Risk vs. Hazard: Is it time to redefine our view of dangerous sports?

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Abstract:Over the last several years, we have seen an increasing recognition that many sporting activities now present the possibility of adverse health outcomes that sit well at odds with any idea of population fitness and wellbeing. As a matter of fact, the discourse regarding the implications for a number of contact sports, in particular the costs and possible trade-offs regarding neurological function and deficit, is now prevalent in terms of the wider media and academic fields. Whilst much emerging evidence and testimonies from athletes, sports people, and their loved ones outlines the damage and consequences that are immediately or longitudinally being experienced (with corresponding lessening of quality of life, or increased mortality risks), there is still an appetite for ‘dangerous’ (i.e. combat, contact, and adventure) or ‘risky’ sports, both in terms of participation and consumption. In this commentary, because of the emerging evidence demonstrating that some sports directly lead to an accelerated development of neurodegenerative syndromes, we argue that a more robust classification system should be used to create a distinction from the largely undefined categorisation of ‘dangerous’ sports, and propose an outline for what we see as ‘hazardous’ sports to reclassify those whose very rules, remit, and objectives present an identifiable risk of harm.

Keywords: Combat sports; contact sports; adventure sports; health policy; risk assessments; industrial/production work

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More than ever before, we understand how sport holds a dominant place in the life of many people, be it for recreation, competitive achievement or, in the cases of parents and guardians, indirect involvement via their children (Crisp, 2019). Of course, it is widely accepted that the physical nature of many sports means that virtually all of them carry potential risk, whatever the level of participation. Despite these risks, which (if we use the example of contact and combat sports) are rooted in battles for physical supremacy and often amplified by an emphasis on spectacular hits and danger, many sports remain admired and widespread. The same sports are often supported by fervent grassroots networks and participation that embraces competition, as well as a desire and appetite from many to continue to act as primary consumers of related media and commercial production in the sport industry (Coakley & Pike, 2009).

Some of this appetite may well be a product of ignorance or a lack of understanding of the potential negative health outcomes that may arise from participation, but it is also worth mentioning that arguments discussing the degree to which sports are possibly 'dangerous' are perhaps distorted by the political need of many key stakeholders (i.e. sport governing bodies, and the political economy and media nexus that modern capitalist sport inhabits). The resulting situation leaves the public with an unbalanced view of the true outcomes of the sport due to a concerted effort by stakeholders and traditionalists to suppress efforts to mitigate for change, or even ban certain 'dangerous' or 'risky' sport activities.

In this commentary, we do not ask for certain sports to be distilled, modified, vilified, or even banned. Instead, we argue that participants and consumers of sport are entitled to their choices, but should be more aware of the emerging evidence that positions certain sports/activities as unsafe. In order to effect this, we posit that a new system of sports classification, one leaning on public health philosophy and paralleling the world of industrial work, should be considered. We believe that this system, which we will outline in detail later on, would allow people to immediately recognise the extent to which some sports are inherently dangerous, and thus inform/influence their decision making, relative to participation or consumption.

We start this discussion by acknowledging that the issue of criticising sport consumption and participation faces several perennial problems. Perhaps the most obvious one, given the context of this commentary, is that people like to think that sports and wider patterns of sports participation are inherently 'good', that they contribute to broader social and psychological development (i.e. community development or individual resilience), and that they can positively socialise young people to function in modern day society (Coalter, 2007; Coakley, 2011; Crisp, 2020). But the reality, outside of one that is immediately critical of a simplistic reductionism that purports sport to be inherently 'good', is that not all sports are equal in the manner in which they present risk.

Whilst many sports are promoted as 'healthy' activities, we must remember that any classification or definition of sports requires an element of disentanglement. Not least, there is the necessity of separating what may be considered the more substantive knowledge and practice of each sport or discipline into categories that mention or highlight some form of risk. Certainly, it is generally agreed that there are some sports that find themselves under the label of 'dangerous' sports. In terms of wider public knowledge and cultural understanding (certainly within western societies), the more obvious examples, such as boxing and its younger cousins mixed martial arts (MMA) and bare-knuckle boxing (BKB), stand out. In fact, these sports often continue to court controversy, no doubt due to their nature and aims of establishing some degree of physical dominance within bouts, that implicitly works towards what can at times be observable and immediate damage caused to an opponent (Masucci & Butryn, 2013).

Outside of combat sports, but under the same banner that people use when identifying ‘dangerous’ (or ‘risky’) sports, we can also include sports such as BASE jumping (a recreational pursuit where participants parachute from fixed objects that falls under the ‘extreme’ sports banner) and mountaineering. Admittedly, these kind of sports/activities only receive similar attention to combat sports, in terms of attribution of danger or understanding them in the context of risk, when there is an accident or fatality (Simon, 2002), or if somebody of appropriate celebrity status becomes a participant (Raggiotto et al., 2019). But, in the context of philosophy, culture, and academic literature related to sport studies, whilst the sports already mentioned in this commentary will often be named or form part of the focus when the subject of ‘dangerous’ sports is considered (Russell, 2005), the low volume/relative dearth of published articles on the subject fails to provide us with a robust definition of exactly what characteristics are required to earn that particular moniker.

However the label of ‘dangerous’ is defined in relation to sport participation, it is undeniable that the growth in research and understanding of the potential negative impact of involvement in sports has increased since the turn of the 21st century. As a consequence of this, more sports than ever may now find themselves under this headline banner of ‘dangerous’ sports. Indeed, the concussion crisis in the NFL (Brenson, 2018), where the increased prevalence (compared to the general population) of neurodegenerative disorders such as Parkinson’s, amyotrophic lateral sclerosis (ALS), Alzheimer’s (Mez et al. 2017), and the now well-known Chronic Traumatic Encephalopathy (CTE), have all contributed to increased concerns about safety in contact sports (Lehman et al. 2012). Indeed, the proliferation of emergent research related to welfare, well-being, and potential risk in American Football has been followed by similar findings related to neurological deficit and disorders found in football (soccer) and Rugby Union and Rugby League (Kirkwood et al. 2015). Overall, progress in research and literature has made it explicit that many sports are not as safe as previously assumed (Ling et al. 2017; Pollock et al. 2017).

In fact, although the initial findings for head injuries, concussion, and neurological deficit within football, Rugby Union, and Rugby League, may have been arguably less dramatic in comparison to American Football, emerging evidence seems to indicate that these sports are equally fraught with danger. Examples such as Steve Thompson (a 2003 Rugby Union World Cup winner) and other ex-Rugby Union professionals attributing early onset dementia to negligence by the game’s authorities (BBC, 2020), the increasing number of players of the 1966 England World Cup winning squad in football who have subsequently suffered early onset dementia or related mortality risk (Dorsett, 2021), and the emerging evidence detailing how teenage girls have close to twice the risk of concussion as teenage boys while playing football (Bretzin et al. 2021), clearly highlight that increased education and understanding is necessary, and that any idea of participating in these sports may need to be approached with increased caution.

Given this increasing body of evidence, many National Governing Bodies (NGBs) are now implementing playing, coaching, and administrative policies that seek to reduce or mitigate harm. Changes have included the English Football Association (FA) and others’ banning of heading for those 11 years and under in training (FA, 2020), and the ever more progressive concussion protocols seen in Rugby Union (for instance, see England Rugby, 2020). These changes are **likely** motivated by both the adverse health outcomes discussed above, but also by litigation that has brought into question how much NGBs in some sports may have known about health risks versus how much they shared with players. Whatever their motivation, we are seeing attempts by NGBs to educate players and staff, and limit exposure or unnecessary damage through continued play.

These growing acknowledgments by various sport administrators that sport participation may carry with it some tangible risks are perhaps reflective of the aforementioned litigation. They may also, when we consider the nature of beloved sports stars diminishing in physical and mental acuity, be a sign of how advocates for sport are cognisant of shifting attitudes towards sport participation and a more nuanced consumption of 'dangerous' sports. An example of policy implementation related to the consumption of 'dangerous' sports, although somewhat extreme perhaps, is the way that Formula 1 (F1) increased safety precautions following the wider public's reaction to Ayrton Senna's motor racing death in 1994, which closely followed the death of fellow F1 driver Roland Ratzenberger at the same event (Fédération Internationale de l'Automobile [FIA], 2014).

Currently, as the breadth of what can or should be considered 'dangerous' sports continues to grow, it is probably fair to say that the larger controversies still centre around the sports that are more explicitly unsafe (dangerous), and that have a longer legacy of negative outcomes for the athletes involved. Since Martland's seminal paper "Punch Drunk" (Martland, 1928) in ring parlance, they speak of as 'punch drunk.' Fighters in whom the early symptoms are well recognized are said by the fans to be 'cuckoo,' 'goofy,' 'cutting paper dolls,' or 'slug nutty.' Punch drunk most often affects fighters of the slugging type, who are usually poor boxers and who take considerable head punishment, seeking only to land a knockout blow. It is also common in second rate fighters used for training purposes, who may be knocked down several times a day. Frequently it takes a fighter from one to two hours to recover from a severe blow to the head or jaw. In some cases consciousness may be lost for a considerable period of time. The early symptoms of punch drunk usually appear in the extremities. There may be only an occasional', (Martland, 1928) it has been clear that medical professionals are aware of the dangers of boxing, and it is some of those professionals that have been behind the repeated calls for the sport to be banned. In more recent years, the rapid rise of MMA as a legitimate mainstream sport has courted further controversy about the place of such sports in a developed society; but, as with boxing, the detractors have so far managed to leverage minimal change or suppression.

It may even be true that MMA's success and penetration into popular culture has been the gateway for the recent return and legalisation of the arguably more brutal BKB (in particular, the rising emergence of the Bare-Knuckle Fighting Championship [BKFC] promotion) in the USA (Sánchez-García, 2020). The physical outcomes of this sport are plain for all observers to see on the faces of the fighters by the end of a match, but despite the fact that many laypeople may consider this a ghastly spectacle, the promoters claim the sport is "safer" than mainstream boxing, due to the lack of gloves resulting in less powerful punches being delivered, thus causing fewer concussions (Barr, 2020). Various BKB organisations have even pointed out that having had zero fatalities in the sport to date, they are well below the average fatalities of 10 deaths per year since 1900 seen in mainstream boxing (Förstl et al. 2010) this development has not been accompanied by a critical discussion of the early and late health complications. METHODS: We selectively review recent studies on the acute, subacute, and chronic neuropsychiatric consequences of boxing. RESULTS: Cerebral concussions ('knock-outs'). The backlash against the resurrection of this sport has been surprisingly muted, but when it has arisen or been voiced it has typically been unequivocally negative (Barr, 2020). However, it is probably fair to say that this voice may get louder if the sport continues on its current pattern of growth.

Whilst the pugilistic sports continue to hold their ground against those pushing for more safety or an outright ban, there are many more fringe sports who, when things do not go to plan, see their practitioners pay the

ultimate price. Between 2007 and 2017, BASE jumping claimed 223 lives (Bouchat & Brymer, 2019) antennae, span, earth, and across the same period fatalities from skydiving reached 179 in the U.S. alone (USPA, 2021), a number far higher than that of boxing and MMA combined over the same period. Nonetheless, and perhaps reflective of a broader acceptance that the risk in these activities is limited (more or less) to the participants themselves, there are far less calls for the banning of these types of sports/activities than the aforementioned combat-type sports.

For the purposes of the present discussion, we consider all of the sports and sporting activity we have so far mentioned to constitute one framework. This is as *prima facie* examples of activities that are inherently dangerous and, indeed, present a known risk of death. All told, participation in these types of physical and sporting activities, may well fall under terms such as contact, combat, and risky or adventurous sports, yet all are—to differing degrees—dangerous. We also acknowledge that there are efforts being made to mitigate risk and danger throughout sports, whether this is through improved equipment (i.e. helmets in American Football, car safety in F1), protocols (concussion), reduction in frequency of higher risk drills (i.e. tackling volume in contact/invasion sports), or even explicit rule changes (i.e. the aforementioned banning of heading in youth football, or various Rugby Union edicts surrounding lowering the height of the tackle). All of this is certainly admirable and, if reduced risk is an objective, it represents a step towards acknowledging and coping with danger from an administrative level.

Despite the positive actions being taken, we argue that the current categorisation of sports ranging from contact, to combat, to adventure, to extreme, as ‘dangerous’ does not necessarily allow for a clearly understood and more nuanced rationale for participants to make a personal, informed choice. Whilst this kind of viewpoint, one that says that willing participants should know the potential risks involved with any activity they seek to undertake, is admittedly arguable (certainly in the context and philosophy of personal freedoms), this potential lack of choice is particularly germane, for instance, with youth sport. How much knowledge does a youth participant, or their parents, carers, or guardians, have regarding each sport or activity? At what point, and to what level, are the biases and potential misunderstandings of significant others socialised to young people who cannot know better? Certainly, given the inequalities in education (and opportunities) that many citizens of western countries face, how much do adults—both as individuals and parents/carers/guardians—know about risk?

The images related to sport, as generated by the media and business corporations, oftentimes look to exemplify pastimes, activities, and athletes that are highly desirable (Sage, 1998; Rowe, 1999; Coakley & Pike, 2009). Whilst these types of images are hyper-prevalent, their pervasiveness and the fact that they perhaps hide danger, sit at odds when we study them under a lens and perspective of public health. If we use the example of smoking, this was an activity that was once considered the height of sophistication and chic, and much media production (for instance, movies) triumphed and promoted it. However, with emerging evidence over time, perspectives and policies have changed in respect to smoking, with anti-smoking campaigns, prevention through higher taxation, smoke-free areas, and mitigation (to others) with work smoking policies (GOV.UK, 2019). In this instance, and in the context of knowing that some activities are not so good for us, knowledge, based on evidence, can permit a more informed choice.

In this vein, and returning to sport, the evolving nature of what is known about injury in sport may require a more nuanced framing of these activities beyond the simplistic, and often inadequate, labelling of particular

sports as ‘dangerous’, risky, or extreme. Indeed, any basic labelling that categorises ‘dangerous’ sports not only lacks definition, but also fails to draw a distinction between those that are harmful if something goes wrong or, as a by-product, those where causing harm is embedded as a function of the sport. In this sense, we believe that there is a justifiable argument to be made that some ‘dangerous’ sports should be relabelled because of the embedded aims of the sport to (at least in part) inflict harm or neurological damage through incapacitation or knockouts.

Of note, there is already precedent in how society categorises potential harm to employees from dangerous substances, equipment, production, and infrastructure risks within work environments. It is this parallel of production work that informs our position statement for this commentary, namely that certain ‘dangerous’ sports should be recategorised as ‘hazardous,’ given their nature. Within work environments (certainly in the UK) the word ‘hazard’ is used to label any substance or practice that will cause harm when an individual is exposed to it. Conversely, risk is the probability that somebody will be exposed to that hazard. For example, a dangerous chemical always presents the same amount of *hazard* to health, but its *risk* is significantly lowered with proper working procedures and storage. Due to the fact that risk is therefore controllable, we can see that transparent labelling for the wider public within work (and dangerous) environments has a well-established framework. Moreover (and of little wonder when we consider the implications), there are clear government guidelines, enshrined in law, that seek to minimise risk and identify hazards within work environments (Health and Safety Executive, 2021). Indeed, factories in most countries will contain education materials, manuals, and warnings throughout their premises, and contracts will outline in detail expectations of workers to abide by the regulations for their own and their co-workers’ safety.

If we shift from this outline of production work back to this commentary’s context of sport, we believe it is fair to say that the combat sports of boxing/MMA/BKB etc., have a 100% probability of exposure to hazard, due to it being an explicit intention of the sports. This intention incorporates, whilst not exhaustively but no less definitively, efforts to overpower, debilitate, and ‘stop’ opponents through temporary neurological failure and damage to the brain (knockouts). Therefore, when we acknowledge that a hazard will actually cause someone harm, we are obliged to conclude that the aforementioned combat sports are indeed ‘hazardous’ sports. It is this title, this recategorisation using the parallels of production work, that underpins our commentary and our desire for more people to more clearly, and quickly, understand the potentially hazardous ramifications of taking part in certain types of sports. Where we have conceded that young peoples’ choices can be entirely articulated by the educational and cultural limitations of others, it is hoped that a reclassification will encourage further thought or education by either themselves or their social/parental group before a particular sporting domain is entered.

To be clear, these are essentially combat sports that seek to produce/inflict neurological damage in order to win. We are also aware that the distinction made here must be realised in the context of other ‘dangerous’ risk-type sports (i.e. contact sports, those where concussion through tackling or related game play may happen, but is not an explicit aim of the sport). With these, whilst we acknowledge that there is a danger, and that there is a variable probability of exposure to hazard, the fact is that the hazard is not the explicit intention of the sport. Indeed, in some cases avoidance of the hazard is perhaps what makes the sport engaging (BASE jumping, skydiving etc.), and at the least any hazardous outcomes are not ‘imposed’ on others. Therefore, we feel we can continue to categorise these contact and extreme sports as ‘risk sports,’ whilst using the ‘hazardous’ categorisation for those sports that specifically, as a function of their rules, have a 100% probability of exposure to hazard.

For clarity, we are not against banning what we term as ‘hazardous’ sports. We think that challenge, adventure, and even combat have some place in the human condition, psyche, and story. We would go so far as to say that, for many, modern society can produce some feelings of mundanity, and that exploration, excitement, goals and tests can lead to a higher quality of life and purpose for some. Equally, we believe that many of the sports that fall under the umbrella of our newly identified ‘hazardous’ sports label have to be placed and understood in a variety of social contexts. Indeed, we are well aware that they are a ‘life-skill’ for many (Wacquant, 1995), and oftentimes bear substantial profit, kudos, and utility within different communities (Lewandowski, 2007). However, and to reaffirm, in this commentary we argue that sports that inherently seek to inflict neurological damage should be recategorised as ‘hazardous’ sports, much like any hazards are identified at work and production plants (the world of industrial work). This is in order to ensure a more well-informed public debate, knowledge, and understanding of the emerging scientific evidence related to neurological deficit, related trauma, and longer-term issues (i.e. dementia) that are now presenting post-sport career or participation with greater frequency.

References

- Barr, J. (2020). *Blood sport: Bare-knuckle fighting emerges from shadows*. ESPN. https://www.espn.co.uk/boxing/story/_/id/28791748/blood-sport-bare-knuckle-fighting-emerges-shadows
- BBC. (2020). *Steve Thompson in group of ex-rugby union internationals to sue for brain damage*. <https://www.bbc.com/sport/rugby-union/55201237.amp>
- Bouchat, P., & Brymer, E. (2019). BASE jumping fatalities between 2007 and 2017: main causes of fatal events and recommendations for safety. *Wilderness and Environmental Medicine*, 30(4), 407–411. doi: 10.1016/j.wem.2019.07.001
- Brenson, K. (2018). Head to Head: The NFL Concussion Scandal and an Argument for OSHA Regulation, *University of Chicago Legal Forum*, 23(2017), 594-626
- Bretzin, A. C., Covassin, T., Wiebe, D. J., & Stewart, W. (2021). Association of Sex With Adolescent Soccer Concussion Incidence and Characteristics. *JAMA Network Open*, 4(4):e218191. doi:10.1001/jamanetworkopen.2021.8191
- Coakley, J. (2011). Youth sports: What counts as positive development. *Journal of Sport and Social Issues*, 20(10), 1–19. doi:10.1177/0193723511417311
- Coakley, J., & Pike, E. (2009). *Sports in Society: Issues and Controversies*. McGraw Hill.
- Coalter, F. (2007). *A wider social role for sport: Who's keeping the score?*. Routledge.
- Crisp, P. (2019). Youth sport coaching and the importance of maintaining participation: Why evidence must underpin notions of performance, talent, and development. *Archives of Sports Medicine*, 3(2), 162-165.
- Crisp, P. (2020). Leadership, Bridging, and Group-Game Engineering: Guidelines for Community Sport Coaches. *International Sport Coaching Journal*. 7(2), 229-238. <https://doi.org/10.1123/iscj.2020-0005> .
- Dorsett, R. (2021) Boys of '66 and Dementia. <https://www.skysports.com/football/story-telling/11095/12174891/the-boys-of-66-how-englands-world-cup-heroes-are-losing-their-battle-with-dementia>
- England Rugby. (2020). *Headcase*. <https://www.englandrugby.com/participation/playing/headcase>
- FA. (2020). *Updated heading guidance announced for youth training sessions*. <https://www.thefa.com/news/2020/feb/24/updated-heading-guidance-announcement-240220>
- FIA. (2014). *Senna's lasting safety legacy*. <https://www.fia.com/news/sennas-lasting-safety-legacy>
- Förstl, H., Haass, C., Hemmer, B., Meyer, B., & Halle, M. (2010). Boxing-acute complications and late sequelae: from concussion to dementia. *Deutsches Arzteblatt International*, 107(47), 835–839. <https://doi.org/10.3238/arztebl.2010.0835>
- GOV.UK. (2019). *Guidance: Health matters: stopping smoking – what works?* <https://www.gov.uk/government/publications/health-matters-stopping-smoking-what-works/health-matters-stopping-smoking-what-works>

- Health and Safety Executive. (2021). *COSHH assessment: Identifying hazard and assessing risk*.
<https://www.hse.gov.uk/coshh/basics/assessment.htm>
- Kirkwood, G., Parekh, N., Ofori-Asenso, R., & Pollock, A. M. (2015). Concussion in youth rugby union and rugby league: a systematic review. *British Journal of Sports Medicine*, 49(8):506–510. doi: 10.1136/bjsports-2014-093774
- Ling, H., Morris, H. W., Neal, J. W., Lees, A. J., Hardy, J. Holton, J. L., Revesz, T., Williams, D. D. R. (2017). Mixed pathologies including chronic traumatic encephalopathy account for dementia in retired association football (soccer) players. *Acta Neuropathologica*, 133(3):337-352. doi: 10.1007/s00401-017-1680-3
- Lehman, E. J., Hein, M. J., Baron, S. L., & Gersic, C. M. (2012). Neurodegenerative causes of death among retired National Football League players. *Neurology*, 79(19) 1970-974. doi:10.1212/WNL.0b013e-31826daf50
- Lewandowski, J. (2007). Boxing: The Sweet Science of Constraints. *Journal of the Philosophy of Sport*, 34(1), 26-38. doi:10.1080/00948705.2007.9714707
- Martland, H. S. (1928). Punch Drunk. *Journal of the American Medical Association*, 91(15), 1103–1107. doi:10.1001/jama.1928.02700150029009
- Masucci, M., & Butryn, T. M. (2013). Writing about fighting: a critical content analysis of newspaper coverage of the ultimate fighting championship from 1993-2006. *Journal of Sports Media*, 8(1), 19–44. doi: 10.1353/jsm.2013.0005
- Mez, J., Daneshvar, D. H., Kiernan, P. T., Abdolmohammadi, B., Alvarez, V. E., Huber, B. R., Alosco, M. L., Solomon, T. M., Nowinski, C. J., McHale, L., Cormier, K. A., Kubilus, C. A., Martin, B. M., Murphy, L., Baugh, C. M., Montenigro, P. H., Chaisson, C. E., Tripodis, Y., Kowall, N. W.,...McKee, A. C. (2017). Clinicopathological evaluation of chronic traumatic encephalopathy in players of American football. *The Journal of the American Medical Association*. 318(4):360–370. doi:10.1001/jama.2017.8334
- Pollock, A. M., White, A. J., Kirkwood, G. (2017). Evidence in support of the call to ban the tackle and harmful contact in school rugby: a response to World Rugby. *British Journal of Sports Medicine*, 51:1113-1117. doi:10.1136/bjsports-2016-096996
- Raggiotto, F., Scarpi, D., & Moretti, A. (2019). Advertising on the edge: appeal effectiveness when advertising in extreme sports. *International Journal of Advertising*, 1–24. doi: 10.1080/02650487.2019.1653009
- Rowe, D. (1999). *Sport, Culture and the Media*. OU Press.
- Russell, J. S. (2005). The value of dangerous sport. *Journal of the Philosophy of Sport*, 32(1), 1–19. doi: 10.1080/00948705.2005.9714667
- Sage, G. H. (1998). *Power and Ideology in American Sport*. Human Kinetics.
- Sánchez-García, R. (2020). The spectacularization of violence in contemporary US bare-knuckle fighting. *Sport in Society*, 1–14. doi: 10.1080/17430437.2020.1814576

- Simon, J. (2002). Taking risks: Extreme sports and the embrace of risk in advanced liberal societies. In Baker, T. & J. Simon (Eds.), *Embracing Risk: The Changing Culture of Insurance and Responsibility*, 177–208. University Press Scholarship Online.
- USPA. (2021). *No Title*. United States Parachute Organisation. <https://uspa.org/Discover/FAQs/Safety>
- Wacquant, L. J. D. (1995). The pugilistic point of view: How boxers think and feel about their trade. *Theory and Society*, 24(4), 489-535.