

Ontology and interdisciplinary research in esports

Tom Brock

Manchester Metropolitan University
Department of Sociology
Manchester
t.brock@mmu.ac.uk

INTRODUCTION

This paper identifies the benefits of adopting a critical realist ontology to research esports in the social sciences. The paper outlines some of the challenges in researching esports, paying particular attention to the emerging specialisms and sub-disciplines. The paper suggests that these emerging ‘schools’ of thought have a variety of ontological and epistemological commitments, resulting in a complex and somewhat fragmented or contested set of principles and research directives. The paper argues that each research paradigm has its own advantages and disadvantages but that, perhaps, we can gain a more complete understanding and appreciation of esports (as a social *and* natural phenomenon) if we aggregate their contributions. As such, the paper outlines some of the central philosophical commitments of critical realism - ontological realism, epistemic relativism, judgmental rationality, and (a cautious) ethical naturalism - and considers their benefit for researching the multi-layered and multi-faceted nature of esports. The higher-level or abstract nature of this departure point is purposeful: it seeks to offer esports research an ontology that recognises its emergent, reflexive and relational features, which, in complex ways, shape the many relationships, behaviours, contexts and values under study. Such an ontology, then, this paper suggests, can provide a meta-theoretical grounding for interdisciplinary research as researchers recognise and incorporate their theoretical and empirical contributions into a more comprehensive critical realist framing.

Research into esports is proliferating (Bányai, et al. 2018; Reitman, et al. 2019; Pizzo, et al. 2022) and covers a variety of academic disciplines, including business and management (Hedlund, et al. 2020; Jenny et al. 2018; Scholz, 2019), sport science and psychology (Behnke, M., 2022; Garcia-Lanzo, et al. 2020, Karhulahti, 2020; Pedraza-Ramirez, et al. 2020; Poulus, et al. 2020; Trotter, et al. 2020), education (Funk, et al. 2018; Jenny, et al. 2021), law (Holden, et. al., 2017; Owens, 2016; Windholz, 2020), sociology (Brock, 2017; Jin, 2010; Taylor, 2012; Ruotsalainen, et al. 2022; Witkowski, 2012) and more. A whole range of interests, themes and challenges emerge across these disciplines, from research into the business and economic aspects of the esports industry to the use of esports as a tool for education to concerns around player health, performance and psychology and the need to improve coaching practices. Other themes (to name a few) include research into the social and cultural impact of esports, the ethical and legal issues surrounding esports, and ways to improve the technology and infrastructure used in esports competitions. Importantly, Pizzo et al. (2022) identify two issues with this exponential growth in esports research. The first is that ‘esports scholarship remains fragmented, missing opportunities to connect with and inform scholarship transcending disciplinary boundaries’ (Pizzo, et al., 2022, p.228; also see Scholz, 2019). The second is that ‘scholars are engaging in siloed research related to esports.... Neglecting their interdisciplinary nature, leading to disjointed scholarship’

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(Pizzo, et al., 2022, p.228). This paper will argue that a critical realist ontology provides a framing that can provide an interdisciplinary research agenda.

Critical realism is a philosophical approach to understanding social (and natural) phenomena that combines elements of realism and critical theory. The version of critical realism presented in this paper is based on Roy Bhaskar's early work (Bhaskar, 1998[1978], 2008 [1975]) and, to an extent, his later works on interdisciplinary research (Bhaskar, et. al 2010). This version has been adopted and developed by many notable social theorists, including Margaret Archer (2007, 2012), Dave Elder-Vass (2010), Andrew Sayer (2000) and Christian Smith (2010). Critical realism has two key commitments relevant to interdisciplinary research in esports. First, critical realism provides a philosophical underpinning for social research that offers an alternative to scientific (positivist) but also subjective (interpretive) accounts of esports. Second, critical realism foregrounds discussions about (realist) ontology above and beyond epistemological and methodological concerns. The paper will discuss what critical realism offers through three key concepts: 'materialism', 'causation', and 'emergence'. It will suggest that critical realists see social (and natural) reality as made up of objects, structures and people that causally interact to produce new, emergent phenomena with more and more complexity, operating at different layers or 'strata'. For example, in the context of esports, we can consider 'player behaviour' as operating at different layers, each one characterised by various causal mechanisms through different disciplines, such as chemistry, biology, psychology, and sociology. The significance of such a 'holistic' approach is that it provides a theoretical case against unilateral reductions of any kind, whether to lower levels of explanation (e.g., psychological constructs) or reified through accounts of social structure or culture (e.g., sociological accounts of identity or the political economy). What results is an explicit acknowledgement of the multi-layered, multi-faceted and relational nature of esports that is amenable to interdisciplinary analysis.

To help discern the utility of these ideas, this article develops a critical realist approach that serves to support esports researchers in two ways. First, it proposes that esports has *ontological depth*, which is to say that current epistemic framings lack the theory and guidance to generate context-dependent explanations. This issue is particularly apparent when trying to address 'wicked problems' (Rittel and Webber, 1973) in esports research, such as the question of whether esports is a sporting activity or not (Jenny et al. 2017). This article will argue that any attempt to address such 'wicked problems' requires thinking of esports as embedded within a stratified ontology that has physical, psychological, social, and cultural orders. Second, this article proposes that esports research must also be situated within a 'SAC' – structure, agency, and culture. Though these are traditionally sociological concepts, they are nevertheless grounded in the emergent interactions of biological, psychological, and social phenomena situated in space and time. Indeed, it is beneficial to think of esports as an 'open system' (Bhaskar, 1998[1978]) embedded within a range of natural and social factors that have different properties, powers, and timescales. From this perspective, researchers can begin to recognise and critique 'conflationist' (Archer, 1998) tendencies in esports research, whether because of overly voluntaristic accounts of human agency (Iwatsuki, et al. 2021; Nagorsky and Wiemeyer, 2020; Pedraza-Ramirez, et al. 2020), deterministic accounts of social and economic structures (McCutcheon and Hitchens, 2020), or elisionist accounts of embodied social practices (Taylor, 2021). The paper concludes by considering how a critical realist might reframe esports research to be more 'adaptive' (Layder, 1998) and integrate biological, psychological, and cultural layers of data into a more holistic understanding of esports phenomena. Of course, this endeavor is not exhaustive but, rather, provides the foundations for a more general approach in esports research.

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