

SPORT, SCIENCE, AND INTERCULTURAL RELATIONS: REFLECTIONS ON RECENT TRENDS IN OLYMPIC SCIENTIFIC MEETINGS¹

*John J. MacAloon **

Changes in the production and distribution of knowledge in various fields of science are interesting in their own right from a sociological point of view (Merton 1973, Shapin 1982). Patterns of differential patronage of sciences by extra-scientific bodies further reveal ideological and political dynamics within the sponsoring institutions themselves (Bourdieu 1984, Latour 1987, Mukerji 1989). Congresses and symposia officially sponsored by the IOC, OCOGs, and other Olympic organizations are, therefore, not only media for transmission of Olympic research, but also special objects of it. In what follows, some recent trends in the relative patronage of various sports sciences by Olympic authorities are described. Claims of the natural sciences of sport to universalist and nonpolitical status—and therefore to a special harmony with Olympic internationalism—are critically analyzed in relation to claims by the more relativist and pluralist cultural and political sciences of sport. I suggest that a growing dilemma concerning an adequate vision of the Olympic movement as a whole is inscribed in these struggles among the academic disciplines for audibility in Olympic contexts.²

TRENDS IN OLYMPIC SCIENTIFIC MEETINGS

Two general developments may be noted at the outset. First, IOC patronage of international scientific and scholarly meetings has expanded over the last decade. While the picture is more mixed with respect to OCOGs and NOCs, on the whole major Olympic organizations seem to be setting aside their past

* John MacAloon is Professor of Social Sciences, University of Chicago, Chicago, Illinois, U.S.A.

reticence concerning collaboration in academic (as opposed to educational and sports technical) meetings. Second, a polarization between the natural sciences and the human sciences of sport has newly appeared in the context of such congresses and symposia. These concurrent tendencies are apparent both in new forums which have lately arisen and with respect to the Olympic Scientific Congresses (OSCs) traditionally accompanying Olympic Games.

A new type of meeting called the "IOC World Congress of Sport Sciences" (WCSS) forms one pole of recent developments. The first WCSS, held in Colorado Springs in 1989, was exclusively devoted to the biological, physical, and medical sciences. Under pressure from a few key organizing committee members, the second WCSS—Barcelona 1991—did incorporate one section each on the psychosocial and the sociohistorical sciences. Still, the conception of "sports sciences" deployed in Barcelona remained dominated by the natural sciences and their clinical applications to a degree which distinguished this meeting, for example, from past OSCs in Munich 1972, Quebec City 1976, Eugene 1984, and Seoul 1988. At the Barcelona WCSS, 60% of keynote speeches, 70% of invited lectures, 87% of panel discussions, and 83% of free papers and posters belonged to the natural and clinical sciences. If positivist contributions in sport psychology are shifted to the natural science side, the presence of the social, historical, and cultural sciences was yet more marginal in Barcelona.³

At the opposite pole lie several international meetings, also of a new type, in which the proportion of attention to the human sciences as against the natural sciences has been intentionally the reverse of the WCSS pattern.⁴ The 1990 Quebec City "Sport: The Third Millennium" symposium (Landry, Yerles, and Landry 1991), the 1988 Calgary "Olympics and Mass Media" conference (Jackson 1989), and the 1987 Seoul conference on "The Olympics and Cultural Exchange in the World System" (Kang, MacAloon, and DaMatta, 1988) were privately organized by independent groups of scholars in the human sciences and patronized in various ways and degrees by official Olympic organizations. The STM attained formal IOC sponsorship and publication subsidy and was further blessed by the Canadian Olympic Association. The IOC, COA, and OCO88 patronized OMM. The OCEWS received official letters of endorsement from the IOC and SLOOC presidents.

Two additional international meetings were conducted by SLOOC on a large-scale. The "World Academic Congress of the Seoul Olympics" (Kang 1989) assembled scores of academic experts from around the world to discuss "The Family in Post-Modern Society." WACSO thus represented a new model

in which the Olympic Games are conceived not as the direct object of discussion but as the appropriate context for high-level consideration of global issues and developments. The 1989 “Seoul Olympic Anniversary Conference” (Koh, 1991) likewise featured the disciplines of political economy, cultural anthropology, sociology, communications, history, philosophy, and physical education and de-emphasized the biomedical and biophysical sciences. SOAC contained many sessions devoted to the explicit analysis of the Seoul Olympics by academic researchers from various fields. But, like WACSO, SOAC also featured speeches, conference sessions, and panel discussions addressing global political, economic, and social issues—notably the end of the cold war—associated with the broader contexts of the Korean Olympiad and delivered by scholars not directly engaged in Olympic research.

As is widely recognized and appreciated, Korean Olympic organizers and cultural, university, and government authorities went far beyond any previous Olympic host country—even the Germans in 1972—in promoting scholarly and academic activities as an intrinsic part of the Olympiad (Park 1991). The Korean innovators explicitly intended these new kinds of scholarly meetings to be continued at subsequent Games. On a more modest scale, the OCEWS model was reproduced in Barcelona at a 1991 symposium on “Olympic Games, The Media, and Culture Exchange,” organized by the Olympic Studies Center of the Autonomous University of Barcelona with IOC blessing and some COOB participation. A 1993 Barcelona anniversary conference on the SOAC model is currently under discussion between the Olympic Studies Center, the COOB, and the Barcelona and Catalan governments. To the consternation of Koreans and a multinational scholarly community, however, neither the COOB nor the IOC has shown any interest in reproducing the WACSO initiative in Spain.

Direct and indirect effects of these new developments on the Olympic Scientific Congresses are of special interest since the OSCs have sought in the past to balance contributions from the natural and the human sciences of sport. As historians of the Olympic movement well know, the institutional status of the OSCs has always been problematic. The IOC encourages but does not contractually require OCOGs to hold them. As a result, the record of recent Olympiads, from a baseline in Munich in 1972, has been highly variegated in this respect.⁵ The 1976 OSC in Quebec City (Landry and Orban 1978) was large and successful, owing to the extraordinary efforts of local organizers in the face of general COJO indifference. In 1984, the LAOOC paid even less attention to the Eugene, Oregon OSC, which was almost entirely the creature of local entrepreneurs, with some assistance by international academic associations such

as CIEPSS–ICSSPE, IAHSPE, ISHPES, ICSS, ISSP, IFSM, and ISAK.⁶ Indeed, a pattern had taken shape in which the leadership and members of such organizations emerged as the principal clients for OSCs, the main allies of local (largely physical educationist) entrepreneurs, and the chief international lobbyists for continuation of these meetings.

In Korea, the SLOOC did its duty toward an OSC, privately organized at a peripheral university campus and populated chiefly by local physical educationists and members of international academic organizations like those just mentioned. However, the real interests of SLOOC and mobilized Korean academic elites lay in the other meetings previously described, not in the OSC. The Albertville COJO was not formally associated at all with the “International Scientific Congress: Sport and Mountains—1992 Winter Games,” held in Grenoble and Chamonix under the main initiative of a local university and teaching hospital. The French NOC (CNOSF) was the only Olympic body and but one of a dozen “institutional supporters” listed alongside the familiar roster of the scientific organizations in a program about equally divided between the biological and human sciences.⁷ In the context of the Barcelona Summer Games, a small OSC has been announced for summer 1992. Significantly: it is to be held in Malaga, not Barcelona; there is no sign of any explicit COOB involvement; and the leading animators seem to be officers of CIEPSS–ICSSPE and not any Olympic authorities.

With so many local cultural variables and economic and political uncertainties surrounding future Olympic sites, it is risky to extrapolate from this record. However, trends seem in the aggregate to point to a likely future. The WCSSs will continue to be dominated by the biomedical and biophysical sciences, including no more than a token representation of human scientists. Moreover, the greater prestige associated with the WCSS because of direct IOC ties and (as will be discussed momentarily) more stable corporate funding will likely draw off more of the better natural science researchers from engagement with the OSCs, particularly where the latter are not held in immediate proximity with an Olympic Games.

On the human sciences side, the clear trend is toward high-level, high visibility, and highly selective meetings, focused on major global issues of relevance to the Olympic movement and on the Olympic movement itself as a global issue. Through this strategy, such meetings will continue to attract direct interest and involvement by IOC, OCOG, and NOC elites. To the extent that natural scientists participate in such meetings at all, it will not be to present results of laboratory research but to consider the cultural, historical, and political

role technoscience plays in contemporary Olympic sport. Since most technoscientists are neither trained nor particularly comfortable in talking about science, as against reporting it, the general segregation of natural from human scientists in Olympic meetings will be reinforced from this side as well.

Where circumstances make it possible, some overlap in scholarly personnel between OSCs and specialized human sciences meetings will likely continue. (In Korea, some dozen OCEWS and SOAC conferees also gave papers at the Seoul Olympic Scientific Congress.) Generally speaking, however, the future looks dim for the OSC model. This could mean that Olympic conference opportunities will become more limited for physical educators who are not either active biomechanical/biomedical or social scientific researchers. Discipline-based academic societies, particularly those with their own journals and professional meetings, will continue to strengthen themselves. The future seems doubtful, however, for general sports studies organizations like CIEPSS–ICSSPE. For some time, that organization has failed to attract leading Olympic researchers in the human sciences and the disciplinary biomedical societies have drawn off members from the umbrella organization. CIEPSS–ICSSPE’s recent tilt toward the biomedical sciences reflects these conditions and also, perhaps, a recognition that the weakening OCS tradition will leave only the WCSSs as possible domains of international visibility and influence. A recent attempt by CIEPSS–ICSSPE to formalize its relationship with the IOC Medical Commission offers evidence for these conclusions.⁸

SOCIOLOGY OF OLYMPIC SCHOLARSHIP AND RESEARCH

Describing trends is much easier than explaining them. Such facts can, of course, be attributed to simple practicality in a world where research and scholarship related to international sport and the Olympic Movement have greatly expanded over the past two decades. No single congress, it might reasonably be argued, could now hope to encompass presentations of contemporary research and the leading academic personalities from all the various disciplinary specialties relevant to international sport. The new cleavage between the natural sciences and the human sciences of sport is, therefore, to be understood as a simple consequence of the specialization which inevitably accompanies scientific progress. From the perspective of today’s Olympic studies, the proceedings even of the highly successful and multidisciplinary Quebec OSC of 1976 show this effect clearly. Whole disciplines like the

anthropology of sport, sports economics, and sport management barely existed at the time, and leading work in a variety of disciplines that did then exist—from sport sociology to biomechanics—is infinitely more sophisticated today. From this point of view, the newly residual status of the OSC model, with its commitment to representation by all major areas of research, is explicable more as a network maintenance operation by an older generation of sports studies pioneers than as a response to the always fragile institutional bases of support for the OSCs.

A second, more sociological explanation for the disciplinary divisions of official Olympic scientific meetings would stress the competition among various groups of specialists for the resources of the IOC and other sports bodies, offering academics and clinicians valuable access to information, scholarly communication, visibility, travel, and prestige. In this account, distributive alliances and patron–client relations with various IOC, NOC, IF, and NF elites engaged in their own competition for prestige and influence would be seen as the key mechanism for the official and quasi–official partitioning of the sports sciences. For example, it is well–known that the WCSSs are propelled by the IOC Medical Commission and the IOC ambitions of its chief, Prince Alexandre de Merode. Olympic technoscience issues such as doping have given the Medical Commission great visibility over the last decade, have allowed it to reach out to create alliances with academic specialists in the bioscientific and clinical areas, and in effect to create its own series of conferences. Their rather pretentious title—IOC World Congresses of Sports Science—indicates the boldness, only beginning to be contested, with which this faction has felt privileged to claim for itself the very definitions of world sport science and IOC involvement.⁹

A similar pattern of alliances is visible on the human sciences side as well. The IOC Press Sub–Commission and then broadcast rights chief Richard Pound, a long–time IOC Executive Board member, had important roles in the Calgary OMM conference. Pound was also the key IOC player in the 1990 STM conference in Quebec City, at which IOC President Samaranch was awarded an honorary doctorate by Laval University. The achievements of both officials in the fields of international politics and intercultural relations were calculated to be best appreciated by the social scientists who dominated that meeting.¹⁰

Korean cultural emphasis on learning and education are synergistically complemented by the need for would–be political leaders to legitimate themselves by association with domestic and foreign scholars. WACSO and SOAC owed much to the personal initiatives of SLOOC president Dr. Park

Seh-jik, whose efforts in this vein continued with sponsorship of a November, 1991 meeting in Seoul which established a World Olympic Academic Network of libraries, archives, and research centers devoted to Olympic studies. Parks domestic political ambitions are matched on the IOC side by Kim Un-yong, IOC vice-president and Pound's successor as head of the television committee. Kim has lately interested himself in activities of Olympic mass communication researchers. Finally, Nelson Paillou, president of the CNOSF and a former teacher of literature, was highly visible at the Chamonix-Grenoble OSC.

In sum, things have changed from a time not long ago when leading IOC, OCOG, and NOC figures took no or purely local interest in formal Olympic research or—as did a few pioneers like Nikos Nissiotis, and the Germans, Rieckehoff and Willi Daume—sponsored individual scholars and their projects. The appointment of various IOC standing commissions of experts under the Samaranch administration laid a groundwork for a process which goes forward now in the additional context of international scholarly meetings. The rivalry for influence by various agenda-setting agencies of Olympic sport joins with personal ambitions of individuals to create from the side of Olympic officialdom a logic of distinction and differentiation of bodies of knowledge. Alliances with academic groups are becoming a regular feature of the careers of top Olympic officials. Indeed, it is perhaps not too much to say that contenders for power within the IOC who have not developed such connections are at a disadvantage.

Rising up to meet this development are intrinsic processes of distinction, specialization, and rivalry among academic groups. Different networks of research specialists define themselves in relation to one another as “taste cultures” through the constitution of and competition for social and cultural, as well as economic, capital (Bourdieu, 1984). Without anyone's having called for it or even necessarily having willed it, the increasing segregation in Olympic scholarly meetings of the laboratory and clinical sciences from the human sciences is one outcome of these processes. A sophisticated sociological account would see this development as an instance of the larger pattern by which the scientific division of labor reproduces the social division of labor.

Big international meetings cost big money. However, conference funding by private sector entities, notably multinational corporations, appears to have had only marginal effects on scientific segregation in recent years. Gross favoring of “hard science” meetings, which might be expected in light of perceived prestige or direct ties to corporate product lines, has not yet been a major factor. Where it has been sought, all of the meetings described above have attained corporate support in cash and services, usually in combination with government

contributions. The Korean OCEWS meeting was principally sponsored by the Hankuk Ilbo Newspaper Group and the associated Paek Sang Foundation. SLOOC and its daughter Seoul Memorial Sports Promotion Foundation funded the WACSO and SOAC, with support by corporate business kept behind the scenes in the preferred Korean cultural form of public finance which is very different from and not directly comparable with Western practices. The Calgary OMM and Quebec STM conferences attained sponsorship from major TOPS and NOC corporate sponsors, such as Federal Express, Kodak, The Royal Bank, and the ubiquitous Coca Cola. The Barcelona WCSS was chiefly (and somewhat controversially) funded by candy and pharmaceutical companies. One of the latter, Sandoz, was a major donor to the Grenoble–Chamonix OSC.

In other words, meetings focused on the human sciences—at least those sufficiently large, high level, and organized by academic and Olympic movement allies practiced in the ways of corporate fundraising—have been at no great disadvantage compared with technoscience meetings. However, this situation could change in the future. Recession in major Euro–American countries, increased transportation costs, shrinking university and government budgets for academic travel, and more selective corporate promotion and advertising campaigns could shift the balance in favor of conferences focused on natural science topics. For example, the WCSS probably has more stable corporate funding prospects, given the direct interests drug, food products, and sports equipment companies take in the results of technoscientific research. A comparison, for example, between the Barcelona WCSS and the Quebec STM conference further suggests that bioscience conference organizers may be more malleable with regard to corporate quid pro quos than organizers of human science conferences. Moreover, the corporate successes of the latter have occurred when their stated conference themes have been quite general, such as “the future of sport” or “sport and mass media.” It may be wondered whether multinational corporations would be quite so forthcoming for conferences explicitly devoted, say, to “Olympic sport and geopolitics” or “sport and North/South relations,” key matters of interest to social and political scientists. Such meetings have so far been most successfully organized in non-European countries like Korea, where Olympic sport is chiefly understood to be for and about international relations and where commercial funding has been less required and desired. In the West, the ideology which holds the discoveries of natural science to be universal and essentially non–political—by contrast with the theories and arguments of the human sciences—holds powerful sway, almost as cultural common sense. If progressive Olympic leaders have abandoned their

fear of what was traditionally taken to be the controversial and critical character of the approach of the human sciences to Olympic sport, other officials retain such views. Multinational corporations have, if anything, been more wary of “political controversy” in the projects they fund than government and sport bodies.

These last points raise the main question considered in the rest of this paper. While sociological accounts have a good deal of explanatory power with respect to the incipient segregation of the natural and human sciences in official Olympic scholarly meetings, the main significance of the phenomenon may lie in ideological and ontological domains. By rewriting the expression “sports sciences” as “sports/sciences,” some very important but quite neglected truths may be brought to light. Bracketing the purely instrumental connections between sport and science permits recognition of their substantial relations as congruent social systems of human activity. The production and communication of scientific knowledge and the divisions of sports/sciences are homologous and in themselves matters of international relations strictly speaking. Indeed, the divide between the main forms of sport science reproduces the central dilemma of Olympic ideology itself in the late 20th century.

SCIENCES AND POLITICAL BOUNDARIES

The story, indeed the mythos, of the development and triumph of modern science is only too familiar. As taught to every school child in Europe and the Americas, it is a story of unrelenting progress. First came the purely empirical discoveries of the ancient Babylonian, Egyptian, and Greek astronomers, physicians, and mathematicians and the epistemological and taxonomic foundations set by thinkers such as Aristotle. Then, after long struggles to escape the shackles of religion, folk belief, and speculative philosophy in the European Middle Ages, modern science emerged in the Enlightenment of the 17th and 18th centuries and triumphed in the 19th and 20th centuries. Then it was exported around the world. One after another, Nature’s secrets were pried from her through that wondrous instrument, the scientific method. Facts accumulated, discoveries were assembled into theories, theories were experimentally tested, and laws of nature were revealed in an exponentially expanding system for the production of surplus knowledge. Within Europe, formerly powerful empires like that of metaphysics were thrown down while others like plastic art and poetry were compartmentalized and marginalized as aristocratic “high” or “lower” class folk cultures. Meanwhile, European

conquests abroad were in no small part attributed to and justified by the theoretical and practical superiority of European technoscience. And all this, to paraphrase Marx, was supposed to have happened in the realm of pure knowledge.

Of course, few working scientists indulge themselves with this children's story of universal rational progress. Whatever their acquaintance with the formal sociology, history, and philosophy of science, researchers are aware in their day-to-day practice of various institutional, political, social, and historical factors which influence scientific activity. But a more radical story must be offered in which forms of knowledge are not merely influenced but constituted by and dependent upon religious, ethnic, linguistic, and political boundary phenomena. In the language of social anthropology, a turn must be made from a grand narrative of events to the delineation of deep historical structures which generate ontologies. Conference organizers and general publics typically expect Olympic human scientists to say something about the ancient Greek world. This convention can be honored unconventionally.¹¹ A structural paradigm from pre-classical Greece can help situate the sports/sciences in our own geopolitical order and discern the real boundaries created in the mutual production today of Olympisms and knowledges about them.

Every social system is built from the joint operation of a principle of segmentation of internal units and a principle of their incorporation within a boundary marking off external others. Through the 8th and 7th centuries BCE (there is no space here to quibble about the dates), the Hellenic world divided itself into more or less autonomous city-states. In theory, each and every free Greek was a citizen, by birth or adoption, of one and only one *polis*. Concurrent with this principle of internal segmentation, the concept of common Greekness was invented and came into widespread usage. By the 5th century, the category "Hellene" was simultaneously naturalized among the general population and problematized by urban intellectuals, as the opening chapters of Herodotus and Thucydides are sufficient to make clear. This came about first of all through a process of marking "Hellas" off from the non-Greek or barbarian world, notably from the great civilizations of the Middle East. (This boundary is the charter, of course, for today's European distinction between the Occident and the Orient, the West and the East.) In the legends of division with which Herodotus opens his *Histories*, boundaries are constituted by the legitimate or illegitimate passage of women across them. Europa, from which Europe would derive its name, is the daughter of the Phoenician king of Tyre carried off by Greeks in revenge for a similar act by Phoenicians and Egyptians. (Prom the point of view of eponymy,

all “Europeans” today are descendents of a raped Asian princess!) Second, in addition to language itself, the positive conception of Hellas came to reside particularly in three pan-Greek institutions: Homeric poetry, the Delphic oracle, and the Olympic Games. Each began to attain significance beyond its local hearth in the 8th and early 7th centuries and by the classical period were fully panhellenic institutions. In other words, the process of generating pan-Greek identity was coterminous with the segmentation of the Greeks by city-state.

This dialectic of incorporation and exclusion, of unification and differentiation between sociopolitical forms and cultural knowledges, is reproduced and historically marked in numerous interconnecting contexts. In its incorporative meaning, the category “Hellene” appears nowhere in Homer, yet his works became the national poetry. This was effected in part by recoding the Trojans as Asian (in fact they were probably Greek-speaking) and by attaching Homer to the culture and education of the city-state, as the lawgiver Lycurgus was said (by Plutarch among others) to have initiated in Sparta. In theory, barbarians could not compete at Olympia, but Greeks who were free citizens of one or another city-state could. Foreign kings could seek the judgment of the oracle at Delphi, but over time Delphi came to be coded as a politically neutral site—that is, like Olympia, a cult center outside the walls of any city-state. At Delphi, rivalrous cities or factions within cities (for example, the Pisistratids and the Alcmaeonids at Athens) could seek and seek to manipulate knowledge recognized as authoritative by all Greeks, or, better said, knowledge that was Hellenically authoritative. Traditions retrospectively associating the oracle with the constitutions of various city-states (such as the famous story of Lycurgus and the Pythia) and with the foundation of the Olympic Games further reveal the structuring process at work. Differentiation required interconnection, as interconnection entailed differentiation: no barbarians, no Eleans, Athenians, Corinthians, Thebans, in effect, no Greeks.

Contemporary interest in this historical paradigm lies not in the mere presence of Olympic Games then and now, but rather in the total set of relations incorporated in a structure which, beginning in the 18th century, has quite exactly reproduced itself and which organizes today’s world. The nation-state replaced the city-state as the segmentary unit of modern political organization, crowding out all other forms in a process very nearly completed on a global scale. This modern logic proclaims that being a nation among nations requires having a nation-state, pushing the decolonization process in some places and separatist movements within existing states in other places. In theory and much legal, political, and social practice (including rules for inscription in the Olympic

Games), each and every individual has only one, or at least one core nationality. Indeed, the category of “the individual”—naturalized and essentialized in Western cultural common sense and positivist science, however historicized and relativized in Western cultural science—arose to permit deployment of the same logic of identity across a multiplicity of ethnic, linguistic, racial, and political groups. The Olympic Games exemplify in a powerful way this modern paradigm in which individuality and nationality are ontological features of human identity: athletes compete as individuals; they cannot compete unless they are nationals.

Simultaneously with these modern principles of segmentation, institutions appeared which seek to constitute an international and even transnational identity of humankind. While the “reborn” Olympic Games enroll individual competitors on a nation-state basis alone, they also seek to incorporate all nations of the world into a “common humanity.” Olympic symbols, ritual performances, and sport practices are today recognized by every person in some places and by some persons in every place in the world. The Olympic Games belong to no nation, and, in principle if not in fact, they belong to every nation. The functional equivalent of Homeric poetry in the contemporary world is the ever-expanding domain of cosmopolitan popular culture, including material objects, bodies of literature, musical forms, styles of dress and the like: the world of “Coca Cola–Marx” as the French pundits used to say. Finally, today’s equivalent of the Delphic oracle in this structuring structure is modern science. Just as ancient Greeks (and those barbarian elites permitted to approach her) once intoned “the Pythia answered,” so today the expression “Science says” carries a weight of authority recognizable, if not always recognized, by all persons in some places and some persons in all places throughout the world. Those nations pleased to pronounce themselves “developed” do so in large measure on the basis of their technoscience, expecting “peripheral” or “underdeveloped” countries to court them for the sake of these knowledges. When such deference is not forthcoming, the old labels of primitivism and Orientalism are whispered anew.

It is unquestionable that modern science is ideologically and practically engaged in the production of tram–personal, tram–national, and pan–human identities. It is at best foolishness and at worst a species of terrorism to believe that science is intrinsically apolitical in a world where the most radical and dangerous boundary between Self and Other is marked, from a dominant Western point of view, by deference to scientific authority. The same, of course, must be said of Olympism.

“MODERN” SPORTS/SCIENCES IN GLOBAL PERSPECTIVE

Recognition that Olympic sport and modern science are co-conditioned and co-implicated in the same general structuring of geopolitical identities permits a deeper exploration of their hidden relations. Whatever else it may be, the Olympic Movement is an internationalist movement and a peace movement, morally devoted to furthering mutual understanding, respect, and collaboration among the diverse peoples of the world by creating, through sport, an international space of common activity and engagement. At a very general ideological level, modern science holds exactly the same view of itself, though the mode of common activity is the search for knowledge of the natural world in laboratories, journals, and classrooms rather than the probing of natural limits through surpassing athletic performance in stadiums and gymnasiums. The fact that both the Olympic Games and science have frequently contributed to the misunderstanding and segregation of peoples from one another, and even to war, only further reveals their shared ideological aspirations and congruent searching for transnational forms of communication and practice.

This deeper symmetry has been overlooked through preoccupation with the purely functional interconnections between the two domains of human activity. Sociological and humanist critics have pointed out that the Olympic medal race has in many countries encouraged the search for biotechnological advantage. This in turn has augmented and legitimated the presence in institutions of international sport of applied scientists and physicians with their distinctive practices, language, and world view. The *citius, altius, fortius* component of Olympic ideology of high performance sport provides a comfortable ideological hearth for these developments. But by leaving matters here and failing to address the deeper structurings of contemporary identities and intercultural relations, even the limited class of facts dealt with in this paper cannot be accounted for adequately. While the increase in bioscience work available for presentation at officially sponsored Olympic conferences can be partially explained, the observed partitioning of the natural and the social sciences of sport in such contexts cannot be addressed. It is hardly the case that all or even most Euro-American natural scientists of sport are enemies of the human sciences of sport, or that human scientists of sport are as a group hostile to sport technoscience. The model of the joint conference held sway for years and survives, for example, in the Grenoble–Chamonix OSC. Many academic leaders

on both sides of the disciplinary divide are frankly perplexed, even after taking account of institutional factors, by the growing bifurcation within sports/sciences assemblies.

This puzzlement is the surest sign of something structural going on. Simple appeals to the modernist myth of universal progress in sports/sciences are ritual ways of dismissing the problem by reducing it to but one of its terms. Confronting the issue as a whole requires consideration of other key facts about the present-day West itself. Belief in the inevitability of progress is probably at its lowest ebb in a century. As the dominant sociopolitical category of identity, the nation-state is beset from within by the claims of ethnic and linguistic minorities and the gender majority and from without by the rise of supra-national entities like the European Community. The category of the individual has been shaken by the collapse of the structuring opposition between capitalist and socialist persons. While post-modernism may be the slogan of only a narrow band of cosmopolitan artists and intellectuals, the concrete realities of ethnic diasporas, multiculturalisms, multilateral political influences, and decentered global economies are everyday experiences of masses of people today. The older meaning of internationalism as universal humanism which has dominated the Eurocentric conception both of science and of Olympism is no longer sufficient by itself to make sense of even European much less global experience.

There are several radically different kinds of internationalism, in both theory and practice. The rootedness of modern science in the philosophy and world view of the European Enlightenment leads natural scientists to conceive of their work as essentially separable from or transcendent of its context in particular human cultures and histories. Positivism, whether classical or neo-, totalizing or compartmentalized in a specific methodological practice, proclaims the existence of a world of universal truth beyond all boundaries of language, nation, ethnicity, culture, class, gender, religion, region, and history. Sociopolitical and cultural dimensions of science, according to this view, are conditions or consequences of scientific practice, never its constitutive essence. The existence of an impersonal, objective, lawful, and universal Nature is said to be the guarantee of this ontology.

Few would deny the conceptual as well as the practical importance, for better or for worse, of this perspective in reshaping life everywhere on the planet. It has contributed to an internationalist vision by positing a common Human world grounded in a common Nature. But precisely because science is dependent upon an ontology rooted in European traditions, it does not now nor has it ever

transcended cultural space and time to the degree it claims. Its ontology, like the essentialist internationalism that flows from it, is only one among many ontologies organizing the experience of the peoples of the world today.

The same is true of the congruent form of Olympic internationalism which holds that people share a common Human Nature and are fundamentally the same everywhere underneath, behind, or beyond the different ways of being human constituted for them by their particular languages, cultures, and histories. In this vision, which has dominated official Olympic ideology from its beginnings and still does today, positive international practice seeks always to produce evidence of underlying sameness where only cultural difference had previously been apparent. Again, few would deny the power of this view in generating contemporary Olympic institutions and practices. Yet recognition of its cultural and historical particularity opens the way to rethinking the abiding Eurocentrism of the Olympic Movement. A key challenge for the 21st century, not only for the Olympic Movement but for all initiatives toward better international relations, lies in finding a new basis for honoring this point of view while incorporating others quite different from it (MacAloon 1991).

Science, both natural and social, faces the same challenge, for it too has not escaped the great law of cultural production. As Marshall Sahlins expressed it in his keynote address to the SOAC meeting:

Contrary to the native Western folklore, the spread of [science and] technology does not necessarily (that is functionally) demand the standardization of culture. On the contrary, these examples are iconic representations of a different world-historical process: the simultaneous development of communication and dissonance, of standardization and variation, of global integration and national differentiation. Nor are these seeming paradoxes the effect merely of the cultural play permitted by the diffusion of modern technology. They come in direct response to the enormous forces of production, coercion, and destruction loosed on the world by Western capitalism and colonialism. Differentiation can be a function of integration—by way of resistance. Levi-Strauss wrote some time ago, “diversity depends less on the isolation of the various groups than on relations between them” (Sahlins 1990: 81).

The recent history of biomedical sports sciences bears out this alternative view of the world-historical process in which integration and diversification, far from being inevitably opposed, are two-sides of the same coin. The spread across national frontiers of the bioscientific knowledges, technologies, and

practices—whose discussion, in contrast to a SOAC or STM, dominates a WCSS—has not produced cultural or political standardization. Whether through accommodation to local conditions or resistance to the sports power of others, scientific knowledge has been used to reinforce, even to radically augment, the differences between social systems employing these same technologies.

On the more fundamental level of science as an ontology and world view, uniformitarianism has been accompanied by radical segmentation and departure from the very beginning of Western science. The Indian sociologist of science J.P.S. Uberoi (1978) has argued that Zwingli's 16th century proclamation that the Eucharist is "*just* a symbol" represents the point of departure of Western or European cultural history from that of the rest of the world's peoples.¹² The specifics of religious doctrine aside, the powerful notion that symbolic, linguistic, or cultural expression can be separated as a mere instrumentality from the substance or essence of the thing expressed, from its "real reality," is a conception of human meaning upon which modern science depends and which the success of secular science has helped bring into dominance over the Western world. Bearers of this ontology and scientific ideology continue, therefore, to have difficulty interacting and communicating with peoples holding other points of view, peoples for whom symbol is substance and substance is representational.

For the Olympic movement, even in its purely Euro-American context, a singular contradiction has been created. The chief values and resources of the Olympic movement consist in the representational or symbolic capital of the Olympic Games. How can those contemptuous or dismissive of "mere symbols," "mere rituals," and "mere games" as something other and lesser than "really real reality" understand, appreciate, and preserve the character and achievements of the Olympic Games? If one cared to argue that there is a danger in the Olympic movement's increasing collaboration with biomedical and physical scientists, it would lie ultimately on this ground, not in such matters as drugs, technological replacements of human means, cyborgism, increased athletic inequality, and so forth.

Moving out from the Western context, how can an Olympic Movement dominated by this point of view be adjusted to the conditions of intercultural diversity on the planet today? How can the Olympics be opened more fully to the contributions of peoples for whom symbol continues to be substance? Such peoples are ironically better situated, in this respect at least, to conserve and multiply the symbolic capitals of the Olympic movement than the Euro-American bearers of the ideology of universal rationality and progress who

gave birth to it and still control it today. Such peoples include not only Africans, South Asians, Oceanians, and East Asians—remembering the contribution of the Seoul opening and closing ceremonies to contemporary Olympism—but many human scientists and human beings in the West today.

If the natural science point of view represents a hidden danger to the established Olympic movement and is implicated in the segregation of non-westerners from certain circles of Olympic activity, why then are some Olympic academic meetings suddenly tilting in its exclusive direction? And why is this happening at the very instant when the social grounds of this point of view are so shaken? Why from the other side, is there a new willingness on the part of other Olympic authorities, particularly—when the resources are available—in the non-European world, to support meetings of human scientists more disposed to admit of and even to celebrate plural ontologies? Why, have the historians, anthropologists, linguists, area studies specialists, and comparative sociologists among them acquiesced to and in some cases openly sought conference segregation from the biological, humanist, and economic essentialists? To ask the question this way is perhaps to answer it. Aspirations for the unity of science may themselves be giving way before growing recognition of a fundamental and principled divide between universalists and pluralists, paralleled precisely by dawning recognition that the significance and power of the Olympic object lies not in the steady march of some monolithic essentialism but in its set of transcultural forms which constitute and express human interrelation and fundamental difference at the self-same time. Developments in sports/sciences, then, are nothing more or less than symptomatic responses to the structural transformation in the production of identities in the world today.

THE NEW POLITICS OF SPORTS/SCIENCES

What then is to be done? If this analysis has merit, what ought the attitude of Olympic researchers be toward the incipient spatial segregation in official Olympic contexts of the sport sciences whose understandings *together* constitute not only the totality of object-knowledge but the phenomenon of sports/sciences itself? Perhaps it is premature to try to answer this question. At the very least, it seems necessary to work to put an end once and for all to the deluded notions that the natural sciences are by nature geopolitically neutral and that the human sciences are necessarily more multicultural in their practices.

On the first point, cultural and political dynamics of the recent sports sciences congresses—some with a long history incidentally¹³—are instructive.

All keynote and invited speakers at the Barcelona WCSS were either European or North American. Of the 301 free papers and posters published in abstract, only 72 (26%) were submitted by non-westerners and 39 of these came from the Chinas. Only two black Africans appeared in the program, and both are US-based. As previously noted, a large percentage of these scientists were not actually present at the meeting, making it much less international in fact than readers of its only publication might imagine. At the same time, in contrast to the usual practice in Olympic contexts, speakers were not identified by nationality in the conference program.¹⁴ This could be read as a further effort to disguise the geographically parochial character of the congress, but it probably had more to do with a common view that nationality and nation-states have nothing to do with scientific research and knowledge, that scientific truth knows no borders. However, as has been pointed out, presumed receptivity to and competence in technoscience is a culturally constituted boundary with critical political implications.

Moreover, historians and sociologists have now shown conclusively that, far from being innocent of political institutions and processes, science in most countries is overwhelmingly tied to governments through the funding process (Latour 1987, Mukerji 1989). The most industrialized countries devote about the same percentages of total GNP to research and development—2.6% in the USA, 2.2% in England, 2.6% in France, 2.4% in Japan¹⁵—interestingly, a percentage or two less than reckoned for the GNP share of the sports industries in these countries. There are some peculiarities with respect to the United States, but it may serve as an illustration of the general situation. In the USA, over two-thirds of the budget for science goes for development not research, and within the research outlay twice as much goes for applied as for basic research. As Bruno Latour puts it, “by and large scientists and engineers have been able to gather support only when they do *not* do basic research. Of nine dollars spent, only one goes for what is classically called ‘science.’ Technoscience is on the whole a matter of development.” In the US, the federal government pays for 50% of the total R&D budget and for 78% of all basic science research. Seventy percent of the total R & D work is carried out by industry, 11% in federal government labs, and 9% in universities. What does vary among the most industrialized countries is not the total engagement of the state in science but the distribution of government support by national objectives. In the USA, 63.7% of the total government R & D outlays go for defense, 15.2% for health, 3.0% for advancement of knowledge, 14.2% for energy and infrastructure, 2.7% for agriculture, 0.3% for industrial growth. The corresponding figures for Japan are

16.8%, 11.2%, 4.1%, 34.4%, 25.4%, and 12.2%; for Germany, 24.4%, 15.3%, 14.2%, 30.9%, 2.9%, and 12.4%.

The relationship between the state and scientific production has become so strong that the sociologist Chandra Mukeji suggests that scientists are best understood as an “elite reserve labor force” maintained by government and industry. There is nothing necessarily sinister about this arrangement, she argues. “This exchange of expertise for money, which is set up to allow scientists to serve both science and the state, is in fact a very subtle system that is built on an even more complex system of communications, and they both have helped to define a balance of power between science and the state that is highly nuanced.” Yet Mukerji also finds that “the nature of the relationship between the government (a political institution) and the scientific community (an intellectual institution) is obscured, covered with clichéd political slogans and forgotten because both advocates and critics are afraid of what they will find, if they look at it closely” (Mukeji 1989: x, 3–21).

While exact information is unavailable as to what proportion of the research reported at the Barcelona WCSS was funded directly or indirectly by governments, there is little reason to believe that the figure deviates from the general norms of technoscience production in represented countries. Indeed, the growth of the sport technosciences in recent years has been propelled in great measure by state interests in the production of athletic champions, directly supported by government ministries and research labs or indirectly through tax-relief subsidies to “private sector” industries and sport organizations. Yet, as elsewhere in science, the issue has not been discussed very much or very systematically in the Olympic sport context, apart from the recent drug scandals in North America and the state sport medicine programs in the formerly communist countries. Still today the impression lingers that the biomedical sciences, particularly in the capitalist countries, are non-political and, therefore, that IOC emphasis on them in its selective patronage of academic disciplines is safer, more neutral, or transnational than promoting the research of the more manifestly engaged human sciences, particularly the social and political sciences of sport.

Since nothing could be further from the truth, since all sciences are social sciences enmeshed in highly political processes of inclusion and exclusion, this ground for discriminating value to the Olympic movement of the natural as against the human sciences must be eliminated. If allowed to persist, it will have debilitating consequences for a movement that seeks to become more and more international and anti-imperialist. To this end, it may be more crucial than ever

to keep the human and the natural sciences of sport in close touch with one another, taking advantage as a mediating bridge of new work in the history, sociology, philosophy, and anthropology of science, both the “moderate” and the “strong” programs (Kuhn 1970, Merton 1973, Latour and Woolgar 1986, Shapin 1982, Latour 1987, Mukerji 1989). Whatever the practical value of sport technoscience (and this is more often assumed than analyzed), Western natural scientists in sport, and Olympic authorities who provide platforms for their work, must take full account of the cultural limits of their own world view and of the unequal distribution of those inscription devices and centers of calculation (Latour 1987) that turn some countries into producers of science and reduce others to the status of impoverished and sometimes unwilling consumers. The human sciences exist to remind biomedical scientists of these duties in the Olympic movement.

But the exchange of cautions and challenges goes in both directions. There are ways in which Western social scientists may be more ignorant of and imperialist toward other civilizations than the biologists and clinicians. After all, the very categories “first world,” “second world,” “third world” are, as Carl Pletsch has shown, inventions of Euro–American social scientists to rationalize their own division of labor, itself strongly mediated by state and industry. Human scientists are just as in need of the example and critique of natural scientists, if they are to further the most important goals of the sports/sciences. If the explicit ideology of some human science is more progressive than natural science ideology from the standpoint of true internationalism, the practical habitus of some human science may be less so.

SCIENCE AS INTERNATIONALIST PRACTICE

For example, human scientists may not be as consistently active as natural scientists in monitoring and protesting government restrictions that have the effect of cutting off foreign researchers’ access to data and scholarly opportunities. In October 1991, an international furor was set off when the US Federal government announced that it would try to patent hundreds of human genes before knowing what role they play in the body (*New York Times*, Oct. 21).¹⁶ The protests from foreign and American scientists, including NIH scientists led by the Nobel laureate James Watson who heads the Human Genome Project, centered not just on the technical issue of whether isolation of genes without knowing their function is sufficient for patent—few scientists are completely opposed to the practice of patenting itself—but on the impact of this

decision for the international research community. Said one, “The human genome project is an international project. The whole purpose of the international project is to promote collaboration, coordination. This would just do the opposite. It would lead to secrecy, hiding, waiting.” In other words, it would make the practice of science further beholden to national government and corporate interests and *interfere* with what scientists take to be their normal and necessary social relations across national boundaries.

Science not only is internationalist practice, it depends upon internationalist practice assisted by its mathematically based symbolic language that helps get around linguistic diversity and thereby more quickly crosses cultural and national boundaries. The habitus of science, reproduced in scientific meetings, publications, research teams, and fund raising leads scientists at least to feel themselves part of an intrinsically international community. Though it may not be empirically true, scientists think they occupy a world of rivalrous labs, but only rarely of rival nations. This ideological picture of the world has real effects in the culture of science itself. Individuals may be referred to as a “French scientist” or “Japanese scientist,” but almost never as “a scientist representing Japan or France.” Even when states become key actors in scientific disputes—such as in the France–American conflict over the HIV virus or the present genome patent affair—scientists still experience themselves as independent and perceive peer judgement of the science itself as the most important thing. If scientists’ attitudes toward the politics of science are often jejune, they are also sincere and very powerful in protecting good science from the designs of those who support it.

The process of peer selection, review, and judgment is more socially contextualized than scientists generally admit, but it makes possible certain practical relations of competition and cooperation that contribute to the internationalist habitus of science. The competition and political in-fighting among scientists is legendary, in part because the peer review process is quite invisible to the general public and because few government authorities or other nonscientists are capable of understanding the research in question. Because public adulation is rare, scientists must turn toward their peers for recognition and the extension of networks. These networks are what establish scientific fact, not Nature itself as the popular ideology suggests (Latour 1987). This popular ideology of scientific progress is neither adequate to the actual conditions of scientific work nor does it necessarily create a truly open field for international understanding. At the same time, it must be acknowledged that the argument against anything that would “stop scientific progress” has been a weapon wielded

by scientists against nationalism, censorship, and militarism. In this paper and elsewhere (MacAloon 1988: 34–37), some very strict and significant homologies between science and sport itself as social practices have been suggested.

In all this, there is much for Euro-American social scientists to contemplate with a view to investigating their own practices and relations to international sport. Scholarly communication across national lines among human scientists is increasing, but social scientists may not yet recognize their work as intrinsically international to the extent that natural scientists do. The ideology of the individual researcher remains even stronger perhaps in social science, and truly collaborative projects among research groups in different countries of Europe and North America, much less ones incorporating scholars from the Southern Hemisphere, are still the exception rather than the rule. In Olympic studies, it is simply absurd to think that one researcher, or one national or regional center, or one discipline could have anything truly scientific to say about the Olympic system as a whole, that is, about a phenomenon encompassing or intruding upon or constituted within 170 national cultures and uncountable sub-national cultures.

Some OJCs and recent Olympic meetings focussed on the human scientists have attained wider international participation than, for example, the WCSSs. But the gains are hardly what they should be, and many barriers remain. Explicit preoccupation with diverse political and social phenomena continues to conceal how radically Eurocentric much of “modern” social science is, and how closed it has been to the indigenous social theories and social knowledge of the non-western world (Marriott 1992). Human science scholars depend on prose argument and have nothing remotely approximating the mathematical languages and inscription devices which make natural science appear to travel so well. The dominance of European languages at international meetings presents enormous difficulties especially for those scholars devoted to exposing the multiple ontologies and cultural worlds now interacting through transnational Olympic forms. Mechanisms must be found for holding major international Olympic conferences in the Southern hemisphere, particularly in Africa, South Asia, Oceania, and the Islamic Middle East, instead of relying on the occasional emigre to the North. In these efforts, there may be much to learn from the practical experience of the natural scientists. What then must be done?

The dominant ontology and world view of the natural sciences cannot be that of the truly multicultural human sciences. Both are on the stage, in science and in the Olympic movement. Positivist and universalist reductions of cultural

systems cannot be reproduced and still leave any hope of understanding and contributing to Olympic intercultural relations. At the same time, it is folly to ignore the importance of European world views in both science and Olympic sport. While the new cultural sciences offer key correctives to the ontological imperialism of the natural sciences, natural scientists' practices of collaboration, their assumptions of internationalism, their mechanisms for exchange of persons and information, and their strategies for achieving a balance of power with government and industry offer much to think about for human scientists wishing to overcome their own parochialisms and dependencies. Human scientists must contemplate the close homologies between biomedical *science* and sport practice itself and wonder whether social science can or cannot develop homologies of the same type for itself.

Such observations point to the necessity of keeping natural scientists and cultural scientists of sport in conversation with one another. These dialogues are enormously difficult, particularly in the absence of any landmark works of scholarship capable of appealing to both sides. But the alternative of increased segregation of the disciplines will merely reproduce the deep structural oppositions between nature and culture, body and meaning, substance and symbol which are endemic to modern European culture and have caused its divorce from, communicative difficulties with, and frequent violence against the other rich civilizations of the world. Through such divisions, Western science and Western societies have likewise impoverished themselves, and internally diverse societies among them have been prevented from taking advantage of the rich resources within their own borders for understanding national cultures elsewhere in the world.

The drama of relations among the different disciplines in Olympic studies is a precise icon of the larger drama of the Olympic Movement in the world today. Contemplating the one helps in understanding the other. The challenge for both is to increase interconnected diversity in familiar contexts while opening up to the rich diversities of the world and interconnecting with them in ways more appropriate to the newly global world we are coming to inhabit. Whether the paradigm of identities which has organized the modern world—and in which the Olympic Games have played a structuring role—will adjust, break down, or transform itself into something quite different is impossible to know. But scientists and supporters of the Olympic Movement need to be preoccupied with the possibilities *now*, and together. Just as their own relations are international relations, so too their grasp of international relations is dependent on what they are capable of recognizing about themselves.

Notes

1. Adapted for *Olympika* from an invited lecture at the Second IOC World Congress on Sports Sciences, Barcelona, October 1991. I am especially grateful to Professor Fernand Landry for information and counsel based on his unequalled experience in these matters. However, responsibility for the interpretations in this paper is mine alone.

2. The brevity of this communication necessitates a number of generalizations and simplifications. Readers, it is hoped, will find sufficient merit in the issues raised to pardon short-cuts in documentation and argument. Consideration is limited to research and scholarship which has been legitimated for communication at official Olympic meetings on the international level. Neither the whole field of Olympic research production nor patterns of legitimation at purely local or national levels are addressed. At each of the international conferences discussed, the author either served on the organizing committee or participated as a speaker or auditor. In each case, an ethnography of conference discourse was supplemented by formal interviews with chief organizers and sponsoring agencies.

3. Data are taken from the published abstracts. Many of their authors, however, were not actually present at the Barcelona meeting.

4. For the sake of simplicity but also to represent the dominant logics at these meetings, continental European categories of knowledge are generally employed in this paper. The term "science" itself is a contested symbol conveying its own powers of legitimation and differentiation. It is employed here in the broader continental sense of *Wissenschaften*, within which the historical sciences, cultural sciences, philosophical sciences, etc., are acceptably included with the natural sciences. As the category opposing laboratory-based natural sciences, the European term "human sciences" has generally been employed here. For present purposes, it has the advantage over the Anglo-American category of "social sciences" of less ambiguously incorporating such disciplines as philosophy, history, linguistics, communication, folklore, and literary theory.

5. Munich serves here as strategic baseline for two reasons. First, German commitment to the intellectual and cultural aspects of Olympism combined with the national and historical commitment to these Games to produce an excellent OSC. Second, 1972 is situated amidst the take-off of the American network television contracts which helped provide increased funds to OCOGs and the IOC which could be used—if OCOGs so wished—to help defray expenses of OSCs.

6. International Council on Sport Science and Physical Education (CIEPSS-ICSSPE); International Association of Higher Schools of Physical

Education (IAHSPE); International Society for History of Physical Education and Sport (ISHPES); International Council of Sport Sociology (ICSS); International Society of Sport Psychology (ISSP); International Federation of Sport Medicine (IFSM); International Society for the Advancement of Kinanthropometry (ISAK).

Since the author was not present for the Tbilisi scientific meetings associated with the 1980 Moscow Olympic Games and their proceedings have never been published, no characterization of this OSC is offered here.

7. The CNOSF was principally involved with the session on the future of Olympism, the same rubric under which a slot was eventually made at the Barcelona WCSS for a keynote address by a humanist member of the Spanish NOC and for the address by the present author from which this communication is adapted. Sceptics might judge that Olympism and the cultural sciences are simultaneously marginalized when the former is used as a catch-all category for the latter. I can offer no evidence that this has been a conscious intention of the organizers of these meetings. However, it has been stated by some that since Olympism and the Olympic movement are explicit topics of IOC Olympic Congresses, such as Paris 1994, less attention need be devoted to them at scientific meetings. This is disingenuous, however, since IOC Congresses only incidentally include presentations by professional academic researchers.

8. "Olympic World Congress Series on Sport Sciences: A Proposal for the Collaboration of the International Olympic Committee and the International Council of Sport Science and Physical Education," a memo prepared by Howard Knuttgen, August 27, 1991.

9. There are some subtle hints that other IOC elites are beginning to recognize and contest this move toward scientific hegemony. President Samaranch himself opened the Barcelona WCSS with a rare lecture, rather than a potted laudatory speech. In that lecture, he discussed the history and present social challenges facing the Olympic movement, devoting not a single word to the technoscience issues that formed the dominant subject matter of the meeting.

10. A precedent-setting development at the Grenoble-Chamonix OSC was the award by the Université Stendahl of an honorary doctorate to an Olympic studies scholar, the distinguished ethnohistorian and linguist James Riordan.

11. The expectation is usually met in three ways: repetition of the platitudes of self-styled universal humanists who have for so long dominated the intellectual production of Olympism; historical debunking of connections traditionally drawn between the ancient and modern games; superstructural and functionalist critique of European philhellenism in the making of the modern world. That these humanistic practices conspire with the natural sciences through a shared universalist and essentialist ontology is revealed in the ready cohabitation of sport "philosophy" and sport technoscience at past Olympic scientific meetings.

12. In the very year Zwingli was preaching in Zurich, Cortez defeated Moctezuma and began the European destruction of the Mesoamerican civilizations. These two facts require to be comprehended in their relation.

13. Intercultural relations and geopolitical matters were very much on the table in the 1892 and 1894 Sorbonne congresses and in the aftermath of the 1896 Games (MacAloon 1981). The 1897 Olympic Congress in Le Havre—the first real academic Olympic congress—likewise had a political agenda: maintaining the control of Coubertin and the nascent IOC over the Olympics as against the rival claims of the Greeks, the British, and others. But the formal subject matters of this congress—hygienic, medical, and pedagogic aspects of sport—were calculated to be the least likely to raise questions of comparative political sociology. These sciences enshrined the twin pillars of the Victorian European world view: the ideology of unilinear progress and the positivist urge to reduce higher-order sociocultural structures and processes to purportedly universal, lower-order biopsychological processes. Focus on the biomedical sciences did double duty, appearing on the one hand to be completely nonpolitical and on the other hand to be fully transnational in addressing the body and sport as “natural” phenomena to be studied through the culturally and politically neutral scientific lens. That the nonscientists active in these early meetings tended to be universal humanists makes similar sense. The relationship between the physical and moral virtues was a perfect obsession of the times and allowed doctors and “philosophers” to make common cause (Coubertin 1919). For both practical and ideological reasons, intellectuals who began with a strong presupposition of universal human nature and then tried to fit sociocultural differences within it were more attracted to “neo-Olympism” and more attractive to the leaders trying to maintain its fragile organizations. Despite Coubertin’s extensive association with the nascent political, social, and historical sciences in Paris, he steered clear in his early congresses of persons more likely to see social diversity as the fundamental and constitutive fact and common humanity as a discovery that could only be made after a long and arduous search. And, of course, the realization that non-western civilizations possessed their own sciences of equal validity had occurred to very few Europeans.

14. Institutional affiliations, and thereby in most cases nationality, were indicated in the printed abstracts. That the WCSS organizers intended no publication beyond these abstracts further emblemizes the dominance of natural science conventions over those relevant to the few humanists and social scientists on the program.

15. These and subsequent statistics are from 1978–1981, as cited in Latour 1987: 168–172.

16. The motivation, of course, was commercial and in a certain sense national. Though a US patent applies only in the US, because of the large market such an act would have consequences for any pharmaceutical firm. The government

science agency involved (NM) was trying to pick up an important bargaining chip in the future foreign relations of science.

References

- Bourdieu, Pierre. 1984. *Homo Academicus*. Paris: Les Editions de Minuit.
- Coubertin, Pierre de. 1972 (1919). *Pédagogic sportive*. Paris: Vrin.
- Hempel, Carl G. 1966. *Philosophy of Natural Science*. Englewood Cliffs, New Jersey: Prentice Hall.
- Kang, Won-yong, (gen. ed.), 1989. *The World Academic Congress of the Seoul Olympics*. 13 vols. Seoul: Poon Nam Publishing.
- Kang Shin-pyo, John MacAloon and Roberto DaMatta, (eds.), 1988. *The Olympics and Cultural Exchange*. Seoul: Hanyang University Institute of Ethnological Studies Monograph Series.
- Koh, Byong-ik, (gen.ed.), 1990. *Toward One World Beyond All Barriers: The Seoul Olympic Anniversary Conference*. 3 vols. Seoul: Poon Nam Publishing.
- Kuhn, Thomas. 1970. *The Structure of Scientific Revolutions*. Second revised edition. Chicago: The University of Chicago Press.
- Jackson, Roger, (ed.), 1989. *The Olympics and Mass Media*. Calgary: Hurford Enterprises.
- Landry, Fernand, and W. Orban (eds.), 1978. *Philosophy, Theology, and History of Sport and Physical Activity*. 10 vols. Miami: Symposia Specialists.
- Landry, Fernand, M. Yerles, and Marc Landry (eds.), 1991. *Sport: The Third Millennium*. Quebec City: Laval University Press.
- Latour, Bruno. 1987. *Science in Action*. Cambridge: Harvard University Press.
- Latour, Bruno and Steve Woolgar. 1986. *Laboratory Life*. Beverly Hills, California: Sage.

- MacAloon, John J. 1991. "The Turn of Two Centuries: Sport and the Politics of Intercultural Relations." In F.Landry, M. Yerles and M. Landry, (eds.), *Sport: The Third Millennium*, pp. 31–46.
- _____. 1988. "Encountering Our Others: Science and Sport in the World System." In Kang, MacAloon and DaMatta, (eds.), *The Olympics and Cultural Exchange*, pp.16–41.
- _____. 1981. *This Great Symbol: Pierre de Coubertin and the Origins of the Modern Olympic Games*. Chicago: University of Chicago Press.
- MacAloon, John and Kang Shin-pyo. 1990. "Uri Nara: Korean Nationalism, the Seoul Olympics, and Contemporary Anthropology." In Koh Byong-ik, (gen.ed.), *Toward One World Beyond All Barriers*, vol. 1, pp.117–159.
- Marriott, McKim. 1992. "Alternative Social Sciences." In J. MacAloon, ed., *General Education in the Social Sciences*. Chicago: University of Chicago Press.
- Merton, Robert K. 1973. *The Sociology of Science: Theoretical and Empirical Investigations*. Chicago: University of Chicago Press.
- Mukerji, Chandra. 1989. *A Fragile Power: Scientists and the State*. Princeton. Princeton University Press.
- Park, Seh-jilt. 1991. *The Seoul Olympics: The Inside Story*. London: Bellow Publishing.
- Popper, Karl. 1959. *The Logic of Scientific Discovery*. New York: Harcourt, Brace & World.
- Sahlins, Marshall. 1990. "China Reconstructing or Vice-Versa: Humiliation as a Stage of Economic 'Development,' With Comments on Cultural Diversity in the Modern 'World System'." In Koh, ed., *Toward One World Beyond All Barriers*, vol. 1, pp. 78–96.
- Shapin, Steve. 1982. "History of Science and its Sociological Reconstruction." *History of Science*, vol. 20, pp. 157–211.
- Uberoi, J. P. S. 1978. *Science and Culture*. Delhi: Oxford University Press.