Roche calls her "creative dancing signature" can be recognized and acknowledged.

The book was a pleasure to read, particularly so because it starts to fill the gap in the paucity of writing that articulates the dancer's perspective. As such, it is a welcome addition to dance discourse.

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Motion and Representation: The Language of Human Movement

by Nicolas Salazar Sutil. 2015. Cambridge, MA: MIT Press. 328 pp., 52 b&w illustrations, notes, bibliography, index. $34.95 hardcover.
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This book aims to develop a cultural theory of human movement and representation that draws on a wide range of sources; ancient Western philosophy, history of science, Lacan, Laban, Deleuze, Forsythe, motion capture technology, contemporary media theory, contemporary performance, and more. Sutil writes that the book illustrates a never-ending cultural enterprise of "finding new means of representing movement language through mathematical or computational means, or indeed through different formal languages of movement that are realized at the concrete level of an embodied discipline" (234). Since the book draws on such a vast field of cultural history, it will likely be of interest to those working within interdisciplinary approaches to movement. With this said, there are two intertwined methodological issues that consistently arise in the book—Sutil's lack of reference to important relevant research and his use of weak analogies.

While reading through the first section of the book, I was struck by the fact that there were few references to relevant secondary literature on Laban and Labanotation. I then noticed a paucity of references to relevant literature when the author discussed Forsythe's formal approach to dance improvisation. In the section of the book that focuses on motion technology, I similarly found few references to literature on the intersection of movement and digital technology. Kozel's (2007) book-length treatment on the topic is given just a passing mention, and relevant work by Birringer (2004, 2008), Dixon (2007), Naugle (1998), and many of the authors published in the *International Journal of Performance Arts and Digital Media* is not referred to. But, if the author's goal is to "write an integrated theory of movement" (104) that focuses on representation and the digital, then this work simply must be addressed. Indeed, I believe that, in many instances, references to relevant literature would push Sutil's analysis further and would likely challenge some of his conclusions (more on this in a moment).

A second issue concerns Sutil's use of analogies. Arguments from analogy can be quite fruitful, but they must consider any relevant differences between what is being compared and then consider if those differences outweigh the similarities. If they do, then they are weak analogies that do not support conclusions that are built on them. For example, Sutil briefly discusses Lacan's topological theory of language and Laban's dynamospheric model of human movement; he then argues that the two are akin in that they both consider the manner in which inner experience is expressed outwardly in movement. He writes, "For a start, Lacan's thinking is fiendishly cryptic at times, in the

same way that Laban's is unwieldily esoteric. In Lacan's examination of the structural analysis of subject identification, the linear structure of concrete discourse and the chains of signification can be ordered and harmonized just as in Laban's theory of space harmony" (73). But this strains reason, since Lacan and Laban are quite removed from each other in terms of their respective theoretical backgrounds, their distinct methodologies, and their research interests. (I will leave aside Sutil's suggestion that the two thinkers are also comparable because they have similar writing styles and because their names are spelled similarly.) Regardless, after then briefly discussing two films by Kurt Lewin and his own multimedia dance work *Labanimations* (2012), Sutil claims that "We can look back at the various theoretical perspectives touched on in this chapter and offer an integrated theory of total movement" (86). But given the weak conceptual association of Laban and Lacan, this conclusion is not justified. Indeed, it would be difficult, if not impossible, to sufficiently support this conclusion in a chapter that is only twenty pages in length.

Another example of a weak analogy arises when Sutil compares the analytical cognitive process that characterizes thinking through a syllogism to physical walking: "Walking is a physical syllogism from a departure point, to midpoint, to arrival point … the logic of movement refers to an association between a step-by-step mental procedure and a step-by-step physical action" (110). We can figuratively say that physical walking and thinking through a syllogism both involve the experience of "movement," but that is to ignore a fundamental difference between the respective operations, namely, syllogisms are based on the principle of logical necessity or on the manner in which the definitional characteristics of concepts relate to one another. Physical walking, however, is not an affair of relationships between conceptual definitions and consequently is simply not amenable to syllogism form. There can be no "syllogism of physical action" (110). Further, I am not sure why the author takes the time to develop this strained analogy between formal logic and walking, for it would be better for him to discuss the manner in which Forsythe's formal and systematic approach to movement advances a coherent kind of physical logic. Strictly speaking, there are no syllogisms at work in the system, but it is composed of rigorous formal parameters that shape the way that the improvising body can express geometric patterns in space. For example, if a dancer is experimenting with "own-body avoidance," then there will be movements and pathways that are more or less logical to the extent that the dancer accurately and consistently imagines him or herself frozen in space and then moves around the negative space of that projected mental image. This would be a much more fruitful approach to developing a connection between logic and physical movement. Further, since he is interested in the relationship between thinking and movement, it would be much more productive to develop a comprehensive discussion of the growing body of work on choreographic thinking as developed by authors such as DeLahunta (2002a, 2002b), Spier (2011), and Protopapa (2013).

These two examples illustrate a general tendency for weak analogies to stand in for in-depth discussions informed by robust academic literature. Of course, if Sutil's approach were a deconstructionist one that was less interested in rigor and that intentionally played with metaphors in order to draw connections between different ideas and practices, then these points would be irrelevant. However, the reader finds that he advances specific arguments and conclusions and, more generally, often reiterates his overarching goal of developing a comprehensive theory of the manner in which human movement can be represented.

My last point concerns the reductionism that surfaces throughout the book. Since he focuses on formal approaches to movement representation, his discussion of the relationship between inner experience and physical movement is conceptually limited. At the end of chapter four, he notes that "what lies inside physical movement is, as Laban has shown, a complex dynamospheric realm, where emotional, psychic, and intellective stresses, moods or dynamic efforts are stored" (86). And at the beginning of the next chapter he asks "How does a language of physical movement arise from an internalized mental activity? To what extent is physical movement an externalization of mental action?" (89). As he goes on to develop an account of basic mental and physical counting or numbering of movements in dance, it becomes clear that Sutil's notion of language is quite limited. This is

odd given his earlier discussion of Lacan's more metaphorical psychoanalytic approach to language, but, regardless, what of other nonformal and less simplistic approaches to language that could help answer his question concerning the manner in which language can connect physical movement with inner experience? What of symbolic gestures (such as American Sign Language) or communicative gestures used in day to day life? What of Lakoff and Johnson's approach that emphasizes the manner in which the body shapes the development and articulation of linguistic metaphors that are used in daily speech (Lakoff and Johnson 2003)? Or, if he is going to focus on dance, what of the manner in which a dance piece can develop its own "movement vocabulary" with specific movements or gestures that—via repeated motifs—can come to signify internal or external states of affairs? Or what of Trisha Brown's *Watermotor* (1978), which performatively explores the intersection of discursive speech and dance movement (Rosenberg 2012)? Shouldn't these more robust—and, frankly, more interesting—accounts of language be discussed? At the very least, Sutil needs to explain why these alternative approaches are not considered.

This reductionism also becomes apparent in the final chapters of the book when Sutil discusses "e-motion" or the manner in which the movements of the individual on the Internet can be traced and represented by a kind of Internet cartography. He writes that

> To navigate, then, involves both an inner motivation (a thought process) and an externalization of this process by a series of browsing activities and navigational maneuvers that involve seeing different things move *on* or *between* screens.... Thus, in the same way that the body becomes a conduit to externalize the interiority of movement as thought, so the internet can be conceptualized as a virtual body that externalizes the inner movement that ultimately drives the navigation of a web use. (223)

Sutil reduces internet "movement" down to "net cartographies" and does not discuss the rich literature on phenomenology, the body, and the experience of the virtual by writers such as Ihde (2001, 2010), Hayles (1999), and Hansen (2006). But such reductionism is questionable given that the book strives to develop a comprehensive cultural theory of human movement and representation.

These points lead me to conclude that Sutil provides interesting insights into human movement and representation, but because he paints with such broad and thin strokes and because he does not sufficiently engage with relevant literature, those insights largely remain underdeveloped.

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