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Choreographic Explorations in the Middle and the Excess

Turning habit into potential with *Tools that Propel*

SARAH LEVINSKY

> It is in the middle where one finds the becoming, the movement, the velocity, the vortex. The middle is not the mean, but on the contrary an excess. Gilles Deleuze (1993: 203)

The dancer moves towards the screen. It reflects the room we are in; she sees herself. There is a flicker, and her image doubles. She moves to the right. Then left, then right. Her moving body catches up with her moving body. She lifts her arms, drops her knees, pushes her leg out, turns, curves her spine, comes back to standing. Curious, she does it again, activating her own past self on screen.

This dancer is playing with *Tools that Propel* (*TTP*), a choreographic improvisation system co-developed by Adam Russell and me. It involves dancers improvising with a life-size projection of themselves and other bodies, a blend of live 'mirror-like' video and recorded fragments from the recent past that resemble their current movement (fig. 1). If the system determines that the live movements it is tracking are sufficiently like others it has previously recorded, it plays the recorded movements (colloquially called 'memories') superimposed with the real-time camera feed of the tracked dancer. A creative space opens as the improvisation between dancer and system unfolds – one in which the dancer's perceptions shift, allowing her to see her environment and her habitual movements differently.

TTP appears to be an amalgam of individual entities – hardware, software, algorithms, cables, etc. – but is it *TTP* until it is entangled (with) human dancer and everything else that constitutes it as an experience? Without a body to track it cannot do anything, and a body separate – disentangled – from it would not make the movement decisions that it does, would not be the *particular, instantiated* thinking-body it is in this entanglement. Examining how *TTP* facilitates dancers to excavate their habitual movement for new creative potential, this article questions whether the co-evolution of technology and humans – technogenesis – can bring new understanding to the nature of habit. As Maaike Bleeker states, technogenesis 'intimately intertwines the perceptual cognitive capacities of our bodies with technology' (2015: 95). If habit is born of our relation to our environment (which we *inhabit*), it might not only be (in)formed and destabilized but also co-constituted through our (increasing) entanglement with computational technologies.

In performance practices the word 'habit' often has negative connotations, referring to default actions to which performers frequently find themselves returning; yet undertaking technical training as a habitual behaviour is seen as positive, solidifying skills through repetition.

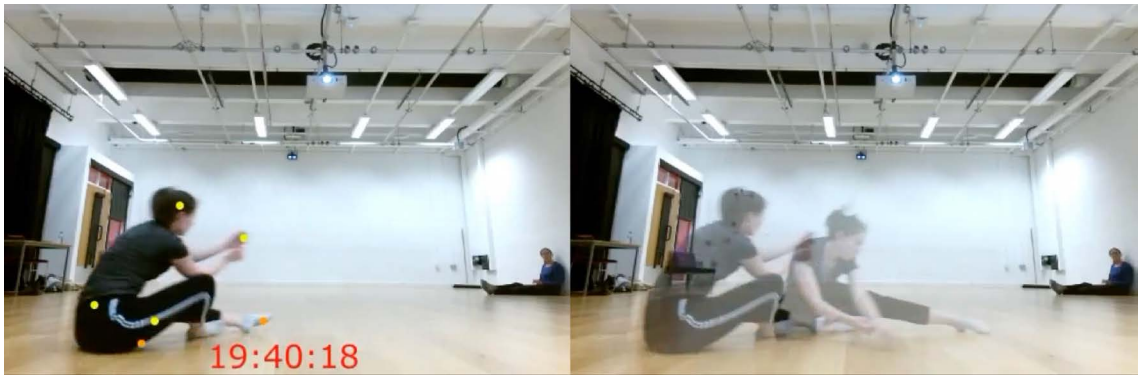

Figure 1. Image from video 'What is *Tools that Propel*?' (Levinsky 2021).

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Developing habits can be understood as moving to a state where thought becomes embodied – habit being something that emerges over time, repeated or sustained movement becoming easier or more accomplished through practice, so that 'the effort required by the body subsides', with the brain perhaps less actively involved, and decisions being made at an unconscious level (Dewsbury 2012: 80). Conversely, however, defaulting to habits has also been conceptualized as what happens when thought is not sufficiently embodied. A performer's habits are frequently viewed as a limitation on their versatility and 'an obstacle that needs to be overcome' (Camilleri 2018: 42). Such framing of performance habits often denotes them as mindless, lacking in attention and intention (Edinborough 2011); performers are expected to break or transcend habits to reach unexpected material, particularly in improvisational or compositional tasks. Initially, *TTP* was designed to help dancers escape their habits, but it soon became apparent that they were as interested in *inhabiting* past movements as evading them. Dancer Maria Evans says *TTP* 'helps you because you look for more in what already exists … you're finding something more out of something that you didn't think was necessarily amazing yet something amazing comes out of it through the reflecting' (Levinsky 2019a).

Karen Barad's term 'intra-action' is used throughout this article to evoke the relation between the dancer and system. It attempts to describe a relation that goes beyond the back and forth, or turn-taking, of separate pre-existing entities implied in 'interaction'; it acknowledges the 'ontological inseparability' they have (or enact) on each other for their mutable existence, always in a process of becoming (Barad 2007: 33). *TTP* is discussed in terms of being a 'diffraction apparatus' (Barad 2007: 73) enabling the re-conception of previously perceived entities in its entanglement of phenomena. Moreover, *TTP* is also viewed as a system of metastable equilibrium (Simondon 2011 [1958]), repeatedly bringing intra-actors back to the brink of emergence – the preformal universe before the separation of subject and object – and enabling them to look towards the middle of the ecosystem, full of creative and proliferating potential (Yang 2015). If, as Barad states, '[o]bjects are not already there; they emerge through specific practices' (2007: 157), then the dancer as 'intra-actor' is not a fixed entity. The terms 'intra-action' and 'intra-actor' reflect the fact that the agency of the unfolding movement, and the phenomena enacting it, occurs through, within and because of, their entanglement. This article examines the affordances of *TTP* to see how the improvisation unfolds in a constant shifting process with no fixed boundary between subject and object – the becoming occurring in the movement between them. It posits that if nothing pre-exists the intra-action between phenomena, and thus the process of becoming, then arguably there is no such thing as habit at all; for nothing is fixed as an object, a thing, an entity, but always dynamically, and intra-actively, emerges as new potential.

HOW DOES *TOOLS THAT PROPEL* WORK?

In terms of hardware, *TTP* consists of a Microsoft Kinect 2 sensor[1] placed in front of the dancer (about 30 cm off the ground), a projector behind the dancer (ideally ceiling-mounted above head-height) and projecting onto the wall in front of them, a PC or laptop (with sufficiently fast central processing unit (CPU) and a dedicated graphics card) and connecting cables (see figs 2 and 3). As well as providing skeletal tracking data, of which we record a subset of six bones from one tracked body (head, pelvis, hands and feet to sufficiently differentiate large-scale pose variations), the Kinect sensor also has a camera that provides the image feed for the video recordings and live projection.

[1] Where many motion capture sensors require markers on a specially created motion capture bodysuit, Microsoft Kinect 2 sensor is a markerless tracker.

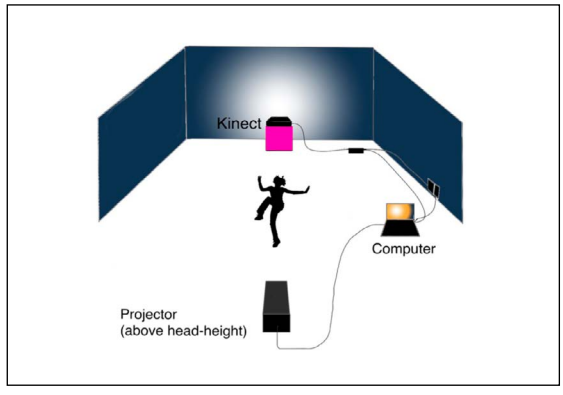

Figure 2. *Tools that Propel* set-up (2021).

Figure 3. Maria Evans improvising with *TTP* (2018).

TTP was developed on Derivative's visual coding platform *Touchdesigner* (Derivative 2021). While *Touchdesigner* provides a visual dataflow for sensor and video processing, it also uses Python code on the backend giving access to a wide range of machine learning libraries, of which *TTP* uses XMM (Françoise *et al.* 2014). While most gesture recognition libraries are trained before use on a number of known gesture classes (supervised learning) and identify these from the data after the gestures are performed, the idea in *TTP* was to confront the intra-actor with their own recent past while they were performing movements identified by the system as 'similar' to previous examples. This meant that online unsupervised learning and online recognition was needed;[2] as such, the system trains itself during intra-action and continually estimates a 'current' gesture class from the incoming stream of sensor data. Essentially, its vocabulary is continually updated in relation to movements it interprets within the live improvisation.

At initial start-up or manual reset the model is empty (a *tabula rasa*). *TTP* begins recording live video and storing accompanying motion data as soon as the sensor starts to track an intra-actor. After a maximum duration time (usually 5–8 seconds) is exceeded, the footage and data are added to the system's memory as a new phrase of movement (class); immediately, *TTP* starts to record a new phrase and simultaneously receives a continuously varying likelihood estimate (calculated per frame) that the intra-actor's current movement is an existing gesture class. As soon as the system thinks that it is sufficiently likely that it is, it stops recording and begins playback of the corresponding memory video. *TTP* stops memory playback if the likelihood falls below another threshold (lower than the first) and begins recording a new class. It can also switch between memories if the likeliest class changes and when playing a memory it continuously adjusts the playback position to follow the progress estimate for the current (that is, likeliest) class; that is, if the intra-actor moves faster, the footage plays faster, etc.[3] Intra-acting with the memories on screen as they improvise, dancers can scroll back and forth through them (their live movement affecting playback); they can investigate the effects of movements and rewind to their causes, exploring the centre, its fulcrum and the moment of action (and potential) itself.

WITHIN THE HABIT

Describing how mental imagery is used in dance, Scott deLahunta, Gill Clarke and Phil Barnard argue that when the 'thinking remains detached, somehow "thought-alongside"' or at 'one remove from the moving', then 'the solutions suggested by the body are likely to stay within the limits of our habitual movement patterning' (deLahunta *et al.* 2012: 248). They contend that paying attention to 'the passage of the movement whilst it is in process' allows the 'movement to become "thought-filled"' (ibid.). *TTP* gives reminders of motifs that the dancer has performed before, offered for more nuanced exploration. Sometimes it brings back a movement halfway through the trajectory the dancer might usually associate with it, breaking into the flow of another movement, disrupting the train of physical thinking and habitual patterning. Reflecting on a session with *TTP* in 2018, dancer Yi Xuan Kwek reports that she was looking for spots that were trigger points for memories; became interested in blending people together; and transitioned into finding free uncharted territory, which became quite saturated, leading her to see how long she could hold memories there while subtly changing their movement.[4] *TTP* triggered the creation of these improvisational rules, acting as part of the dancer's cognitive apparatus, extending her bodymind. We could call this entangled system of matter and thought her 'bodyworld' to borrow Camilleri's term (2018: 45), but equally, could it be that *TTP* disembodies the act of thinking? In materializing the computational decision-making

[2] 'Online' in this context means that the data is processed live, rather than offline.

[3] For further technical discussion of *TTP* see Levinsky and Russell (2019).

[4] This can be seen in the video *Yi Holding Space* (Levinsky 2021).

on screen, seen in the superimposition of bodies performing real-time and past movements, perhaps *TTP* displaces thought to 'alongside' the dancer, thereby encouraging movement generation along the lines of their habitual movement patterns.

The fact that intra-actors take information from a visual representation of the body means that *TTP* could etch out new clichéd habits, encouraging them to repeat what they see. In a workshop with Company Van Huynh in 2018, two dancers suggested that *TTP* brought them back to their habitual movements rather than enabling them to escape them, because they were trying to make the memories reappear and 'collaborate' with them (Levinsky 2018). One stated that he found 'the fact that you could go back to certain habits' both 'interesting' but 'also quite challenging because [he] had to force [him]self sometimes to get a habit' as 'you don't necessarily always have habits when you improvise' (ibid.). Yet two other dancers at the workshop suggested that *TTP* had opened them up choreographically, making them think about space and composition more, 'looking at patterns instead of necessarily a phrase as such' (ibid.). Camilleri argues that we should resist the idea that 'habit is merely a counterfeit condition, a copy of movement, thought pattern or process that lacks intentionality, attention, and awareness' (2018: 48). The crystalizing of embodied knowledge in a habit, achieved through repetition and 'gradual, incremental change' (Bissell 2012), can also be understood as the source of a performer's ability to compose, improvise, adapt and respond with 'intentionality, attention, and awareness' (Camilleri 2018: 48). Habit might thus be seen as synonymous with a performer's technique, foundational support for creative versatility.

Dancer Maria Evans discusses a revelatory moment in a technique class when she realized the effect that *TTP* had on her training:

> [W]e [were] doing this shifting motif, not motif, exercise, where you literally like shift your weight, almost like a wave … I was thinking this feels so different, I feel so much more in control and I realised it was because I had played with making [*TTP*] breathe with me with this same shifting motion … the persistence of just trying to get something or someone to do it made me train my body in a way that was correct. (Levinsky 2019b)

TTP provides visual and proprioceptive information that develops the dancer's bodily understanding about the effect that a cause will produce. Evans concludes that 'it's different from a mirror because a mirror would just show you what you are rather than what you could be' (Levinsky 2019b). One might presume this idea of seeing 'what you could be' is about embodying someone else's 'memory' (or habit), a movement that Evans wants to do as they did. But it is not just about matching one's own body to a 'technically correct' virtual body, moving back and forth along the trajectory from past to present to future. The connection between the sensing, moving body on the floor and the virtual body on screen enables a sharing of the physical knowledge available in that movement and a development of the dancer's bodily intelligence.

Observation in studio sessions and interviews with dancers show that some intra-actors discover new possibilities within their own habitual movements re-presented in front of them. We might consider here Deleuze's statement that the artist 'enters into the cliché, and into probability … precisely because *he* [*sic*] *knows what he wants to do*, but … he *does not know how to get there*' (Deleuze 2003 [1981]: 96). Arguably, *TTP* brings an intra-actor's habitual movements back to them and through the intriguing way they are reperformed through the folding of time and layering of bodies, it encourages them to engage in a deep process of digging into the cliché to find more within it. *TTP* seduces dancers into practising the vital skills of 'attention and imagination' (deLahunta *et al.* 2012: 248). It does this through dancers' engagement with the overlaying of, and fitting inside, the virtual movement, their own and other people's bodies, editing the projected footage through embodying it, giving it kinaesthetic empathy, and allowing the perceptual disruption of linear time to reveal new possibilities.

QUESTIONING THE HABIT

Dancers who have used *TTP* for sustained periods of time have also suggested that they learn which kinds of movements work well with it. Issues within its functionality to do with latency or the fact that gesture classes

are primarily differentiated by position in the visual frame, for example, can bring surprising interventions to their physical thinking. Equally, however, they can become limitations they learn to accommodate. It is possible that long-term engagement with *TTP* leads to new habitual behaviours and movement patterns – even a dependency on it. N. Katherine Hayles articulates how 'learning to read has been shown to result in significant changes in brain functioning' and so too has 'learning to read differently, for example by performing Google searches' (2012: 2). How we relate to the computational aides that we create raises questions about the impact that using them habitually has on our cognitive abilities.

TTP draws on the affordances of film and motion capture technologies, as well as machine learning. Deleuze argues that cinema is the 'system which reproduces movement as a function of any-instant-whatever that is, as a function of equidistant instants, selected so as to create an impression of continuity' (1997 [1986]: 5). In turn, motion capture technologies have enabled the live body to move these instants back and forth in space and time across that same apparent continuity, directly entangling the body with its representation. Motion capture technologies have introduced a new gesture-haptic writing (Rotman 2008), facilitating a potential twenty-first-century 'corporeal literacy' (Bleeker 2015: 95) that capitalizes on the trajectory (or blurring perhaps) between subjectivity and objectivity embodied in the gesture (prefiguring spoken language or representation). With *TTP,* reality is experienced through a performative approach wherein, as Barad states, we are 'moving away from the familiar habits and seductions of representationalism (reflecting on the world from the outside) to a way of understanding the world from within and as part of it' (2007: 88). Through the entanglement of embodied and virtual gesture, the dancer explores the centre of the movement they are in to discover and precipitate a new emergence.

TTP flattens the hierarchy that subjects everything to human perception and objectifies things in accordance with the human subject's rationale, use and representational formulation of reality. The system continually questions where a movement begins and ends and thus challenges preconceived (or habitual) understanding of what constitutes the movement (in terms of dance history or any other system of representation) – for the gesture class starts with 'any-instant-whatever' (Deleuze 1997 [1986]: 5), a singular snapshot from anywhere in the perceived continuity, simply defined in relation to the moving body tracked by the sensor. Even if they become habituated to using it, *TTP* continues to ask dancers to interrogate their movement habits; to delve inwards, to the middle and the excess, where unspent potential resides. The movement that appears on screen is not fixed as an object – a representation of one of the dancer's movement habits – but is also a subject, surprising the dancer, asking for consideration, acting on the improvisation, and ensuring that even within any limitations of the system's functionality, habits are always in a process of becoming.

HABIT DIFFRACTED, HABIT IN FLUX

Camilleri discusses the dualist nature of Ravaisson's principles of habit – that it 'strengthens action/movement and weakens feeling/sensation at the same time' – and argues that 'these contrasting aspects of habit are not only complementary but *constitutive* of each other' (2018: 42). What if habit is continually constituting, emergent through what Barad calls 'contingent iterative performativity' (2014: 173)? Can *TTP* as a diffraction apparatus both reveal this and be part of the habit's becoming?

For Barad 'apparatuses' are 'specific material reconfigurings of the world that do not merely emerge in time but iteratively reconfigure spacetimematter as part of the ongoing dynamism of becoming' (2007: 142); if you change the apparatus you change the phenomena being observed. She argues for 'an understanding of difference not as an absolute boundary between object and subject, here and there, now and then, this and that, but rather as the effects of enacted cuts *in a radical reworking of cause/effect*' (Barad 2014: 173–4). As such, apparatuses can be both objects and agencies of observation depending on what is being measured (Barad 2007).

When *TTP* determines what a movement is, it is an *agency* of observation, tracking, recording and determining whether it has seen a movement before or not. Yet when it brings back a memory according to its similitude to a movement the dancer is currently performing, and the dancer moves in accordance with the memory, then it becomes part of the *object* of observation: 'there is no inherently determinate Cartesian cut' (Barad 2007: 114). Yet, if we take the movement itself, when it is categorized as a particular memory it becomes momentarily fixed as an object of observation, but when it is brought back it is agentially involved in the movements the dancer does on the floor. It is acting on and acted on at the same time.

The term 'system' evokes systematization, something that might cross over with understanding of terms like habitual, but in *TTP* the nature of the systemization (and determination of movement as *a movement*) is always affected by the improvisation that occurs (and is tracked) in the space between dancer and screen images. This specific system (*TTP* in use) intra-acting within the larger systems (dance, improvisation, choreography, choreographic software, society, nation, world, universe, for example) is part of an ecosystem, and asks intra-actors to look to what Andrew S. Yang terms 'the middle of the thing we are in – the active and complex middles of creation' (2015: 176). The intra-actor journeys inwards to find new potential in systems-within-systems, so that 'entropy can decrease and new forms diversify' (174). The model – or vocabulary of movements – is constantly being updated; along with the knowledge and potential actualized in its intra-action, *TTP* is a system that shifts boundaries.

Concerned with the process of emergence and individuation from a preformal universe where form and matter are one, Gilbert Simondon discusses how the 'emergence of the distinction between figure and ground results from a state of tension, from the incompatibility of the system in relation to itself, from what one would call the oversaturation of the system' and argues for 'metastable equilibrium' rather than 'stable equilibrium' as the source of transformation and the emergence of 'technicity' (2011 [1958]: 411). He states that 'stable equilibrium' means 'all potential would be actualised' whereas 'living systems, precisely those that manifest the greatest organisational spontaneity, are systems of metastable equilibrium' (ibid.). To improvise with *TTP* is to experience a system of metastable equilibrium. Every time there is a sense of structure, a 'provisional resolution of incompatibilities' (ibid.), new potential emerges, and the old habit reforms as new. *TTP* facilitates constant differentiation of movements, defying fixity of identity and the subject/object divide. The emergent gestural language between dancer and *TTP* does not originate just with the human, but also the machine. For both dancer and computational system, use of this shared language constitutes and contributes to their (entangled) becoming. Barad writes that 'for every given apparatus, there is an unambiguous resolution of the distinction between the object and agencies of observation' (2007: 115). With *TTP*, as a metastable system, the resolution is always in flux, and it is through this that the improvisation evolves, and performative habits are destabilized and (re)configured.

HABITS IN BECOMING

To break habits assumes a present discontinuous with the past. Habit here becomes capturable, with boundaries, a discreet site of memory perhaps, like history archived in material records. Yet, as Deleuze writes, 'time must be grasped twice, in two complementary though mutually exclusive fashions' (1993: 43). Like the motion tracked in *TTP*, time is continuously embodied, flowing from past to present to future; yet, like the way that the system discerns and categorizes discrete movements, a moment is defined as past (or future) by dint of its difference to the present. For dancer Maria Evans, *TTP* reflects the infinitesimal moment in which the present turns to past, a fulcrum of potential action and discovery:

> [S]eeing myself on screen is a moment that's already passed. It's like this being that is literally milliseconds after I've moved … you are very much the next step whereas the digital version of you is kind of the step that your other foot's on … you're this kind of hovering foot that's kind of undecided on where it's going. (Levinsky 2019b)

Maria's hovering foot could be understood as moving into the future while also stepping into the possibilities held in the past self on screen (fig. 4). With two temporal planes overlayed, *TTP*'s intra-actors experience time as linear and successive, enabling movement out of old habits and into new ones, and also simultaneous, enabling exploration of their affect on each other and the subsequent potential: the dancer can revisit their past in their present, rewind it with their current movement, and move into their future through the archival images.

Figure 4. Image from video 'Time Past' (Levinsky 2021).

Human memory is not stable, fixed and determinate: it is carried within the body in gestures and habits, those of the individual, the social collective, and the body's environmental intra-actions – in the movement of all matter perhaps. We might consider Deleuze's statement that '[m]ovement always relates to a change [and] this is equally true of bodies: the fall of a body presupposes another one which attracts it, and expresses a change in the whole which encompasses them both' (1997 [1986]: 8). The technological affordances of *TTP* bring perceived changes to the physical laws that condition the whole and so the whole changes. Dancer Zach McCullough discusses intra-action with *TTP* as 'changing his inner body knowledge of rhythm', the properties inherent in the objective memory on screen coming from different moments in time, starting off-balance, for example, rather than progressing from stability to instability (Levinsky 2019b). The screen memories can act as a disruption to the energetic flow of what José Gil discusses as the 'tightly imbricate[d] interior space and external space, the inside of the body invested with energy, and the outside where gestures of the dance unfold' (2009: 88–9). Yet it is predominantly a disruption through which new movement ideas can emerge. Gil's discussion of the body-without-organs, whereby energy can flow more easily, unimpeded and freed from habituation, concerns the possibility that with the reduction of obstacles (of which organs form one) innovation can occur and 'intensities may be taken to their highest degrees' (98). While the encounter with *TTP* might appear an obstacle to such intensities, in fact, through learning and developing a language with it, new (unhabituated) movement exploration occurs: the whole, and thus the habit, changes.

TTP both *reveals* and *is* a process of becoming. It makes cuts in the unfolding improvisation that determine new semantic-ontic units (Barad 2003), whose difference to previously conceived ones bring about the dancer's new perception of themselves in relation to the world: they experience meaning and coexistent matter anew. Appearing on screen these semantic-ontic units reactivate moments from the past in the dancers' moving body – 'initiat[ing] sensations from muscle memory' (Levinsky 2019b) – challenging them because of the unexpected start or finish of their interjection and catalysing the potential of further versions. The virtual bodies are explicit as memories, relationally entangled with the intra-actor's implicit, bodily, memories – but their fragmentary nature, as memory, as movement,

as habit, is determined by the system. The screen images are full of body, formed of the physical movements recorded, but they are not entirely the intra-actor's body as she recognizes it. The peculiar way that her movement is parsed and then reflected to her in relation to her current activity, overlapping with its real-time projection, causes the dancer to look at it again. Investigating this un/familiar body's dynamics, moving in and out of its margins, the dancer is composing with her entangled, extended bodyworld (fig. 5).

Figure 5. Yi Xuan Kwek improvising with *TTP* projected on gauze (2019). *Photo Ian Kingsnorth.*

The language unfolding between dancer and *TTP* is performative – not just used to inform but to actualize, bringing its potential into being. As the system builds up memories and the dancer circles back on the motifs (or habits) she has already embodied, she is actualizing the knowledge within them. Arguably, this suggests that there is no room for imagination. Yet, informed by Barad, we understand not that it is all inherently there to be actualized but that it only becomes actualized – or even ontologically becomes at all – in its entangled intra-action. The affordances of *TTP* and all the phenomena that make it up affect the nature of the emergent movement, but within the intra-action and the metastable equilibrium conditioning the resolution of the system's incompatibilities, there is always new matter, meaning and habit in becoming.

CONCLUSIONS (FROM THE MIDDLE AND THE EXCESS)

TTP as a system includes the intra-actor, whose injections of energy and movement data are necessary for it to function, but also to evolve in relation to it; so too do performance habits – informed, destabilized and co-constituted within it. As dancers interrogate their 'habitual' movements, in the entanglement with(in) the system, a new language of movement is constantly emergent: in the dancers' attempt to understand, respond to, embody, occupy and actualize this language (with its shifting, emergent, evolving semantic-ontic units) new meaning and matter emerge.

The functionality of the system strives to maintain energetic potential and the-always-possibility-of-something-more. Through the process of determining what a movement is in the first place – when it begins and ends – and offering it up for embodied examination, *TTP* continually enables 'discover[ies] of structure' and 'provisional resolution of incompatibilities' while not destroying the potential itself (Simondon 2011 [1958]: 411). The system makes cuts in continuous motion, classifying a new movement by its dissimilarity to ones recorded previously; when reperformed by the system because of its similarity to the intra-actor's real-time movement, this could be seen as a reminder of limited versatility to be overcome. Yet, in fact, the memories act as interventions, sending the intra-actor back to the centre of the movement that is reperformed, demanding reconsideration of that which has come before. Through their simultaneous reperformance and interrogation within the intra-active use of *TTP*, habits are destabilized and diversified in new forms. All potential has not been actualized; if it had, and *TTP* was a system of stable equilibrium, there would be no further transformations, and habits

would become fixed and immutable.

The experience of dancing with *TTP* is one of ontogenesis, constantly taking us back to the brink of emergence so that any habits are subject to ongoing transformations and shifts of matter and meaning. Through metastable transformations we can gain glimpses of the preformal universe that concerns Simondon. Of course, the creation of the hardware used in *TTP*, and the intersecting software and gesture-following library driving them, are inevitably predicated on human conceptual models, but importantly the system's programming is not built on predetermined conceptual systems of movement categorization. By not fixing the conceptual models through which the segmentation of movement is defined – allowing the any-instant-whatever to begin or end the movement – intra-action with(in) the system (re)activates metastable connections between movement and its purposing in dance, thereby also breaking the fixity involved in something being a habit. As such, the thinking body explores the potential in the diverse possibilities of what the movement is and can be, of its infinite recurring archivization, and emerges together with the system, in the middle and the excess, in the becoming.

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