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Physical Education in Higher Education: Chaos Out of Order¹

Karl M. Newell

The last 25 years have witnessed significant changes in the field of physical education in higher education that include the “disciplinarization” of the field of study and the generation of a broader front of professional options for physical activity than the single focus of teacher training. The field of physical education in higher education has not displayed uniformity in reacting to these profession-discipline opportunities and problems, to the extent that chaos reigns throughout. Illustrations of this chaos are provided with respect to defining (a) the field of study, (b) the establishment of a balanced focus of professional and disciplinary training, (c) the activity focus, and (d) the issue of societal representation. It is argued that the field has emphasized the differences rather than the similarities of the potential knowledge subdomains that emerge from the central phenomenon for study: namely, that of physical activity.

There was a time when physical education was physical education. That is, physical education was recognized within higher education, school systems, and society at large as the education of and through the physical activity that individuals receive in their formative years of education, primarily in institutional settings (after Williams, 1927). There were, of course, influences other than education (e.g., medical and military needs) in the creation of physical activity as a field of study in higher education, but the most recent model for the study of physical activity has been the professional domain of education. This focus has dominated the field since at least the 1930s in the United States and other countries. This educational focus for the field of physical activity provided a unified background from which it was relatively easy to establish and sustain order and regularity in university and school physical education programs.

Since the late 1960s, however, there has been a gradual shift away from an educational model as the sole focus for the study of physical activity in higher education, to the extent that the training of teachers in universities is only one

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professional outlet for graduates of many physical education departments. Moreover, the traditional teacher-training focus of physical education has been eliminated altogether in some departments. Several forces have created this changing environment for university departments of physical education. On many occasions, these influences have been characterized in terms of a profession-discipline contrast for the field, but as I will argue, a profession-discipline debate is not necessarily the only or even the major polemic. Chaos reigns within both the professional and disciplinary segments of the academic field of physical activity, independent of the arguments regarding the relative balance of so-called theory and practice.

On the one hand, there has been a decline in the need for teachers of physical education due to the bursting of the baby bubble that followed World War II and the general scaling-down of physical education in the curricula of school systems. Hence, the demand for physical educators in school systems has waned (although the negative impact of this trend for departments in higher education has been offset by the growth of professional opportunities beyond the school system for graduates of physical education departments). On the other hand, there has been an increasing emphasis in universities on the creation of an academic discipline of physical activity (after Henry, 1964),² which has also inadvertently and indirectly contributed to the decline of teacher training, rather than its enhancement.

This change in the balance of professional and disciplinary programmatic emphases has wrought tremendous change in university departments of physical education. Indeed, even now the field of physical education has not displayed uniformity in reacting to these profession-discipline problems. When one adds the fact that many departments still seem to be in a state of significant programmatic transition, it is not an overstatement to suggest that physical education in higher education is in a state of chaos. This chaos exists at a time when societal interest in physical activity is at an all-time high.

One reflection of this state of chaos is that individuals, departments, and academic societies in the field seem to be spending inordinate amounts of time soul-searching such questions as Who are we? Where are we going? and What is the future of physical education? In fact, so much time continues to be spent discussing these nebulous questions that there is a danger that the central problems arising out of this chaos in the field will never be addressed or resolved with a workable, if not optimal, formula to meet the current demands of academe and society. I view the central problems facing university departments of physical education to be reflected in the questions that follow.

1. What is the central focus of the subject matter in the field of study? Is the activity focus exercise, sport, or physical activity more broadly defined? Is this field of study to be performance-oriented (performing arts model), professional, or disciplinary? These questions raise this subsidiary and complementary question: What label for university departments best reflects this chosen academic subject matter?

2. What is the appropriate balance between teaching, research, and service within this academic focus in terms of disciplinary orientation and clinical practice? This question raises these subsidiary and complementary questions: What labels best reflect the organization of the subdomains of the field, and how do departments balance professional and disciplinary aspects of academic programs?

3. To what degree and in what way should specific professional or clinical training be conducted? This raises subsidiary questions of professional certification and the policing of the professional body in the physical activity field at large.

4. To what extent are our academic societies adequately representing the field in terms of its academic, professional, and service interests?

In the remainder of this article, I substantiate the claim that physical education in higher education is in a state of chaos and document the primary forces at play that have created this disorderly state of affairs. No attempt will be made here to outline potential answers to these questions. The lofty goal of identifying the similarities rather than the dissimilarities in the field of study is reserved for the companion article (Newell, 1990). I believe a clear exposition of the state of the field is required, even at the expense of the interpretations being considered unnecessarily negative, before any programmatic order can emerge in the study of physical activity in higher education.

The Field of Study

One of the major reflections of the chaos in the academic physical activity community is the considerable disagreement that exists in university departments on the question of the central academic focus of the field of study. To some degree, this chaos has been created and sustained by the prevalence of indifferent and inconsistent nomenclature in the field of physical activity and the inability to articulate clearly and consistently the academic programmatic themes. However, even after deciphering the nomenclature at what might be labeled the promotional level, I find chaos still prevails even in the philosophical issues of academic physical education. The incorporation of disciplinary emphases, other professional focuses beyond the traditional teacher-training focus, and the accompanying downscaling or even elimination of teacher training has left many in the field uncertain of its center of gravity. The general claim is that physical education has shifted to a disciplinary orientation, but there has been no clear exposition of what that discipline is, nor whether or not the subject matter can ever meet the criteria for a discipline.

In the last 25 years since the publication of Henry's disciplinary message (1964) the field has shifted, in varying degrees, away from the educational model of "of and through the physical" to a disciplinary-oriented model focusing on phenomena that may collectively be labeled "the physical." To put it another way, the so-called disciplinary emphasis has shifted the academic focus to the study of exercise, sport, and physical activity, in which these last three labels are taken to reflect distinct activity or phenomenological categories deserving of distinct administrative and degree-granting status. Of course, by most working definitions of these activity terms, the categories of exercise and sport are not mutually exclusive, and the important similarities and distinctions between these activity categories are oftentimes masked.

The shift in academic focus, as briefly described, has brought with it a significant change in the types of labels used to describe university academic departments even though most departments at one time probably had the common academic base and departmental label of physical education. A listing of the common department titles for the field is provided in Figure 1. I do not claim

Department of Physical Education
Division of Physical Education
School of Physical Education
Health, Physical Education and Recreation
Physical Education, Recreation and Human Performance Science
Health and Physical Education
Health Education, Physical Education and Recreation
Physical Education and Athletics
Athletics, Physical Education and Recreation
Health Education, Physical Education and Leisure Studies
Physical Education and Health
School of Education, Human Movement Program
Physical Education, Health, and Athletics
Physical Education and Recreation
Health, Physical Education, Recreation and Dance
Physical Education, Recreation and Dance
Physical Education and Sport
Physical Education, Health and Leisure Sciences
Physical Education and Leisure Management
Athletics
Movement Education
Physical Education and Fitness
Basic Physical Education
Health Science and Physical Education
Health, Physical Education, Recreation and Athletics
Physical Education, Recreation and Leisure Studies
Health and Recreation
Physical Education and Health Fitness
Professional Studies
Physical Education and Dance
Physical Education and Sports Medicine
Physical Education, Health and Recreation Studies
Physical Education, Recreation and Safety
Physical Education and Health Science
Physical Education and Exercise Science
Professional Education
Physical Education, Sport and Leisure Studies
Health, Physical Education, Recreation and Safety
General Physical Education
Professional Physical Education
Physical and Vocational Education

Figure 1 — Listing of the primary academic department labels as compiled from the *Physical Education Gold Book 1987-1989*.⁴ (I added four titles that I knew were not listed in this source.) Continued on next page.

Sport Science
 Sport and Leisure Studies
 Sport Science and Physical Education
 Sport and Movement Studies
 Health and Sport Leisure Studies
 Sport Studies
 Health, Sport and Leisure Studies
 Health and Sport Sciences
 Sports Medicine and Management
 Sport Fitness and Leisure Studies
 Sport Science Education
 Teaching and Learning Physical Education
 Sport and Exercise Studies
 Exercise and Health Science
 Exercise and Sport Sciences
 Health and Exercise Science
 Exercise and Sport Studies
 Kinesiology
 Human Kinetics and Leisure Studies
 Human Performance
 Movement Sciences and Education
 Health Promotion and Human Performance
 Human Development Studies
 Movement Sciences and Leisure Studies
 Human Kinetics
 Kinesiological Studies
 Human Movement Studies
 Kinanthropology

Figure 1 — (Cont.) Listing of the primary academic department labels as compiled from the *Physical Education Gold Book 1987-1989*.⁴

that this list is complete for academic departments in the United States, but it captures the majority of the current department labels for the field of study in this country and the world at large.³

The very fact that an extensive list of departmental labels can be generated is the most obvious reflection of the existence of chaos in the field of physical activity in higher education. Furthermore, the lack of order in academic programs is even worse than it appears on the surface because the same departmental label is often used to reflect different academic focuses. For example, some departments of sport studies or sport science do not limit the focus of their study to the activity category of sport but use the label of sport to imply a range of physical activities, of which sport activities represent only one physical activity category for study. Furthermore, it appears that in some departments the distinc-

tion between sport studies and exercise studies is not the activity focus per se but an implicit guise for a behavioral-social and biological science distinction to the study of physical activity, respectively.

The existence of such a diverse set of academic domain titles undermines the standing of the physical activity field in the academic community and society at large. Indeed, this diversity of labels is the most obvious sign to academe and society that chaos reigns in the field of study. Even the field of physics would suffer if it had 70 or so different department labels to reflect its knowledge domain.

The long list of department titles displayed in Figure 1 can be factor analyzed (via a gedanken experiment, so to speak) into four categories. These are (a) a professionally oriented category that encompasses physical education, health, and recreation either separately or in some combination; (b) an exercise category; (c) a sport category; and (d) a broad physical activity category that is reflected, for example, by the titles of human kinetics, movement science, and kinesiology. Of course, various combinations of these four categories can and have been formulated as the listing in Figure 1 reveals. This gedanken factor analysis is instructive in understanding the programmatic forces at play that have shaped the field of physical education.

The chaos is not reduced, however, by this categorization procedure because the labels, and the models that the labels represent, are in most cases not mutually exclusive. In fact, the labels and the practices they reflect tend to be primarily inclusionary or exclusionary at least by definition, if not in practice. For example, a human kinetics title by definition presumably covers a broad physical activity interpretation that incorporates implicitly, in principle and practice, an exercise focus. Furthermore, because a professional label such as physical education is used does not mean that disciplinary studies do not prevail. Similarly, professional activities such as teacher training can be developed under a discipline-oriented label, such as kinesiology. In brief, the range of department titles employed tends to emphasize knowledge domain differences, not similarities, in the field of physical education, and we are left with the hard task of justifying these differences in academic programs to both academe and society.

I believe that continued emphasis of the differences in our academic programs, rather than the similarities, is a fundamental cause of the chaos in physical education in higher education. And, of course, if we cannot justify these programmatic differences to our peers in the field (and many of us are unable to do this), then we should anticipate that we will be in a hopeless position attempting to explain our programs to the rest of the academic community and society at large.

In summary, the boundaries of our knowledge domain have been broadened considerably in the last 25 years, but we have not harnessed and labeled this field of study into a coherent academic package. This fragmented state of the academic focus has created what can only be described as a state of chaos within the field of physical education in higher education. This chaos in the degree programs undermines our position in academe in general and in society at large. Indeed, this chaos is fractionating the field of physical education in higher education per se, independent of its consequences for our direct and immediate impact in academe and society.

Professional and Disciplinary Training

Given the changing focus of academic programs in the physical education community, it is not surprising that considerable differences also exist across academic departments in the organization and teaching of a given academic focus. Thus, for example, the shift in orientation to a disciplinary thrust after Henry (1964) has created considerable problems for the traditional emphasis of the training of teachers and, more broadly, for the pedagogical aspects of physical activity. These problems are usually swept under the rug by the general and apparently self-satisfying claim of many individuals and departments who say that even the educationally driven physical activity programs of teacher training are "more academic" now. Of course, statements such as these usually beg the question as to whether the field produces better physical education teachers now than it did before.

There are four reflections of chaos in physical education academic programs that I wish to emphasize here by way of raising and discussing briefly four questions. First, to what extent and in what way should teacher training and other professional programs be disciplinary? Second, is there a significant, common professional ground for training in the various professional and clinical thrusts that relate to physical activity? Third, what disciplinary knowledge is relevant to our field, and how should this knowledge be formulated and developed? Fourth, how broad is the activity focus for the field? There are, of course, many other vexing issues and problems surrounding our academic programs, but I believe these four questions allow us to reflect on the significant elements of the programmatic chaos.

Disciplinary Knowledge for Professional Training

The question of how much and what type of disciplinary knowledge of the organism-environment interaction a prospective teacher of physical education requires is a fundamental problem. The traditional 1960s response was that the student gained a general knowledge of a variety of disciplines that relate to physical activity plus significant training in pedagogy to insure that the prospective teacher could educate, not only of, but through, the physical. The disciplinary knowledge was generally taught with the underlying notion that it was a means to the end of producing educators of and through the physical. Theoretical knowledge of the physical was not seen, as it is now by many individuals and departments, as an end in itself. Over the last 25 years, the balance of disciplinary to professional training in physical education programs has shifted so that there is now in many departments a greater emphasis on disciplinary knowledge at the expense of professional knowledge, even in programs that offer or emphasize teacher training. Disciplinary knowledge of physical activity is now taught and defended as an end in itself.

The amount of academic time devoted to pedagogical training for even prospective certified teachers of physical education is now woefully limited in many instances. This trend is not only evident in standard 4-year undergraduate physical education programs, but also in the California 5th-year model for the training of teachers and in some of the projected programmatic interpretations that have emerged in reaction to the Holmes Report (1986). Of course, defenders

of current approaches to teacher training will generally claim no intention to reduce the commitment to professionally relevant training, but rather to increase the time invested in disciplinary training. There are, however, only 24 hours in a day.

My general impression is that no matter what the nature of the programmatic structure in physical education departments most academicians would agree that the field does not produce as good a teacher of physical education as it used to. Indeed, the quality of teaching in physical education (and other domains of education) is viewed by many scholars and teachers to be abysmal. It is clear that the disciplinary shift in physical education in higher education has undermined to some degree the training of teachers of physical education rather than enhanced their skills and status. I am not proposing that chaos in professional programs has to be a consequence of developments in the disciplinary aspects of the field. Rather, I am simply saying that chaos in programmatic formulation over the profession-discipline balance has, in general, actually weakened the professional skills of prospective teachers of physical education, not enhanced them.

The relationship of so-called disciplinary and professional knowledge is also a key factor in the formulation of programs designed to train directly or indirectly a variety of future professionals in the field of physical activity. My perspective is that all the tensions of the profession-discipline debate surrounding the training of teachers of physical education are also evident in the programmatic development of other professions, such as athletic training. Thus, the issue of the type of disciplinary knowledge and its relation to professional practice has magnified because of the broadening of the professional agenda.

A Broad Professional Agenda

Another dilemma for the physical education community is how to structure degree programs that cater to a broader professional clientele than the single profession of teacher training. For example, this broad, professionally oriented package might include the specific options of coaching, athletic training, corporate fitness, health club instruction, and physical therapy. What are the similarities and differences of the required disciplinary and professional knowledge of these various professional subgroups? To what extent should universities be involved in the professional certification of clinical outlets including and beyond the traditions of teacher training? The answers to questions such as these differ in the departments that make up our field. Furthermore, there are faculty who advocate that the field, or, at a minimum, certain academic units in the field, should not be involved at all in the direct training and certification of professional, clinically relevant skills that relate to physical activity. Here are some examples of professional and clinical outlets in the physical activity domain:

- Physical education
- Coaching
- Athletic training
- Corporate fitness
- Health club instructor
- Pre-Physical therapy
- Exercise therapy
- Aerobics instructor
- YMCA director
- Exercise specialist
- Sport psychologist
- Premedicine

A similar problem of disciplinary knowledge exists regarding the commonalities and differences of programs of study in specific professional outlets or certification requirements. For example, what are the similarities and differences in the training required for teaching physical education and coaching sports in the school systems and outside the school systems such as in health clubs or YMCAs? Again, my observation is that the differences in training needs of the various potential professional and vocational outlets of the physical activity marketplace are emphasized. Their commonalities are not emphasized, in part so that different academic programmatic tracks, unique professional statuses, and labels may be justified and promoted.

The changing context in which physical activity programs in society are conducted has also contributed to the chaos in our field, particularly in the last 10 years or so. The traditional school-oriented nature of physical education provided a relatively narrow and central theme of study that was simple to promote and police. The school systems have become, however, the least significant forum in which education of and through the physical occurs. Children of school age have many opportunities now for organized and informal physical activity outside the school system, and similar opportunities have been developed for the ever-increasing activity needs of American adults. Thus, physical education classes in the school system constitute only a small proportion of the time spent by an individual in organized activity when considered on a life-span basis.

It is also worth remembering that physical education survived the creation of recreation departments in academe during the 1950s and 1960s, largely on the fragile ground that recreationists were not really *educators* of and through the physical. They were merely providing a recreational opportunity for children to use and sharpen the skills that were taught in the school system's physical education classes. Indeed, the fields of physical education and recreation survived as separate academic entities even though the practice of recreation on its inception appeared to have many of the hallmarks of physical education practiced after 4 o'clock. Thus there was, or should have been, much common ground between these respective departments in academe. The common ground of the two fields was obvious to many, and now that academic and practical physical education is looking beyond the school system (partly due to the shift in demographics that has resulted from the graying of America), the artificial boundary between physical education and many elements of recreation is again being exposed and questioned. Thus, even the institutionalized programmatic demarcation between physical education and recreation in higher education is open to question. Similar arguments can be formulated about the real or imaginary nature of the distinction between health education and physical education.

The physical education community just does not seem to know how to react to the changing professional and clinical demands and opportunities that have been created and fostered in the physical activity field. Thus, chaos exists in the professional physical activity marketplace and in university programs that attempt to prepare professionals to enter this work environment. Physical education faculty tend to chide the Jane Fondas and Richard Simmons of the world, but in many ways the physical activity community has followed rather than led individuals such as these. In general, the field has been and still is backward in responding to the marketplace. Many academics criticize the commercialization of the field

while at the same time wanting to reap the rewards of the marketplace, albeit on the grounds of maintaining academic respectability.

In summary, the academic physical education community has failed to react (even inappropriately!) to the many opportunities that exist for physical activity in society. On the other hand, *no* action can be construed as *an* action. If academic physical education does not react positively to the changing needs of society, we will find that other groups, even if they are labeled as paraprofessionals or business people, will have developed these many opportunities in a fashion that is distant or antagonistic to academic physical education. (For an informed discussion of the issue, see Ellis, 1988.) It is clear that chaos is evident in the professional and clinical elements of physical activity and in the academic programs that are training students for these employment markets.

The Discipline of Physical Activity

One of the key dilemmas facing professionally oriented and non-professionally oriented departments is how to organize the disciplinary knowledge in academic programs. The most common response to this problem has been a cognate discipline-activity categorization that has allowed subdomains such as exercise physiology, sport psychology, and sport sociology to emerge as relatively autonomous within the broader field of study. These subdomains have grown and flourished during the last 25 years to the extent that many faculty and students see themselves as, for example, sport psychologists or exercise physiologists rather than physical educators or kinesiologists. In spite of the growth of these subdomains, it is not clear that this form of knowledge categorization is the best way to organize the academic subject matter of our field on either academic or political grounds. Indeed, I would claim that this intuitive approach to organizing the heart of the academic subject matter of physical activity has been another contributing factor to the emergence of chaos in the field, not merely a reflection of it.

I sense that there is renewed interest and even pressure in higher education to reconsider this cognate discipline formulation in creating knowledge subdomains in academic physical activity. Of course, these counter views rest on varying attempts to break down the cognate discipline-activity distinction and to promote a broader based interdisciplinary or cross-disciplinary focus to the study of physical activity. One inevitable reflection of this chaos at the programmatic level is the inconsistent nomenclature used to describe the subdomains of the field. Table 1 shows examples of the cognate discipline-activity subdomain approach, the broader cross-disciplinary approach, and the many labels used to reflect just one area that I am more familiar with, namely the motor-skills domain. This time chaos is evident in categorizing the disciplinary and subdomain approaches to the study of physical activity.

The cognate discipline-activity approach has created an identity for our subdomains in the physical activity community, but it is not clear that it has created the most appropriate identity. First, there are genuine academic and professional reasons to suggest that an activity subcategory is not a strong enough basis to formulate an academic field of study (although there are examples that

Table 1
Examples of Subdomain Categorization

Cognate discipline-activity	Cross-disciplinary	Motor skills
Exercise physiology	Biodynamics	Motor learning
Sport biomechanics	Growth, development, and form	Motor control
Sport psychology	Coordination, control, and skill	Motor development
Sport sociology	Physical culture	Perceptual motor skills and psychomotor skills

have been successful to varying degrees, such as speech). Second, the majority of our faculty use the cognate level for their identity but, in most cases, have little or no formal training in that cognate domain. The outcome is, therefore, that we are viewed as second- or third-rate psychologists, sociologists, or whatever. Third, the weakness of the cognate discipline approach is buttressed by the fact that our field has had little or no impact on the theory development of the cognate disciplines that it claims to align itself with. We have cognate discipline-activity subdomains that are isolated not only from each other and the broad confines of our own academic field but also from the cognate disciplinary group to which a number of faculty in the subdomain probably more earnestly aspire.

A few scholars in our field have promoted the idea of academic subdomains that are interdisciplinary or cross-disciplinary in focus and organized around important phenomena in our field. Thus, for example, the exercise science program at the University of Massachusetts has an academic thrust in motor integration that can be viewed as an attempt to link the physiology, psychology, and biomechanics of motor control. I believe that a cross-disciplinary orientation to our academic subject matters holds the most potential for our field, but I will not elaborate or defend that point here (see Lawson & Morford, 1979, for discussion). The cross-disciplinary concept has been a problem for many in our field to accept because, in part, this type of orientation is more difficult to enter and sustain from an academic standpoint. Some faculty have problems with this approach because the academic waters have not been charted out, as the cognate discipline has, by some other group. Thus, in following a cross-disciplinary perspective, it is less easy or even inappropriate to test, for example, sociological or psychological theory, even in a different context, like sport.

The creation of inconsistent subdomain groupings and the primary reliance on a cognate discipline-activity demarcation has contributed to the extant chaos in the field. It should be recognized that these academic tensions are not confined to our field of study. Similar growing pains are evident in many other segments of academe. However, the academic physical education community continues to sustain the strategy of emphasizing the differences rather than the similarities in both the academic and professional aspects of our field.

Activity Focus

One of the most striking forms of fragmentation in the field is manifest in the various attempts to partition and promote narrow physical activity categories as the focus for academic study. As the list of department titles suggests, there are many who do or would promote sport or exercise activities as the activity phenomena of the field. These activity categories are typically used rather loosely as descriptors for our field, but they have gained considerable momentum as activity focuses. A major problem is that if the concepts of sport and exercise are interpreted literally then it is clear that the field of physical education involves a much broader spectrum of physical activities than those that can be defined as sport or exercise.⁵ In other words, sport and exercise activities are only a collective subsegment of the field of physical activity, albeit a major segment when viewed in the collective form.

There has been a tendency for the field of physical education to undermine the study of the generic fundamental activity categories of posture, locomotion, and prehension. These are primarily studied in only a sport or exercise context, but there are many contexts in which physical activity occurs that cannot be construed as either sport or exercise. My experience is that many proponents of a sport and exercise model recognize this dilemma but then duck out of the classification problem and the programmatic challenge by implicitly or explicitly broadening the received boundaries for defining sport and exercise activities. A good case in point is the journal *Research Quarterly*, which recently changed its title to *Research Quarterly for Exercise and Sport*. The guide to contributors indicates that the journal includes research articles in the art and science of human movement. Perusal of the journal contents confirms that this broad-based perspective is being put into practice. The journal, like the field of study in general, is not confined to the study of exercise and sport activities.

The easiest way out of this activity classification problem is to recognize and promote physical activity in general as the activity focus for the field. Again, it seems preferable to err on the side of inclusion rather than exclusion, particularly as any activity analysis of the field clearly shows that we study a broader range of activities than those that may be construed as sport or exercise. Furthermore, while the activity categories of sport and exercise provide some unique boundary constraints to action, it should be clear that we will not generate important theoretical propositions that individually describe and explain a limited physical activity subdomain such as sport, exercise, dance, work, self-help skills, or music.

In summary, the emergence of order in a variety of dimensions of the field of physical activity in higher education does not appear to be a prospect in the short term. There is chaos within the professional and disciplinary segments of the physical activity field. The fact that chaos is evident within diverse segments of the field is often lost in the promotion of the central problem as a discipline versus profession issue.

Societies

The academic field of physical activity is a large one with 508 departments that offer a bachelor's degree, 176 departments that offer a master's degree,

and 49 departments that offer a doctoral degree in physical education or related departments.⁶ The many scholars of physical education who relate to these degree programs require societal representation to promote their activities in academe and local, state, and national communities. The central society has been the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD), which was founded in 1885 and currently has approximately 28 thousand members. Most members of AAHPERD do not, however, work in higher education.

Since its inception in 1885, AAHPERD has been the core society for the academic community in physical activity, but during the last 25 years its central status has been challenged implicitly and explicitly by those physical education faculty in university institutions that have strongly pursued the disciplinary orientation. For such faculty, AAHPERD has become increasingly irrelevant and is seen as primarily a professionally oriented society, consistent with the education model for physical education in higher education of the 1930s. To accommodate the newly arising disciplinary interests of the field, many of the academic, cognate discipline subdomains created new societies bound by the focus of the subdomain knowledge. As shown in Table 2,⁷ at least 14 societies relevant to the physical activity domain have been initiated by the physical education community. For many faculty and their students, the relevant academic, political, and societal action is seen to be in these smaller discipline-oriented groups rather than in AAHPERD.

Given the chaos that reigns in defining the academic subdomains, it should not be surprising that similar problems have surfaced in many of these new

Table 2
Societies in the Academic Field of Physical Activity

Society	Year founded	Approximate membership
American Academy of Physical Education	1930	300
American Alliance for Health, Physical Education, Recreation and Dance	1885	28,000
American College of Sports Medicine	1953	12,000
Association for the Advancement of Applied Sport Psychology	1985	500
International Society of Biomechanics	1973	700
International Society of Biomechanics in Sports	1967	200
National Association for Physical Education in Higher Education	1979	800
North American Society for Sport History	1972	550
North American Society for the Psychology of Sport and Physical Activity	1968	
North American Society for the Sociology of Sport	1978	200
North American Society for Sport Management	1985	150
Philosophic Society for the Study of Sport	1972	300
Sport Literature Association	1983	600
The Association for the Study of Play	1974	300

societies. Each of these subdomain societies varies in (a) the degree to which it has attracted members from outside the physical activity community, (b) the membership qualifications or lack thereof, and (c) the scope of the activities, professional and/or disciplinary. The size of these societies varies tremendously, with the American College of Sports Medicine (ACSM) clearly having the largest membership after AAHPERD and also probably having the largest number and proportion of members that are not physical educators.

Another development consonant with and sometimes related to the growth of these societies has been the proliferation of subdomain journals beyond *Research Quarterly for Exercise and Sport*, published by AAHPERD since 1930. These so-called specialist journals have opened up the publishing possibilities for faculty and have gained so in stature that for many non-professionally oriented scholars the *Research Quarterly for Exercise and Sport*, originally the central journal for the field, now receives primarily second- or third-rate papers, often the rejects of subdomain journals.⁸ Furthermore, the professional-discipline debates outlined previously have even caused tension within academic subdomains—sport psychology for example—to the extent that more than one society and journal are apparently required to represent them.

The growth of these specialist societies and journals has certainly contributed to the promotion and institutionalization of the academic study of physical activity. However, the structure and standing of many of these societies and journals is marginal, and we might wonder whether the academic subject matter of the field warrants further differentiation, or even the current differentiation, at society and journal levels. Again, it is clear that these societal undertakings have helped reinforce apparent differences between academic subdomains at the expense of highlighting the similarities.

The academic societies listed in Table 2 have little or no potential for political impact in physical education in higher education because they are not action-oriented. Thus, the field of physical education is left with the academic power distributed and defused through a group of small subdomain societies; the political power, or the potential for it, is left housed under the umbrella of the increasingly irrelevant professional society of AAHPERD. This dissipation of the politics, economics, and philosophy of our field has also contributed to the chaos in physical education in higher education. This trend should not be surprising because, to a large degree, the same people are involved in formulating departmental missions, academic subdomains, and academic societies.

Concluding Remarks

Physical education in higher education exhibits a classic property of chaotic systems. Namely, small changes in initial conditions (in this case, marginal changes in knowledge domain emphases) have led to large-scale or exponential changes in the resultant dynamics (in this case, the structural categorization, organization, and labeling of academic programs). The outcome is that there is little or no order to our academic programs (disciplinary or professional) or to the organization of physical activity programs in society. Physical education in higher education has had considerable difficulty reacting to the changing de-

mands of both academe and society. Indeed, a measure of the problem is that some academics in physical education would propose that the demands of academe and society are incompatible.

The prevailing point evident in all the issues I have discussed (the nature of the field of studies, professional and disciplinary training, disciplinary knowledge for professional training, the activity focus, and societies of the field) is that faculty in physical education have emphasized the differences rather than the similarities of the subject matter. It seems that the common ground is viewed as half empty as opposed to half full. To continue emphasizing the differences can only erode the momentum of the center of gravity of the field and consequently erode the future prospects of the field of study in both higher education and society.

I believe that the differences (the unique programmatic emphases) can only survive given a recognition of the similarities (the common core of programmatic study). By continuing to emphasize the differences of certain disciplinary, professional, or activity thrusts, the field of physical activity in higher education is in danger of narrowing and fragmenting the academic knowledge domain and finessing the central phenomenon of the field—physical activity (see Newell, 1990).

References

- BRASSIE, P.S., & Razor, J.E. (1989). HPER unit names in higher education—A view toward the future. *Journal of Physical Education, Recreation and Dance*, **60**(7), 33-40.
- COLLEGE blue book. (21st ed.). (1987). New York: MacMillan.
- ELLIS, M.J. (1988). *The business of physical education*. Champaign, IL: Human Kinetics.
- HENRY, F.M. (1964). Physical education: An academic discipline. *Journal of Health, Physical Education and Recreation*, **35**, 32-33.
- HOLMES Group, The. (1986). *Tomorrows teachers: A report of the Holmes group*. East Lansing, MI: Author.
- LAWSON, H.A., & Morford, W.R. (1979). The cross-disciplinary structure of kinesiology and sport studies: Distinctions, implications, and advantages. *Quest*, **31**, 222-230.
- McPHERSON, B.D., Curtis, J.E., & Loy, J.W. (1989). *The social significance of sport*. Champaign, IL: Human Kinetics.
- NEWELL, K.M. (1990). Physical activity, knowledge types, and degree programs. *Quest*, **42**(3), 243-268.
- PHYSICAL Education Gold Book 1987-89. (1987). Champaign, IL: Human Kinetics.
- PRIGOGINE, I., & Stengers, I. (1984). *Order out of chaos: Man's new dialogue with nature*. New York: Bantam.
- THOMAS, J.R. (1988). Editorial. *Research Quarterly for Exercise and Sport*, **59**, v.
- WILLIAMS, J.F. (1927). *The principles of physical education*. Philadelphia: Saunders.

Notes

¹The term chaos is used with respect to its current scientific interpretation and the subtitle with due respect to Prigogine and Stengers (1984).

²The Henry (1964) paper was a landmark influence on the study of physical activity in higher education. However, in retrospect, it is clear that Henry did not lay out any formal rationale for physical education being a discipline. He simply said it was—and others have believed.

³At a recent state-of-the-art meeting, sponsored by the Big Ten Universities (Chicago, December 1988), Jack Razor indicated that his research revealed 114 different department labels for the field (see Brassie & Razor, 1989).

⁴It seems a real shame and is further evidence of the chaos that AAHPERD no longer collects information regarding university degree programs and that our one chance for preserving this information through Human Kinetics Publishers is being frittered away by the poor response from the physical activity community in higher education.

⁵After McPherson, Curtis, and Loy (1989), I view sport as a structured, goal-oriented, competitive, contest-based, ludic physical activity. Exercise, as interpreted by the field of physical activity, is bodily exertion for the sake of developing and maintaining physical fitness (Webster's Dictionary).

⁶These numbers were obtained from the 1987 *College Blue Book*. These numbers probably represent approximations due to the inconsistencies in reporting such data and the large number of labels we have to represent the field.

⁷This information was compiled from documents distributed at a meeting of representatives from the Physical Education, Exercise, and Sport Organizations, Fort Worth, TX, September 1987. The membership numbers for AAHPERD were obtained directly from that organization as were those for the North American Society for Sport History.

⁸See a positive view of the status of the *Research Quarterly for Exercise and Sport* in a recent editorial by Jerry Thomas (1988).

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