What is New About New Materialism for Sport Sociology? Reflections on Body, Movement, and Culture

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The new material turn in social sciences and humanities has drawn attention to how the material interacts with the social in the world where both human and non-human actors produce power relations. To include the material objects and their environments within the social analysis, new materialists argue for a new onto-epistemology that departs from the humanist social constructionism. To explore what this might mean for sport sociologists, I discuss three themes characterizing the new materialism: the focus on processes of materiality, post-humanist tools needed to engage with the material processes, and post-qualitative research methodologies and ways of representation that include the material world. I advocate studying the body in motion as a unique focus for socio-cultural scholars of physical activity who can connect the material with the social into research that matters in the contemporary world.

In 1997, Alan Ingham asserted that, “At the heart of physical culture stand the human body and movement” (p. 176). The main task of a sport sociologist, as a scholar of physical culture, was to engage with movement. “Movement,” he continued, “is a neuralphysiological and kinesiological activity... anchored in ‘cultured’ distinctions” (p. 176). Ingham, thus, located sport sociologists as part of “a faculty which wonders about the hegemonic sport practices in relation to the broader range of movement practice” (p. 175), but acknowledged that, typically, such faculties are also battle fields for dominance. He named two warring ‘tribes:’ the tribe of humanist intellectual physical cultural studies researchers with a shared research agenda of critical, emancipatory, conceptually and politically oriented, cultural research against the dominant tribe of technocratic intelligentsia with positivist, empiricist, scientificechnical, objectivistic functionalist, measurement-minded research agenda. Although Ingham conducted his observations 20 years ago, many of us can testify that such a battle continues at our home institutions. Nevertheless, his affirmation of a body as “both physical and cultural” (p. 176) has become extremely timely again with the calls for the new turn into things material in the social sciences and humanities.

The material turn now draws our attention to processes of materialization in the contemporary world, but what does it offer to sociologists of sport, if we, following Ingham (1997), have already placed physical culture with the physically active body that is both *matter* and that *matters* at center of our inquiry?¹ Could the new materialist agenda to reconcile, to unite, rather than further distance the warring factions in kinesiology departments and faculties? Might the newly established concern with the material body be used as a political tool to advance critical sport sociology in the neoliberal academia² that often favors the positivist, empiricist research agenda?

To discuss these questions, I have organized this paper around three themes that I believe characterize the material turn: first, the need to engage with the material world including material bodies, non-human objects, and the material environment; second, the need

to engage with new post-humanist theoretical tools to include materiality in social analyses; and finally, the need for new post-qualitative methodologies and creative ways of representing research that engage the theoretical with the material world. Through these themes, I hope to highlight the focus on the body in motion as a way of practicing movement research that matters in the contemporary, cultural moment of materiality. I then conclude with a cautious nod to the material, post-humanist, post-qualitative turn as a way of acknowledging innovative work that can create a unique space for socio-cultural scholars of physical activity as leading researchers of the material body in motion.

A Focus on the Processes of Materiality

Social science and humanities scholars who advocate an engagement with matter and the material world, now recognize the material human body, non-human objects, and their environments as a field of force relations with a significant impact on humans as social actors, their ideas, values, and politics (e.g., Coole & Frost, 2010; Fox & Alldred, 2017; MacLure, 2017). Consequently, the important point to consider is how the material world is produced in collaboration with its various actors. In this sense, the new materialists are concerned, not so much with what matter is, but rather with what matter does: how things around us, in everyday life, happen (e.g., Fox & Alldred, 2017). Considering these insights, what does this mean for socio-cultural scholars of physical activity?

New materialists Diana Coole and Samantha Frost (2010, p. 6) argued that mere social analysis is “inadequate for thinking about matter, materiality, and politics in ways that do justice to the contemporary context of biopolitics and global political economy.” As a partial remedy, they recommended increased resonance with the natural sciences, yet without a return to positivism, empiricism, or foundationalism. Interacting with the natural sciences, however, requires some relation to positivism that continues to inform a large part of scientific inquiry. How then should we renew our relationship with positivism, the type of research that we used to love to

hate? To answer this question, I believe a brief reminder of the main assumptions of positivism is necessary.

Positivism, often credited to August Comte (e.g., Crotty, 1998), the father of sociology, is generally considered to be a version of foundationalism where good science rests on one clearly definable, universally agreed upon foundation: Science focuses on studying reality and what can be directly observed or “experienced” by (human) senses is “real” (Hacking, 1983). Following this foundation, positivism rejects causality, explanation, theory, or thought that interfere with the objectivity of direct observation (Hacking, 1983). Inductive, experimental design in strictly controlled laboratory settings ensures the direct measurability of these objective observations. While perhaps not strictly compliant to the true form of positivism, the majority of natural scientists we deal with in our kinesiology contexts follow the foundation of directly measurable observations as the “gold standard” for true science. They are, nevertheless, the ones who study the material body: its metabolism, its movements, and its ability to sense and perceive—the matter that new materialists aspire to include in their examinations of the processes of materiality in the world. What does a new materialist share with the numerizable, objective, universal truth claims of positivism?

It is important to note that positivism, with its foundation in objective direct observation and its reliance on experimental design, has been a target of criticism for some time now. One of its early critics was quantum mechanist Niels Bohr who demonstrated that the way humans can know about “reality” is always necessarily ambiguous, not “absolutely true.” For example, his work on subatomic particles demonstrated an existence of “reality” that scientific concepts, as created by the scientists, cannot “truly” capture. Consequently, Bohr argued, new descriptions that offer a different frame of mind to observe the world need to continually evolve (Crotty, 1998). While Bohr also inspired the work of Karen Barad (2007), now an acknowledged new materialist scholar, one of the most acknowledged critics of positivism is arguably Karl Popper whose “post-positivism” challenged the idea of a scientist ever being able to remain entirely objective. Instead of one, universal foundation (direct observation based on experience), science, for Popper, was conjunctural: all scientific observation takes place in the context of theory that is a result of selective explanations by the scientists. Science, then, should be based on deductively falsifying theories through testing hypotheses. In a Popperian sense, a scientific truth is only true because it has not yet proven false (Crotty, 1998). Rigorous hypothesis testing, followed by the scientist, now acts as the foundation for good post-positivist science. Popperian post-positivism enabled the validation of scientific methods beyond an experimental design to include such indirect instruments as questionnaires and thus, the quantitative social sciences (in addition to natural sciences) as valid scientific disciplines. As a post-positivist, however, Popper continued to endorse objectivity through quantifiability and thus, generalizable scientific findings as representations of one true reality (e.g., Latour, 2004a).

Although post-positivism leaves the onto-epistemological foundation of positivism unchallenged, it is, as opposed to positivist foundationalism, non-foundationalist: as it does not consider direct observation as a guarantee of its truth claims, but rather assumes that scientific truth is contingent on scientists creating (and testing) theories that necessarily are influenced by their background, knowledge, and context. The closest to Popperian hypothetico-deductive science in sport sociology are quantitative scholars who test scientific theories hypothetically, deduce

propositions from these theories, and then test their propositions by proving them false. New materialists’ assumptions, however, do not appear to coincide with the Popperian process of deductively falsifying theories through rigorous, objective hypothesis testing using quantifiable indirect instruments (e.g., questionnaires), in other words, quantitative social science. How is it possible, then, to approximate the research processes central to positivist science but to oppose the post-positivist assumptions of quantitative social science as inadequate for examining force relations at multiple levels of social interaction? The new materialists refer to such critics of (post-)positivist onto-epistemology as Karen Barad and Bruno Latour to renegotiate their relationship to science.

In her work, Barad (2003) suggested that scientists rethink their “objects,” not as “things” or substances with clear boundaries, but as phenomena with intra-acting components. In such intra-acting, each component has “agency” to produce, in its part, the final phenomenon. Thus, the notion of intra-action replaces the idea of “causality.” To account for phenomena (not things), the scientific experiments, instead of “static arrangements in the world” engineered by the scientist, need to be rethought as “apparatuses:” *“dynamic (re)configurings of the world, specific agential practices/intra-actions/performances through which specific exclusionary boundaries are enacted”* (p. 816, italics original). Such apparatuses give meaning to certain concepts in exclusion of others and thus, as productive of the phenomena, scientists should treat them as active meaning-making technologies, not means for objective measurements. As Barad argued: “phenomena are not the mere result of laboratory exercises engineered by human subjects. Nor can the apparatuses that produce phenomena be understood as observational devices or mere laboratory instruments . . . Apparatuses are open-ended practices” (p. 816). These practices are open to “rearrangements, rearticulations, and other reworkings,” very much a part of “the creativity and difficulty of doing science: getting the instrumentation to work in a particular way for a particular purpose” (p. 817). From Barad’s view, each apparatus always intra-acts with other apparatuses: other laboratories, cultures, or geopolitical places.

Throughout his work, Latour (e.g., 2004a, 2004b, 2007) also recommended rethinking (post-)positivist science. For example, he (Latour, 2004a), following chemist and philosopher of science Isabelle Stengers, suggested that instead of universal scientific method that distinguishes scientific knowledge from “non-sense,” scientists should accept all well-articulated, interesting endeavors as knowledge even if they operate beyond the “boundaries of science.” Instead of relying on a clearly specified method, science should be interesting, “articulable,” productive, rich, and original, not repetitive, redundant, simply accurate, or sterile. To be interesting, he continued, “a laboratory has to put itself at risk” (p. 216) by being prepared to question its research program, its technical apparatus, its protocol, and its research questions. This means the scientist jeopardizing “the privilege of being in command” (p. 216). Following these principles, both natural science and social science are equally “scientific” in condition that scientists from both fields are passionately interested, instead of detached from, in their studies. In addition, the “elements under the study” should be interested in and given voice in the research project. Similarly, scientists need to acknowledge the prejudices and biases that they bring into the study. This type of scientific study can provide generalizable results but not by eliminating differences, but by accounting for possible alternative versions. “Generalization,” Latour asserted, “should be a vehicle for travelling through as many differences as possible—thus maximizing articulations—and

not a way of *decreasing* the number of alternative versions of the same phenomena” (p. 221, italics original). Based on these principles, Latour asserted, any epistemology is necessarily political.

Barad (2003) and Latour, thus, insisted that (post-)positivist science has to change in order to allow for closer collaborations with post-humanist social sciences. But this is unlikely to happen in the near future unless we begin to educate the scientists in our departments and faculties to understand science beyond positivism. At the moment, it is unlikely that exercise physiologists, biomechanists, or motor control researchers, similar to most natural scientists, perceive a need or an opportunity to challenge positivism as the dominant way of knowing accurately about the world. The methodological foundationalism of positivism, however, is incompatible with the new materialist aim to examine the material processes in everyday settings. It is obvious that we should not, in our newly found enthusiasm for things “science,” uncritically embrace positivism. Is it possible to engage with science without calling for extensive changes in its positivist onto-epistemology?

Some new materialists discuss, at the theoretical level, Bohr’s quantum physics or Einstein’s theory of relativity as challenges to Newtonian physics (e.g., Coole & Frost, 2010). I am not certain, however, that we have the expertise or need to engage with the abstractions of theoretical physics if the aim of new materialism is, indeed, to understand the material, moving body in everyday life situations. For example, I cannot employ insights from quantum physics or Einstein’s relativity theory to create new movement practices in an exercise or dance class. It is not possible to create the conditions in these contexts where we cannot sense the effects of relativity (the speed of light) or detect the effects of particle size relevant to quantum mechanics. In the perceivable world of human action, gravity is the primary force that dictates movement patterns and thus, Newton’s laws are still of good use here. Neither do I need to resort to theoretical physics to analyze movement patterns as we already have a sub-field, biomechanics, specializing in human movement. At the same time, the mathematical models, equations, or measurable outcomes of laboratory testing used by (post-)positivist biomechanists do not engage with the body’s doing in its everyday context of material processes.

What, then, do I examine when I study matter as a potential new materialist? While seldom defined by the new materialists, matter in a Newtonian sense (Kirby & Roberts, 1985) is the substance or material of a body, the subject matter typically assigned to exercise physiologists who detect the composition of different body tissues. A research focus on the body’s tissue—what the body is—alone, however, does not appear to correspond to the new materialist call for analyzing how bodies are produced in or produce their environments. Barad (2003) offered a conceptualization of matter beyond “an inherent fixed property of abstract independently existing objects of Newtonian physics” (p. 822) by defining matter as “*substance in its intra-active becoming—not a thing, but a doing, a congealing of agency. Matter is a stabilizing and destabilizing process of iterative intra-activity*” (p. 822, italics original). Phenomena, that for Barad, “replaced” the idea of studying “things” (like bodies), become to matter in this “ongoing intra-activity. That is, *matter refers to the materiality/materialization of phenomena*” (p. 822, italics original). This process of intra-activity then constitutes the performativity of the matter, the phenomena of both material and discursive. From Barad’s point of view, a new materialist is to study bodies in their performativity as material-discursive phenomena. While Barad’s thinking can direct us to account for the body as both material and social, the most interesting aspect of her argument is the idea of materialization:

imagining bodies beyond ‘things,’ beyond what they are to what they do.

To more fully account for the body’s doing, I believe, we need to analyze not only its matter but its movement in everyday settings. For this purpose, I employ further concepts from Newton’s vocabulary. First, the concept of mass: the quantity of matter. The body’s matter become mass when engaged with gravity. In other words, the body moves in response to gravity as it interacts with its environment in its everyday contexts. How matter operates as mass in gravitational force fields, is contingent on the muscles that move the bones in different planes, the type of muscle work required in each movement to react to gravity, as well as the main principles of inertia, speed, acceleration, force, work, or power. An analysis of this material process requires an enriched research vocabulary with a focus on what such concepts as inertia, speed, acceleration, force, work, and power can do for me as a social scientist of human movement. In other words, as social scientists we need to become familiar with natural science concepts to fully incorporate processes of materiality into our examinations of the moving body. At the same time, to extend the new materialist analysis beyond what the body is to account its doing, concepts pertaining to how body’s movement takes place in current conditions of the material world (e.g., gravity) are necessary analytical tools. The focus on the body in motion in its social world makes such an analysis possible without the onto-epistemo-methodology of (post-)positivist science.

In summary, I have argued for a materialist engagement with everyday movement practices that, in addition to drawing from theoretical discussions of the nature of science, incorporates concepts from other kinesiology sub-fields. I, thus, advocate that accounting for the material processes including different types of (human) bodies requires engagement with scientific concepts that highlight the nature and importance of movement. It is essential, however, to modify these concepts to embrace processes of materiality beyond what is possible for a positivist within a controlled laboratory setting. I advocate, thus, that studying the moving body allows a direct and constructive incorporation of natural science into sport sociological examinations of everyday materiality. To more fully engage with this materialization process—or in Barad’s (2003) terms, the intra-activity of the discursive and material—I now turn to social science to further locate the body in motion in its social world.

Towards Post-Humanism: New Theoretical Tools to Capture Materiality

The new materialists understand the material world as relations, constantly in flux, put in motion by both human and non-human actors who produce the social world of power relations (e.g., Coole & Frost, 2010; Fox & Alldred, 2016; van der Tuin & Dolphijn, 2012). To account how the material interacts with the social,³ they challenge the onto-epistemology of social science that, they argued, excludes material objects and their environments.

The turn to the material, according to its proponents, necessitates a rejection of what they mark, often interchangeably, as the cultural, linguistic, interpretive, or representational turn in the social sciences and humanities (e.g., Barad, 2003, 2007; Coole & Frost, 2010; Fox & Alldred, 2017; Seigworth & Gregg, 2010; St. Pierre, Jackson, & Mazzei, 2016). This turn denotes the rise of humanist (radical) (social) constructivism: the idea that we interpret culture, human behavior, the body, ideas, values, and organizations

as socially constructed. These social conditions become meaningful when they are represented through language. Based on this logic, beings—material things, bodies, and the world—exist anterior to their socially constructed representations that appear in a different context from the “real.” As a result, Barad (2003) summarized, “there are assumed to be two distinct and independent kinds of entities—representations and entities to be represented” (p. 804). According to Gilles Deleuze (1994), this distinction has created a dominant “image of thought” that has enabled the steady growth of the philosophical tree of representational logic: a type of thinking that, supported by a singular root, excludes multiplicity and diversity.

Many familiar social theories are now assigned to the camp of humanist, cultural representationalism. Phenomenology and Marxist derived critical theory, particularly, are criticized for relying on the social construction of (true) representations of (pre-reflective) reality transcendent to humans and their exaggerated faith of the power of language (e.g., Coole & Frost, 2010). The same image of thought has defined what Nick Fox and Pam Alldred (2017) characterized as the critical sociology of critical realism and Marxism that seeks to “‘explain’ the social in terms of ‘deep’ or underlying structures or mechanisms” (p. 16) sustaining such ideas as the structure/agency binary and reductionist materialism in sociological theorizing.

Foucauldian projects (e.g., Coole & Frost, 2010) are similarly critiqued for their reliance on discourses to represent reality when Foucault’s work is used, parallel to critical theory, to expose (embodied) identities as socially constructed agents within neo-liberal governance. This type of work locates itself opposite to Foucault’s often open challenge to “top-down” power operating through ideological domination and the agentic humanist self resisting its operation.

While the cultural/linguistic/representational turn has made positive gains, the new materialists observe that this approach tends to stay at the level of critique of the social and political conditions of the world. To move beyond critique to account for material processes more inclusively, however, requires new non-dualist ontology. Accordingly, the new materialists reject the distinctions between nature and culture, non-human and human, matter and mind, structure and agency, dominance and resistance, and micro and macro (structures) inherent in the cultural/linguistic/representational turn (e.g., Barad, 2003; Coole & Frost, 2010; Fox & Alldred, 2017; Iovino & Oppermann, 2013). As new materialism aims to move beyond a dualistic approach to discourse (social construction) and lived experience (agency) (e.g., Coole & Frost, 2010) in order to consider the production of the material world, the theoretical concepts representative of the cultural/linguistic/representational turn and its humanist (social) constructionist approaches are inadequate for thinking about matter, materiality, and the empirical world. I draw on Fox and Alldred’s (2017) new materialist sociology to give examples of some social science concepts employed to focus on the material and social production of power relations.

Fox and Alldred (2017) advocated that materialities—bodies, objects, organs, species—should be regarded as relational, “not as ontologically-prior essences” (p. 24) to detect what they do, associations they make, capacities that affect their relations, and the consequences that derive from these interactions. They use Deleuze and Guattari’s concept of affect to describe this relationality: a change of state “that might be physical, psychological, emotional or social” (p. 24). In these relations, human agency is not to be privileged because the affect of all types of entities is what is

at stake. Fox and Alldred (2017), thus, advocated new materialism with “flat ontology:” the rejection of any sense of social structures such as “patriarchy,” “neo-liberalism,” or “masculinity” as “explanations” of how societies and cultures work. This dismissal, they continued, has “profound implications for the concerns of social researchers (typically with human lives, experiences and identities), the kinds of data that are to be collected, and the sorts of research questions that should be posed” cutting “across one of sociology’s favourite dualisms: agency/structure” (p. 25). The different materialities gain “substance and shape” when arranged into assemblages that Fox and Alldred, following Deleuze and Guattari, observed developing “in unpredictable ways around actions and events” into a network of connections that is always in flux and continually reassembling (p. 17). Affects, thus, link “matter to other matter relationally, within *assemblages*” (p. 24) that then produce forces. The matter in these assemblages is affected and as a result, might acquire new capacities. Similarly, thoughts, memories, desires, and emotions have material effects and thus, material forces act locally within their assemblages. The focus on locality breaks “with top-down conceptions of power . . . as something outside or beyond the flow of affects in assemblages” (p. 27). When power is conceptualized as a “flow itself . . . Resistance to power, in the same way, is processual and transitory rather than something that stands outside of material affectivity” (p. 27).

In addition to Deleuze and Guattari, the new materialists draw from works by such well-established scholars as Bergson, Foucault, Latour, Merleau-Ponty, Nietzsche, Spinoza, even Darwin, and a number of feminist writers influenced by these male scholars. So what is new here? Some of the new materialists assert that, from a theoretical point of view, it is not necessarily a question of finding new theories, but rather, defining a “renewed materialism” in a contemporary context where “theorists are compelled to rediscover older materialist traditions while pushing them in novel, and sometimes experimental, directions or toward fresh applications” (Coole & Frost, 2010, p. 4). The important point, however, is to reach beyond the limitations of humanist social-constructionism to include the material into the social analysis of the world.

Despite the strong theoretical critique of humanist onto-epistemology of the world as structured based on hierarchical binary oppositions and top-down power relations, departing from social constructionism presents a serious challenge. Logically, revising the perspective of power from the humanist, historical materialist, top-down perspective (e.g., Fox & Alldred, 2017) should require also a revision of the grand humanist narratives of social justice, emancipation, empowerment, and resistance via strong critique of ideological construction of dominant and marginalized identities (e.g., MacLure, 2017). Related concepts, autonomy, freedom, and agency, provide further terms through which the humanist subjectivity and socially constructed identity have been understood. For example, Elizabeth Grosz (2012) explained: “the questions of freedom and autonomy are irremediably tied to the functioning and deprivatory power of the (oppressive or dominant) other—that is, the tradition of dialectical phenomenology that dates from Hegel, through Marxism” (p. 139). Many advocates of new materialism, however, prefer to leave these narratives in place arguing that material agency can be included in examinations assuming a society that is simultaneously socially constructed and materially real (Coole & Frost, 2010). For example, Coole and Frost (2010) advocated that critical materialists need to add an analysis of “the material, historical, and sociological structures” (p. 28) alongside “ethical concerns about subjectivity, normative concerns about social justice, cultural concerns about

postmodern diversity, and discursive concerns about the construction of gender or ethnicity” (p. 28). While Fox and Alldred (2017) clearly advocated new materialism with ‘flat ontology’ arguing that “there are no structures, no systems and no mechanisms at work in new materialist ontology” (p. 7), they assigned new materialist sociology to examine social inequality divided into lines of gender, sexuality, race, and class and the corresponding notion of resistant agency and subjectivity. In her call for new materialist analysis for sport and leisure, Simone Fullagar (2017) similarly noted that post-humanists critique the dualist ways “that privilege certain identities over others (e.g., whiteness of blackness; masculinity over femininity and culture over nature)” (p. 248), but asserted that “feminists working with post-humanism don’t necessarily want to abandon humanist ideals of social justice, empowerment and freedom” (pp. 249–250). So what is new here for sport sociologists who have already used several theoretical frameworks to examine the social construction of the physically active body as a possible resistant agent within social structures of inequality?

Numerous sport sociological examinations effectively demonstrate how dominant socio-political conditions solidify into recognizable dominant or marginalized identities expressed by the active body. This research highlights the contradictory manner in which sporting bodies align with dominant identities, but also opens up possibilities for resistance by the agentic self. Accordingly, many sport studies scholars have critiqued how gendered, transgendered, racialized, classed, nationalized, aged, able bodied, and/or sexualized sporting and exercising bodies reproduce or oppose social inequality through such theoretical lenses as critical disability theory, critical feminist theory, critical masculinity theory, intersectionality theory, or critical race theory. This work, by highlighting how power, ideology, language, and agency, are intertwined to produce relations of dominance, has provided pointed critiques of marginalization in sport. While not necessarily assuming the “flat ontology” or post-humanist epistemology of affect, it effectively detects the inequality divided into lines of gender, sexuality, race, or ability and the corresponding possibilities for empowerment through the agency of physically active bodies. At this juncture, it is difficult to understand what new materialism aims to add to the already existing work in sport sociology that has engaged with both *matter* and the ‘*matting*’ of sport from critical perspectives located within the cultural/linguistic/representational turn. A new materialist perspective—without challenging the humanist narratives of social justice through emancipation, empowerment, and individual agency—can add the material world to sport sociological analyses by accounting for the agency of material objects around us. This type of new materialist research might examine how material objects and conditions in different sport and physical activity environments impact how the humans construct their selves and their worlds. But does this work not continue to follow the familiar premise of humanist social constructionism instead of post-humanism? In attempt to answer this question I draw from Maggie MacLure (2017) who suspected that some new materialist work, indeed, does not significantly depart from the humanist social constructionism.

According to MacLure (2017), it is difficult to “think outside of the structures of Cartesian self, and the stories it tells itself about progress, reason and the advancement of knowledge” (p. 55). She, thus, cautioned against the powerful dangers of “not going far enough:” “intoxication” by improper appropriations of non-hierarchical representation and “flat” ontologies of difference only further protect the ‘old’ humanist research logic. For example, if we, indeed, are to consider a new materialist project on how

human bodies affect and are affected by their material environments in different assemblages, it is not sufficient to determine how an individual constructs a different self or identity (narrative) within, for example, different sporting or exercising locations. While a very valid undertaking, this type of inquiry remains locked within the parameters of humanist, interpretive logic: it relies on the ability of the human agentic self to interpret the social worlds of different types of physical activity environments that the researcher can locate within the social relations (of identity based inequality). If new materialists aim to account for the issues of power departing from the Marxist derived top-down, binary-based model of inequality, their inquiries need to account for multiple forms of forces that impact on the formation of assemblages and the affects within them. Inspired by the possibilities offered by new materialism to move beyond some of the limitations of social constructionist humanism, but puzzled by difficulty to actually transcending its familiar boundaries, I have experimented with a focus on socio-cultural analysis of the human body in motion.

In earlier works, I (Markula, 2011b, 2014) combined theoretical insights by Deleuze, Foucault, and/or Latour with biomechanical and anatomical analysis to practice Pilates differently in an exercise class setting. My aim was to transcend the neoliberal biopolitics that disciplines the moving body within governmental health control and/or the social construction of the body beautiful. Focusing on the force of the moving body, I used both natural and social science knowledge to redesign a different substance from health (illness prevention) or the appearance orientation for exercise practices. While not entirely successful, such experimentations offered an everyday empirical setting for investigating how new materialism might inform more ethical physical activity practices. More recently, I sought to further re-open the works by Merleau-Ponty, Latour, Foucault and Deleuze (Markula, forthcoming) to involve the body in motion. Recognizing that their works are grounded on fundamentally different assumptions concerning reality, knowledge, and the body, such a reading, I believe, locates the moving body closer to the interface of social/material than the examinations of the body socially constructed as oppressed or empowered. For example, all four scholars, like the new materialists, called for dismantling the previous divisions of natural science knowledge and social science knowledge. Merleau-Ponty advocated the necessity of integrating the physiological and psychological body through his concept of motility: through body’s movement a phenomenologist can reach to the pre-reflective knowledge unrestricted by the social, historical, and political issues clouding our access to “true” knowledge. When Merleau-Ponty sought for knowledge devoid of social construction, his vision necessarily excluded social and cultural context for meaning making. Latour went a step further to critique how both “science” (as a study of objects as “natural” reality) and social science (as a study of objects as representational ‘signs’) need to be revised for meaningful analyses of the moving body. He offered his Actor Network Theory (ANT) as an answer: both human and non-human actants actively create networks to operate in society and thus, both need to be included in an analysis if we are to understand the interactions in different cultural contexts. While many new materialists already employ Foucault’s and particularly, Deleuze’s concepts, I wanted to draw further attention to incorporate both material (visible) and “thought” (sayable) elements to understand the force of the moving body. In Foucault and Deleuze’s view, the visible and sayable assemble together into recognizable social and cultural units. Unlike Fox and Alldred (2016), I noted that the assembling is not arbitrary, but is influenced by a separate

“diagram of power.” Neither Foucault nor Deleuze saw the power operating as conflict between dominant and oppressed groups, but Deleuze, particularly, understood change, not as a result of confrontation, but as a result of “lines” (the lines of flight) continually escaping from an assemblage. Such lines then connect with other elements to serve as an impetus for new and different assemblage formations. Furthermore, Deleuze (Deleuze & Guattari, 1987) in his work with Guattari drew attention to the body’s force embedded in its abstract, machinic qualities of connectivity, energy, and momentum that need to be explored if we are to think differently about knowledge, power, and society. It was clear, however, that none of these scholars assigned the body as a surface of social construction, but called attention to the body’s force, often explicit in its movement. The works of Latour, Foucault, and Deleuze and Guattari, to my reading, reached beyond the humanist, social constructionist onto-epistemology by introducing alternative ways of considering both the material and the social embedded in the body’s movement. Foucault and Deleuze, particularly, located the moving bodies in networks of power operating in a different premise from agentic, autonomous individuals interacting in top-down relations of dominance and oppression in search for empowerment. As the moving body (what the body is doing) played a central role in Foucault’s and Deleuze’s thinking, sport sociologists wanting to follow the new materialist call to reach beyond the social constructionist, humanist framework can fruitfully engage with their work to examine the possibilities for multiple force relations by different physically active bodies.

In summary, I have advocated for a post-humanist re-reading of scholarly works that transcend socially constructed binaries by including the body in motion as vital matter for socio-cultural examinations of physical activity. A socio-cultural scholar of the moving body, thus, needs to be equipped with an understanding of both how the body moves, its speed, acceleration, and force, and how it becomes to mean. Adding to the existing works in sport sociology, I emphasize that more integrated social analyses with the natural science concepts of the moving body, its practices, experiences of movement and expressions, are needed for a more complete analysis of the force and politics of physical culture. This, I believe, necessitates using an onto-epistemology of social science that moves beyond the humanist narratives that prioritize social construction. I am not, by any means, the only one experimenting with new materialist approaches in the socio-cultural study of sport. While this type of inquiry is relatively absent in the current scholarship of physical culture, there are some recent calls to engage with the material turn in sport and physical cultural studies research (e.g., Fullagar, 2017; Larsson, 2014; Larsson & Quennerstedt, 2012; Thorpe, 2014) and some examples of empirical engagement with new materiality (e.g., Monforte, 2018; Andrews, Thorpe, & Newman, forthcoming). While their interpretations of new materialism differ, these researchers offer openings to others interested in this type of approach to physically active body.

Thus far, new materialism has evolved, largely, at the theoretical level through challenges to the onto-epistemologies of both positivist science and humanist social science. However, if we are to engage with the material world of the every day life, new materialism is also an empirical quest for sport sociologists: How do we actually collect data and represent material processes, socio-political-economic aspects, and the effects of power through post-humanist frameworks? The third theme, post-qualitative inquiry, addresses some of the methodological discussion emerging from the new materialist turn.

Post-Qualitative Inquiry and Performative Representation

The material turn’s challenge to previous humanist onto-epistemologies has led to a need to “new empiricism:” new ways of collecting and analyzing (qualitative) data that accounts for the material as well the social world (e.g., St. Pierre, 2016; St. Pierre, Jackson, & Mazzei, 2016). This methodological position also aligns with the new materialist challenge to the linguistic turn: the dominant understanding that language necessarily represents the world. From the new materialist perspective, humanist qualitative research in which data collection, analysis, and representation rely heavily on language, needs to be reequipped with different tools.

While many new materialists engage in conceptual readings (e.g., Coole & Frost, 2010), some discuss how qualitative methods can correspond with the theoretical advances to transcend the humanist ways of gathering research data. For example, Fox and Alldred (2017) suggested “re-engineering” methodology for the purposes of new materialism.⁴ Materialist sociology, they defined, should be projected as a “research assemblage” in which the research design, methods, and analysis consider the material and the cultural to “identify specifications and generalizations, aggregating and singular flows within assemblages” (p. 171). This shifts the analysis away from individual bodies, subjects, experiences, and sensations to connections between different elements within an assemblage. In Fox and Alldred’s vision, the actual methods or the “empirical data sources” are the familiar qualitative methods—ethnography, interviews, document analysis, photographs—but these eclectic sources should enable “close reading of data sources to identify possible relations (which may be human, nonhuman or abstract) within assemblages, and how these affect or are affected by each other” (p. 172). In addition, “[r]eading across and between field data progressively builds understanding of the assemblage” that “enables a micropolitical reading of data, to understand what bodies and things in assemblages can do, and what limits and opportunities for action are available within an event” (p. 172).

As a rare empirical example from physical activity research, Javier Monforte (2018), following Fox and Alldred (2017), concluded that new materialism enabled him to approach his data conceptually that differed from his previously interpretive, narrative analysis study. Monforte re-read the narratives and the photographic data he had collected on rehabilitation process of Patrick, a spinal cord injured man. Instead of focusing on the human experience and “the semiotic dimension” of Patrick’s exercise experiences, Monforte included the material environment of the human and non-human interactions in Patrick’s storied process of disability. Such a new materialist reading, he concluded, fosters “social and natural interactions that enhance environmental (and in the process, human) potentiality” (p. 287).

Fox and Alldred (2017) and Monforte’s (2018) calls for different ontology for qualitative, new materialist research resulted in a different ways of conceptualizing data collected through the familiar set of qualitative methods. Elizabeth St. Pierre (e.g., 2013, 2015, 2016, 2017) suggested a more radical move towards post-qualitative, new materialist methodology. According to her, the current method driven qualitative research has not been able to “refuse positivist [sic] and phenomenological assumptions about the nature of lived experience and the world,” or give up “representational and binary logics” to “see language, the human, and the material” as non-separate entities (Lather & St. Pierre, 2013, p. 630). These ills are not remedied, she continued, by “confused

projects” (St. Pierre, 2015) that infuse, for example, a few Deleuzian or Foucauldian concepts within a conventional humanist qualitative methodology. “[M]ethod,” she suggested, “as we think of in the methodological individualism of conventional humanist qualitative methodology with its methods of data collection and methods of data analysis, *cannot be thought or done in new empirical inquiry*” (St. Pierre, 2015, p. 79, italics original). How to practice non-representational research, where “language is not . . . removed from and representing first-order materiality” (St. Pierre, 2013, p. 650)? St. Pierre’s (2017) solution is a more careful, time-consuming, and challenging task to engage with theory. She now imagines working with students who are ‘methodology free.’ Having refused qualitative methodology they now explore the onto-epistemology of such scholars as Derrida, Deleuze, or Foucault to begin their conceptual practice projects with theory.

Sounds enticing: No more justifying the sample, choice of a specific method (e.g., text analysis, interviews, or ethnography), or an analysis technique. Now we read to use concepts. While I endorse, with St. Pierre, the importance of learning onto-epistemologies through theoretical reading, I also find dissertation work that introduces a multitude of theorists without a clear methodology for its empirical material confused. Pure theoretical reading does not guarantee a deep knowledge of how different ontological and epistemological groundings shape the research practice. When the power of theory is left unproblematized, I find, we are in danger of returning to rationalism, positivism’s counterpart in foundationalism (e.g., Phillips & Burbules, 2000). As noted earlier, foundationalism refers to the idea that true ‘knowledge’ is securely established on one clearly definable foundation (e.g., positivism’s foundation in human ‘experience’). Rationalism’s foundation is the use rational faculties because sensory experiences (as advocated by positivism) can be mistaken or illusory. According to rationalists, thoughts that cannot be doubted should be accepted as true (e.g., Phillips & Burbules, 2000). As such, rationalism established the root of the tree of the image of thought, as Deleuze (Deleuze & Guattari, 1987) described it.

Instead of eliminating empirical material—after all, new materialists are interested in observing, recording, and analyzing human and non-human interactions in everyday life—from post-humanist inquiry, I suggest that we continue to shape our methodologies based on our onto-epistemological assumptions. For example, humanist inquiry still necessitates a formalized, qualitative methodology that is compatible with its onto-epistemology. Unlike Fox and Alldred (2017), I do not find myself quite satisfied with the familiar methods of data collection only to conceptualize analysis techniques differently. Instead of neo-rationalism or revised conceptual analysis, could we not imagine new ways of collecting empirical material from the world through post-qualitative inquiry? We cannot, after all, include the full force of the moving body in our research through interviews or perhaps any purely language driven research technique. What instead, then? This is the task for us, as the researchers of the body in motion, to imagine and to experiment. This is an exciting opportunity that we, as socio-cultural scholars specializing in physical activity, are more qualified to undertake than other social science or humanities new materialist scholars.

If we are, as I presume, to still continue to research the processes of materiality, we must communicate our findings in one way or another. What role does language and writing play in this endeavor if we are to move beyond the representationalism of the humanist, cultural, linguistic turn as advocated by new materialists (e.g., Barad, 2003; Fox & Alldred, 2017; MacLure, 2017)?

We have struggled with the role of writing in qualitative research for some time now. Already in the 1980s, the interpretive turn challenged us to consider the unacknowledged authoritarian role of the researcher’s voice in the process of interpreting research results. In my own studies in interpretive and symbolic anthropology at the time, we assigned research writing as necessarily representing partial truths created in dialogue between the participants (e.g., Clifford, 1988; Clifford & Marcus, 1986).

In his work, Norman Denzin (e.g., Denzin & Lincoln, 2005) demonstrated that interpretive qualitative research faced a further dual crisis of representation and legitimation in late 1980s spreading to 1990s. This led to the so called “narrative turn” (e.g., Bochner, 2001; Denzin & Lincoln, 2005): the need to acknowledge the act of interpreting research findings as a deeply subjective process and the following concern of research writing as more than a transparent act of completing a research process. While the term narrative has since taken multiple meanings, at this point, it meant acknowledgment that all research tells stories about people’s experiences that should be represented in an engaging and evocative manner to reduce the separation between the researchers and their participants. The narrative turn has since produced specific methodologies (narrative inquiry, narrative analysis), but also legitimized using more conventional research methods (e.g., interviews) to employ so called alternative ways of research representation that moved away from the usual “realist” research writing to more storied approaches (e.g., fiction and poetry). The narrative turn has provided a space, particularly, for what Anthony Papathomas (2016) identified as humanist, interpretivist narrative inquiry in sport sociology. He placed this narrative tradition directly against positivism: The narrative turn, he proposed, clashes “with those of the positivist paradigm of the natural sciences which is underpinned by ontological realism and the belief that, with sound methods, we can accurately and unbiasedly discover an objective reality” (p. 37). In addition, the narrative turn has further legitimized the use of qualitative methods to examine sporting experiences in opposition to what was critiqued as the overt discursivity of critical, cultural studies inspired research.

Narrativity, thus, strongly privileges writing as a way of authentically representing physical activity experiences. To imagine all lives as stories, however, assumes that language is the best way to share and interpret experiences, values, and points of views. Furthermore, the author’s role has increased, not reduced, as originally intended by the proponents of interpretive anthropology. For example, writing, even if it uses a storied approach, still often foregrounds the author’s voice. In this sense, the narrative genres, while departing from realist research writing, do not necessarily move beyond representationalism as intended by new materialist and post-humanist writers. According to MacLure (2017), these genres continue to be embedded in the humanist notion of interpretation that leaves “the authorial self intact” (p. 53). She further observed that many of these types of writing experiments “failed . . . to effect any change in the relations of power and authority that compose and are reflected in research texts . . . At best (or worst) they ended up reinforcing the identity of the postmodern author as jester or melancholic guide to the groundless abyss beneath language and discourse” (pp. 53–54). How, then, do we move beyond representation as advocated by the new materialist, post-humanist scholars?

It is not possible, or even desirable, to exclude language and writing from our research processes. Language remains a part of

human existence—in fact, most new materialists express themselves through writing when communicating their largely theoretical treatises. However, we could, as the researchers of the body in motion, experiment with infusing more movement, and not only in an abstract sense, into some of our writing. Again, as interventions that include bodies in motion are unique to us, why not employ their force more visibly in our research presentations? With my graduate students at the University of Alberta, for example, we have experimented using movement as a representational tool equal to language in performance ethnography work.

In a recent class project with my two dance graduate students, Mariel Day and Janita Frantsi, we co-created a course ('The Dancing Body in Motion') that was admittedly driven by my (new) materialist, post-humanist agenda despite them not necessarily being quite familiar with such scholarly terms at the time. The course was divided into three main parts: movement analysis that used anatomical and biomechanical concepts to examine functional dance technique; a theoretical section that drew from humanist theories; and a performative section that combined new materialist "principles" with movement practice. Instead of the usual assignment of a written paper, the course was to culminate in performance ethnography to draw together the three aspects of the course. Mariel and Janita, at the time, had no previous experience of performance ethnography.

We began creating their performance ethnographies collectively: they were each to take three memorable personal experiences that they had recorded in their learning diaries during the course and a theoretical concept from the lectures. I chimed in through my own experiences of constructing performance ethnography.⁵ They then were to experiment with what it meant to move inspired by their personal experiences. From the initial movement experimentation, they built in more theoretical texts chosen to support the original (or discarded) theoretical concept; further references to their struggles with functional dance technique; and more movement themes. These resulted in each of them creating a 12-minute performance that was presented in the public "showing" at the Faculty and later in the Faculty graduate student conference, ReCon. These performances were well received by a multi-disciplinary audience that gained an appreciation for scholarly work done from the socio-cultural perspective to physical activity. Such a multidisciplinary way of research representation, thus, can serve as one way to bring together the warring tribes (Ingham, 1997) in multidisciplinary kinesiology departments and faculties. This experimentation can be more time consuming because of the added aspect of movement work (creation and rehearsing) than (realist) written research representation, but it is worth while, at least occasionally, to encourage students and researchers alike to move beyond words. My students are trained dancers and thus, movement performance for them is not a daunting prospect. It is clear that performing requires additional training even if the movement vocabulary does not draw from dance. In addition, performance ethnography does not align equally well with the requirement for increased research outputs in the corporate, neo-liberal academy dominated by annual evaluations of efficiency metrics such as numbers of publications, grant figures, and multi-authored projects (e.g., Denzin & Giardina, 2017; Giardina, 2017) than, for example, writing projects. As such, however, experimentation with research representation that canvases the analyses of the moving body as both material and social can activate social change by challenging the boundaries of neo-liberal knowledge production.

Conclusion

Drawing from some new materialist themes, I have advocated a deeper engagement with the body in motion as it has the potential to include both the material and social worlds in the socio-cultural analysis of physical activity. An emphasis on the moving body can facilitate a use of concepts from the natural sciences without their foundationalist research assumptions of directly measurable observations in controlled laboratory settings as the guarantee of their "truth." The new materialist focus on what the body does in its everyday settings, however, requires an ability to apply, for example, such movement concepts as gravity, speed, acceleration, force, work, or power to one's investigation. This means an informed (re) connection with the knowledge base from such kinesiology sub-disciplines as biomechanics or exercise physiology.

If the body in motion can connect our research endeavors with the material world, locating it further within the social world requires post-humanist theoretical approaches. According to new materialists, these need to overcome the limitations of the socially constructed binaries of the cultural/linguistic/representational turn. Although the theoretical arguments against humanist approaches to studying the social world might be convincing, transgressing such limitations in research practice, however, can be difficult. Several new materialists, for example, argue for increased attention to the material environment of social action, but still desire to locate the action within the parameters of such humanist narratives as emancipation, social justice, and empowerment. I have argued that a new materialist re-reading of the moving body can provide further avenues for transcending the limitations of humanism through theoretical frameworks inclusive of multiple motions in diverse directions.

Finally, while some new materialists urge for different conceptualization of the qualitative research process and analysis, others call for abandoning humanist qualitative methods as inadequate when reaching beyond the representational logic that privileges language. The new materialist researchers of the moving body, I contend, still prefer to engage with the everyday social and material environments and thus, need some ways of collecting empirical material. I have advocated, nevertheless, for inclusion of movement material that requires new methods to be "captured" for a social/material analysis and creative representational techniques to reach beyond a humanist qualitative research process.

To account for bodies in motion, it is important to clarify the onto-epistemo-methodological assumptions guiding the research process. During this journey, one might discover, after all, a preference for studying bodies as social constructions and continue to find much to critique in the ways that individuals and experiences are interpreted and represented. Not everyone needs to embrace the new materialists, post-humanist thought if we are to support a scholarly field that embraces multiplicity. It is worse to jump on the bandwagon of the post-humanist, post-qualitative, new materialism but remain ignorant of what it actually means to abandon the familiar humanist social constructionism.

Nevertheless, I believe that socio-cultural scholars of physical activity are excellently placed to investigate bodies in motion by adopting an interdisciplinary approach integrating natural science concepts and social theory. Consequently, we hold an advantageous position to find methodologies for appreciating the force of the moving body. We also are well equipped to add to the power of language by including other ways of representing our work. As the scholars of the body in motion, we should actively employ our unique ability to activate the moving body as a machinic

assemblage of metabolism and mechanics, motion and meaning, force and politics to affect social change in the time of neoliberality.

Notes

1. Sport sociology offers, by no means, a unified scholarly approach to the socio-cultural study of physical activity. Recently, for example, an emerging “intellectual project” (Silk, Andrews, & Thorpe, 2017, p. 1) termed physical cultural studies (PCS) has aimed to merge “expressions of active embodiment” (p. 1) beyond sport through a socio-cultural analysis. Drawing from previous calls to engage, more broadly, with physical culture (e.g., Hargreaves & Vertinsky, 2007; Ingham, 1997; Pronger, 1998), PCS has induced a stimulating debate regarding a need and direction for a “project” distinct from sport sociology (e.g., Adams et al., 2016; Atkinson, 2011; Giardina & Newman, 2011a, 2011b; Pavlidis & Olive, 2014; Silk & Andrews, 2011; Thorpe, 2011; Vertinsky, 2015). In their recent “definitional effort,” Michael Silk, David Andrews, and Holly Thorpe (2017) explained that PCS evolved against the “bioscientization” of kinesiology/sport studies as well as the narrow disciplinary space of sport sociology. While indebted to Ingham (1997) in several ways (see Giardina & Newman, 2011a, 2011b), unlike his vision of physical culture as a collaboration between sport scientists and social scientists of sport in kinesiology types of departments, the proponents of PCS advance connections to social scientists from other disciplinary backgrounds (e.g., Giardina & Newman, 2011a; Silk, Andrews, & Thorpe, 2017). For example, Silk, Andrews, and Thorpe (2017) estimated that only a small minority of “PCS exponents are located within kinesiology/sport departments” (p. 3). Similarly, Michael Giardina and Joshua Newman (2011a, 2011b) imagined PCS as a meeting for ‘body work scholars’ from various social science and humanities disciplines. There are also scholars within sport sociology who question the need for a new “moniker” within a field that, among other scholarly orientations, already embraces the type of cultural studies research now advanced by PCS (Adams et al., 2016). To account for the diversity across the field, I refer to sport sociology in this article.

2. I draw from Norman Denzin and Michael Giardina’s (2015, 2017) critiques of the neoliberal academia. They discussed how neoliberal fundamentalism—“a belief that all social and economic problems can always be solved through a free market economy” (Denzin & Giardina, 2015, p. 12)—has resulted in restructuring the role of the university based on commodification and commercialization in the North America. Following this agenda, research mandates are also assigned based on “the commodification of knowledge and the marketization of science” (Denzin & Giardina, 2017, p. 3). In this context, “positivist rationality” is privileged to maximize the “instrumentalized pursuit of external grant dollars and other forms of capital accumulation” (Denzin & Giardina, 2015, p. 15) and academic performance is increasingly policed by external forces (e.g., performance ‘metrics’ that concretely document each scholar’s outputs) that determine “correct” research productivity.

3. Echoing some of the new materialist premise, PCS scholars attempt to examine how the active body operates within the social world of power structures. For example, Silk, Andrews, and Thorpe (2017) assigned PCS “to explicate how active bodies become organized, disciplined, represented, embodied, and expressed in mobilizing (or corroborating), or at times immobilizing (or resisting), the conjunctural inflections and operations of power within a society” (p. 5). While PCS is not a unified scholarly project (e.g., see Giardina & Newman, 2011a, 2011b), it generally embraces critical, qualitative, transdisciplinary scholarship to theoretically and empirically identify, interpret, and intervene into ways physical culture is “linked to broader social economic, political, and technological contexts” (Silk, Andrews, & Thorpe, 2017, p. 5). In so doing, it has broadened

the remit of sport sociology to include a variety of physical activity modalities such as dance, exercise, fitness, recreation, leisure, wellness, and health-related movement practices. However, while delineating the practices and experiences of active bodies, PCS project does not directly align itself with the new materialist challenge to humanist social constructionism. Many works within the umbrella of PCS, as well as cultural studies of sport sociology, nevertheless, intersect within new materialism in terms of their interest in the micro-level experiences of active bodies in the social world of power relations.

4. Qualitative research is common, if not the dominant, methodological approach within sport sociology today. A number of texts dedicated to qualitative methods in sport and exercise (e.g., Gratton & Jones, 2004; Markula & Silk, 2011; Smith & Sparkes, 2016; Sparkes & Smith, 2014; Young & Atkinson, 2012) further illustrate the position of qualitative inquiry within the socio-cultural analysis of physical activity. While qualitative researchers in sport sociology, as well as physical cultural studies, assume multiple ontological and theoretical perspectives, calls for “re-engineering” any possible humanist premise of qualitative methods are rare. For example, Silk, Andrews, Thorpe (2017) asserted that “PCS’s value-laden approach to qualitative inquiry is rooted in an humanist intellectualism—a pathway paved by many who have put their heads above the parapet in a variety of disciplines—motivated by the identification and elimination of disparities and inequalities, the struggle for social justice, and the realization of universal human rights” (p. 7). In the introduction to their handbook of qualitative methods (that also has a strong emphasis on sport and exercise psychology), Brett Smith and Andrew Sparkes (2016) acknowledged that “qualitative research is a movable and constantly expanding scholarly community of practice and intellectual engagement,” but continued that “many qualitative researchers subscribe to a form of interpretivism” that differs from positivism and post-positivism (p. 2). They further argued that such paradigms informing qualitative research as critical theory, constructionism, and participatory approaches are now collectively identified as “interpretive paradigms” (p. 3). While Silk, Andrews, and Thorpe, as well as Smith and Sparkes, located their qualitative approaches within humanism or interpretivism, Pirkko Markula and Michael Silk (2011) organized their qualitative methods book based on a wider selection of paradigms by including postmodernism and poststructuralism as non-humanist approaches to qualitative methods. Their selection of methods, however, parallels the other qualitative texts in sport sociology. Despite their slightly different approaches to qualitative methodologies, qualitative methods books in sport sociology/physical cultural studies typically introduce a familiar range of methods: different forms of ethnography (visual, autoethnography), interviews, and media analysis (old and new media) with such additions as narrative analysis, mixed methods, case studies, or participatory action research. Giardina (2017) observed that qualitative research courses, subsequently, are oriented generally around what he characterized as a “toolbox” or “bookshelf” approach. In these courses, students quite rightly learn about interviews, focus groups, case study, ethnography, participant observation, mixed methods research and visual methods; if they are lucky they might also learn how to conduct narrative analysis, phenomenological studies, critical discourse analysis and use digital methods. If they are very lucky, there might also be some discussion of paradigms (positivism, constructivism etc.) (Giardina, 2017, p. 262). Such “methodolatry” or “method-driven” approach to qualitative research, according to Giardina, is problematic, because it reduces “the conduct of inquiry solely to the technical execution of a particular method” (p. 262). Drawing heavily on St. Pierre’s work, Giardina, consequently, challenged socio-cultural researchers of sport and exercise to go beyond method to engage “with the philosophy of inquiry and the philosophy of science” (p. 264) to address “why we largely *haven’t* addressed such questions in the field and to seek out those new questions still left to address” (p. 264,

italics original). He, thus, advocated “a turn towards thinking of ourselves as *philosophers of inquiry*” (p. 265, italics original). While such a call often characterizes “poststructural, postmodern, posthuman, and new materialist approaches” (p. 265), these, Giardina continued, do not necessarily broaden the boundaries of methodolatry. What is more important, rather, is to confront the onto-epistemology of any paradigmatic approach to qualitative inquiry. While Giardina’s call for “(post?)qualitative inquiry,” at this point, does not include examples of new materialist research, specifically, in sport sociology, it aligns with my argument for designing qualitative research projects following the specific parameters of their paradigmatic approaches.

5. My own performance ethnography (e.g., Markula, 2011a) as well as my students’ work draws from the movement vocabulary of contemporary dance. There are other research genres such as arts based research and research creation that also immerse artistic representations with research. In my work, however, I draw on Denzin’s (2003) characterization of performance ethnography as socio-political act of intervention, a form of criticism that uses aesthetics to locate bodies, individuals, and/or events within the intersections of institutional, cultural politics, and embodied experiences. It is way of “bringing culture and individual into play” (p. 9). While Denzin found performance embedded mainly in language and emphasized critical Marxist participatory action theories as its foundation, I have included movement to focus more on the body’s doing, its force, informed by a poststructuralist, Deleuzian reading.

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