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What is Kinesiology? Historical and Philosophical Insights

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Twenty years ago Karl Newell suggested in Quest *that the proper name for the field was "kinesiology" and that its proper subject was "physical activity." Yet, despite his success, for many the purpose of the field remains enigmatic. This has led to a lack of clarity in programs, as well as tensions between scientists and humanists in the field. This tension was conveniently summarized by C. P. Snow's famous "two cultures" thesis. Dissonance within the field is born of faulty and unexamined philosophic commitments. This article reviews the historical and contemporary state of kinesiology in an attempt to introduce readers to two of these unexamined philosophic commitments. The first misunderstanding is metaphysical and regards the questions, "What is the nature of* kinesis*?" The second misunderstanding is epistemological and regards the question, "What counts as knowledge?" Answers to both questions—sometimes implicit, sometimes explicit—have had a great impact on the field. This history deserves further attention.*

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> *"However, not everything that can be counted counts, and not everything that counts can be counted"* (Cameron, 1963, p. 13).

The "name wars" are over. Although skirmishes still appear from time to time, although pockets of resistance can still be found, it is safe to say that there is a consistent and apparently irreversible trend in our discipline towards the name "kinesiology." The truth of this claim can be seen in, for example, Thomas and Reeve's (2006) study of doctoral programs. Of the top 20 programs in their ranking 14 had "kinesiology" as their name. Additional evidence can be found in the recent founding of the American Kinesiology Association (AKA). The AKA's stated intent is to be a "strong national organization," whose purpose "is to promote and enhance kinesiology as a unified field of study" (2008). Clearly the trend in our discipline is towards the name kinesiology.

My point however is neither to establish nor defend this trend. Instead, I intend to examine the historical and philosophical *meaning* of this shift in nomenclature in hopes of clearing a path forward for the discipline of kinesiology. It has been 20 years since Karl Newell's *Quest* articles helped set the present foundations of our discipline by successfully arguing for kinesiology as the name of our field and physical activity as our subject. Yet, in many ways, despite our continued coalescence under one nomenclature, our self-understanding is as contentious and fractured as ever. Even with this dissention, a review

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of the historical data shows that a vision of kinesiology that embraces a holistic and cross-disciplinary understanding is possible. The oft dominant materialistic understanding of the field of kinesiology is a choice, it is neither theoretically nor practically inevitable.

Prologue

Before beginning this historical review it must first be briefly explained how both ancient (Aristotle) and modern (Polanyi) influences led me to investigate the historical and philosophical foundations of kinesiology. During the course of my academic career suspicions regarding the value of the conventional and dominant descriptions of kinesiology have been deepened on two philosophic fronts. The first front was metaphysical. I was struck while studying Aristotle's definition of motion in the *Physics* (1995), how a geometric and spatial understanding of "motion" was taken for granted in current definitions of kinesiology and how different this conception was from Aristotle's own understanding. Aristotle saw *kinesis* as a matter of being, that is, as an ontological rather than merely geometrical reality. *Kinesis* was central to human identity and to the nature of the cosmos as a whole. To be a human being—for example—is to be more than a lump of chemicals, or a few pounds of flesh. Rather, a human being is an organic whole that maintains its existence through engaging the processes (the motions) of life appropriate to its nature. Therefore, *kinesis*, involved more than merely change of place, and in the case of animals, could not be understood apart from choice and perception. In short, motion was more than a material reality.[1]

After studying Aristotle, I began to wonder whether the definition of *kinesis*—from which we derive the word kinesiology—had simply been taken for granted in the field. The conventional understanding of *kinesis* in kinesiology is usually a materialistic one. Motion is described in strictly mechanistic terms. According to this definition, motion is phenomenal. It is the dislocation of mass in space. It is the result and domain of objects rather than subjects. Motion is a necessary outcome of universal and impersonal laws, to which human beings can be reduced. It is in such soil that a commitment to scientific materialism grows in kinesiology. Scientific materialists argue that since reality consists of only atoms and void, the investigative methods of the physical sciences are the only source of human knowledge. If motion is merely a function of atoms, then it follows that all forms of knowledge in kinesiology can be reduced to their underlying physical causes. This idea, that science is a self-sufficient and all-encompassing guide to the nature of reality, is also sometimes described as scientism.

It is true of course that not all scientists or scientific methodologies embrace the doctrine of scientism. Dynamical systems theory (Kelso and Engstrom, 2006) or chaos theory as well as quantum mechanics, have—some argue—challenged hard mechanistic models.[2] Yet despite the openness of some scientists to a reality beyond matter, materialistic commitments are still common both within kinesiology as well as the larger scientific community. In fact, materialism is arguably the dominant (if largely unspoken) philosophy in the field. As a result quantification is too often championed to the detriment of other types of knowledge and richer understandings of motion. That being said, if scientific work based on models such as dynamical systems theory or quantum mechanics actually makes challenging the presuppositions of scientific materialism easier, so much the better. Some scientists are even aware of and even open to Aristotelian ideas.

> Organisms by contrast [to atoms, molecules, and crystals] are anything but static structures. The ancients used to compare living beings to flames because they thought of both as forms through which matter streams. It is quite unlikely

> that we shall ever be able to determine by measurements which particular atoms belong to a living being and which do not. The questions must therefore be put as follows: Can quantum mechanics explain nature's tendency to form structures through which matter with fixed chemical properties can stream for a limited time? (Heisenberg, 1971, p. 110)

Clearly, scientific research does not require that practitioners dogmatically embrace a materialistic philosophy. Yet materialistic commitments are nonetheless widespread among scientists. Acclaimed physicist Richard Feynman provides one powerful example of materialistic thinking. Many other mainstream scientists such as Carl Sagan, Stephen Jay Gould, Richard Dawkins, Francis Crick, and E. O. Wilson, could be quoted as well (Wallace, 2007). Feynman (1991) asserts that:

> Everything is made of atoms. That is the key hypothesis. The most important hypothesis in all of biology, for example, is that everything animals do, atoms do. *In other words, there is nothing that living things do that cannot be understood from the point of view that they are made of atoms acting according to the laws of physics* (p. 17).[3]

Similar attitudes are not unknown in the world of contemporary kinesiology. The recent article "Motor Control: The Heart of Kinesiology" by Mark Latash (2008), a leading kinesiologist in the area of motor control, makes this abundantly clear. Latash opines that, "The main challenge of motor control (and kinesiology in general) seems to be turning it into an exact science, just like physics" (p. 27). Latash believes that motor control is the heart of the field because "it combines approaches across most (if not all) of the more-traditional components of kinesiology" (p. 23).What are these more traditional components of kinesiology? According to Latash they are "anatomy, muscle physiology, and physics," as well as "neurophysiology, psychology, and mathematics" (p. 21). The humanities are nowhere to be found in his program. The implication of this omission is clear. Only scientific knowledge is real knowledge.

As the preceding sentence demonstrates, these metaphysical concerns bleed right into the second front of philosophical investigation; epistemology. If doubts can be raised regarding the scientific materialist's belief that atoms and void comprised all of reality, then doubts can also be raised regarding the claim that science is the only source of knowledge. But what then constitutes knowledge?

Scientist and philosopher Michael Polanyi offered an answer. His theory, known as "tacit knowledge" focused on examining the process by which knowledge is acquired. In particular, Polanyi was worried about modern conceptions of objectivity. He believed that a materialistic understanding of objectivity—despite the important discoveries and real progress science itself has allowed—was "strictly speaking nonsensical" (1969, p. 41). The strident scientism resulting from these types of scientific successes was mistaken. A scientized conception of objectivity quarantined non-empirical knowledge by labeling its claims as untrustworthy or worse yet wholly illusory.

On the materialistic view, any allegiance to the reality of consciousness, values, and tradition get in the way of real knowledge because they cloud analysis, and are incapable of being "objectively" measured. Polanyi offered a powerful anecdote regarding the prevalence of this view. "When I urged a meeting of the American Association of the

Advancement of Science . . . to recognize the absurdity of regarding human beings as insentient automata, the distinguished neurologist R. W. Gerard answered me passionately; 'One thing we know, ideas don't move muscles'." (1969, p. 46).

But ideas do move muscles. A commitment to the reality of intangibles does not impede progress. As Polanyi pointed out, "no human mind can function without accepting authority, custom and tradition: it must rely on them for the mere use of language" (1969, p. 41). Without intangibles no knowledge of any kind is possible. Clearly Polanyi not only wanted to make room for intangibles, he also felt that one cannot help but *rely on them*, even in scientific inquiry.

The upshot of all this is the following: kinesiologists' fundamental commitments regarding motion, whether metaphysical or epistemological, have remained largely unexamined. Though kinesiologists do not need to apologize for their commitments (materialistic or otherwise) they do need to admit that they are in fact *commitments*. These commitments—often unexamined—have shaped our understanding not only of the field today but of its history as well. That is, the philosophic commitments within the field, themselves *have a history*. They are not mere brute facts, but are rooted in inheritance. These commitments and the history out of which they grew, in turn, shape how the history of kinesiology is understood. If this is true, then kinesiologists must directly engage this historical arc to properly comprehend and evaluate the field.

Finally, philosophic commitments and assumptions in kinesiology often fall along subdisciplinary lines, ultimately pitting the sciences against the humanities. This academic phenomenon, classically described by C. P. Snow in 1959 as the "two cultures," is a great threat to the discipline. These divisions within kinesiology can create an environment of isolation, misunderstanding, and mutual suspicion between scientists and humanists. It may even facilitate the disintegration of departments within the field.

Several contemporary examples of programs being put on the chopping block or outright cut make the dangers created by these fractures within kinesiology tangible. For example, the University of Iowa is considering eliminating graduate programs in Integrative Physiology, Health and Sports Studies, and Exercise Science (June, 2010). It is hard to argue that the defense of these programs—currently in separate departments—would not be strengthened by being under the common umbrella of kinesiology.

The recent elimination of the Physical Education Teacher Education (PETE) program at Florida State University provides an additional warning. At Florida State the splintering of kinesiology had been long established, leading *Kinesiology Today* author Shirl Hoffman (2009) to question whether this fracturing was itself part to blame.

> Whether or not the dispersal of the original department into smaller units [begun in 1989] made the PETE program ripe for picking can't be said with any certainty. However, at a time when colleges and universities are forced to look for increased efficiencies, programs that have been splintered off from a multispecialist kinesiology department may find themselves struggling for solid footing (p. 2).

The threat "two cultures" poses to kinesiology is a real and present danger. Polanyi argued that it was the epistemological dichotomization of the tangible and intangible, as well as the objective and the subjective that had set the stage for the "two cultures." Different conceptions of knowledge had led to different conceptions of the Academy, and all too often, antagonistic relationships between researchers in different fields. Yet although the debate is often characterized as "scientists vs. humanists," the debate itself rests squarely

upon a *philosophic* question, "what counts as knowledge?" Once this point is understood, it becomes clear that *no inherent reason* exists for antipathy between scientists and humanists. Differing methodologies and differing research questions do not necessitate differing epistemologies. The scientific method does not require a philosophical commitment to materialism; just as the philosophic method does not require a commitment to humanism.

Consider for instance the following quote from the introduction of Werner Heisenberg's book *Physics and Beyond* (1971).

> Science is made by men, a self-evident fact that is too often forgotten. If it is recalled here, it is in the hope of reducing the gap between the two cultures, between art and science. . . . Human, philosophical or political problems will crop up time and again, and the author hopes to show that science is quite inseparable from these more general questions (p. xvii).

The "two cultures" are then, in the end, two schools of *philosophic thought* not necessarily aligned with different disciplines. The solution to reconciling the two cultures is not a matter of changing "occupation type" but rather one of either altering one's commitments or at least broadening one's outlook through philosophic and historical engagement. Such philosophic engagement demonstrates that more than one understanding of field is rational (even if only one is ultimately right), while historical engagement demonstrates that one's commitment's are not merely one's own but part of a larger story.

It is vital then to investigate the history of these ideas in light of the recognition that particular metaphysical and epistemic commitments make up the foundation of kinesiology. Aristotle and Polanyi both provide essential tools for examining these dilemmas. Aristotle's understanding of *kinesis,* as well as Polanyi's epistemology shed vitally needed light on the path towards a vibrant and reconciled field. Yet even if one ultimately rejects both thinkers, it should be clear that "two cultures" in kinesiology are not inevitable. Although Snow may have gone too far in reifying the two cultures, his fundamental propositions are alive and well in departments of kinesiology. All too often there is an atmosphere of mistrust and misunderstanding among scientists and humanists in the field (Hughson & Tapsel, 2006; Booth, 1997). Furthermore this mistrust and misunderstanding, in concert with a ubiquitous embrace of materialism within the field, has encouraged a neglect of the humanities in kinesiology that further weakens the discipline.[4]

This historical and philosophical review will begin with C. P. Snow's *The Two Cultures* (1959) and the controversy surrounding it. Snow's essay is important because it sheds light on the mid-20th century relationship of the sciences and humanities, which deepens historical insight regarding the place of kinesiology within the larger academic culture. An examination of the history of kinesiology and physical education will follow Snow. This history includes debates going back into the early twentieth century, regarding the proper place of science in the field. James Bryant Conant (1963), and Franklin Henry (1964), who are considered critical players in the transition from physical education to kinesiology, will be the focal points of this examination. This historical analysis will show that the questions regarding the unsettled nature of the field are not new, nor are questions regarding the proper relationship of the sciences and the humanities in the Academy.

An analysis of vitally important articles from within the kinesiology literature itself will close out the literature review.[5] One set is well known, while the other has received comparatively little attention. First are Karl Newell's (1990a, 1990b, 1990c) *Quest* articles on the topic of renaming and reorganizing the field. These essays had, and continue to have, a significant impact on the field's own self-understanding. Perhaps the most lasting impact

of Newell's work is the widespread adoption of the name "kinesiology" in departments around the United States. Two lesser known articles by philosopher Doug Anderson (2001, 2002) are vital as well. While Newell (1990b, 2007) acknowledges the importance of the actual practice of physical activity, Anderson *demands* that activity in "Gym Class" (the actual practice of skillful moving) provides a fundamental and human form of *knowledge*.

Literature Review

"The Two Cultures"

C. P. Snow published *The Two Cultures* in 1959. His book, a condemnation of the fractured state of the academy, was originally given as a Rede lecture at Cambridge University in the spring of 1959. Snow's idea caused an immediate stir, generating both negative and positive reactions. Most of the negative reaction focused on his specific analyses rather than his more general assertion of existence of two cultures in the academy. Snow's paradigm did receive some criticism however. Critics alleged that Snow's account of the Academy was an oversimplified dichotomy that left no room for the existence of other "hybrid" groups such as social scientists. Snow himself acknowledged his dichotomy as a useful but "dangerous" characterization (p. 9).

In the body of the work, Snow argued that there was "a gulf of mutual incomprehension" (p. 4) between proponents of the sciences and the humanities. This gulf was mutually harmful. Scientific imagination was stunted, while across the great divide, the literary intellectuals were inclined towards pessimism, as well as ignorance of the role that knowledge of the natural world played in informing and improving culture.

Accordingly Snow scolded humanists for being "natural luddites" (p. 22), as well as enemies of the industrial revolution. "If we forget the scientific culture, then the rest of western intellectuals have never tried, wanted, or been able to understand the industrial revolution, much less accept it" (p. 22). The danger created by such agrarian romanticism was that it limited human potential and encouraged stagnation in areas of the world that were desperate for improvement.

Snow believed—not without reason—that the greatest hope of mankind lay in the advance of science, technology, and industry. He argued that it was easy to criticize industrialization from within the comforts it had created. It was quite another thing, absent such progress, to see, for example, "most of your children die in infancy" (p. 25). Industrialization and the scientific revolution had all but eliminated hunger, reduced infant mortality, and greatly increased life spans in the Western world. It followed, Snow argued, that eliminating the gap between rich and poor nations in the rest of the world was simply a matter of educating and organizing "enough scientists and engineers and technicians" (p. 45).

While his work is insightful, particularly regarding the academic tensions between scientists and humanists, Snow can be criticized from many angles. Snow's chief detractor was Cambridge professor Dr. F. R. Leavis, who was deeply concerned about the educational merits or demerits of Snow's emphasis on science. The substance of Leavis critique was recently addressed in a *Quest* article by John Hughson and Christin Tapsell (2006). Hughson and Tapsell point out that Leavis was concerned both by what he saw as the low quality of Snow's argument, as well as by the weight given by the academic community to the argument of—what Leavis viewed as—a mediocre intellect. Leavis also worried about the utilitarian overtones of Snow's concern for economic development. Culture, Leavis opined, was not reducible to material gain (Hughson & Tapsel, 2006, p. 414).

Snow was right of course to point out the very real benefits of economic development, but his faith in science and technological development as the standard bearers of progress does seem, especially in retrospect, naïve. Material gain is not without merit. But science and technology do not exist in a vacuum. Social, political, and cultural values are as important as technological breakthroughs to the advancement of human societies. Technology is an impotent force, for instance, absent the rule of law. The journal *Nature,* commenting on the fortieth anniversary of Snow's lecture, made exactly this point. The editors of *Nature* charged Snow with "optimistic technocratic naivety" (1999, p. 91).

Polanyi (1969) also commented on Snow's lecture, although he took a very different approach than did Leavis. Instead of attacking Snow's qualifications or utilitarianism, he simply advanced a full frontal challenge to Snow's underlying thesis.

> Sir Charles Snow complains about the gap between science and the rest of our culture. I concur. But I see the problem in a different perspective. I don't agree that the influence of science on the rest of our thoughts is too feeble. On the contrary, the claims made today on the minds of men in the name of science are comprehensive (p. 40).

Polanyi then went on to elaborate how scientific rationalism has subsumed all claims regarding human morality under a naturalistic explanation that "must ignore, and so by implication deny, the very existence of human responsibility" (p. 42). Echoing his recently completed work on tacit knowledge in his magnum opus *Personal Knowledge* (1962), Polanyi closed the critique by insisting that "a humanistic revisionism can be secured only by revising the claims of science itself" (p. 46).The humanities can only matter if the all too pervasive philosophic commitment to materialism is wrong.

Conant, Henry, and the Birth of Kinesiology

An appreciation of the power of Snow's lecture and the boldness of Polanyi's counter claim is deepened by remembering the historical context in which the debate was held. Sputnik, the world's first artificial satellite was launched by the Soviet Union on October 5, 1957 and caused an immediate stir in the West (Soviets Fire Earth Satellite, 1957). Soviet superiority in science and technology seemed self-evident (Soviet Claiming, 1957). Although there were voices cautioning a more comprehensive reform of education, the general reaction to the launch in the United States was to demand increased time and money spent on math and science in American classrooms (The Educated Man, 1957). Catching up to the Soviets was considered a matter of both national prestige and national security (Reston, 1957). Given the spirit of the times, Polanyi's decision to challenge an already robust scientific hegemony is even more noteworthy.

In reaction to Sputnik, President Eisenhower established a "Science Advisory Committee," which among other things suggested federal scholarships for qualified students in mathematics (Estrow, 1957). After consulting with some scientific advisors Eisenhower announced at an October 30, 1957 press conference his goal of "awakening the United States to the importance and, indeed, the absolute necessity of increasing our scientific output of our colleges and universities" (Finney, 1957, p. 11). Two days later Eisenhower commented that "The growing needs of our economy, defense and community life require an ever increasing emphasis on the training of future engineers and scientists" (Bigart, 1957, p. 8).

It was in the midst of this politically charged milieu that the work of former Harvard president James Bryant Conant and University of California professor Franklin Henry was published. Both are commonly credited with spurring physical education in the early 1960s toward academic and scientific respectability. However the picture revealed by the historical record is more complex.

James Bryant Conant undoubtedly ranks as one of the giants of twentieth century American higher education. His influence extended from teaching and research to administration and educational reforms. Despite the general historical importance of Conant's huge body of work, his 1963 text, *The Education of American Teachers* attracts the most attention from sport historians and kinesiologists. In this text Conant offered what many historians generally consider an extremely critical attack on what was then called physical education.

According to conventional wisdom Conant's criticism of physical education—particularly physical education graduate programs—prodded a reluctant discipline into academic respectability and diversity. Richard Swanson and John Massengale (1996) begin their well respected volume, *The History of Exercise and Sport Science,* by stating that Conant's words "sent shock waves through, and a challenge to, the field" (p. 1). Such thinking is reiterated by nearly all of the other chapter authors in their anthology. Sport historian Nancy Struna's (1996) comments on Conant are of particular interest. Struna emphatically states that, "No history of a subdiscipline to which physical educators have contributed can ignore James Conant, the president of Harvard University" (p. 155). Although the position summarized by Struna has become ubiquitous, there are important reasons to question this interpretation of Conant's impact on kinesiology. As Struna herself admits, "whether Conant's charges, and the subsequent intellectual and political parrying, had the transformative impact on the subdisciplines that some people have attributed to this episode remains a question" (p. 156). In fact, Conant's impact on the field, even if significant, is overstated. It is physical educators' own philosophic insecurity that is most noteworthy. Unfortunately the history and impact of their own reaction to Conant has been largely ignored.

Evidence to support this re-conceptualization of Conant's impact is not hard to find. The headlines of the *New York Times*, which announced Conant's reforms, did not scold physical education. Rather, they lamented, "Teacher Training Scored by Conant as U.S. Scandal" (Heichner, 1963, p. 1). In truth, no mention of physical education appears in the text of the newspaper articles. This suggests that the reaction of physical educators to Conant's criticism, says more about what the discipline thought about itself than about outside pressure causing reform.

Indeed, Conant's (1963) criticisms of physical education amount to only a few paragraphs out of the two hundred pages in the book. Such sensitivity on the part of physical educators implies a far deeper vein of disquiet than could have been instigated solely by Conant. Conant himself recognized this insecurity when he wrote,

> As I have talked to teachers and professors active in the four areas [P.E., Art, Music, Foreign Language] I am here exploring, I have become impressed with an attitude something like an inferiority complex that seems to arise out of the lively competition for the high school student's time and interest (p. 181).

Such insecurity was reflected, not created by Conant, and was born from the tenuous and contested nature of the discipline's philosophic foundation(s). The problem, it would seem, is that in 1963, just as today, the philosophic foundations of physical education and kinesiology were insecure.

Conant himself alluded to this state of affairs when he pointed out that the public, as well as the educational establishment, were unsure of the value of such pursuits.

> The American public and the professional educators, then, are still a bit uncertain as to why instruction should be provided in art, music, foreign languages, and physical education. This uncertainty is reflected in the amount of time allotted to the subjects in the schools and in the varying practice as to the optional nature of the work. In only a few of the schools I have visited are the teachers of all four satisfied with the positions accorded to their specialties (p. 180).

Conant dedicated a mere five pages of his text to physical education, not all of it critical. Some of his thoughts, rather than being critical, are quite positive. For example, he believed that physical education teachers have been labeled "suspect" (p. 185) because they are overburdened; by teaching courses for which they haven't been trained and by the public pressures of coaching. For this reason Conant recommended that physical education teachers should be certified only in physical education rather than multiple disciplines. Conant also believed that the physical educator like the art or music teacher should be a specialist.

> Therefore, in the interest of this branch of the teaching profession, I suggest the door should be firmly closed against such practices. The institutions and the state, through the approved practice teaching program, should certify teachers of physical education and hygiene but *not* physical education and mathematics or similar combinations. The physical education teacher will also be a coach, either intramural or interscholastic, and to my mind should be. He therefore has two important functions to fulfill, and this should be sufficient (p. 185).

The fact that Conant called teaching physical education and coaching "two important functions" should not be ignored. Whether the specifics of Conant's recommendations are advisable, "blaming" Conant for disrespecting physical education becomes a muddy prospect. His overriding concern in *The Education of American Teachers* has nothing to do with physical education. Instead his focus is to insist on "academic"—that is a disciplinary—rather than a pre-professional model of teacher preparation. Conant's work is not seminal to kinesiology but rather fits into a broader history; a history of contention and debate over the meaning, purpose and value of the field.

In fact, calls to "liberalize" or humanize the field, as well as calls to "intellectualize" the field by making it more scientific, both preceded and followed Conant's critique—just as such disparate calls continue today. To properly understand the transformation of physical education into kinesiology historians must look both beyond and before the work of James Bryant Conant. The increasing emphasis on science in the mid-twentieth century United States did not create, but rather rekindled, one side of the debate regarding the nature and purpose of physical education. Calls to "scientize" physical education are far older than Conant's text, reaching back at least to the dawn of the 20th century.

Coming on the heels of *The Education of American Teachers* was another important publication, *Physical Education: An Academic Discipline* by Franklin Henry (1964). In this article, Henry claimed that proper academic status for physical education would only come by grounding the discipline in theory. Henry argued that "an academic discipline is an organized body of knowledge collectively embraced in a formal course of learning . . . the content is theoretical and scholarly as distinguished from technical and professional"

(p. 32). Henry continued, "The development of personal skill in motor performance is without question a worthy objective in itself. But it should not be confused with the academic field of knowledge" (p. 33). The field would not be recognizable without "personal skill in motor performance" yet according to Henry's own paradigm, such skill does not actually count as knowledge. In other words, physical education is academic as long it ignores the actual practice of skilled physical activity. It is no wonder then, that Henry's article encouraged a scientific self-understanding in the field.

Philosopher Doug Anderson's (2002) analysis of Henry's claim—that there are such limitations on "knowing" in kinesiology—is noteworthy. Anderson points out the costs of committing the field solely to a "theoretical" and "scientific" self-definition. Additionally Anderson's analysis makes clear how such thinking rests on *philosophic roots* that have been chosen rather than imposed.

> From a humanist's perspective, the attempt to lift physical education out of the university ghetto by making it predominately scientific seems somewhat peculiar. Such a move accounts for and overcomes a previous blindness of physical education programs to the scientific dimensions of movement. Kinesiology takes these seriously and makes students accountable for them. But such a redemption seems incomplete. It leaves the rest of physical education just as it was. The humanities of movement remain marginalized because they are not scientific in any strict or positivistic sense; they are not simply identifiable as "fields of knowledge." Furthermore, movement courses themselves remain in the ghetto as "just gym classes." Implicitly if science is the way to save physical education, the rest of its features must become ancillary at best (p. 89).

A recognizable shift towards science surely took place in physical education in the 1960s, and as Anderson argues, this shift to science has been good in many ways, but these ideas and this debate long preceded Henry or Conant.[6] Although Conant and Henry's impact on the field is real, it is often overstated. If this is correct, Conant's criticisms—no matter their impact—immediately become subordinate to this larger question. In other words, criticisms are impotent without a reaction to them. Trying to understand why and how physical educators overreacted to Conant reveals more than Conant's criticisms themselves. For the reaction speaks volumes about what philosophical insecurities drove the evolution and growth of physical education in 20th century America.

Perhaps no scholar has done more to illuminate the foundations of American physical education than Roberta J. Park. As Park (2005) points out repeatedly, the field of physical education in America was born at the knee of medicine, and was most often sold on the grounds of being either hygienic, preventative, or both.

In two important articles, *Research Quarterly and its Antecedents* (1980) and *Of the Greatest Possible Worth* (2005), Park indentifies many pre-Conant instances of this urge. Charles W. McCloy is perhaps the paradigm example. In 1928, McCloy argued that the adoption of a scientific research methodology would "presage a new day in physical education, and make of it a mature science." (Park, 1980, p. 3) This was not the first time McCloy had such thoughts. In 1921 he stated that the field would rise or fall on its adoption of the scientific method. "Physical educators are not infrequently criticized- and justly- for a lack of scientific method in their procedures" (Park, 2005, p. S11). McCloy's insistence on research and academic rigour, are in many ways (like Henry's), quite admirable. The danger, as Anderson (2002) points out, is in believing that science is the only respectable

lens through which to understand the discipline. Yet even Anderson's rejoinder is not new. In fact, these ideas pre-date Conant as well.

Several pre-Conant calls to humanize the field; (i.e., treat movement, play and games, as inherently human activities that are of intrinsic worth), can be identified. Eleanor Metheny and Lois Ellfeldt for instance, wrote in 1961, two years before Conant's report that:

> Without belittling in any way the physiological and social concomitants of man's movement experiences, we value our theory because it identifies structured movement experiences as a source of mental-emotional concepts that are not only significant but essentially unique forms of human knowledge and understanding . . . Physical education—or as we prefer to call it "movement education"—can be identified as one of the forms of liberal education, comparable with music and other non-verbal arts as the source of one of the kinds of meaning that enrich man's comprehension of reality as he knows it (1961, pp. 289–290).

Of course it is well known to anyone who has studied sport history that visible evidence of the importance of "man's movement experiences" reaches back into antiquity (Miller, 2004), (Baker, 1982). For those who are willing to pay attention, the visceral appeal of play and games throughout history offers important evidence of the intrinsic importance of physical education. The ubiquity of games and play across time and culture is not a matter of historical dispute. Nor should their near universal appeal be in doubt. As Jesse Feiring Williams declared in 1959 regarding the proper focus of physical education, "There seems to be one: stress at all times and everywhere the need of man for play, recreation and wholesome leisure" (p. 78).

The mid-20th century turn toward "intellectual" and scientific conceptions of the field, seems to be as much a result of this unsettled foundation, as it was the result of genuine need for reform. Roberta J. Park rightly insists concerning these older uncertainties that, "at the turn of the [twentieth] century the American Association for the Advancement of Physical Education was by no means a stable organization with a clear sense of direction" (1980, p. 1). The same thing could be said about the field of kinesiology today. The more things have changed the more they have stayed the same. The current trends in kinesiology towards a scientific and technical self-understanding are not the byproduct of necessary and inevitable forces, nor are they the child of one moment or of one person's criticism. Rather kinesiology is the product of value-laden historical commitments, which have been and continue to be, matters of contention.

The importance of recognizing this reality should be clear. The two cultures in kinesiology are not inevitable in any sort of deterministic sense. The currently dominant materialistic conceptions of the field are not the required historical outcomes of inherently progressive forces. If these commitments were and are choices, rather than inevitabilities, then these choices are open to examination, criticism, and revision.

Contemporary Voices within the Kinesiology Literature

Unfortunately the kinesiology literature often fails to directly address the epistemological and metaphysical underpinnings that impact the definition of the field. More often one sees subtle manifestations of the two cultures problem in methodological or epistemological

assumptions that have not been explicitly thought through (McFee, 2007). Such unexamined presuppositions regarding the nature of kinesiology are so common that egregious and some might even say offensive assertions are often missed in the kinesiology literature. Because of this, opportunities for real insight, growth, and mutual understanding are missed.

Two brief examples from the February 2007 issue of *Quest* should suffice to make the point clear. The first is from McCullagh and Wilson's article "What Should Students Know?"

> In our opinion, a well-rounded kinesiology program should offer courses from all these areas. As we are well aware, however, many programs are heavy on the biological side of the scale and slight on the humanities side partly due to the greater funding sources available to the biological fields (p. 51).

Now, although many humanists will feel that this is a gross understatement, it is certainly reasonable to assume that one of the reasons the humanities are slighted is due to a lack of research funding opportunities. Yet the point should not and cannot be left at that! Several deeper and more important questions need to be asked if one is *really concerned about* the importance of the humanities in kinesiology. The title of the article is after all, "What Should Students Know?" not "What will Attract Funding?"

What, for example, are the other reasons the humanities are slighted? One can only presume that if McCullagh and Wilson can recognize that such de-emphasis is "partly due" to research funding, they must have some inkling of other possible influences. Why are these other possibilities not mentioned? Why are there funding disparities in the first place? What do the funding disparities say about the larger culture's philosophy and values? Are such values justified? Do schools that are not primarily research institutions give any more attention to the humanities than schools that are? If not, why not? Presumably, research funding dollars would be a moot point at most if not all of these institutions. If the disparity continues to exist at smaller institutions then the initial assertion itself can be called into question. There must be some deeper reason for the precarious position in which the humanities find themselves. By not focusing on these types of larger questions an important opportunity to clarify and understand the current state of the field is missed.

A second example is provided by Michael Wade's article "Quo Vadis Kinesiology" (2007) in which he regularly refers to entire field as the "physical activity sciences" (p. 171). Wade asserts that the key to moving the field forward is not unity of purpose but rather unity of voice.

> Now that we have gained admittance into the NRC [National Research Council], it is time for us to seriously revisit the challenge of forming a single comprehensive body to represent our field . . . Creating a "big tent" to accommodate all elements of *the physical activity sciences* is not a new idea and requires only a fundamental commitment to adopt a succinct name for our field of study and refer to it as kinesiology. *We should worry less about the development of the body of knowledge . . . and focus solely on developing a unified voice* (p. 172). [Emphasis mine]

One cannot help but wonder about what Wade envisions this "unified voice" rallying around? Why exactly is it so important to develop a unified voice if our self definition is so unimportant? On what philosophic grounds, other than crass utilitarianism, would such an

assertion make *any* sense? Perhaps on the grounds that one has already implicitly endorsed science as the rallying point? But how then does "physical activity sciences", even if read generously, encompass a "big-tent"?

While such superficial thinking, that ignores the deeper philosophic questions at play in the field of kinesiology, can be seen as symptomatic of the very problem, the situation may not be as bleak as it seems. Some important articles have also been written on the nature and mission of kinesiology which directly address metaphysical and epistemological questions, and give kinesiologists the opportunity to make principled decisions about the future of the field. Among the most important are the work of Karl Newell (1990a, 1990b, 1990c, 2007) and Doug Anderson (2001, 2002).

Karl Newell's (1990a, 1990b, and 1990c) *Quest* articles on the topic of renaming and reorganizing the field are of extreme importance. As mentioned previously, these articles profoundly impacted the direction of the field, and also led to the widespread adoption of the name "kinesiology." Newell's recent follow-up article (2007) essentially reiterates his previous position. For that reason this analysis will focus mainly on the 1990 articles.

Newell's two most enduring and important points in these articles are that the heart of the disciple can and should be "physical activity" and that the appropriate name for the field should be "kinesiology." Newell (1990b) conceives the state of the field as fractured mainly due to misunderstandings over the sub-disciplines commonalities, which are best expressed under the rubric of physical activity. "This situation is due in part to the fact that there no longer appears to be a central theme that constrains and organizes the traditional field of physical education in higher education" (p. 243).

Newell believes that physical activity "very broadly defined" (p. 247) is the most inclusive and appropriate label for the field on the grounds that, "there are political and economic advantages to pursuing a broad physical activity agenda" (p. 247). Newell argues that such an inclusive definition allows for, and recognizes an already broad research agenda. This in turn creates a more integrated (and academic) pursuit of the different knowledge types in which the field engages; the declarative, or "knowing-that" versus the procedural or "knowing-how." A more limited definition of the field, Newell insists, would stunt such symbiosis.

> If exercise and sport are the only activity subdomains of the broader physical activity category to be studied, then it is likely that their focus will largely be applied research. One would expect scientific theories to be general to physical activity and not particular to, for example, activities that are constructed as sport. This is not to propose that sport does not provide some different and interesting constraints to action. Rather, it proposes that an overarching goal of academic fields is the establishment of general theories of physical, natural and social phenomena (p. 247).

Interestingly enough, even while making his case, Newell does point out some worrisome tendencies in the field that nonetheless fit into his schematic. These include the "increasing trend" (p. 250) towards a theory dominated field, as well as the deterioration of the "value of physical activity as traditionally examined and understood by the humanities" (p. 250). At least the humanities are, by relying on theory, appropriately academic. Procedural knowledge (know-how) has fared even worse. Newell argues that this is because of "the failure of performance oriented-scholars to articulate the basis of procedural knowledge" (p. 257), a contention for which he is later criticized by Anderson.[7]

Building on his assertions regarding the pragmatic advantages presented by "physical activity," Newell opines that the name of the field should likewise change to kinesiology (1990c). Similar to his previous argument regarding physical activity, he argues that kinesiology is appropriately inclusive, unlike titles that include "sport" or "exercise."[8] Kinesiology also sounds academic and scientific.[9] Finally, the title kinesiology does not carry the cultural connotations or philosophical baggage of a more traditional name such as physical education.

Despite problems in Newell's argument, there is certainly weight to such pragmatic concerns. As mentioned at the beginning of this article, it is not the name kinesiology that needs to be disputed, but rather the meaning of the term. Kinesiology is an appropriate name for the field. The impact that this name choice has on the meaning and nature of the discipline is quite another matter.

The endorsement of "physical activity," as the core of the field has the same problems. The main criticism again regards the meaning of the term, and whether or not it is actually, both in theory and practice, too broad a characterization of the field's core. In practice, physical activity thus defined has lead to inanities.[10] For example, in the textbook *Introduction to Kinesiology* (2000), the definition of physical activity, following Newell, includes everything that admits of being "intentional, voluntary movement directed toward achieving an identifiable goal." This definition includes "typing, handwriting, sewing, and surgery" (Hoffman & Harris, p. 8). Accordingly, when sport and exercise "receive primary attention" it is not because of any inherent relationship to the field, but because, "kinesiology is historically linked to physical education"[11] (Hoffman & Harris, p. 11). Under such a paradigm, the relationship between sport and kinesiology is precarious indeed.[12]

It is worth pointing out that this definition of "physical activity," in principle, also includes first and second degree murder, sexual intercourse, and not meaning to be crass, defecation. All of the aforementioned activities are motor-oriented, intentional, voluntary, and directed towards a goal. The exclusion of these types of areas from active study in kinesiology is apparently purely arbitrary and historically contingent.

Yet, my concern is not over abstraction as such, but rather over the philosophic motivation for moving towards what I cannot help but deem overly abstract descriptions of the field; descriptions that effectively empty it of any unifying content.[13] If physical activity is a comprehensive (or placeholder) term, meant to summarize the specific contents of the field (play, games, sport, etc.), then the abstraction makes sense. A commitment to "physical activity" absent such underlying specificity is a mistake.

Daryl Siedentop (1990) also critiques Newell's concern for inclusion. Siedentop predicts that such an emphasis will negatively impact the two cultures in kinesiology.[14] He argues that Newell's analogies regarding department names—Dept. of Christianity which Newell argues is too exclusive vs. Dept. of Religion which Newell favors—are both unconvincing and dangerous.

> The more appropriate term for Newell's analogy would be *department of belief* since belief, like physical activity, is sufficiently inclusive. Religion, like sport, is a cultural institution, an expression of human social organization and life. Physical activity, like belief, is a more fundamental phenomenon, without the restrictions that define cultural institutions such as religion, sport, art, music, or drama. The more restricted definitions, of course, are precisely what infuse those fields with shared meanings, allowing persons within the field to pursue often diverse work that is still clearly interrelated . . . physical activity, whether

> intentional or not, is largely devoid of cultural meanings and therefore lacks the restrictive boundaries within which shared meanings provide scholars with reasons to value diverse work and, on occasion, with reason to work together (p. 316).

Siedentop reminds kinesiologists that for all the important benefits of defining the field's core as physical activity, there are also important, perhaps even prohibitive costs. Yet, as persuasive as Siedentop is, his criticism should not lead kinesiologists to re-open the name wars. The fight over terminology is not as important as what philosophy motivates the selection of the terminology and what that terminology signifies. If the proponents of the term physical activity are unashamed of the central role of games, play, and sport in kinesiology then the label makes sense. If they are not, then I am convinced they will only hasten disintegration within the field. Even Hoffmann and Harris, who apparently are true believers in Newell's thesis, admit that sport and exercise are kinesiology's primary focus. If this is true, why then hide from it? Perhaps the desire to hide from, or mask the important role of sport in kinesiology, is a function of misunderstanding *kinesis*; both metaphysically and epistemologically.

The powerful influence of games, play, and sport as cultural institutions is clearly articulated in philosopher Doug Anderson's articles, "Recovering Humanity: Movement, Sport, and Nature," (2001) and "The Humanity of Movement or 'It's not Just Gym Class'" (2002). In "Recovering Humanity," Anderson (2001) reminds kinesiologists of the power of sport experiences to wake one to their own humanity. Anderson laments that "Civilization insofar as it becomes merely habitual, has the tendency to eliminate our spontaneity and make us automata" (p. 141). The creative and embodied nature of sport, has the potential to counteract such sedation, by creating "borderland" experiences between sleepy "over-civilization" and brutish "under-civilization" (2001). Anderson emphasizes the role sport can play in self-understanding.

> In such instances, I think it is fair to say that sport and movement allow us to realize and re-create ourselves. By this I don't mean that we come to some final consummation of being, but that we bring our full range of powers and energies to life—we become fully human (p. 145).

As Anderson (2002) points out in his second article, "The Humanity of Movement," gym class is then anything but a triviality in kinesiology. Anderson claims that the growth of the sciences in kinesiology was a valuable and intrinsically important development. Nonetheless, this growth was philosophically flawed. The growth of the sciences was in part an attempt to "produce respectability on two fronts" (p. 88). The first front, following Henry, was academic respectability. The second front was utility, which led to Michael Ellis's (1987) famous claim that "physical education will be reconceptualized as a retail service" (p. 84).

Anderson laments the tendency of scientific generalization and reductionism to marginalize the humanities of movement. He insists that the actual practice of culturally significant movement forms is a humanizing experience that must be treated as such. It should not be ignored or explained away. In such experiences, "we aim at excellence and virtuosity; we encounter limits and failures; we learn the 'thisness' of movement, not just the theoretical 'how' or the 'what'" (p. 91). The "thisness" of the experience is imperative, for "this good [of movement experience] cannot be argued for nearly so well as it can be felt in the actual experiences of moving" (p. 93). The magic of "chasing-down a fly ball in the

gap" cannot be fully captured by description; whether verbal or mathematic, mechanistic or artistic. It must also be felt.

Echoing Siedentop, Anderson argues that such specific movement experiences are what can create a "new passion for the profession" (p. 95). This new passion "must come from the perennial heart of its studies, from reawakening to the experiences of movement" (p. 95). The humanities are essential to kinesiology. "If kinesiology is to be fully redeemed, science must be complemented by the humanities of movement—the features of movement experience that generate, disclose, or develop personal and social meanings and virtues" (p. 91). According to Anderson, the human experience of moving—whether on the ball field or in the dance studio—cannot be trivialized. Nor can such experiences be reduced to the math and science of atomic particles.

What of motion itself? How should it be understood? Are Aristotle's insights worth considering? Can *kinesis* be appropriately described and defined in the terms of geometry and physics? What does *kinesis* mean? What role should the concept of *kinesis* play in its namesake, the discipline of kinesiology? Such questions deserve serious attention in the discipline of kinesiology. For the assertion that moving is a humanizing experience raises fundamental questions about the nature of *kinesis* itself; particularly regarding the relationship of motion to our humanity. This insight raises further questions about what it is to be a human being, which in turn will impact kinesiologists' understanding of the nature of knowledge. Questions such as these—even when absent sufficient answers—demonstrate why history and philosophy are so important to kinesiology. *Our answers will shape the future of kinesiology, just as past answers have shaped the present*.

Epilogue

Aristotle and Polanyi's insights offer the opportunity to strengthen and clarify the foundation of kinesiology. Aristotle helps kinesiologists see that our field is not trivial, but at the very heart of what it means to be human. Polanyi reminds kinesiologists that all knowledge is born of the skilled engagement of the knower with the known. Contrary to materialistic assumptions, science is not a superior way of knowing.

Given the unsettled nature of the field (Rikli, 2006; Wade, 2007; Latash, 2008), such clarification is important. One of the most important lessons Aristotle can teach is his underlying commitment to observation. For Aristotle, philosophy was dialectical and therefore ultimately a historical process by which one progresses towards knowledge. Philosophy proceeded from our experience and our inheritance up towards first principles. Such a paradigm is dependent on the cultivation of observation and the cultivation of practice. For the connoisseur—Polanyi (1962) continually insists—gains the skills to see things that the novice cannot.

> Connoisseurship, like skill, can be communicated only by example, not by precept. To become an expert wine-taster, to acquire a knowledge of innumerable different blends of tea, or to be trained as a medical diagnostician, you must go through a long course of experience under the guidance of a master (p. 54).

If we kinesiologists pay attention, and really observe human life, it becomes abundantly clear that embodiment and *kinesis* are characteristic of, rather than incidental to, our humanity. Furthermore it becomes clear that human beings are more than a mere aggregation of chemicals beholden to physical laws. We "make love," "jump for joy," and "sink into depression." We slide "just under the tag," "run to daylight," and "catch our second

wind." Though these expressions are certainly figures of speech, they are built on tangible embodied realities. We are corporeal beings for whom touch is our greatest form of intimacy. We are moving beings that are at home running, jumping, catching, throwing, and kicking. We are embodied beings who dance, play and compete. We are social, temporal, and communal beings that are born, grow, inherit and belong.

What, given these insights, is kinesiology? Perhaps it is best to offer an answer that serves as a beginning rather than an end. Kinesiology is a human discipline,[15] born of, and reliant upon the embodied, curious, political and rational nature of human beings. The field examines physical activity from a myriad of scholarly perspectives, with physical activity being understood not as an abstract or literal moniker, but rather as the placeholder term for culturally significant and recreative movement forms. Games, play, sport, exercise, dance (among others) are central to who we are and what we do. If physical activity is understood in this way, then the field is as reliant upon "ethics" as much as it is reliant upon "biology." Human *kinesis* is a function of all aspects of the human person whether those aspects are physiological *or just plain logical*. Kinesiology is neither a pure science nor solely a member of the humanities, but rather a field that necessarily encompasses both.

Notes

1. Human beings eat, sleep, breathe and grow. Human beings also learn, value, and desire. This activity is dependent on material without being reducible to material. To understand motion in human beings one must understand human beings as such. For the kinesiologist baseball is as important as biomechanics, as both are bound up in what it means to be human.
2. In so far as I understand quantum mechanics and chaos theory, they do not *necessarily* change materialistic commitments among scientists. A more "chaotic" universe does not require the immaterial. The universe is merely a more complicated and unpredictable "machine." Quantum mechanics on the other hand, if it is interpreted as a theory that emphasizes the necessity of the conscious observer, can combat the mechanistic worldview of materialistic scientists.
3. It is true that understanding atoms *helps* us understand livings things, but a closer reading reveals that that type of limited claim is not what Feynmann has in mind. Why else would he say that "*everything* animals do atoms do." [Emphasis Added] It seems clear that Feynmann thinks that livings beings can be *completely* understood by understanding atoms.
4. This neglect is tangible. A review of doctoral programs published by the American Academy of Kinesiology and Physical Education (AAKPE; 2006) reveals one quantifiable reason many scholars are concerned about the future of the humanities in kinesiology. According to AAKPE's data, there are approximately 212 total Ph.D. program options at the 61 kinesiology doctoral institutions in the United States. The number is approximate because some programs failed report what options they offered. Of these 212 options only 15—or 7.1%—can in any way be characterized as programs in the humanities. To arrive at these numbers, I included sociology, sport studies, and history and philosophy of sport in the definition of humanities. These statistics also include variants on the three general categories above such as, The University of Maryland's "Sport Commerce & Culture," and The University of North Carolina's "Sociohistorical Studies of Physical Activity."
5. There is a significant literature on these topics outside of kinesiology as well, some notable works include those of B. Alan Wallace (2000, 2007) and Stephen Jay Gould (2003). Wallace, builds on the work of American philosopher William James, by arguing for a broader and more inclusive definition of science itself. Gould argues in *The Hedgehog, the Fox, and the Magister's Pox* that reconciliation between scientists and humanists must be built on mutual respect, as well as the notion of "NOMA" or "non-overlapping magesteria" (p. 87).
6. "The sciences are important, and the thrust of Henry's essay is that they have been neglected. At the same time, however, honoring science to the exclusion of the humanities of movement can have disastrous consequences; specifically it bodes an inattentiveness to the creative

and disciplinary features of movement experiences that yield personal and social meaning" (Anderson, 2002, p. 89).

7. "But this is to ask procedural knowledge or know-how to be what it is not, to measure it by a standard that is not appropriate to it. It is a kind of category mistake . . . The practice of movement, like the practices of music, art, poetry, and teaching, is the basis of any theorizing about movement and it is ultimately the site of any testing of theory" (Anderson, 2002, p. 94).
8. An amusing but disturbing instance of this can be found in the *Quest* article "Sociology of Sport: Expanding Horizons in the Subdiscipline" (2006). Author Janet C. Harris takes the liberty to clean up the CV of Sport Philosopher Scott Kretchmar, by labeling him a "physical activity philosopher" (p. 86). Ironically enough Harris' whitewash of Kretchmar's qualifications occurs in a section of her paper where she lauds his insistence on the "importance of encouraging people to go beyond duty and fun in order to experience richer meanings in physical activities" (p. 85). Harris apparently fails to consider the fact that specificity might have something to do with "richer meanings."
9. Newell is not alone. As we have seen, Latash (2008) is not shy about proclaiming the need for kinesiology to become a hard science. "Motor control (and kinesiology) should help itself and by 2050 become a respected science" (p. 29).
10. It has encouraged other problems as well. Newell (2007) himself admits, the "practice and performance of physical activity is increasingly being de-emphasized if not eliminated from physical activity programs in higher education" (p. 10). The inherently contradictory nature of this statement is obvious. How can a discipline dedicated to physical activity "eliminate physical activity" from its program?
11. Setting aside the issue of contingency; if kinesiology is really about physical activity thus defined, then using the historical relationship to physical education as a justification of sport and exercise remains problematic. For if physical activity is the core of the field, then even the historical affinity of physical education for sport and exercise is in need of reform, which is exactly what Newell suggests (1990c, p. 277).
12. In what almost sounds like doublespeak Rikli (2006) says that "*sport* psychology and *sport* sociology are very important parts of the kinesiology curriculum, but courses on these narrower topics might be best conceived as electives, for those with an interest in sports studies, rather than as a part of the core curriculum" (p. 300) [Emphasis Added]. One can't help but wonder how an elective can be labeled "very important"? Notice too that she mentions social sciences, but no strictly humanistic disciplines. Furthermore, what is the home for sport studies if not kinesiology? Is "physical activity" allowed to have *any* specific contents? It is true however that if the humanities are not part of the core curriculum there will soon be no "two cultures" problem, because there will be no humanists left in kinesiology departments. In other words the fragmentation and dismantling of kinesiology departments that Rikli laments may be the logical outcome of her own philosophy.
13. Departments of music are not called the department of "rhythmic activity" nor are Art departments thrown into paralysis over the fact that their title is actually "too broad." For they know and are unashamed of their subject matter, whatever it is called. "Art" means, sculpture, painting, drawing, ceramics, and so on, even though in actuality the term could encompass everything from dance, to film, to carpentry. In so far as "physical activity" is trumpeted implicitly or explicitly on the grounds that it hides, embellishes, or legitimizes our subject matter, such a label is a mistake. Although such "deception" could be argued for on strategic grounds, it comes at too high of a cost, that of the field's own self-understanding.
14. "And it is the mistake ['physical activity' being devoid of cultural meaning] (for that is what I believe it to be) that will make kinesiology departments increasingly hostile places for the social sciences and humanities" (Siedentop, 1990, p. 316).
15. This should in no way be understood as a denigration of science within the field. Scientific research in kinesiology is vital. Rather, to call kinesiology a human discipline is to emphasize the central role the field has in our self-understanding (as human beings) and to insist that a stoic, dispassionate, acultural or detached examination of *human kinesis* is impossible.

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