

2 For more about Bal's incorporation of Damish and the connection of specific types of theoretical objects to knowledge objects, see Bleeker, Verhoeff, and Werning (2020). There, *knowledge objects* are defined as theoretical objects that produce knowledge about phenomena or data that are otherwise inaccessible for human perception and (thereby) reflection. William Forsythe's *Synchronous Objects*—also discussed in the following paragraph—are a case in point. Here, our argument remains on the discursive level of theoretical objects as presenting themselves as reflexive objects through their own qualities and workings, while responding to wider phenomena.

3 With this phrase, we refer to the practice of working with theoretical concepts by means of

and in response to art. About the meeting of theoretical and creative practice and concepting on both ends; see the introductory chapter of *Critical Concepts for the Creative Humanities* (van der Tuin and Verhoeff).

4 See Mary-Anne Doane (2007) for more information about Peircean semiotics, the trace, and the index in photography and film. For further analysis of the situatedness and binding of the trace, see "Trace, Tracing" in *Critical Concepts for the Creative Humanities* (van der Tuin & Verhoeff 2022: 196-198).

5 The other pillars are: MCing (rapping), DJing (turntablism) and breakdancing.

6 This discussion about the concept of *figuring* is discussed more elaborately in the chapter of the same name in Verhoeff (2024).

7 See Liddell, Scott, and Jones (1940).