

Technology and Ethical Behavior in Running Sports: An Actor-Network Theory Perspective

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ABSTRACT

Wearable technologies' popularity in sporting practices continues to grow. Runners use GPS watches and activity trackers to track steps, log miles, map courses, and monitor heart rates. Likewise, wearables are integrated into long distance running events, with race officials relying on technologies to effectively execute events. However, technologies can also enable and monitor cheating. Many studies focusing on the individual explore why cheaters make unethical decisions. Actor-Network Theory shifts cheating's focus from the individual and moral failings to an assemblage that includes not only the runner, but nonhumans, such as technology, as well. A 2015 Canadian Ironman cheating incident case study illuminates intricate relationships and networks between humans and nonhumans. By examining the intersections of cheating and technology in running sports, the authors see where and how technology works as intended or is repurposed. Whereas a human-centered approach to sport and cheating dismisses wearables' agency, Actor-Network Theory reveals their underexamined, sociotechnical complexities.

KEYWORDS

Actor-Network Theory, Assemblage, Cheating, Running, Technology

INTRODUCTION

In 2003, Garmin launched the first GPS running watch. Since then, the satellite tracking has improved, and the popularity of the watches has not waned. This popularity is not at all surprising, however. Runners have embraced technology since the first Casio watch in the 1980s to log speed and distance progress. Today's watches have the added benefits of including mapping, heart rate monitoring, and running dynamics, such as cadence and stride length.

Similarly, today's running events are also rich with technology: GPS watches, course clocks, timing chips, timing mats, photography, videos, computers, social media updates, and website communications. These technologies help officials launch and manage a successful race and assure that all athletes complete the event correctly. For instance, timing mats monitor not only *when* an athlete crosses a part of the course, but also if the athlete crossed it. Before a race, runners register for races online. During the race, runners wear timing chips or timing bibs, run over timing mats, pass video and photography cameras, and wear activity trackers and smartwatches. After the race, runners often post photos and times to social media or Strava, a social network website and app for athletes. Racers can locate times and photos online within 24 hours. Thanks to wearable devices, gone are the days of waiting for race results to be posted in the local newspaper.

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Unfortunately, the ease afforded by technology to post successful race times is an extrinsic motivation that has led some athletes to cheat. Posting and tweeting about finishing another race, earning another medal, or qualifying for Boston has pushed some to engage in unethical behavior (Sailors, Teetzel, & Weaving, 2017). Although the studies are still inconclusive, some researchers suggest that the social pressures to post a successful race after announcing entry are enough for some athletes to cheat (Sailors et al., 2017). Furthermore, the availability of race data online has encouraged the rise of homemade detectives, such as Derek Murphy who runs MarathonInvestigation.com. Murphy mines race times to catch and expose cheaters. Cheaters are then shamed on social media, and most are banned from racing the event again.

Research on cheating in sports is prevalent, especially in the Philosophy of Sport field. Similarly, work on technology in sports abounds in science and technology studies and in sport studies. However, it is the intersection of technology and cheating in sports where there is a gap. In response, this article analyzes how and when technology is used in running practices to enable cheating. To clarify up front, what this study does *not* do is dive into a cheater's mind. This is not a philosophical or psychological venture into the reasoning of why someone cheats. Individuals' motives or intentions are only one part of a complicated situation. These cheaters enroll space, technology, and time into their actions, and it is in these latter and under examined parts where this study operates. In order to attend to the various roles of technology in sporting practices, I turn to a methodology that thrives in the complexities of networks. Actor-Network Theory serves this purpose. Actor-Network Theory [ANT] requires an impartiality where no human is privileged over a nonhuman and vice versa. Therefore, actions, such as cheating, are examined after appropriating agency not to the individual, but to the assemblage -- a human and all its co-productive relations of nonhuman actors, such as wearable technology. Through Actor Network Theory, I delve into a heterogeneous sport ontology in an effort to bring to light new considerations when examining unethical behavior.

I begin this work by demonstrating that Actor-Network Theory is an appropriate and compelling methodology to apply to the sociotechnical phenomenon of cheating in current recreational sports, such as marathon and triathlon racing, where technology plays an active role. After exploring ANT, I discuss wearable technology in running practices. Then, I divert slightly from technology to discuss cheating and suggest a new approach to thinking about unethical behavior that will carry the study forward into examples of course cutting. Finally, in order to plunge into the specifics of how technology and cheating are enacted in running events, I present a case study of the 2015 Ironman in Canada. The circumstances surrounding this particular race make it an ideal model. The 2015 Ironman, like all major running events, implements technology throughout. The events during and after the race expose the re-purposing of technology to enact unethical behavior while also demonstrating the use of technology as surveillance. In addition, this case study provides the opportunity to examine course cutting—a method of cheating studied less than other methods of cheating, such as doping. Finally, this event highlights the role of the participants and spectators as investigators aiding to expose cheating within their sport community.

The research questions driving this study include the following: How does Actor-Network Theory allow us to approach unethical behavior differently by shifting the focus from the individual and his or her moral failings to an assemblage that includes humans and nonhumans? In other words, does distributing agency to an assemblage instead of an individual reframe how we examine unethical behavior? How is technology working in running events to either provide affordances for unethical behavior or prevent unethical behavior? Is technology encouraging or persuading these behaviors?

ACTOR-NETWORK THEORY

Actor-Network Theory, introduced in the 1980s by scholars Bruno Latour, Michel Callon, and John Law, proved useful to those working in the Science and Technology Studies [STS] for its unique approach to agency and what constitutes “the social.” Formerly, society was defined as a determinate

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