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Reconsidering and Re-conceptualizing Kinesiology

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INTRODUCTION

As a new faculty member in a department of kinesiology, I am frequently asked by others outside of the discipline “what is kinesiology”? Since I was never formally taught the definition of kinesiology, I took the initiative to determine the answer as the general public would via an internet search. The first link made available after typing in “kinesiology” in most internet search engines is for Wikipedia. It states

Kinesiology is the *scientific study of human movement*. Kinesiology addresses physiological, mechanical, and psychological mechanisms. Applications of kinesiology to human health include: biomechanics and orthopedics, strength & conditioning, sport psychology, rehabilitation, such as physical and occupational therapy, as well as sport and exercise (“Kinesiology,” n.d.).

Although Wikipedia can be helpful, a more credible source for a definition was needed. Fortunately, the third link was for the *American Kinesiology Association* (2010) which defines kinesiology as “an *academic discipline which involves the study of physical activity* and its impact on health, society, and quality of life.”

Both of these definitions and many others found via the internet imply, whether explicitly or implicitly, that kinesiology is the *scientific study* of human movement. A quick overview of most undergraduate and graduate kinesiology degree programs indicates the strong emphasis on scientifically-based knowledge. Courses in biomechanics (i.e., engineering, math, and physics), exercise physiology (i.e., biology, physiology, and chemistry), motor control (i.e., neuroscience and cognitive science), sport and exercise psychology (i.e., psychology), and measurement and evaluation (i.e., statistics and math) dominate degree requirements.

There is no question that the science of movement or knowledge *about* movement continues to govern the field of kinesiology leaving movement performance and experiences on the periphery or altogether eliminated. Are kinesiology faculty members satisfied with this trend? Did they willingly choose the path of science because it corresponds deeply with their philosophical views of kinesiology? Or were they forced down the path to meet the political expectations of the academy? Is the sole or primary focus on science in kinesiology how kinesiology faculty members want their field to be defined?

The purpose of this article is to delineate a more humanistic view of kinesiology by drawing on the rich, but often overlooked, phenomenology of movement literature (Arnold, 1979; Brown & Payne, 2009; Merleau-Ponty, 1962). Brown and Payne (2009) maintain that “phenomenology is a reaction against . . . the scientization of [kinesiology] that sees its conceptualization, contextualization, representation, and legitimation primarily as a science” (p. 423). By drawing on the work of Maurice Merleau-Ponty (1962) and Peter Arnold (1979), I argue that kinesiology is not *only* a scientific discipline charged with creating and disseminating scientifically-based knowledge, but also a field of study that encompasses the performing arts where the experience of movement is valued and appreciated for what it is, independent of scientific analysis or study.

THE PLACE OF SCIENCE IN KINESIOLOGY: A MERLEAU-PONTIAN PERSPECTIVE

Phenomenology addresses ontological and epistemological questions such as: what is a human being? what is knowledge? As a philosophy, phenomenology maintains that a human being is not merely a physico-chemical object or a transcendent immaterial mind. A foremost phenomenologist, Merleau-Ponty, (2004) declares

I am forced to acknowledge . . . that in some inexplicable sense [my mind] is bound up with my body . . . and that this union of mind and body can barely be spoken of; it can only be experienced in everyday life (p. 85).

In contrast, a dualistic view of human being reduces people to their parts (i.e., immaterial mind and a material object or body) rather than accepting and appreciating the complex, “inexplicable” nature of human being. Under a dualistic framework, the body becomes a mere object for scientific exploration while the dynamic nature of human being remains concealed and unappreciated (Schrag, 1979). Phenomenologists challenge the dualistic view of human being and call the integrated nature of the human person the “lived body” or “living embodiment.” To Merleau-Ponty and other phenomenologists, a person does not have a body; a person *is* her/his body. As Calvin Schrag (1979) asserts “the lived body signifies a mode of orientation [to the world] rather than a conceptualized entity [of science]” (p. 156).

With this ontological view in place, Merleau-Ponty provides a much needed perspective about the place of science in kinesiology. He calls science a “second-order expression” because, as he argues, it always follows a person’s basic experience of the world. He declares:

The whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to rigorous scrutiny and arrive at a precise assessment of its meaning and scope, *we must begin by reawakening [to] the basic experience of the world of which science is the second-order expression* [italics added] (1962, p. viii).

For a field like kinesiology, without a person’s lived bodily experience of movement, the scientifically-derived knowledge pertaining to movement would not exist and, therefore, will always

remain secondary to the actual experience of movement. Merleau-Ponty continues by arguing for a return to that world which precedes [scientific] knowledge, of which knowledge always speaks, and in relation to which every scientific schematization is an abstract and derivative sign-language, as is geography in relation to the country-side in which we have learnt beforehand what a forest, a prairie or a river is (1962, p. ix).

What does Merleau-Ponty mean when he suggests getting back to “the world as directly experienced?” For kinesiology this means “reawakening to the experiences of movement” (Anderson, 2002, p. 95). The core foundation of human being and knowledge *is* pre-scientific experience. Using Merleau-Ponty’s example, if a student is to learn geography, one way to begin is by visiting the different landscapes (i.e., deserts, plains, mountains, etc.) to experience them. It is in the climbing of the mountain, walking through the desert, or wading or floating the river that a person will realize the essence of the terrain and her/his place within the terrain. Reading, studying, and memorizing terms and fact-centered information about landscapes is important, but remains, according to Merleau-Ponty, secondary to directly experiencing the landscapes. Furthermore, and perhaps most importantly, there are lessons to learn about one’s self while in the landscape—what one can and cannot do in the midst of the landscape; what it means to a person to traverse the landscape; how one feels while traversing the landscape; and so on.

In line with Merleau-Ponty’s claim, I argue that students need opportunities to live and employ their embodiment via participation in the various forms of human movement (i.e., dance, exercise, games, outdoor recreation, play, and sport) in kinesiology degree programs as much as they need to read, study, and memorize scientifically-derived movement-related information.

KINESIOLOGY: EDUCATION *ABOUT* MOVEMENT AND EDUCATION *IN* MOVEMENT

Peter Arnold (1979) identified two educational approaches that can provide a useful framework to outline and define the field of kinesiology: education *about* movement and education *in* movement.

Education About Movement

Education *about* movement is education that centers on the disseminating of technical and fact-centered information about movement-related content. Proponents of this approach embrace and promulgate knowledge made available through scientific methodologies. According to Arnold (1979):

Education about movement is predominately concerned with the transmission of what might be called rational movement knowledge. It is largely of a propositional kind and is capable of being presented in a discursive way. It is public and objective, in principle shareable, and therefore communicable (p. 170).

Examples include specific body positions for executing a volleyball forearm pass, the role of the mitochondria in oxidative respiration, or the dose-response relationship between physical activity and health outcomes. The main goal of this approach is to *step back away from the actual experience of movement* and to learn or analyze movement from an objective viewpoint. Traditional teaching styles such as lecture or direct instruction are preferred because these styles are seen as the most efficient means of spreading information. Furthermore, many value this approach too because technical information can be assessed with relative ease using standardized assessment protocol such as multiple choice and true/false examinations.

Education in Movement

Advocates of the education *in* movement approach cherish the various forms of human movement (i.e., dance, exercise, games, outdoor recreation, play, and sport) for what they are in their own right (Anderson, 2002; Metheny, 1965; Tweitmeyer, 2012). Under this perspective, movement need not be justified by the instrumental outcomes it may provide (e.g., increased physical fitness or health or cognitive functioning, etc.), but is respected for what it can and does *mean* to individuals. Supporters of this approach recognize the *inherent* educational value *in* movement experiences as those experiences are lived. As Arnold (1979) observes

Education in movement upholds the view that movement activities, especially when looked at from the ‘inside’ or participatory perspective of the moving agent, are in and of themselves worthwhile. What makes them educationally desirable is that they permit the person to actualize herself in a set of distinctive and bodily oriented contexts and thereby allow her to learn a great deal about herself and the world in which she lives (p. 176).

In other words, the meanings individuals have and do develop in various movement forms are oftentimes very peculiar. Due to the potential eccentric nature of these personalized meanings, quick and easy measures, like a paper and pencil test, often do not suffice. A variety of “saying to show” methodologies are needed to illuminate these meanings (Hass, 2008). It should be clear that supporters of the education *in* movement approach uphold the intrinsic value of moving for the sake moving.

Although it is easy to pit the two approaches against each other, Arnold would be the first to argue that kinesiology degree programs should include strong foci on science (i.e., education *about* movement) and the performing arts (i.e., education *in* movement). The danger occurs, however, as it has today, when scientific knowledge attainment becomes the sole or the primary focus of kinesiology programs. As Arnold (1979) contends

If movement were conceived only in intellectualistic terms or what can be propositionally stated about it, it would be but a hived-off and disembodied academic pursuit. For the curricular implications of movement to be grasped in an adequate way, movement must be seen not only as a field

of study, but as a worthwhile group of physical activities to be engaged in for their own sake (1979, p. 177-178).

I argue that the current definition and view of kinesiology with the primary emphasis on the scientific aspects *about* movement continues to asphyxiate the potential for deep, rich educational experiences *in* movement and that a more balanced approach is desperately needed.

CONCLUSION

Both Merleau-Ponty and Arnold would censure educational approaches that focus exclusively on the scientific, technical, and fact-centered information of a subject matter (i.e., education *about* movement), especially when it is to the demise of the participatory, embodied nature of human movement. Kinesiology faculty members ultimately possess the potential to embrace or suppress movement experiences (i.e., activity courses, movement lessons, etc.) in kinesiology degree programs. As a movement-oriented field, kinesiology faculty can and should appreciate and employ a balanced approach between movement experiences and the scientific study of movement in kinesiology curricula.

The call to adopt a more vibrant and lucid movement-oriented approach in kinesiology is not new. Many scholars in recent years have lamented the scientization of kinesiology that continues to push and in many cases eliminate movement experiences and opportunities from kinesiology curricula (Anderson, 2002; Kretchmar, 1998; Tweitmeyer, 2012). The question is who else besides kinesiology faculty will defend the intrinsic, humanistic virtues of human movement in the academy? Douglas Anderson (2002) contends

There is at best an ambivalence and at worst a deep indifference within kinesiology toward a passion rooted in the experience of movement . . . there should be no apology to university academics and intellectuals for the presence of actual human movement in kinesiology programs. It should be celebrated and should be sold directly as an intrinsic value of being human, as an essential feature of the humanities of movement. On this basis, *we should ask that our students engage in more of it* [italics added] (p. 94-95). As a kinesiology faculty member, I could not agree more.

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