WADA AS SPORTING EMPIRE: PROSPECTS AND SHADOWS

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Abstract

In the efforts to police doping practices in high performance sport, the World Anti-Doping Agency exerts formidable powers of registration and control over competing athletes. Using the political framework of Empire developed by Hardt and Negri, this essay interrogates WADA's policing practices, which allow it to draw biological specimens from an athlete's body in or out of competition with no advance notice; which require athletes to provide accurate whereabouts information at all times for said testing; which reserve the right to retroactively nullify previous results should future detection techniques be discovered within an eight-year statute of limitations; and which is implementing a longitudinal "athlete passport" system. The essay concludes that due to these techniques of control the striated space of sporting competition has mutated into a topological form that challenges traditional understandings of fixed space and time, and that this introduces potential new subjectivities for high performance and recreational athletes alike.

Introduction

While athletes have sought to gain competitive advantage over their sporting opponents for centuries, the stakes for winning have gotten much higher in the contemporary age of capitalist high performance sport, and the techniques by which competitive advantage are gained have followed suit. As a result, interventions at the level of the athletic body designed to improve performance have increased considerably, some of which push the boundaries of legality in sport while others cross them completely. These latter interventions, understood broadly under the rubric of sports doping, involve a host of techniques that introduce substances into the body or methods of body augmentation contrary to the rules of sport. This essay concerns the efforts of sporting authorities to police these practices in high performance sport on an increasingly global basis.

The anti-doping efforts in contemporary sport arguably rest on a foundation of three critical concepts. First, there is a humanist conception of a bounded unitary athletic body that may be disciplined through training to achieve peak sporting performance and increasingly surpass limits of speed, height, or produced force. Second, there is a purportedly universal conception of competition that values sport as a vehicle of individual achievement in body and mind, which may be embodied in personal or group forms. Third, there is a corresponding ethic of "fair play" that suggests normative models of athletic behaviour in and out of competition, with deviations, like performance itself, being rationally measurable quantities.

Regarding the latter, this essay does not intend to critique the ethic of fair play in modern sport as many others far more qualified have done in very eloquent fashion.¹ Instead, it seeks to illuminate how the former two foundational principles—universal sporting values and the unitary athletic body—contribute to the form of power that the World Anti-Doping Agency (WADA) and its networks exercise in their anti-doping efforts. Given the scientific-technological disposition that dominates Western conceptions of physical culture, it may be argued that the particular mechanisms of control employed by WADA are the logical outcome of the purportedly universal values and unitary athletic bodies that have been so heavily influenced by Western ethics in the constitution of the modern sport project.² This essay will use the Empire thesis put forward by Michael Hardt and Antonio Negri as the framework through which to interrogate WADA and the politics of its anti-doping efforts, and in doing so, shall suggest that the imperial formation of anti-doping control has radical consequences for sporting space, athlete subjectivity, and the nature of high performance competition.

The Empire Thesis

For Hardt and Negri, Empire constitutes a polycentric, fluid mesh of power featuring nation-state actors in shifting alliances with supranational organizations, transnational corporations, and certain humanitarian non-governmental organizations. No one actor can unilaterally seize power in the era of global capitalism, according to Hardt and Negri, and thus a flexible network of inter-actor relationships emerges to modulate the global political order.³ Hardt and Negri contend that capitalism is always already about biopolitical production; while it has appeared historically as a matter of material commodity production, it was always in fact about the production of social relations. These social relations shifted dramatically during the course of the twentieth century as various cycles of struggle between labour and capital continually renegotiated the parameters of production and consumption. Electronic media and communications technologies were being used to intensify levels of automation in manufacturing plants, most fully realized in the economics of post-Fordism, which led to a displacement of labour into new white-collar bureaucratic positions or lower-paying service jobs, and the concomitant relocation of manufacturing plants to developing economies around the world. These same electronic communications technologies were also instrumental in developing the consumer society after the Second World War. This required an intensification in the production of content for these media as well as the commercial messages that subsidized this programming. Taken together—the automation of production, the stimulation of consumption, the informatization of capital markets and exchanges-leads to immaterial production as the

dominant form , the production of "data, information, affect, etc." (Hardt and Negri).⁴ But what has fundamentally changed, in their analysis, is the locus of biopolitical production.

In developing the Empire thesis, Hardt and Negri make particular use of Gilles Deleuze and Félix Guattari's concept of smooth and striated space as the means by which flows and bodies are subjectified, inscribed and adjudicated.⁵ Striated space is a gridded space in which the lines serve to code and channel flows; "[m]ovement in it is confined as by gravity to a horizontal plane, and limited by the order of that plane to preset paths between fixed and identifiable points."⁶ Consider the example of American football, which is played on a rectangular pitch enclosed by sidelines and endzones, with regular markings at major (5-yard) and minor (1-yard) intervals. This "gridiron" codes the space of play and the corresponding rules of the game while channeling and disciplining the particular movements players may perform to optimize the outcomes of offensive and defensive strategies. As Deleuze and Guattari maintain, striation is to the benefit of State authority, which seeks above all to maintain the integrity of the grid, its control of flows, and the production of disciplined, docile and efficient bodies.

Smooth space, by contrast, is the space of the nomad who freely roams in a non-linear fashion from stopping point to stopping point along the way—it is "open-ended" space.⁷

Consider the example of the street skateboarder who cuts across, around and through the coded grids of the urban milieu to aesthetically engage various points of architecture and produce a "performative" subjectivity in smooth space.⁸ In opposition to the remote, optic space of surveillance and striation, smooth space is haptic, tactile, sensuous and close.⁹ Deleuze and Guattari note that smooth and striated spaces should be considered ideal types, which are found in admixture at any particular location. Furthermore, they note that the constitution of a particular space may mutate over time: the State may "capture" smooth spaces and inscribe the

codes of striation upon them; likewise, new opportunities for smooth passage may unfold within the directional forces of striation.¹⁰

In the disciplinary societies of enclosure and striation social relations maximizing economic utility and minimizing political insubordination were produced and reproduced by analogical process as the subject moved between discrete spaces such as the factory, the prison, the school, and the home.¹¹ But Deleuze illustrates the transitory nature of the disciplinary societies: just as they follow the feudal societies of sovereignty, so too do they cede to the societies of control.¹² No longer are there discrete spaces that one moves through by process of analogy; in the society of control the boundaries enclosing disciplinary spaces have become increasingly permeable, border-crossings have become normalized, and biopolitical production has become immanent to the social domain. As capital flows out from enclosure into the smooth, fluid space of global production, circulation and consumption, Empire emerges as a correlative political response.

WADA and Sporting Empire

Though not homogenous across all cultures, it may nonetheless be safely stated that sport is a global concept. Thus, it is no surprise that the production, circulation and consumption of sporting practices are intimately woven into the politics of Empire. While such a totalizing meshwork of power would seem to resist the convenient isolation of its component parts, we shall take the liberty here of examining those elements of Empire that we may properly consider sporting—always keeping in mind the myriad connections this network of sporting power

cultivates with broader imperial meshworks. Generally speaking, we may conceive of this sporting Empire as those nation-states and national sports organizations, transnational corporations, supranational organizations and non-governmental agencies that create and sustain sporting capital and the vectors that communicate sporting products and practices. Among other related interests, we are primarily describing the International Olympic Committee and other sport governing bodies, professional sports leagues, media conglomerates, corporate sponsors, sporting good and athletic footwear businesses, medico-scientific apparatuses, and WADA.¹³ Though Hardt and Negri assert that the "paradigm shift of production toward the network model has fostered the growing power of transnational corporations beyond and above the traditional boundaries of nation-states," it must be pointed out that the contemporary economies of global high performance sport have not fully mutated to the network form of production in quite the same fashion.¹⁴ Instead, sporting competitions such as the Olympics are still contested by nationstates in a hierarchical format. This is not to imply a teleological approach in which the hierarchy of nationalist sporting competition will necessarily assume at some future time a networked, linear form of production; rather, it is to suggest that myriad configurations of meshworks and hierarchies (cf. De Landa) or networks and strata (cf. Deleuze and Guattari) have better explanatory power in questioning the social dynamics of high performance sporting economies.¹⁵ In the case of the Olympics, for example, while the hierarchies of sporting nationalism form the basis for competition, their architectural forms and opportunities for capital accumulation are inextricably bound with networked media apparatuses that capture the immaterial output of a joint sport-media production process. Hence, the configuration of sporting competition that forms the epistemological basis for this essay should be understood in its particularity as a hybrid of meshwork and hierarchy.

Nonetheless, Hardt and Negri's central assertion about the political constitution of Empire remains valid: that a separate meshwork of nation-states, supranational organizations and transnational corporations together influence the course of global political economy. So while we should be attentive to the particular ways in which sporting economies unite embodied, hierarchical forms of sporting nationalism with immaterial, networked forms of communication in contemporary biopolitical production, it still seems acceptable and justifiable to consider the existence of a sporting Empire with WADA as an extremely powerful node of control.

WADA, Governmentality and Control

In the interests of space it will suffice to give an abbreviated history of the emergence of WADA as the independent international authority responsible to "promote, coordinate, and monitor the fight against doping in sport in all its forms."¹⁶ The International Olympic Committee convened the World Conference on Doping in Sport in 1999 following several high-profile doping scandals across the sports world; the product of this conference was the Lausanne Declaration on Doping in Sport and the subsequent establishment of WADA that same year.¹⁷ After receiving its first two years of funding directly from the International Olympic Committee, WADA is currently funded by nation-state governments as well as the broader Olympic Movement: since 2001, the governments of United Nations member countries have agreed to fund half of WADA's budget by means of a regional formula to determine contributions, with each region mutually agreeing upon the final contribution of each individual nation-state.¹⁸ More recently, WADA has partnered with corporate sponsor Lenovo in a program to distribute branded anti-doping paraphernalia in the Beijing Olympic Athletes' Village, more fully realizing the integrated meshwork characteristic of sporting Empire.¹⁹

Perhaps the most critical work to date on the politics of the anti-doping movement is Jin-kyung Park's essay that examines WADA through the lens of Foucauldian governmentality.²⁰ Park identifies several key points characterizing the politics of anti-doping: that sport is a central cultural technology for governing the social body; that there has been an increased desire to enhance the role of "policing" in anti-doping efforts; and that the model for anti-doping governance has become rationalized and technologically-driven in the age of globalization. But the essay falters when describing these shifts under the rubric of a rising global culture of surveillance. Hardt and Negri suggest instead that governmentality acts as a "passage *within* the notion of sovereignty, as a transition to a new form of transcendence."²¹ They seek to move beyond the transcendence that governmentality implies by more fully interrogating the immanence of capital as it flows into the smooth spaces of globally networked economics.

This is not to suggest that elements of governmentality no longer apply in the high performance sporting context, since we have already indicated that the hierarchies of the nationstate are very much still entwined with networks of sporting capital. Rather, these elements become subordinated as the disciplinary spaces of modern sovereignty become permeable to the smooth flows of capital, requiring a reconsideration of governmentality and its spatially-fixed concept of surveillance within societies characterized by modulating control elements. This control is continually expanding, since "Empire is formed not on the basis of force itself but on the basis of the capacity to present force as being in the service of right and peace."²² Returning to sport, we might suggest that WADA is constituted not on the basis of its ability to force athletic subjects to comply to a particular body composition or to disclose personal whereabouts at all times, but on the basis of its capacity to present these intrusions as necessary to preserve the truth claims and fair play dictates of modern sport.

WADA and the State of Exception

Hardt and Negri borrow from Carl Schmitt the notion of the "state of exception" as it relates to sovereign political entities and the moral justification to extend authority over others well beyond the established limits of law such as, for example, in times of military conflict.²³ It is understood in functioning democracies that there are exceptional circumstances in which moral transgressions may justify the necessity of force beyond the rule of law and that such a response must temporarily be granted in the name of just cause. For Hardt and Negri, one of the fundamental defining characteristics of Empire is its ability to broaden the parameters of exceptionalism such that they encompass the entire social domain; the state of exception for the global meshwork of power to extend authority beyond the rule of law becomes permanent. For this state of exception to become permanent, Empire requires a continual challenge to generally accepted codes of morality from outside its parameters, which must be ambiguously defined such that its constitution and challenge to the established order modifies as the societal requirements for exceptionalism change as well.

"The age of globalization is the age of universal contagion," contend Hardt and Negri, though in the case of contemporary high performance sport this contagion—referencing the fundamental binary of fair play—features pure bodies being contaminated by polluted bodies.²⁴ The state of exception in the context of high performance sport and anti-doping may be described as WADA's limited right to violate the sovereign organic unity of the athletic body from which the notion of fair play is partially derived. At a basic level, the relative constitution of competing athletes or teams must be based to the greatest degree possible upon symmetrical relations; any asymmetries arising in athletic competition must be grounded within the unitary athletic body in its genetic composition, refined through aptitude and hard work, and expressed through the poiesis of sporting performance. Substances, methods and other enabling technologies are permissible in this ethic of sport so long as they are supplementary to the organic unity of the athletic body and do not penetrate or pollute.

Initially, WADA's limited right applied at the space of the sporting competition itself, when an athlete would provide a post-event urine sample to authorities. As the science of doping substances and methods improved in its myriad intersections with the still-emerging disciplines of weight training, periodization, and sport-specific technique, however, it was soon realized that one could gain the benefits of illegal ergogenic aids in practice sessions, metabolize any traces of substance abuse given a certain substance-dependent clearance time before competition, reap tangible performance improvements in competition situations, and still pass tests administered by anti-doping authorities. What was required by the arbiters of fair play, then, was an expansion of exceptionalism as it pertained to the invasion of sovereign athletic bodies—a just cause in the pursuit of sporting truth.

WADA has accomplished this expansion of exceptionalism in three ways: first, by broadening the spatial and temporal boundaries of just cause such that testing encroaches upon the entire social domain; second, by enlarging the scope of substances and methods considered to compromise the organic purity of the athletic body, as well as the number of stakeholders contributing to the policing of this organic purity; and finally, by increasing the magnitude to which authorities could penetrate the sovereign boundaries of the athlete's body and determine compliance. The remainder of this essay will elaborate upon the practical consequences of this threefold expansion of the state of exception and a contemporary understanding of sport that has morphed from a series of discrete contests located in particular spatiotemporal contexts to a biopolitical relation immanent to the entire social domain.

Techniques of Imperial Doping Control

Since contemporary sport, like other forms of production, have been radically transformed by the forces of informatization and immaterial labour, it is imperative to be cognizant of the means by which data vectors and flows produce athlete subjectivities. WADA, in its imperial anti-doping role, utilizes a variety of tools and techniques that exist on the threshold between the material athletic body and the immaterial vectors of communication, several of which will be discussed here.

Vectors of Signification

The first topic of consideration is the increasing penetration of the athletic body by antidoping authorities as the substrates required for anti-doping signification have evolved from urine to blood to DNA. Urine, the original signifying vector used in the anti-doping efforts of sporting authority, should be considered in the context of organic totality as a proto-penetration of the athletic body. Since urine is considered in Western discourse to be a waste product and thus external to the body, it was not viewed by the sovereign athlete in most cases as a violent transgression of the body's organic boundaries. Given the legacy of early modern factory production and biopolitics, this discursive understanding of the athletic body in analogy to the factory machine (produced force, uniform repetitiveness and manufactured waste) is easily understood. As a consequence of this legacy, however, athletes did not accord urine a substantial material value and generally did not perceive a palpable breach of the body's sovereignty in its seizure by authorities. To the contrary, urine testing was generally welcomed by athletes and coaches in that it purportedly reassured the integrity of the symmetrical relations between competitors characteristic of fair play in Western sporting cultures.

Thus, the sporting authorities began their "endocolonization" of the high performance athletic body relatively unchecked.²⁵ As mentioned earlier, however, the vulnerabilities in the early system of urinalysis were soon exposed and exploited by those who wished to gain an illegal ergogenic advantage or push the boundaries of legality in new directions. The requirement for another signifying vector became evident, not only to better thwart those who wished to foil existing anti-doping detection methods, but also to detect other doping substances and methods that escaped urinalysis. Blood became that new vector.

An example here may illustrate this endocolonization in the context of doping regulation. It is acceptable to train at altitude or sleep in an oxygen tent, but it is not acceptable to dope one's blood, a method in which one penetrates the body with a syringe to withdraw living blood cells, which are later re-injected once the body has replenished the missing blood. In both scenarios oxygen transport capacity and muscular endurance are improved, yet only the latter method is banned. While the penetration of the organic boundaries of the body by the athlete is considered unacceptable, WADA claims this very right as its own in the name of just cause; the broadened state of exception offers the meshwork of sporting power vectors a "state syringe" with which to endocolonize the body for a blood test.

The right of WADA to invade the human body in such a way is predicated on an outdated Western metaphysical conception of the body that specimens outside or removed from the body are no longer "alive." With the further advent of gene doping techniques and the introduction of DNA as a substrate for anti-doping controls, the stakes have changed once again. The ability to replicate cells, clone new ones from DNA or transplant biological specimens into another body has forced bioethicists and sporting philosophers to reconsider the question of "aliveness" and the ways in which doping, prosthetics, genetic modifications, stem cell research and other medical interventions redefine the essential character of the human body.²⁶ And the right of WADA to sample such specimens raises new questions of subjectivity, security and power.

Limitless Postponement

Though multiple vectors of signification are tested in the quest for purity, it has been well known in the high performance sport community for some time that the benefits of doping could be accrued without the athlete's body containing traces of illegal substances substantial enough to trigger a positive test at the time of competition.²⁷ Cycles of steroid intake in conjunction with weight training programs, for example, would be halted several weeks before a competition such that the athlete's body would have sufficiently metabolized the drug. As such, it became increasingly important for doping control authorities to intervene during these training cycles: no-notice out-of-competition testing was introduced by various anti-doping control authorities, which displaced the temporal locus of testing prior to the time of competition.

This temporal shift introduced a new layer of bureaucracy in which athletes became required to notify their respective national sport organizations of their whereabouts information at all times to facilitate no-notice out-of-competition testing. In 2005, WADA introduced the Anti-Doping Administration and Management System (ADAMS), a web-based data management system to harmonize athlete compliance with whereabouts notification; more recently, WADA has streamlined the ADAMS bureaucratic process by offering athletes the ability to use network-enabled communications devices such as cell phones to register their whereabouts information directly from outside the striated space of the stadium in the smooth space of the lived everyday.²⁸ At the threshold between the material and the immaterial, athletes now participate in their own control.

Even this shift in anti-doping protocol is limited, however, in that it operates solely as a function of negation: only those substances and methods that have been previously identified by WADA may be targeted in urine, blood or DNA tests. The nomad science of sports doping, by contrast, continually invents new substances and methods unbeknownst to the machinations of identification. In recognition, WADA's response was to effect a second temporal dislocation, codified in Article 17 of the *World Anti-Doping Code*, Statute of Limitations, which states that all punitive actions must be initiated within eight years of the initial violation.²⁹ This was elaborated upon in the IOC Anti-Doping Rules prior to the 2006 Winter Olympic Games in Torino, which stated that samples would be "stored in a secure manner," with ownership "vested in the IOC for the eight years" and then "transferred to the laboratory storing such samples."³⁰

We might read these two temporal dislocations as an emerging permeability of the site of competition, a form of what Deleuze refers to as the "crisis of enclosure": disciplinary sites of high performance sporting competition have their boundaries compromised by the act of circulating bodies, which are then replaced or bolstered by modulating elements of control. In response to this crisis of enclosure, Deleuze posits the "limitless postponement" of juridical forms as constitutive of the control society.³¹ Though the statute of limitations for detecting new substances and retroactively declaring a positive drug test is currently set at eight years, the mechanism is comparable to the notion of limitless postponement in that the "truth" of the outcome is at stake for the duration of that period. Hence, the bounded parameters of a particular sporting competition cannot be said to have been completed until the eight-year statute of limitations has expired. Competition becomes an open process, still at stake long after the body

has finished performing, with only interim winners declared at the time of participation.

Right to Registration

The final technique of imperial control to be discussed is the biological or athlete passport currently being implemented by WADA. This passport is a document that monitors a series of blood parameters for an athlete to create a medical profile that could be used for longitudinal comparison after doping tests. As noted earlier, the spatial element of passage into competition sites has changed with the introduction of no-notice out-of-competition testing. "The rite of passage was no longer intermittent. It had become immanent."³² Instead, we must understand passage with the athlete passport as the right to registration and a passage through time: the longitudinal form of the passport document is continually revisited in both an abstract and particular sense. In particular, new samples are tested against historical samples to make sure that non-acceptable deviations in biochemical composition have not occurred. More abstractly, these samples are aggregated together statistically to determine the thresholds at which a pure body becomes juridically impure. In other words, the high performance sporting "social," a coding mechanism by which we include or exclude particular bodies, now resides in a database.

Prospects and Shadows in the Network

Where there is light, a shadow forms: as WADA and its affiliated networks continue to illuminate the athlete's body and its training and competition regimens, a data shadow of that body forms and its darkness intensifies. All signatories to the *World Anti-Doping Code* form a tight mesh of control to administer and process athletic bodies in smooth space, and require these bodies to speak against the archive in order to enter the striated space of competition. With the attendant national, political, economical and social interests that accompany a world-level

sporting competition, biological specimen samples must now be protected during the eight-year postponement as securely as the competition venues themselves. Indeed, we must recognize that since the eight-year window essentially renders the current winners temporary, the boundaries of the competition space mutate over time to match the shape not only of the stadium, the testing lab, and the specimen storage facility, but also of the sites of out-of-competition testing and the transportation and transmission vectors through which these flows of human corporeality and competitive uncertainty travel. Qualitatively, this suggests that Bale's formal conception of the contemporary sports stadium must be revisioned as a topological figure to account for this mutability and the social relations these changing spatial configurations produce in a shift from the optics of surveillance to the haptics of control.³³ The potential vulnerabilities that exist in this topological model as competition moves out of the stadium and into smooth space should also be understood in a technical sense from both material and immaterial perspectives. Not only do anti-doping authorities need to secure samples from intruders, chemical change, etc., but they must also secure the data once it has crossed the threshold from the biological to the electromagnetic. And not only is that data susceptible to interception during transmission, but the physical storage devices that enable database mining and statistical regression are themselves vulnerable, given their "penchant for remanence."³⁴

Finally, we ought to be concerned about the potential for both a trickle-down effect through levels of sporting competition and the drift of the abstract diagram of sporting registration and control beyond sport into cognate areas of produced subjectivity. As Hardt and Negri contend,

> Empire is formed and its intervention becomes juridically legitimate only when it is already inserted into the chain of international consensuses aimed at resolving existing conflicts. ... [T]he expansion of Empire is rooted in the internal trajectory of the conflicts it is meant to resolve. The first task of

Empire, then, is to enlarge the realm of the consensuses that support its own power. 35

In our present context, existing conflicts may be situated within the global contestation for athletic supremacy, the political promotion of nation-states, and the flows of capital that may accrue to individual winners. WADA has enlarged the realm of the consensuses that support its own power in convincing hundreds of National Olympic Committees and several hundred other international sports organizations to become signatory to the *World Anti-Doping Code*, while moving beyond the quasi-amateur realm of international high performance sport to publicly and privately pressure professional sport owners and athletes to accept its Code.

We wonder how far the tenets of the World Anti-Doping Code might filter down hierarchically along geographic and competition vectors towards increasingly local and recreational levels of sport, rendering normative the invasive measures theretofore restricted only to those who desired to compete at the pinnacle of capitalist sport. Sports organizations at these latter levels, smaller in scale and scope, are often operating under tight financial constraints and are potentially compromised by the increased costs of anti-doping control. If, as discussed earlier, there are potential security vulnerabilities in the topology of doping control at the worldclass level, then these vulnerabilities are certain to multiply exponentially as anti-doping measures are introduced at this new scale. Sport volunteers may be under-trained or underequipped to handle the criteria of administration and may expose either the athletes to privacy risks or themselves to health hazard. Or, other administrative structures may emerge to rationalize anti-doping efforts at increasingly granular levels of sport organization, which seems counter-intuitive for sporting practices that are purportedly more recreational in nature than high performance competition. And once such control mechanisms are normalized by the next generation of athletes, the potential arises for new vectors to emerge in which the abstract diagram of longitudinal testing of biological samples, the tracking of bodies in smooth space, and the limitless postponement of juridical structures flow seamlessly into cognate areas of produced subjectivity in a fashion far more insidious than that addressed by the question of governmentality.³⁶ The immanence of capital, of competition, of the state of exception—all yield to the immanence of control.

Notes

¹ See, for example, Sigmund Loland, *Fair Play in Sport: A Moral Norm System* (London: Routledge, 2002); E. König, Criticism of Doping: The Nihilistic Side of Technological Sport and the Antiquated View of Sport Ethics, *International Review for the Sociology of Sport* 30, 247-259.

² Rob Beamish and Ian Ritchie, *Fastest, Highest, Strongest: A Critique of High Performance Sport* (New York: Routledge, 2006), 136-144. See also Brian Pronger, *Body Fascism: Salvation in the Technology of Physical Fitness* (Toronto: University of Toronto Press, 2002), 6-10.

³ Michael Hardt and Antonio Negri, *Empire* (Cambridge: Harvard University Press, 2000), 8-13.

⁴ Hardt and Negri, *Empire*, 284-289. Hardt and Negri are careful not to interpret this shift through the lens of a linear "stages of development" thesis in which less developed economies progress to the higher, or more privileged, immaterial stage. Instead, they suggest that the imperatives of capital and the non-linear processes of network communication allow for complex intertwining of material and immaterial forms of production, which subvert any linear dynamic of progressive developmental stages.

⁵ Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1987), 474-499.

⁶ Brian Massumi, A User's Guide to Capitalism and Schizophrenia (Cambridge: The MIT Press, 1992), 6.

⁷ Ibid., 6.

⁸ Iain Borden, Skateboarding, Space and the City: Architecture and the Body (Oxford: Berg, 2001), 1-13.

⁹ Deleuze and Guattari, A Thousand Plateaus, 495-496.

¹⁰ Ibid., 351-422.

¹¹ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Penguin, 1977).

¹² Gilles Deleuze, Postscript on the Societies of Control, October 59, Winter (1992), 3-7.

¹³ For nation-state governmental involvement and the question of cultural nationalism in sport, see, for example Michael Silk, David Andrews and C.L. Cole, eds., *Corporate Nationalisms: Sport, Cultural Identity and Transnational Marketing* (Oxford: Berg, 2004). For the role of WADA, see, for example Beamish and Ritchie, *Fastest, Highest, Strongest.* For a discussion of the intersections between transnational capital and sport, see, for example David Andrews, *Sport--Commerce--Culture: Essays on Sport in Late Capitalist America* (Bern: Peter Lang, 2006). For a discussion of imperial tendencies in sport-for-development agencies, see Simon Darnell, Sport without Borders: 'Empire' and the Development through Sport Movement (conference paper, *To Remember is to Resist: 40 Years of Sport and Social Change*, University of Toronto, May 21, 2008).

¹⁴ Hardt and Negri, *Empire*, 304.

¹⁵ Manuel De Landa, *A Thousand Years of Non-Linear History* (New York: Zone Books, 2000), 25-56. Deleuze and Guattari, *A Thousand Plateaus*, 474-500.

¹⁶ World Anti-Doping Agency, *Mission & Priorities* (Montreal: WADA), http://www.wada-ama.org/en/dynamic.ch2?pageCategory.id=255.

¹⁷ World Anti-Doping Agency, *WADA History* (Montreal: WADA, 2008), http://www.wada-ama.org/en/dynamic.ch2?pageCategory.id=253.

¹⁸ World Anti-Doping Agency, *Finance* (Montreal: WADA, 2008), http://www.wada-ama.org/en/dynamic.ch2?pageCategory.id=259.

¹⁹ World Anti-Doping Agency, *Lenovo Sponsors WADA Athlete Outreach Activities in Beijing* (Montreal: WADA, 2008), http://www.wada-ama.org/en/dynamic.ch2?pageCategory.id=784.

²⁰ Jin-kyung Park, Governing Doped Bodies: The World Anti-Doping Agency and the Global Culture of Surveillance, *Cultural Studies* <=> *Critical Methodologies* 5, no. 2 (2005), 174-188. ²¹ Hardt and Negri, *Empire*, 88.

²² Ibid., 15.

²³ Ibid., 16-26.

²⁴ Ibid., 136.

²⁵ Paul Virilio, *Crepuscular Dawn* (New York: Semiotext(e), 2002).

²⁶ See, for example, Andy Miah, *Genetically Modified Athletes: Biomedical Ethics, Gene Doping and Sport* (London: Routledge, 2004); John Hoberman and Verner Møller, eds., *Doping and Public Policy* (Odense: University Press of Southern Denmark, 2004); Robert Butcher, Angela Schneider and Fan Hong, eds., *Doping in Sport: Global Ethical Issues* (London: Routledge, 2005); Claudio Tamburrini and Torbjörn Tännsjö, eds. *Genetic Technology and Sport: Ethical Questions* (London: Routledge, 2005).

²⁷ Andy Miah, *Genetically Modified Athletes: Biomedical Ethics, Gene Doping and Sport* (London: Routledge, 2004).

²⁸ World Anti-Doping Agency, *Athlete Whereabouts by SMS: New Feature in ADAMS* (Montreal: WADA, 2008), http://www.wada-ama.org/en/newsarticle.ch2?articleId=3115579.

²⁹ World Anti-Doping Agency, *World Anti-Doping Code* (Montreal: WADA, 2003), 46; http://www.wada-ama.org/rtecontent/document/code_v3.pdf.

³⁰ World Anti-Doping Agency, *IOC Anti-Doping Rules for the XX Olympic Winter Games in Torino* (Montreal: WADA, 2005), 32; http://www.wada-ama.org/rtecontent/document/IOC_AntiDoping_Rules_05.pdf.

³¹ Deleuze, Postscript on the Societies of Control, 5.

³² Paul Virilio, Lost Dimension (New York: Semiotext(e), 1991), 11.

³³ John Bale, *Sport, Space and the City* (London: Routledge, 1993).

³⁴ Matthew Kirschenbaum, Mechanisms: New Media and the Forensic Imagination (Cambridge: The MIT Press,

2008), 26.

³⁵ Hardt and Negri, *Empire*, 15.

³⁶ Deleuze, Postscript on the Societies of Control, 6.