The Eighth Rhetoric of Play

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To Brian Sutton-Smith's catalogue of seven play rhetorics in his influential work, *The Ambiguity of Play*, the author adds an eighth category—the rhetoric of computational play, connecting the research field of game studies with other forms of play studies. By proposing this rhetoric, Sicart seeks to consolidate the relation between game studies and play studies. **Key words:** Brian Sutton-Smith; game studies; play rhetorics; play studies

Introduction

Tesla's electric cars are an icon of Silicon Valley's technological prowess and hubris. Sleek vehicles targeted to affluent, environmentally minded buyers, Teslas illustrate a possible future for clean energy and computational innovation. In a Californian of tomorrow, electric cars will be autonomous agents, driving by themselves and interacting with each other as their passengers enjoy the pleasantries of the scenery or the entertainment streamed to their car's WiFi system.

Such a techno-utopian vision redefines the car as no longer a mechanical, gas-powered motor but now an electric engine controlled by a computer. Tesla's products exemplify how computers reshape technologies from the past. The computational system at the heart of the car does more than just run the car. As of 2018, if a Tesla owner has the autopilot installed and presses its icon four times, the display shows the car driving on a Mario Kart track. Holding the Tesla logo and entering the code "mars" allows users to turn the visualization of their car in the dashboard display into a Mars Rover. The Model X offers a holiday light display when the driver enters the code "ModelXmas," and it can even turn its large central display into a sketch pad on which users can draw—clearly not a good idea in a moving vehicle.

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These Easter eggs, as Tesla defines them, are puzzling additions to a car's software: Why would a vehicle need these extra functionalities? Cars once were machines of efficiency, of industrial-era aesthetics that signalled mechanic power and prowess. It was possible to play with cars, but the machines themselves were not playful. They were engineering products for transportation and speed. The Tesla is both a car and a playful computer on wheels. It is also a symptom of a world that computers have changed.

This change is often compelled by a ludic drive. My goal in this article is to apply the concept of a rhetoric of play á la Brian Sutton-Smith as an epistemological instrument to inquire about the play element in computational culture. To those listed in Sutton-Smith's *The Ambiguity of Play* (1997) I propose to add an eighth rhetoric of play: The rhetoric of computational play. This rhetoric partially explains the importance of play in shaping computational culture, threading together play studies and game studies with other disciplines to address novel phenomena that emerge from the ubiquitous presence of computers in our society and culture.

I have structured my argument in five elements. The first section describes Sutton-Smith's concept of rhetorics of play and how I apply it. The second section appropriates the concept of the Information Age to describe the historical time in which a novel rhetoric of play comes into being. The third section reflects on the presence of play and games in the culture of the Information Age. The fourth section introduces the concept of the rhetoric of computational play, following the template Sutton-Smith presents in *The Ambiguity of Play*. Finally, the article summarizes the rhetoric of computational play and its potential relevance for play and game studies.

Rhetorics of Play

In *The Ambiguity of Play*, Brian Sutton-Smith (1997) developed the concept of rhetorics of play to address an epistemological problem in play theory: Play is a fundamentally ambiguous concept. Any definition of play will leave out phenomena that can be considered play, because it is impossible to define play formally: "The ambiguity is most obvious, however, in the multiple forms of play and the diversity of the kinds of play scholarship they have instigated. Obviously the word play stands for a category of very diverse happenings, though the same could be said about most omnibus categories, such as, for example, religion, art,

war, politics, and culture. Any definition of play involves a cultural, technical, and societal perspective" (3).

To address this issue, Sutton-Smith proposed the idea of rhetorics of play. According to him, the concept of play rhetoric allows us to describe how the history, function, and dominant form of play has been understood at a particular time by society and academia because "the rhetorics of play express the way play is placed in context within broader value systems, which are assumed by the theorists of play rather than studied directly by them" (8).

Sutton-Smith defines a rhetoric of play "as being a persuasive discourse, or an implicit narrative, wittingly or unwittingly adopted by members of a particular affiliation to persuade others of the veracity and worthwhileness of their beliefs" (8). Sutton-Smith deals with the ambiguity of play and the divergence in theoretical discourses about the nature of play by locating the source of each definition within the broader cultural milieu in which a theory of play develops, from which it takes its examples, and which it wants to change. As Sutton-Smith argued, "by seeing how the play descriptions and play theories can be tied in with such broad patterns of ideological value, one has greater hope of coming to understand the general character of play theory, which is the ultimate objective here" (12). Rhetorics of play are epistemological constructs used to understand particular human and animal phenomena as play. These constructs are grounded in culturally and historically bound theories. A rhetoric of play is an artifact of a theory, at a point in time, attempting to make sense of phenomena.

The point in time with which I am working is defined by the ubiquitous presence of computers in society, culture, and almost all manifestations of humanity. Although computers and software have been present in our world since the days of Ada Lovelace, I am mostly concerned with the post–World War II era, when computers began to take more central roles as they became more capable of calculating, simulating, and automating otherwise natural processes.

My premises are that from the very beginning of this computational age, play has had a role in shaping what computers can do and what we use them for. This play encompasses different phenomena, different epistemologies, and different ontologies from the concept as it had been used before. The emergence of a world defined by computation also marks the development of a new rhetoric of play, which I understand, following Sutton-Smith, as "part of the multiple broad symbolic systems—political, religious, social, and educational—through which we construct the meaning of the cultures in which we live" (9).

Sutton-Smith developed the concept of rhetoric of play to help determine

which scholars have done the work of bounding a particular understanding of play, which disciplines have contributed to this definition of play, and how various players have been described. These need to "be distinguished from what are called scientific or scholarly rhetorics, as well as from disciplinary rhetorics and personal rhetorics" (8). Sutton-Smith's work, and by extension the concept I propose with this article, are not part of the discipline of "rhetorics," and I am not interested in the understanding of the rhetorical possibilities or applications of play. Although the study of the rhetorical applications of play is interesting and central to a certain convergence of rhetorics, media studies, and game and play studies (Bogost 2007; Boyle 2015; Daniel-Wariya 2016; Lanham 2007; J. Murray 2009), I want to stay closer to the original intention of Sutton-Smith's project: to identify how the concept of play is used by different researchers, within different traditions, to study different phenomena in a coherent way. In this sense, I am closer to an epistemology of play than to a rhetoric of play. However, the use of the concept of rhetoric allows me, first, to continue Sutton-Smith's project and, second, to relate my understanding of this particular kind of play to other concurrent understandings of the concept. Rhetorics of play allow for a more complete mapping of why and how we use play as a concept that makes sense of phenomena.

The rhetoric of computational play highlights its connection to theories of play in an era defined by computers. By identifying this rhetoric, I introduce a way to systematize the main discourse and conceptual elements of recent theories of play. From Sicart's (2014) and Bogost's (2016) books on play, both grounded on the developing field of game studies yet using philosophical approaches to define play, to Henricks's (2015) rethinking of the Huizingan tradition, theorists of play seem determined to make sense of what play is in a world of digital pleasures and perils.

All theories of play have an academic research agenda. They also affect culture, helping define what gets studied and how it gets studied. The way we use play to describe phenomena is a permanent conversation between play theory and the colloquial use of the term. This is where the concept of rhetorics of play becomes useful. Instead of trying to define what play is, we can start by looking at how academia, culture, and society, at a particular point in time, use the concept of play to enact different agendas and promote different technologies, behaviors, and activities. We do not propose a theory of play, but a description of how play gets used to make sense of phenomena.

Ideally, a rhetoric of computational play should facilitate the development

of a theory of computational play. But this premise epistemologically involves circular argumentation. I propose the concept of a rhetoric of computational play to describe the ways in which computational culture (here understood as a shorthand for the culture of an era defined by computers) uses the concept of play. This rhetoric provides the description of an epistemological landscape from which a theory of play could emerge. In other words, the rhetoric maps the theory and the theory justifies the rhetoric. I am aware of this potential problem, and I therefore shy away from proposing a theory of computational play.

And yet, it is precisely an approach that starts from a rhetoric of play that can help us deal with the impossibilities of defining play. By looking at the uses of the concept of play in culture through its manifestations in technologies and practices, we can set a boundary to the concept of play as it is being used. Such an approach allows us to draw a definition of play rooted in human practices, values, and cultures. It is a goal beyond the scope of this article but present in its motivations.

Finally, it is worth noting that the rhetoric of computational play will not exclude the presence of the other rhetorics identified by Sutton-Smith. All rhetorics of play coexist, mix, and affect each other. The distinction between the rhetorics constitute an argument that allows us to make a better analysis of cultural phenomena and human behaviors. However, before I move on to describe this rhetoric of computational play, we need to understand better the concept of the Information Age, to situate more precisely the rhetoric of computational play in its own historical era.

Living with Computing Machines

My key premise is that we are living in a new historical era, the Information Age. The rhetoric of computational play is contingent on a particular historical periodization. Using a category to describe this particular point in time can be contentious. The rhetoric of computational play could be situated in history through other labels such as the Anthropocene (Light et al. 2017), the late- or postcapitalist age (Fisher 2009), or the Cthulhucene (Haraway 2016). I adopt the Information Age because it provides a philosophical foundation to the delimitation and study of a time period and its culture, politics, and society.

The concept of the Information Age comes from Floridi's philosophy of information, in which he defined the Information Age as the historical period

during which human progress and well-being cannot be achieved without information and communication technologies (ICTs). In fact, Floridi (2014) argues that there are societies in which "ICTs and their data-processing capabilities are not just important by essential conditions for the maintenance and any further development of societal welfare, personal well-being, and overall flourishing" (4).

To make sense of these novel environments in which computers are essential for life, Floridi uses the concept of an infosphere that minimally

> denotes the whole informational environment constituted by all informational entities, their properties, interactions, processes, and mutual relations. It is an environment comparable to, but different from, cyberspace, which is only one of its sub-regions, as it were, since the infosphere also includes offline and analogue spaces of information. Maximally, infosphere is a concept that can also be used as synonymous with reality, once we interpret the latter informationally. In this case, the suggestion is that what is real is informational and what is informational is real. It is in this equivalence that lies the source of some of the most profound transformations and challenging problems that we will experience in the near future, as far as technology is concerned. (8)

The Information Age is a period during which humans and information and communication systems share an environment, the infosphere, in which their agencies are deeply entangled and cannot be understood without each other. In the Information Age, we cannot understand society without the presence of informational agents shaping them as much as, if not more than do human agents. These ICTs are agents, in the sense that they act in the world and we need to relate to their actions. In the Information Age, then, ICTs are agents that relate to us in our shared experience of a world, understood as an infosphere.

To summarize this historical background for the rhetoric of computational play, the Information Age is that historical era in which computers have become essential for human life. In this era, we should talk about an infosphere as the environment in which biological and computational agents coexist and relate to others. This is perhaps the fundamental change of the Information Age. People share an environment not only with other biological beings but also with computational agents that affect how all the others live. The Information Age is defined by the extension of agency to include computational agents.

This notion of Information Age proves particularly useful. The main argument for a rhetoric of computational play lies in trying to understand the effect that computers have had in the activity of play. Floridi's concept of the Information Age, which situates ICTs not just as a technology but as a form of agency with which people get entangled (Frauenberger 2019), allows us to inquire about the types of relations we establish with computational agency. As I argue, play constitutes a form of establishing particular, unique relations with computational agents.

Before I explain my argument more fully, I need to provide the foundations for computational agency. For a computer to act in the world, this world needs to be modelled in informational ways. For example, a computer needs to have an informational model of human heartbeat frequencies to be able to analyze sensor data as heartbeats. To explain this phenomenon, Floridi (2015) suggests the concept of reontologization, which explains what happens to the world when it becomes an infosphere. Reontologization is a radical form of reengineering that transforms a particular system to eliminate the friction in the interaction between human and artificial agents. In more conventional terms, reontologization describes the process of creating models that ICTs can use to interact with humans. These models are abstractions of phenomena so they can be computed.

These abstractions are based on rules and data (Wirth 1976). Computers can only act provided the processes they run are computable (Floridi 2012; Turing 1950). Whatever phenomena a computer needs to act upon needs to be reontologized into data that can be processed using rules. A computer will then act following those rules, its agency confined to the data of the world with which it is presented and the rules that allow for the manipulation of this data. In the Information Age, more and more of our world gets modeled into data, and more and more efforts are made to develop rules that allow for more capable ways of engaging with these models. The world is slowly becoming more computational, and we have to learn to live with these rule-following, data-bound agents.

Here we can see where play might emerge. Play also creates worlds based on models structured around data and rules that shape agency. Sometimes these worlds are confined in stadia or pieces of cardboard, and sometimes data are just plastic chips or wooden blocks. But play, particularly in the form of games, proposes models in which agency is modulated for a specific purpose (Nguyen 2020), often for having fun but occasionally also for learning, or even for hurting others (Mortensen and Jørgensen 2020).

The Information Age is then defined by the ways in which the world is remodeled, reontologized, to facilitate the agency of computers. This era has

ushered in a world of human-computer interactions and relations. ICTs have deeply changed the world, expanding the agencies we meet and the relations we can establish with them. The question is, has this process also affected play? There is something about the creation of a world using rules and modulations of agency to create novel forms of relations that we have historically connected to the nature of play. It is possible then to think that play has also expanded its meaning and role in the wake of computational agency. Let us examine what happens when we play with computers.

Playing with Computers

From the very beginning of the Information Age, games were central to making sense of computers. Alan Turing found inspiration in a party game to devise the most famous test of whether a machine is intelligent—the Turing test or "Imitation Game" (Bringsjord et al. 2003; Turing 1950). Turing proposed a thought experiment that took the shape of a set of rules to limit agency and data to test the interpretability of computational agency as human agency. The game was a proxy for understanding how interactions with computers are modelled. Rule-based conversations in which the players' freedom may often involve engaging with the rigid formalisms, automatisms, and procedures of machines. In Turing's game, the clash between the freedom in asking and the rigidity in responding is supposed to illustrate the limits of machine intelligence. Turing's test may indeed say something about machine intelligence, but it says more about the role of play in the Information Age.

Games offer an interesting lens to understand and use computational machines. Through rules and processes, games and computers create models (or worlds) in which different forms of agency interrelate with each other. Furthermore, computers can be used to reproduce or re-mediate other media, so that these worlds are also experienced through audiovisual means. Computer games are illustrative of the technical possibilities of computers, both as calculating machines and as media devices—that is why game designer Frank Lantz (2024) defined video games as "operas made with bridges" (53).

With the Imitation Game, Turing suggested that the rule-based nature of computational operations can be understood through games, a rule-based form of culture and expression with ancient roots in human history. After all, games use rules to structure human agency, giving it meaning in a temporary, separate

world. Because of the rule-based nature of games and play, it is obvious they are a form of engaging with and making sense of computers. The goal is to play within the rules to determine whether those rules are upheld by a computer or by a person. Paraphrasing Salen and Zimmerman's (2003) famous definition of play, Turing proposes free movement within the rigid structure of the Imitation Game, with the purpose of inquiring about the nature of the agency on the other side of the keyboard.

If games are so interesting for understanding what computers can do, what does it mean to play these games? Play studies has given us sufficient concepts to understand how play can help explore agency, develop and master skills, and learn, compete, and create order. Whether as the center of culture or as a phenomenon that emerges in all biological forms of agency, play has had a central role in describing those activities that are undertaken for their own sake, with no expected productive outputs, adding uncertainty that is solved by binding agency to rules that create meaningful inefficiencies (Caillois 2001; Gordon and Mugar 2020; Huizinga 1971; Myers 2012; Suits 1978). Most theories of play address biological agency and rules and processes created, run, and maintained by people or other animals (Allen and Bekoff 2005; Goffman 1961). But in the case of computer games, we have machines delegated with some of the tasks of play becoming effectively agents (players). Whatever understanding of play develops in the Information Age, it needs to take into consideration computational processes applied to data, computers and their relation to media, and different forms of artificial agency. A rhetoric of computational play emerges as a result of the need to understand how playing with computers challenges common understandings of play and games.

The Eighth Rhetoric of Play

I like to think (and
The sooner the better!)
Of a cybernetic meadow
Where mammals and computers
Live together in mutually
Programming harmony

—Richard Brautigan, "All Watched Over by Machines of Loving Grace"

Playing has been central to computing since *SpaceWar!* (Chapman et al. 2017). For every technological advance in computing, we have had a new game to develop and test the possibilities of real-time physics simulations (*SpaceWar!*), natural language parsing (*Colossal Cave*), networked computers multiple user dungeons (MUD), 3-D graphics (*Doom*), or graphical environments in distributed systems (*Ultima Online*), all examples of the playful exploration of what computers can do. Even more or less popular niche technologies like blockchain (*Cryptokitties*) or virtual reality (*Beat Saber*) have been the subject of creative appropriation.

Even the practice of programming has had a particular formulation of the concept of fun (Breslin 2013). Figuring out how to make the best of a computer's limitations was a form of playful exploration of what these machines could do, as in the case of the so-called "demoscene" in the 1980s (Reunanen and Silvast 2009; Scheib et al. 2002), in which programmers competed with each other, trying to create the smaller, more expressive graphics that used as few resources as possible in the most creative ways. Hackers have historically displayed not only a particular ethos (Himanen 2010) but also a particular sense of fun that manifests itself in the form of puns, the creation of obscure programming languages (Mateas 2005), or variable naming in computer code. Beyond digital games, the relation between software and fun indicates the importance of the ludic in shaping the practices of computer programming. As Goffey put it, "Coding for coding's sake entails exploiting the 'play' inherent in the structures, types, and other elements of computer code that enables them to be turned to other, perhaps less work-like, ends." (Goffey, 2016, in Goriunova 2016, 33).

The cultural and economic importance of the games made for computers propitiated the rise of a new academic field. Game studies (Aarseth, 2001, 2017) emerged in the late 1990s as the interdisciplinary research field that wanted to study digital, computer, and video games using methods and theories from the humanities, the social sciences, and computer science. Even though play has had a long academic presence in many disciplines, game studies rather quickly became the dominant approach to the study of (typically digital) games in many academic environments. This new field saw the emergence of new departments, research groups, conferences, and educational programs (Aarseth 2015).

Historically speaking, game studies was understood to be the field that studied games made for and played with some form of computational machine. The importance of media theory and science and technology studies in the foundational works of the discipline, as well as the parallel development of soft-

ware studies (Wardrip-Fruin 2009) and platform studies (Montfort and Bogost 2009), reveal an interest in understanding the particularities of digital games and digital play from humanities, social sciences, and computer science perspectives. While this may be a reductionist understanding of the achievement of game studies, the fact that researchers doing work in nondigital games tend to identify themselves as doing "analog game studies" (Waldron et al. 2016) is an indication that the default understanding of "game studies" is "digital game studies." In fact, the leading international association of games researchers is called DiGRA, Digital Games Research Association. I argue it is fair to say that since the inception of the field, game studies has focused on the study of play and games made for digital artifacts.

Games and play have had a critical influence on research in computer science and software studies. A significant amount of new research on procedurally generated content, artificial intelligence, and interactive narratives is driven by and through an exploration of techniques, approaches, and instrumental applications of play (Shaker et al. 2016; Togelius 2019). From applying machine learning approaches to designing invincible playing machines to exploring the expressive capacities of software through playful and play-driven appropriations of the activity of programming, play and games have a relevant influence on technical fields. However important this work is, it is not really contributing to a further understanding of play. It is relevant work, and some of its outcomes have been very influential in game studies, like Bogost and Mateas' understanding of procedurality. But I would prefer to see these as instantiations of a technical area of game studies rather than as a relatively separate field or discipline.

Media studies has also importantly focused on play and its technologies. Some of the most important contemporary media theorists, like Flusser (2013), Galloway (2006, 2021), and Wark (2007), have expressed their interest in games and play as forms of understanding how computers and humans make sense of each other. Media studies has adapted to understand play's role in shaping computational culture. Similarly, law scholars (Cohen 2012; Lastowska 2006) and economists (Castronova 2006; Lehdonvirta and Castronova 2014) have looked at forms of digital play to understand the effects of computational media on their fields but also at how their disciplinary backgrounds can help make sense of new cultural forms. In media studies and game studies, the pervasive concept of play can be understood as a mode of experiencing, of engaging with, the potentialities of computational media. Digital game studies explore what kind of games can be made for computers. Media studies has looked at the playful

approaches to computers in hacking (Coleman 2014), digital arts (Britton et al. 2019; O'Brien 2017), and other forms of interactive experiences. A function of play in the Information Age is making sense of the expressive and cultural possibilities of computing machines.

So far I have mapped the dominant disciplines in a rhetoric of computational play. Following Sutton-Smith's template, it is also important to think about what role players have in the rhetoric of computational play. Given the importance of computer games in shaping this rhetoric, it would be the obvious place to start with the "gamer" (Shaw 2010, 2012). However, that concept is fraught with connotations that need to be addressed. The gamer identity has been taken over by a vocal minority of misogynistic, racist, entitled (mostly) white men who appropriated the label gamer to create an exclusionary identity that railed against progressive themes and politics (Chess and Shaw 2015). Events like the GamerGate harassment campaign (Massanari 2017; Mortensen 2016) illustrate how this entitled minority, pandered to for decades by the video game industry, has occupied a loud central position within computational culture while marginalizing other digital player identities (Shaw 2015).

Many individuals are video game players. Women and children who find in games and other forms of computationally mediated play a form of leisure and learning, of power fantasizing, and of escapism, are gamers. Video game players form communities around games, to play them, to watch them, and to talk about them (Taylor 2006, 2018). Players are creatively engaging with what these worlds allow them to do by crafting mods for games (Sotamaa 2010), maps, and new worlds, and even moving communities across these game worlds (Giddings 2016; Pearce 2011).

Computer game players—or gamers in the rhetoric of computational play—can be characterized by their commitment to use computers to find forms of expression within the voluntarily accepted boundaries of a game. These gamers are also interested in the expressive and relational possibilities of computers. Their social and cultural worlds are often deeply invested in digital games and other forms of playable computational media. Players in digital play appropriate computational technology to find ways to express themselves or enjoy playing with audio visual machines that can simulate different systems. The concept of a player attached to computational play is of someone who wants to use computers to structure leisure, to engage in the thrilling or soothing or amusing experiences computers facilitated. Digital play affords new instruments for play, and players explore how these new technologies create and facilitate these forms of play.

The gamer can be a creative, community-generating, socially engaged individual but can also be a racist and a misogynist. The gamer is a figure as ambiguous as play itself, threading always between the inclusive and the exclusive, the best and the worst of humanity. Gamers are defined by the way they define the role digital play has in shaping their individual and collective identities.

Following these reflections, and to continue the structure that Sutton-Smith used to describe his seven rhetorics of play, I propose figure 1 as a summary of the rhetoric of computational play

This figure should not be read as a comprehensive description of the elements of the rhetoric of computational play, but as an overview of some of the important elements to be considered. Like all simplifications, it leaves many things aside. However, articulating a rhetoric of computational play will hopefully lead to a conversation in different fields and disciplines about the role and values we attach to the activity of play. Figure 1 should be read as a conversation starter, not as the final word on the eighth rhetoric of play.

Summarizing the historical context of this rhetoric is complicated, but the general concept of the Information Age allows us to invoke the philosophy of technology, cybernetic theory, information science, and the research that has looked into the relation between humans and computational machines, from cyborgs (Haraway 1987) to the regime of computation (Hayles 2005).

The function of play is perhaps the least clear of all the categories in figure 1. I have decided to adjudicate play with the role of making sense of computers, a vague yet hopefully evocative functional description. To play is to explore the possibilities afforded by computers. This exploration is not guided by functional purposes, but by aesthetic, leisurely interests. It is an exploration not of what computers should do, but of what they could do. In this sense, computational play is closer to the cybernetic ambitions of British cybernetics artist

History	Function	Form	Players	Discipline	Scholars
The Information Age	Making Sense of Computer	Digital Games	Gamers	Game Studies	Laurel, Murray, Aarseth, Juul, Bogost, Taylor

Figure 1. Summary of the rhetoric of computational play

and researcher Gordon Pask than those of Norbert Wiener, the philosopher and mathematician who created the field of cybernetics right after World War II (Pickering 2010). In this formulation of the rhetoric of computational play, then, I am setting aside other uses of computational play, such as learning or political video games. Although the development of digital games that address serious matters does offer some key elements of the rhetoric of computational play, ultimately its purpose is closer to other rhetorics identified by Sutton-Smith, such as the rhetoric of progress.

The dominant form of play in this rhetoric is digital gaming, and the dominant conception of the player is the gamer. My use of the concept of gamer should be read as an inclusive category, one that reflects the multiplicity of individuals who engage with digital play. I understand gamer as a polymorphic category that includes anybody who engages with digital play, as players in public or in the streaming publics, as well as creators and even coordinators of the communities of digital play, such as games festivals. I also propose gamer as a category that embraces its inherent ambiguity—the gamer as a positive contributor to the world and society and the gamer as a nihilistic troll.

Finally, the discipline that has best articulated the rhetoric of computational play has been game studies. Even though media studies, sociology and ethnography, and computer science have also been critical in the development of concepts, tools, and frameworks that contribute to the study of digital play, game studies is the field that has emerged from the study of digital games. Despite the field's push towards studying more than video games, the vast majority of its publications and the major conferences and journals address video games and other forms of digital play as their object of study.

As for the most relevant researchers in this field, I have decided to single out the foundational authors in game studies. Laurel (2014), Murray (1997), and Aarseth (1997) provided the first conceptual works focused on digital play and games, while Juul (2005), Bogost (2007) and Taylor (2006) contributed to the multiplication of perspectives and disciplines focused on digital play. These lists are inherently unfair, and mine could be extended to add the work of pioneers like Sudnow (1983), Kennedy (2002), Kerr (2006), Kücklich (2003), Mortensen (2006), or Giddings (2008). Similarly, more recent work of scholars like Shaw (2015), Stenros (2015), Ruberg (2019; Ruberg and Shaw 2017), Gray (2012, 2014), Trammell (2020), Jørgensen (Jørgensen and Wirman 2016), and Wirman (2021), who have critically helped diversify the discipline of game studies. It is not my intention to formulate a canon, but to signal the

works that help consolidate the scholarship that developed the rhetoric of computational play.

Conclusions

With the concept of rhetorics of play, Brian Sutton-Smith proposed a systematization of the cultural and academic understanding of play, categorizing theories and definitions to understand how some particular moments have helped define what play is. In this article, I have proposed an eighth rhetoric of play with the intention of continuing Sutton-Smith's project.

Any systematizing project like this will be met with well-needed resistance. Many rhetorics of play happen simultaneously, and the concept of the Information Age, a foundation of my definition of the eighth rhetoric of play, can be contested. It is, after all, a concept proposed by a philosophical and historical analysis of the developed world. This eighth rhetoric not only inherits this temporal and economic situatedness but also disregards other historical concepts, like the Anthropocene, that might as well articulate alternative rhetorics of play. I have also consciously not addressed postcolonial critiques of games and play studies (Hammar et al. 2019; Trammell 2023) or the "material turn" in game studies (Apperley and Jayemane 2012). We cannot—and we should not—understand game studies without these works. And at the same time, the writings cited are the starting point of a much needed change in how we conceptualize the study of games and play. When the work begun by these researchers becomes more central to game studies, it will be the time to revise this article. In the meanwhile, it is the collective task of game scholars to understand and overcome the foundations of the rhetoric of play with which we are all engaging.

Like all research, this article is limited in its scope and achievements. However, I believe the rhetoric of computational play is a useful concept. It allows play scholars to see the commonalities between digital toys and digital games, between digital game-like experiences in the workplace, and the use of digital games in classrooms. The rhetoric of computational play helps us see patterns in contemporary play and games research. For example, it helps game scholars analyze the importance of video games beyond just games, as in the case of the Tesla Easter eggs. As machines designed and marketed in Silicon Valley, Teslas showcase a future designed for and by computers. The presence of video games in that future, while hidden in plain sight through these Easter eggs, is unavoidable,

because it is a way of making sense of that computer that happens to be a car too.

With this article I intend to both systematize and categorize contemporary research in game studies, media studies, and other related disciplines and give importance to a set of questions for play studies, namely, what happens to play when computers critically contribute to shaping culture. The big question left to be answered is, once again, what is play? The rhetoric of computational play encourages us to think about play as something beyond the biological, deeply related to artificial forms of agency, computation, modelling, data, and processes. The next step is, then, to understand whether computers can play. But, in the words of Sutton-Smith (1997) himself, "enough is enough" (224).

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