PAIDEIA: PHILOSOPHICAL E-JOURNAL OF CHARLES UNIVERSITY

ISSN 1214-8725

Issue/Volume/Year: 1–2/IV/2007 (Conference paper)

Sport, Science and the Problems of 'Race'

Autor: Scott Fleming

Abstract

Sport, věda a problémy „rasy". – Tato práce se zaměřuje na rasové problémy v souvislosti se sportem. Autor nachází minimálně čtyři klíčová témata. Zaprvé, není dostatečně jasné, co rasy vlastně jsou. Zadruhé, rozdíly mezi příslušníky tzv. rasy jsou mnohem větší než rozdíly mezi rasami. Zatřetí, existují zmatená a zavádějící rozlišení, která jsou spojována s „rasami", a která nejsou logicky odůvodnitelná. Začtvrté, s ohledem na nejasnost, která je zřejmá z prvních tří témat, rasová kategorizace je přinejlepším svévolná. Přesto, navzdory těmto obtížím, obsahovaly diskurzy zaměřené na sportovní výkony často analýzy založené na chybném biologickém determinismu. Ty jsou diskreditovány použitím popperiánské falsifikace a ilustrují neadekvátnost tohoto vědeckého rasismu.

Keywords: Sport, 'Race', Biological determinism, Falsification

Klíčová slova: sport, „rasa", biologický determinismus, falsifikace

(Pozn. ed.: Příspěvek byl připraven pro mezinárodní konferenci *Násilí ve výchově, umění a sportu,* která se konala na Pedagogické fakultě UK v Praze 4. května 2006.)

I Introduction

There is some general consensus that the concept of 'race'[1] emerged in an apparently meaningful and recognisable way during the period of Enlightenment, towards the end of the eighteenth century. A biological interpretation of the differentiation between 'races' predominated, and with it came attempts to quantify the characteristics of each of the 'races' as well as to develop a hierarchical order of amongst them (Miles 1989). These characteristics were not confined to descriptions of phenotype, they also included reference to behaviour and even personality.

With scientific legitimacy attached to conceptions of 'race' the "classical racist ideology" (Callinicos 1993: 17) was cultivated, and an assumed causal relationship between 'race' and intelligence was subsequently investigated by leading academics and scholars during the first half of the twentieth century. The inadequacies of this biological determinism are laid bare by Lewontin (1991) in his penetrative critique of natural science as a social institution. His underlying theoretical position is a commitment to fundamental principles of developmental genetics, and he concludes that there is: "no reason *a priori* to think that there would be any differentiation between racial groups in characteristics such as bevavior,

[1] In recognition of the conceptual and empirical problems with the term 'race', many sociologists (and others) have adopted the convention of putting it in parenthesis. This serves to draw attention to the problematic nature of the word ontologically and epistemologically whilst at the same time acknowledging that it continues to be (mis)used in popular discourses.

ISSN 1214-8725

temperament, and intelligence" (p. 37). The similarity of the parallel explanation for biological determinism and the links between 'race' and sports performance is striking. The notion that there was a hierarchy of 'racial' groups in connection with physical activity emerged very explicitly, and with it came the suggestion that black people had a physique that was better suited to physical activity.

Black sporting success is often explained with reference to a genetic predisposition associated with being black, similar analyses are seldom (if ever) advanced for white athletes. This is an important point because associations are advanced that purport to connect two independent variables. The first is that sports performance **is** very demonstrably related to genotype, and genotype is a clear limiting factor on sports performance. The second variable is that phenotype **is** very clearly linked to genotype. (Skin pigmentation is directly related to genetic make-up.) What does **not** follow from this, however, is that skin pigmentation is linked to sports performance.

In this paper,[2] the conceptual and operational problems of 'race' are explored in the context of sport. It begins with a brief consideration of the historical derivation of the term and the fundamental shortcomings of 'race' as a conceptual basis from which to proceed in any analysis of sports performance. There then follows an exposition of the effects of sporting stereotypes, and finally a theoretical critique of the assumed connections between 'race' and sport based on Popperian falsification.

II Conceptual problems of 'race'

The first recorded use of the word 'race' was as long ago as 1508 in a poem by William Dunbar (Husband 1982), but it was some time before the concept had been appropriated by natural scientists. Since then the term has become embedded in the scientific (and more often pseudo-scientific) discussions, and herein lies the greatest difficulty associated with the 'race' and sport discourse. The application of the concept of 'race' to human beings is a direct consequence of the attempt to apply a taxonomic classification of organisms (Tobias 1972). That is to say, attempts were made to group organisms if they show shared characteristics considered to be derived from common ancestors (Baker 1974). Hence, in terms of the taxonomy, 'phyla' and divided into 'classes', then into 'orders', then 'families', then 'genera', and then 'species'. It is at the next level of the taxonomic hierarchy, sub-species, that 'races' would be encountered. Yet in spite of the apparent systematic clarity of the taxonomic process, it is fraught with ambiguities and complexities that make the operational utility of the concept of 'race' troublesome – to say the very least.

The first point is highlighted in the lack of precision over the quantitative analysis of genes, and concerns the difficulty in defining 'races' with any absolute criteria. As the UNESCO (1972: 68) proposals on the biological aspects of 'race' – first published in 1964 – make explicit, "Pure races – in the sense of genetically homogeneous populations – do not exist in the human species". This being the case, the analytical description of 'races' is blurred and indistinct. Indeed, given the absence of clear 'racial' boundaries and attributes, it would seem to be almost impossible to categorise every individual according to 'race' (Howells 1974).

[2] A more lengthy and developed version of the argument presented in this paper can be found in Ben Carrington and Ian McDonald's (2001) edited collection *Race, Sport and British Society*.

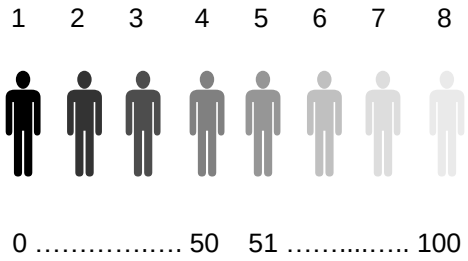

Figure 1 – A diagrammatic representation of phenotypes and the 'whiteness' scale

Figure 1 illustrates the point. In it, there is a continuum of phenotypes moving from black (number one) to white (number eight). If we were to suppose that pure 'races' did exist, they would reflect the extremes of the continuum – numbers one and eight. The reality, of course, is that most persons are neither number one nor number eight; they are numbers two, three, four, five, six or seven. Any ascription of so-called **pure** 'races' would therefore fail to accommodate most of humankind.

One way to advance the argument pragmatically is to acknowledge (quite properly) that there are no pure 'races'. This presents a further conceptual difficulty. In this instance, the decision to categorise an individual as black or white would be arbitrary. Somewhere within the continuum a decision would be needed in order to differentiate all white persons from all black persons. Given the absence of any reasonable criteria for making such a distinction, any differentiation would be random.

The second point relates to the first, and is the conceptual leap from the commonality that characterises the species to the difference that distinguishes between 'races'. It has been demonstrated that humans share about 99.9 per cent of their DNA with every other human[3] – we are, therefore, much more alike than we are different. At the level of 'races', let us consider the continuum in figure 1 again, and add some units to the continuum to indicate degree of 'whiteness'. That is to say, number one is 0 % white and number eight 100 % white. Let us also suppose that number four is the last black person on the continuum, and number five the first white person – the outcome of the arbitrary decision described above. The distinction between them is relatively small, say 1 %; whilst the variation within a so-called 'race' is significantly greater, perhaps as much as 50 %. We must inevitably conclude that the differences within a so-called 'race' are much greater than the differences between 'races'.

[3] The same report also revealed that people also share about 98.5 % of their DNA with chimpanzees, about 75 % with dogs, approximately 50 % with fruit flies and roughly 33 % with daffodils: URL:<http://www.timesonline.co.uk/tol/news/uk/article499474.ece> – (accessed 7th November 2006).

ISSN 1214-8725

The third area of conceptual uncertainty is related to the descriptions (as opposed to definitions) of 'racial groups' and also relates to the first. Classifications of 'races' and even 'sub-races' have occupied the attentions of various scholars since the late eighteenth century (cf. Baker 1974, Bouchard 1988), yet the failure to come to any sort of consensus over these inevitably undermines the status of the work. On a broad level there does seem to be some agreement that there are (at least) three major groups: Caucasoid, Negroid and Mongoloid (Tobias 1972). Yet this broad typification is inadequate as it fails to accommodate certain other groups, for instance the indigenous Aborigine population of Australia. Hence, as Miles (1989) explains, when confronted by empirical evidence and logical inconsistency, new classifications have been advanced.

In this case the typology was therefore extended by some commentators (cf. Bouchard 1988) to include Australoids. The difficulties do not, however, end there. Within the Caucasoid group there are further distinctions: Nordic, Alpine, Mediterranean, Armenoid, and East Baltic. Nordics are described by Tobias (1972: 21) as: "robust, hairy, tall and fair, long-headed and long-faced"; whilst Alpines are described as: "squat, medium in stature and dark in hair colour, short-headed and short-faced". Yet these attempts to classify within the Caucasoid have been utterly discredited (Farb 1978).

The fourth area of concern is related directly to the empirical difficulties (even impossibilities) associated with the third. For if it is difficult to distinguish between 'races', and perhaps more difficult to accommodate the differences within a 'race', the implications for the kind of empirical research that is conducted are serious. So serious that they might be confounding variables of such magnitude as to render the findings of research invalid – regardless of the experimental rigour and the sophistication of the measurement protocols involved. In short, if it is not possible to empirically demonstrate the differences between 'races', any attempt to categorise an individual into a particular 'racial' group must be based on the subjective judgement of the researcher. Given the obvious lack of clarity over taxonomic distinctions (outlined above), this is – at best – an insecure basis from which to proceed.

III Sport and 'race'

It is now almost three decades since Martin Kane's (1971) highly contentions article 'An assessment of black is best' was published in *Sports Illustrated*. In it Kane synthesised studies from a variety of academic disciplines, as well as coaches and athletes, and included the following summary remarks from Professors and Assistant Professors: "Evidently the Negroes (*sic*) have longer limbs and narrower hips than whites" (p. 74); "In total arm circumference Negroes (*sic*) are just significantly greater than whites" (p. 75); "The Negro (*sic*) has more tendon and less muscle than the white" (p. 75); the Black athlete has "hyper-extensibility – or what the layman (*sic*) might call being double-jointed" (p. 75).

The paper was rebutted by angry responses, especially by Harry Edwards (1972, 1973) who challenged the methodological basis of the assertions that were being made. This critique has been developed Ellis Cashmore (1982, 1996) who made specific mention of the unquestioning acceptance of the theoretical concept of 'race', of its homespun Darwinism, and of the overwhelming empirical falsification to the proposed causal links (a theme to which the discussion will return).

ISSN 1214-8725

Yet in spite of the inadequacies of Kane's article it seems to have made a huge impact and lasting impression on the discourse that surrounds the issue of 'race' and sport. The damage caused Kane and others is especially profound, for pseudo-scientific and anti-scientific explanations of the relation between sport and 'race' have become embedded in many of the stereotypes that exist. When they, in turn, permeate the consciousness of coaches, teachers and even athletes themselves, the impact of scientific racism is very severe. Some of these have found expression in the discourse surrounding physical education, and the following are all cited by Bayliss (1983: 6–7): "Blacks will never make good swimmers because their bones are heavier. They cannot float easily and they have weak ankles"; "Blacks run faster because they have wider nostrils and can breathe in more oxygen"; "Blacks have an extra muscle at the top of their legs which helps them run faster"; "Blacks possess a muscular structure suited to power/explosive events"; "There is a relative precociousness in the psychomotor development of black children compared to their white peers"; and "Blacks are good at boxing because they absorb a heavier beating".

This synthesis presents a set of flawed perceptions that were prevalent in the early 1980s. What is especially worrying is that there is little evidence to suppose that the sophistication of the 'race' and sport understanding has advanced significantly since then.

IV Stereotypes and the principles of sciences

The process of stereotyping as outlined by Nugent and King (1979) provides an important point of departure for a further consideration of the scientific racism that undermines many of the attempts to engage in serious analysis of the relation between sport and 'race'. When flawed natural science is factored into the analysis the argument can appear to be even more compelling and emphatic:

- the identification of a category – such as black people;
- the attribution of characteristics to the category – black people run fast:
    - evidence: in 1996 all the finalists of the Olympic men's 100 m and 200 m track events were black;
    - argument by example: the **do** because they **can**;
    - explanation: black people are anatomically and physiologically suited to power sporting activities;
- the application of the traits to anyone belonging to the category – all black people can run fast.

The traditional view of the scientific method is that it demonstrates two components: first, the use of sensory perception to make observations of empirical facts; and second, the inductive reasoning that moves from particular observations into general laws (Sankey 1993). These have been assumed to demonstrate objectivity. Yet since "observations are theory-dependent" (Parry 1986: 210), they are also subject to previous experience – including bias and prejudice. In order to make observations researchers need to know what to observe, and this must inevitably reflect some preconceived idea that the research question being posed is worth answering. Why, for instance, did Ponthieux and Barker (1965) decide to investigate the relationship between 'race' and physical fitness if not as a consequence of their previous experience and understanding of 'race' and sports performance. This is not therefore impartial, and is evidence of an implicit commitment to scientific racism.

Having established that observations are affected by subjectivity, the way that induction moves from the particular to the general in natural science is also problematic. Parry (1986: 210) makes the nature of the concern unambiguous: "The crucial question is: how do we legitimately infer law-like generalisations from singular instances of observation (no matter how numerous)? The short answer is: we can't." Indeed to move from the specific instance to the general law in natural science can be construed as the kind of false universalism and stereotyping that has blighted much of the discourse in this area (Fleming 1994). For example, consider the example of the general acceptance of the perception about the physical stature of South Asians based on some particular observations:

- "The Asian pupil is typically seen as physically frail, lacking in stamina and likely to underachieve in physical education";
- "Asians are too frail for contact sports";
- "The Asian build is not that of a footballer ... It may well be that Asian ingredients in food, or their nutrition that they take, [is] not ideal for building up a physical frame."

Leaving aside the methodological issues associated with the observations themselves, there is a sense in which these particular observations have become the basis for a generalisation. In those citations where the 'usually' and 'generally' disclaimers have been invoked it is clear that the observations should **not** be interpreted as having law-like qualities; and there is a real hazard of dangerous **over**-generalisation. In short, some South Asians have been observed to be small and slight, these observations have been replicated elsewhere. This is only a **generalisation** though for if it was a law of natural science it would be possible to apply the same deductive reasoning to a particular South Asian. The false syllogism emphasises the point:

- All South Asians are frail
- 'X' is South Asian
- *ergo*, 'X' is frail

Yet there are many South Asians who are not physically frail. Ikram played the high-impact, team contact sport of Rugby League at international level for England. Pakistan men's Test cricketer Moreover, Shaoib Akhtar simply could not bowl a cricket ball in excess of 94 miles per hour (150 km/h) if he was frail and puny. The inescapable conclusion is either that Shaoib Akhtar is not South Asian (which for reasons already described would be virtually impossible to demonstrate empirically), or that the assertion about the frailty of South Asians is not a law of natural science at all. The latter seems more probable. There is also a third alternative to which Parry (1986: 211) draws attention: "to deny that the Traditional view is an adequate account of science".

An alternative approach to the philosophy of science is provided by falsificationism (Popper 1963). Parry (1986: 212) again provides a succinct description of the logical point: "countless confirming instances can never conclusively verify a general proposition, but a single counter example can conclusively falsify it". That is to say, if there is a general understanding, for example that South Asians are excitable; and there is a single piece of evidence to the contrary, for example that cricketer Inzamam-ul-Haq is anything but excitable (however that might be measured); then the general understanding ceases to apply as a **necessary** condition. It is no longer true that in **all cases** South Asians are excitable.

ISSN 1214-8725

In short, general laws of natural science do not accommodate ‘exceptions that prove the rule’. If exceptions exist then the assertion being made can be no more than a generalisation. The implications for scientific racism are especially far reaching, for if ‘race’ is being linked to mere generalisations, the theoretical basis for causality is unsustainable.

V Concluding comments

In summary:

- the theoretical concept of ‘race’ is fundamentally flawed;
- the operational application of ‘racial’ definitions is fraught with insurmountable difficulties;
- the objectivity of natural science is contentious, especially in these avenues of enquiry;
- the principles of science (based on either verification or falsification) undermine scientific racism;
- and hence, conclusions about the links that are asserted between ‘race’ and sports performance are invalid and unreliable.

Notwithstanding the philosophical, theoretical and operational shortcomings of the ideology, the impact of contemporary scientific racism is profound (Hoberman 1997). The benign stereotype of the ‘natural ability’ argument has been internalised by many people, not least the subjects of the argument themselves.

The factual accuracy of these analyses is, in one sense, largely immaterial. If something is believed to be true, whether it is or not, it will become real in its consequences. The key point is that natural science provides legitimacy, and people in general are seduced by the power of natural science. With regard to ‘race’ and sports performance specifically, it is pseudo-science (and even anti-science) that provides the unsatisfactory explanations for the stereotypes that exist. These are seldom challenged effectively, and hardly ever with the assumed authority over popular consciousness that natural science carries.

SEZNAM LITERATURY

Baker, J. R. (1974) *Race,* London: Oxford University Press.

Bayliss, T. (1983) 'Physical education in a multiethnic society', *Physical Education,* London: I. L. E. A.

Bouchard, C. (1988) 'Genetic basis of racial differences', *Canadian Journal of Sports Science* 13, 2: 104–108.

Callinicos, A. (1993) *Race and Class,* London: Bookmarks.

Carrington, B. & McDonald, I. (2001) eds. *Race, Sport and British Society*. London: Routledge.

Cashmore, E. (1982) *Black Sportsmen,* London: Routledge & Kegan Paul.

Cashmore, E. (1996) *Making Sense of Sports,* 2nd edition, London: Routledge.

Edwards, H. (1972) 'The myth of the racially superior athlete', *Intellectual digest* 2: 58–60.

Edwards, H. (1973) 'The black athletes: 20th century gladiators for white America', *Psychology Today* 7: 58–60.

Farb, P. (1978) *Humankind – A History of the Development of Man,* London: Jonathan Cape.

Fleming, S. (1994) 'Sport and South Asian youth: the perils of false universalism and stereotyping', *Leisure Studies* 13: 159–177.

Hoberman, J. (1997) *Darwin's Athletes – How Sport Has Damaged Black America and Preserved the Myth of Race,* New York: Houghton Mifflin.

Howells, W. W. (1974) 'The meaning of race', *New Community* III, 1–2: 26–30.

Husband, C. (1987) 'Introduction: 'Race', the continuity of a concept', in C. Husband (ed.) *'Race' in Britain – Continuity and Change,* 2nd edition, London: Hutchinson Education.

Kane, M. (1971) 'An assessment of black is best', *Sports Illustrated* 34, 3: 78–83.

Lewontin, R. C. (1992) *The Doctrine of D. N. A. – Biology as Ideology,* London: Penguin.

Miles, R. (1989) *Racism,* London: Routledge.

Nugent, N. and King, R. (1979) 'Ethnic minorities, scapegoating and the extreme right' in R. Miles and A. Phizacklea (eds) *Racism and Political Action in Britain,* London: Routledge & Kegan Paul, pp 28–49.

Parry, S. J. (1986) 'Philosophy and sport science', *Annali* V, 1: 203–220.

Ponthieux, N. A. and Barker, D. G. (1965) ‘Relationships between race and physical fitness’, *Research Quarterly* 36, 4: 468–472.

Sankey, H. (1993) ‘Kuhn’s model of scientific theory change’, *Cogito* Spring: 18–24.

Tobias, P. V. (1972 [first published in 1961]) ‘The meaning of race’, in P. Baxter and B. Sansom (eds.) *Race and Social Difference*, Harmondsworth: Penguin, pp 19–43.

UNESCO (1972 [first published in 1964]) ‘Proposals on the biological aspects of race’, in P. Baxter and B. Sansom (eds.) *Race and Social Difference*, Harmondsworth: Penguin, pp 68–73.

(*Prof. Scott Fleming* působí na Cardiff School of Sport, University of Wales Institute, Cardiff, UK.)