Affective Traces in Virtual Spaces: Annotation and Emerging Dance Scores

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Introduction

The potential of codified notational systems to adequately document dance works has been the subject of much discourse and debate. One school of thought, following scholars such as Nelson Goodman (1976) Anne Hutchinson Guest (2005, 2000), Graham McFee (1992, 2011), Natalie Lehoux (2013), suggests that movement notation systems such as those developed by Laban, Joan and Rudolf, Benesh,and Eshkol and Wachmann are the only way to fully inscribe movement. Lehoux suggests, 'Notation systems are essential to the description of movement' (2013: 154). On the other hand, scholars such as Katja Čičigoj (2013), Bojana Cvejić (2012) and Miriam Van Imschoot (2010) argue against the need for codified notation.

Similarly to western music notation, which represents specific notes, movement notation uses symbols to stand for parts of the body and their movement through space. Although a seemingly useful tool for recording and analysing movement, no single system has ever been universally adopted. Critiques of notation often focus on the apparently reductive mode of representing the body and the seeming fetishization of the document over the event (Čičigoj 2013, Van Imschoot, 2010). The widespread use of recordings for the restaging and appreciation of dance further provokes this debate. Recordings provide a more accessible record, which maintains the perceptual presence of the body. However, they offer only one instance of the work, failing to allow for multiplicity and difference. Some scholars argue therefore, that recordings can never truly capture the work and question their value for re-instantiation and appreciation (Phelan 1993, McFee 2011).

The increased prevalence of digital technology and the generation of new forms of 'score', 'archive' and 'installation', add further layers to the debate. Referred to by Scott deLahunta (2014), James Leach (2013) and others under

the emergent rubric of 'choreographic objects'; these entities cross and challenge existing modes of description. Perhaps confusingly, the term is used to refer to two different, albeit related types of things. Frankfurt based contemporary choreographer William Forsythe uses it to discuss artefacts that are created in accordance with choreographic principles (2008). However, following Leach, deLahunta and Sarah Whatley (2008), I use it to refer to an object that is created with the intention to articulate and disseminate choreographic thought. [{note}]1

This paper considers three 'choreographic objects', which are also referred to as 'scores'. Synchronous Objects for One Flat Thing, reproduced (Forsythe/OSU 2009), Using the Sky (Motion Bank/Hay 2013) and A Choreographer's Score Fase, Rosas danst Rosas, Elena's Aria, Bartók (De Keersmaeker and Cvejić 2012) use annotation by the choreographer or by an authorised proxy to analyse the works they score in various ways. The method either provides a hidden tool, or is laid over the top of recordings, drawing the viewer's attention to certain features. This paper introduces some of the ways that annotation is used in these scores before focussing in depth on the aesthetics and 'affect' of the annotations on Synchronous Objects. Drawing on the work of Human Geographer Derek McCormack (2013) I draw comparisons with notation to consider how annotation maintains and re-frames the expressive and affective experience of dance movement.

Annotation and Digital Scores

Synchronous Objects is the second major project from Forsythe and his team concerning ways in which 'choreographic thinking' (Forsythe 2008) can be shared through technology. Forsythe's interest in this area dates back to the production of the CD- Rom Improvisation Technologies: A Tool for the Analytical Dance Eye in 1999.

This tool uses video annotation to map Forsythe's movement and visualise the relationships between body parts. The technology helps the viewer to see the shape of the movement in space, highlighting otherwise invisible

relationships, pathways and traces. <u>Synchronous Objects</u> furthers this enquiry, this time focussing on a single work. The site analyses and maps the choreography of Forsythe's stage piece <u>One Flat Thing, reproduced</u> (2000), using a film version by Thierry de Mey (2006). Forsythe worked with Norah Zuniga Shaw and Maria Palazzi at Ohio State University's Advanced Computing Centre for the Arts and Design to create a score comprising 20 digital objects, inspired by the question, 'What else might physical thinking look like?' (Forsythe et al 2009).

<u>One Flat Thing, reproduced</u> features seventeen dancers, whizzing around a high-ceiling space, contorting their bodies over a grid of 20 tables. As the film begins, the dancers rush towards the camera, dragging the tables behind them. Once the set is in place the space empties, leaving two male dancers moving between the table-tops. The dancer on the right throws an arm through space, whilst the other kicks a leg. They are positioned close together; their actions appear to be related, although they are not in unison and do not make contact. Other cast members gradually join the action. There are very few recognisable movements or motifs. A mass of quickly moving bodies creates a sense of chaos. Yet, fleeting moments of unison make it clear that this chaos is actually highly organised, even if the rules and structures are not readily apparent..

American dance critic Roslyn Sulcas suggests:

> Mr Forsythe brilliantly constructs the chaos to resolve
> into sudden movements of alignment. The organization
> of shape (legs stretching straight up), directions (heads
> turning the same way) and dynamics (everyone speeding
> or slowing) keep the eye focused and the machinery of
> the work in order. It's fascinating, exhilarating; like
> nothing you have seen before (Sulcas 2014).

Sulcus describes how a viewer may see the structure of the work. However, her position as a critic implies extensive experience of viewing and analysing dance. Spectators who are less used to reading choreography may well miss

the organisational indicators that keep Sulcas focussed. Philosopher Alva Noë describes the work as a,

> complex phenomenon, that is to say, as an event; the work is compelling and absorbing, but it is also, like many dances, and like life itself and the environments we occupy, very difficult to understand; that is, it is nearly impossible to command a clear view of it (Noë 2009).

This problem is addressed by <u>Synchronous Objects</u>, which aims to 'unlock' the structures of the work, to help users recognise the systems of organisation and disambiguate the dance. Palazzi (2009) describes how the team initially used annotations to reduce the visual complexity of the dance so that they could understand the core systems. They gathered extensive data regarding the work's structural features, to develop a diverse set of 'objects'. Some of the objects are didactic, leading users through a clear path and demonstrating a motivation to educate, whilst others are more expressive. Video annotation is often used to visualise the relations discovered through the team's analysis. For example, in an object entitled 'The Dance', a video of the work is surrounded by data demonstrating the cues and alignments between the dancers, with features foregrounded by coloured annotations, digitally inscribed over the top of the recording.

The 'Alignment Annotations' object uses colour-coded lines and curves to show how movements relate. The annotations have a practical function, to 'make the spatial and temporal patterns of the dance's alignments spring into view as you watch' (Forsythe et al 2009). They appear in real time, meaning that the inscriptions are only visible as long as the moment of alignment between the dancers occurs. As a result, they become seemingly part of the dance, echoing the rhythms and dynamics of the movement. For example, as the first dancer's arm movement correlates with his partner's leg swing the relations between the actions are made visible by sweeping white lines. As the action builds, so too do the annotations, carving temporary traces through virtual space. The annotations can also be viewed without the film. Without the dancers, the coloured forms slice through black space. Spiralling

geometric forms (dis) appear, arising from nowhere. They circle around each other, intersecting and continuing on. The animations move quickly. They leave nothing behind: traceless traces of invisible movement. The dancers' bodies are no longer present, yet their energetic impetus is maintained.

Following Synchronous Objects Forsythe initiated Motion Bank, a three-year project (2010 – 2013), led by deLahunta, which resulted in online scores of work(s) by Deborah Hay, Jonathan Burrows and Matteo Fargion and Bebe Miller and Thomas Hauert. Annotation was also used in the development of these scores, to analyse the works and help the research team to comprehend movement structures (Motion Bank 2013.). Hay's score Using the Sky demonstrates how annotation was used in different ways to Synchronous Objects. The score considers Hay's solo work No Time to Fly (2010), for which Hay wrote a detailed score through language and sketches. The score was sent to three dancers, who were each recorded performing the work seven times. The 21 digital renderings were annotated using Piecemaker, a video annotation tool developed by Forsythe company member David Kern (Motion Bank 2013.) a version of which is now available via the Motion Bank site.

No Time to Fly is an 'open' work (Rubidge 2000), meaning that there is no set movement structure, and that every instance of the work can appear different to the last. Annotating the videos allowed the team to identify where and when the performers were moving from one part of the score to another, revealing structures that are otherwise imperceptible. The team aligned the recordings with a digital version of Hay's original score, and with other forms of information including spatial diagrams, written accounts and interviews from Hay and the dancers. This annotation process enabled the systemization of the features of the work.

The team's annotations served a crucial methodological function, however they remain hidden to the viewer. Nevertheless Using the Sky also adopts a more palpable type of annotation in the form of Hay's notes. Whilst the score is complete without her notes these provide further insight, and are often

longer than the directives. For example, directive 24 reads; 'I mend the field' (Hay in Motion Bank 2013). This is followed by the note, 'Accepting any movement, I call it mend. At the same time it is an effort not to automatically produce comforting arm or hand movements or behave like a mother hen' (Hay in Motion Bank 2013). This demonstrates the ambiguity of Hay's writing and shows how the annotations do not serve to 'explain' in a directive or didactic manner, but flesh-out the framework of the score, allowing a deeper vision of Hay's way of thinking.

A Choreographer's Score is more explicitly concerned with structure than Using the Sky. This score is also more analogue than the previous examples. It takes the form of a DVD and book, collaboratively authored by Anne Teresa De Keersmaeker and Bojana Cvejić examining the structures, inspiration and choreographic processes of De Keersmaeker's early works. To develop the score Cvejić examined all available documents about the works and held extensive interviews with De Keersmaeker (Cvejić in De Keersmaeker and Cvejić 2012). During the interviews De Keersmaeker deconstructs the choreographic material and structure. For instance, discussing the first section of Rosas danst Rosas (De Keersmaeker 1983), she starts by explaining how the choreography arises from one phrase (in De Keersmaeker and Cvejić 20122012: 86). Readers are directed to the correlating section on the DVD, where De Keersmaeker uses a chalkboard to explain how the phrase is made up of five sections (A,B,C,D and E) and that each part of the phrase can be danced either with attack, or with a slow and suspended dynamic (De Keersmaeker in De Keersmaeker and Cvejić 2012). These sections are interspersed with video footage of the work in performance, and clips from a film version of the work (de Mey 1997), allowing the viewer to see how the structure is enacted in performance.

The annotations on A Choreographer's Score are verbal. De Keersmaeker talks over the footage; referring to sections 'A', 'B', 'C' and so forth. This helps the viewer to forge links between the information outlined on the board and the work in performance. As she continues the discussion is expanded, providing detail about the rhythm and motivations of the material. She starts to

use full sentences, such as, 'The second movement opens with the nodding to each other. The dancers look at each other and pair up' (in De Keersmaeker and Cvejić 2012). 2012). The descriptions keep pace with the movement, drawing attention to the structure and relations between the dancers. As the DVD continues De Keersmaeker's verbal annotation becomes more constant, her tone becomes discursive and she starts to include descriptions of the dynamics, such as; 'C with stops and with really pulling out the pauses' (De Keersmaeker in De Keersmaeker and Cvejić 2012).

When talking over the movement De Keersmaker's tone is different to when demonstrating. She speaks softly and slowly, as though not wanting to overshadow the movement. Cvejić suggests, 'The choreographer's parole fleshes out the account with affective tones of storytelling that the text is numb to' (in De Keersmaeker and Cvejić 2012: 12). De Keersmaeker's voice informs the aesthetic and affect of the video. But is this still annotation or has this become narration? [{note}]2 The notion of annotation implies a practice of highlighting key points and drawing certain aspects into focus. Whilst De Keersmaeker does this in the way that she focuses on structure, the consistency of her speech generates a sense of narrative. The point at which annotation becomes narration is perhaps open to interpretation, however I suggest that De Keersmaeker's simple structural markers are verbal annotation, whereas once the talking becomes discursive and anecdotal she starts to provide a narrative.

Cvejić suggests that the documents gave her clues as to what was invisible in the work alone (in De Keersmaeker and Cvejić 2012: 10), going on to claim that, 'De Keersmaker and I try to lay out the work and all that constitutes it' (Cvejić in De Keersmaeker and Cvejić 2012: 11). These articulations highlight a similarity with Synchronous Objects and Using the Sky as all three scores use various forms of annotation to excavate hidden features of the work. As with Synchronous Objects, and Using the Sky this publication is not intended for reinterpretation or reconstruction (Zuniga Shaw 2009, Cvejić 2012: 18), rather the scores use annotation to provide insight into the works' structures

and visualise features of the work.

Annotation and Notion

In dance, the term 'score' is used to refer to a wide array of physical and non-physical objects. A conventional view, such as that proposed by Goodman (1976) sees a score solely as a work-determining document, written in codified notation. He suggests that to qualify as notation a system must use inscribed characters to denote components, with each inscription standing for only one character, hence avoiding the ambiguity associated with words or drawings (1976: 127). Notation systems have been developed that follow such a framework, including Laban, Benesh and Eshkol-Wachmann notation. However, these systems are used relatively infrequently, with choreographers and dance artists more often using idiosyncratic inscriptions to record features of the work, and as part of the creative process (deLahunta 2004). Whilst the term notation has no essential relationship to codification, artists' sketches and notes do not aim for universality. Therefore, I use the term notation to refer to codified systems that aim to provide a sharable mode of documenting movement. Alongside idiosyncratic notes, scores may be non-physical, such as those used in improvisational practices. In such cases a set of instructions, parameters or stimuli are given to, or agreed upon by the performers in order to instance the work.

The breadth of scoring practices means that as a choreographic term, 'score' has arguably become ubiquitous. However, scores are constrained by some commonalities. The term generally refers to a set of instructions or parameters that document and/or initiate action. Dance scores usually provide stimulus for movement, or instigate the performance of a specific practice or dance work. However, the scores discussed here problematize this conception insomuch as they do not aim only document or instigate action, but to encourage specific ways of seeing the work. Whilst they have a generative capacity and are likely to inform future choreographic practices,

this is not their primary or sole function. It is not even clear that all three examples are commonly accepted as scores; for example, Zuniga Shaw uses the terms 'visualizations' and 'objects' (2014: 97). However, the use of annotations to uncover and make visible dance structures perhaps posits the method a central role in the score-status of these objects.

Affect, Aesthetics and Experience

Observing the work via these scores offers an experience that departs dramatically from a conventional theatre context or an unaltered recording. In all three cases the explicit intention of the annotations is to reduce complexity by making choreographic structures perceptible to the observer. However, they also function much more broadly, offering first-hand insight and striking aesthetic forms. There are important differences between the written, spoken, visual and hidden annotations. For example, whilst Hay's notes provide access to elements of her experience and arguably inform readings of the work, they do not impact on the aesthetic experience in the same way as the visual annotations on Synchronous Objects. [{Figure 1}]

In the case of Synchronous Objects, the annotations focus primarily on the relations between the dancers, arguably stabilising such features. However, performance philosopher Petra Sabisch suggests, 'Relations are not describable as fixed or signified objects; rather, they are extremely subtle, changeable, they have different coexisting durations' (2007: 7). If relations are intrinsically unstable, why annotate them in this way? Does this stabilising process not echo the problems of codified notations by reducing the complexity of movement? McCormack suggests that abstraction is conventionally critiqued as reductive (McCormack, 2013: 179), but that Forsythe's work might allow for a more 'affirmative' view of abstraction (2013: 179), due to the way that his movement works with decentralised points in space and creates generative geometric forms (2013: 180).

These observations certainly seem to relate to *One Flat Thing, reproduced*, in which the bodies contort and twist, and are frequently off-centre and

dispersed erratically through space. However, as McCormack points out, Forsythe's choreography is far from random; it deploys multiple concepts to generate movement. For example, establishing virtual lines between body parts is a key element of Forsythe's process; 'A line or a point is there in space and how you establish it is up to you' (Forsythe in McCormack, 2013: 182). Whilst the imagined line might be 'there in space' for the dancer, or even a highly trained observer, these features are not generally perceptible in performance. Video annotation in both Improvisational Technologies and Synchronous Objects makes these lines apparent for the observer. Thus annotation of abstract forms within Forsythe's work allows the viewer to share in the concepts, expanding as opposed to reducing the vision of the movement.

Annotations are also expansive through their potential to re-present the resonance of movement through space and generate affective relations with the viewer. Sabisch and McCormack use the term 'sensible' to refer to that which relates to the senses (Sabisch 2007: 7). This seems key; it is possible to argue that the affective nature of the annotations ignites a relational 'sense-ible' form of interaction between the viewer and the work. According to Sabisch, relations can only be described through the senses, meaning that their effect and affect are central to their function. Their dynamic, aesthetic qualities and affective function generate new relations with the viewer.

The notion of 'affect' has gained currency in recent writing in cultural studies and the social sciences, resulting in the so-called 'affective turn', described by dance scholar Stefan Apostolou- Hölscher (2014: 79) as a departure from text-centred performative theories. Discussing the generative relationship between bodies and space, McCormack suggests that, 'Affective qualities are those heterogeneous matters of the sensible world we often try to capture through terms such as emotion, mood and feeling' (2013: 3). Although often discussed in relation to the body, McCormack suggests that affect is not constrained to the 'physical limits of bodies' (2013: 3). Conceptualising affect as a relational experience that may occur between living observers and

digitised forms allows us to further understand the role of annotation in these scores.

So, what makes these annotations affective? How can digitised inscriptions transmit or translate such experiences? A crucial feature in this context is the way that the annotations relate to, and replicate the dancer's experience of space. McCormack conceptualises space as multiple; produced and experienced through a range of sensory experiences and technologies (2013: 2). He describes it as 'never undifferentiated', implying that the body alters the space it moves through (2013: 2). Conceptualising the sensation of the body's relationship to space is often central to dance practices. However, Rubidge points out that affect is not entirely the same as physical sensation, but has to do with 'intensities', which 'express relations and degrees of variation' (Rubidge 2009: 3). This relates to the way that the annotations represent the experience of the dancer; they do not replicate or stand for a specific sensation, but make visual the intensities occurring between their bodies and space. It possible to suggest therefore, that the annotations on *Synchronous Objects* invite the spectator into an imagined version of the performer's experience. The shape of the annotations not only echo the traces of the dancers' limbs, they seem to highlight the affective sensation of the body's altering of space, arguably generating intensities between the viewer and dancer's bodies.

The way in which these annotations inscribe that which is not perceptually present reveals a paradigmatic difference to notation. Apostolou- Hölscher suggests that notation systems provide written treatise, denying the body the opportunity to move freely (2014), but that scholars such as Andre Lepecki (2007) and Sabisch provide a rethinking of how the body can be captured. This shift is articulated through his discussion of 'intensive movements'.

> In contrast to extensive movements, which connect already
> established points in space and bring us from A to B and from
> pose to pose, intensive movements provoke an affective
> modification of the body's structure, its components, and its
> capacity to act. Such movements modify the body's internal

relations and its relatedness to a given environment as much as they may transform the environment itself. (Apostolou-Hölscher 2014: 81)

The annotations on <u>Synchronous Objects</u> similarly inscribe virtual relations while simultaneously foregrounding the affect and experience of the body in space, in contrast to notation, which simply represents the actuality of the body's positioning.

Claiming that inscriptions deal with virtual relations may seem paradoxical, given that they respond to actual bodies. However, <u>One Flat Thing, reproduced</u> is structured through non-visible relations and the annotations do not denote the specific behaviors of the body, but the affect and resonance of its virtual interaction with the space and other bodies. According to Apostolou- Hölscher this framework relates to a recent tendency in contemporary choreography to consider the body's potential to transform space. He refers to <u>Up in the Air</u> (Ingvarsten and van Dinther 2008) in which the performers bounce on trampolines, suggesting that the movement of the performers, in relation to one another creates a circulation of 'subliminal' qualities (2014: 8), and allows for their bodies to be 'virtually where they are not actually' (2014: 8). I suggest that the intensity and proximity of movement in <u>One Flat Thing, reproduced</u> similarly allows for the construction of virtual relations or intensities, and that by inscribing the body's affective trace, the inscriptions allow the viewer to take part in the experience, foregrounding that which is not (actually) present. As Manning points out, the central aim of <u>Synchronous Objects</u> to explore 'what else' physical thinking might look like, 'is a proposition not for the body itself but for the relational force of movement-moving' (2013: 100).

The function of the annotations depends upon their temporarily. The fact that they do not last allows them to elude fixation. As McCormack points out, 'Abstraction can be a static form withdrawn from the dynamism of the matter' (2013: 182). However, these annotations echo and enhance the dynamics of the movement, by allowing for the impact of the movement to remain for a moment longer. Furthermore, they are not simple lines, they gradually taper

and dissolve. As the image above (fig.1) demonstrates, the gradual disappearance of the image echoes the temporal resonance of the movement's impact on space.

Conclusion

Synchronous Objects, Using the Sky and A Choreographer's Score utilise technology to conflate didactic, structural information with expressive properties of the work. The motivation to share the 'choreographic knowledge' embodied within the work is demonstrated through the affective function of the annotations. As Manning suggests, considering a work's potential to exceed its form and generate a felt sensation that exceeds its structure is key to its success (2013: 101).

Where does this leave the comparison with codified notational systems? Is there any meaningful connection between the two modes of inscription, other than similarity in their terminology? While notation methods such as Labanotation can communicate expressive elements via qualitative inscriptions, (Maletic 2001), these systems are reductive insomuch as they aim to crystalize the movement into its fundamental parts. Systems such as Labanotation are composed from the position of the dancer, whereas the annotator inscribes on top of, as opposed to in the place of, the dancing body. While notation aims to systematize the behaviour of the body, visual, virtual annotations deal with the body's relational engagement with space. Furthermore, whilst codified notational systems often use floor plans to demonstrate the pathways of the dancer(s) in space, annotation systems such as Synchronous Objects highlight the relational interaction between the dancer and space, replicating the impetus of the movement's trace. This position is both internal, as it mimics the experience of moving, and external as it is placed on top of the movement in order to highlight an imagined experience. Such strategies appear to honour the ephemerality of movement by foregrounding the imagined trace of the body.

Both notation and annotation seek to uncover structures. Both are analytic tools, which abstract from materiality in order to represent something no longer present. However, whilst notation focuses on the hypothetical ideal form of the dancing body, some annotations, such as those examined here,, concentrate on relations and space, opening up possibilities for highlighting that which is not perceptible in performance, such as traces, internal experiences, bridging the theoretical gap between notation and recording.

NOTES

1 Examples include Siobhan Davies RePlay (Davies et al 2009), *A Choreographer's Handbook* (Burrows 2010), Double Skin/Double Mind (Emio Greco| PC et al 2006), and Material for the Spine (Paxton 2008).

2 This distinction was pointed out to me by deLahunta (January 2015).

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IMAGES

Figure 1. <u>Synchronous Objects for One Flat Thing, reproduced</u> (2009), The Ohio State University and The Forsythe Company