

Game Studies

Mäyrä, Frans

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Abstract

'Game Studies' is generally used to signify a humanities-based orientation to the study of games, play and related phenomena. This involves the development of conceptual, theoretical and methodological approaches that address the artistic form and aesthetic experience of games as a form of art and entertainment. As such, Game Studies is also a young academic discipline, which entered academia in the early 2000s. There are different emphases in how contemporary Game Studies is being practised, with some scholars focusing more attention on the formal characteristics of games, some on the role of play and players, game design, or on the historical and political contexts and meanings for games and play.

Introduction

Game Studies is an academic discipline and a research field that is focused on games, play and related phenomena as its subject of study. As a disciplinary formation, it is a relatively young entrant into academia, but the study of games and play itself reaches far into history.

The concept and function of Game Studies as a disciplinary formation are similar to other related fields, such as Media Studies or Literary Studies. These disciplines are traditionally positioned in the humanities and put emphasis on the perspectives opened by historical, theoretical and analytical inquiry into their subject matters (cf. Bod et al., 2016).

The contemporary landscape in the academic and scientific study of games is very broad-ranging and the methodological and (inter)disciplinary range is wide. Some scholars working with the subject area prefer to use 'game research' while referring to their field, rather than subscribing to Game Studies as a discipline.

Game Studies is characterised by a great variety and diversity in its research topics and methodological approaches, which is apparent both in the content of published studies as well as in such educational applications as the Game Studies degree programs.

While Game Studies has not aimed to establish any single paradigm as the sole "correct" way of conducting research into games and play, it continues to evolve and accumulate domain-specific vocabulary, a deep understanding of what games are [LINK: Ontology], how they operate, and what kind of research methodologies are best fit for different kinds of games, and the different dimensions of games and play. All this has helped to establish some of the key directions and concerns that create identity for Game Studies as an academic field.

Researchers operating in Game Studies continue to have their academic backgrounds in a wide range of different disciplines (Mäyrä, van Looy & Quandt, 2013), and the development of Game Studies has also contributed to the strengthening of interdisciplinary expertise in several games-related research fields.

The History of Game Studies

There are multiple historical roots for the contemporary study of games and knowing some of the related intellectual pre-history also helps to understand its basic character and some of the different trajectories in the development of this field. All Western study of art and culture has been influenced by the classics of philosophical inquiry, most importantly by the *Poetics* of Aristotle (c. 335 BC), which discusses the role of mimesis (imitation) in poetry to create drama, lyric or epic poetry to produce, e.g., the cathartic effect in audiences. Similar discussions of an art form in relation to human experience have continued for over two millennia since then. The classic philosophers, however, did not engage in systematic studies of games or play, and the attention to games and play long remained somewhat sporadic and often ambivalent over centuries.

The philosophical inquiry and then modern research into the fundamental character of games and play started to develop during the 18th century, when Romantic philosophers first turned their attention to this area. Perhaps the most influential was the German poet and philosopher Friedrich Schiller, who argued in his *Letters on the Aesthetic Education of Man* (1795), as a part of his critique of Immanuel Kant, that a 'play drive' serves as the crucial harmonising element between 'sensuous' and 'formal' drives in human existence – while playing, humans most fully engage their intellect as well as their sensuous, emotional and physical capacities. Or, as Schiller writes, a human being “only plays when he is in the fullest sense of the word a human being, and *he is only fully a human being when he plays*” (Letter XV; original emphasis). It should be noted though, that 'playing' was a broad-ranging aesthetic concept for Schiller in this context, and that his discussion was mostly focused on playing music or practising other arts, rather than on playing games as popular entertainment. Schiller nevertheless made the connection between play and aesthetics that has proved highly influential for modern Game Studies.

The wide-ranging, aesthetic and cultural interpretation of play informed also the work of Johan Huizinga, a Dutch cultural historian, whose work *Homo Ludens* (orig. 1938) has directly inspired some of the modern Game Studies. Huizinga discusses how a “play element” can be found in many different areas of culture and society, including games and sports, but also in music, dance and in arts in general, as well as in various religious rituals, and in the playful or ritualistic practices related to philosophy, law and even war. Huizinga's way of defining play has become particularly influential for Game Studies; he emphasises that play is a free activity, it stands outside of “ordinary life”, it is “not serious”, but yet capable of absorbing the player intensely and utterly. Huizinga also underlined that genuine play does not aim for material interest or profit, and that play “proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner”. Play also promotes the formation of special “social groupings” which unite players (Huizinga, 1949, p. 13). Huizinga also refers to the “magic circle” as an ancient precedent for the symbolic separation of play

spaces from the ordinary reality, which is also apparent in modern formations such as a tennis court, football field or chessboard (ibid., p. 20). In contemporary Game Studies, Huizinga's thinking has both been criticised as well as built upon (cf. Ehrmann, 1968; Duncan, 1988; Salen & Zimmerman, 2004).

It can be argued that the modern field of Game Studies generally relies on the humanities and the intellectual tradition drawing from Schiller and Huizinga when analysing and interpreting play and games. The focus in this tradition is on their role and potential as aesthetic or entertaining, socio-cultural phenomena which carry meaning and value as such (i.e., they have 'endogenous meaning'; Costikyan, 2002), without recourse to any instrumental arguments. But there are notable areas of study where the aesthetic and philosophical tradition of analysing games as forms of art and culture overlaps with other traditions, most notably in the areas of educational and psychological game research. The analyses of children's games and play continue to be one such research area, as well as the study of "serious games" that are based on an overt intention of impacting our behaviour or thinking.

The educational use and research of games have a long and well-established history [LINK: Applied Games]. There are various war-themed games with centuries-long histories; chess is one notable example (see Murray, 1913 for a classic study on this). At least since 1780, there have been more systematic efforts in adapting wargaming to educational uses, when the teaching of military tactics with recreational war games began in the Court of the Duke of Brunswick (Avedon & Sutton-Smith, 1979, pp. 271-72). The modern art and practice of wargaming continued to evolve with contributions like the publication of the *Little Wars* rulebook by H.G. Wells (2013). The research into the educational uses of gaming became gradually more popular during the 20th century, and in 1970, the first academic game-focused research journal, *Simulation & Gaming*, was established in the United States. The founding of the journal was connected with a busy period of experimentation and research activity in the educational uses of games in the 1960s, and several academic associations were also established during the same period in the early 1970s, including ISAGA, the International Simulation and Gaming Association (Klabbers, 2009).

Finally, related to the educational game research but having its own distinctive historical trajectory, there is the study of play and games in the area of developmental psychology. Swiss psychologist Jean Piaget positioned play as a cornerstone for his theory of children's cognitive development. Piaget argued that there are different ways of using toys and games that reflect the abilities and developmental needs of children: functional play, constructive play, symbolic or fantasy play and games with rules (Piaget, 1962).

Changes in Games and in Game Studies

The field of Game Studies developed into its contemporary form during an energetic period of theorisation, discussion and publication activity at the turn of the millennium. At that time, there were several ongoing, simultaneous developments that had diverse intellectual and disciplinary roots, and the dialogue that emerged in the early 2000s sometimes had elements of conflict and debate. As a discipline, Game Studies integrated the various orientations into

its discussions and has continued to evolve and adapt to the changing environments both in the field of gaming as well as to the conditions in the changing academia.

Perhaps two central ways of perceiving the contributions of Game Studies as a new academic discipline are on the one hand related to the establishment of new critical vocabularies, theories and methodologies for research, and on the other hand to the important social functions that the organisation of a new discipline has served to a new generation of scholars. This is connected to the ways in which the new discipline stimulated the organisation of various academic events, but particularly to its educational effects. Most dictionary or encyclopaedic definitions of 'discipline' emphasise that disciplines are primarily ways to organise academic learning and instruction in academic degree programs. The shared foundations provided by disciplines provide joint approaches to understanding and investigating new knowledge, methods for inquiry and communication, sets of standards and more generally certain shared perspectives on the surrounding world. Disciplines also form their own academic cultures, with some degree of common history, sense of community and shared values.¹

The historical and anthropological studies of games and play had traditionally explored board games and folk games of various kinds (e.g., Culin, 1907/1992a; 1907/1992b), but it was the application of computation and digital media technologies in games that began to present the modern Game Studies with its distinctive range of research topics and challenges, thereby also boosting its growth as a discipline. While there are important non-digital game cultural forms, such as table-top role-playing games that also continue to innovate and inspire new kinds of research, the combination of interactive media and gaming created a veritable explosion of new phenomena and related research questions.

Prior to Game Studies, the research and design of digital games [LINK: Digital Game] had been a long-standing part of the computer sciences in particular. Many of the pioneers of computing studied the applications of computer programming with games, and the English mathematician Alan Turing created a chess-playing computer program already in 1948. But it was with the introduction of early video games in the 1970s that the artistic and cultural effects of digital gaming started to be felt more widely in society, leading (after some delay) to a wide-ranging response in the changing scholarship.

In the first issue of the new *Game Studies* journal, the editor-in-chief Espen Aarseth (2001) discussed the need for "creating a new discipline" for computer game studies as there was a "chance of uniting aesthetic, cultural and technical design aspects in a single discipline". Somewhat in the same spirit, the inaugural issue of the journal *Games and Culture* (SAGE, 2006) features a collection of scholars' writings exploring the reasons for the rising popularity of the new discipline, all written under the shared theme "Why Game Studies Now?" The various individual disciplinary backgrounds are visible in these short essays, written by authors trained in psychology, anthropology, ethnography, semiotics, education, history, law, sociology, communication studies, media studies, literary studies, narratology, gender studies, critical race theory – and many others. Yet, there is also an undercurrent of certain commonalities that are visible in these multiple approaches to Game Studies. One is related to the new artistic potentials enabled by the digital games (video and computer games): like James Paul Gee (an American researcher with a background in sociolinguistics and the study

of literacy) put it: “Video games are a new art form”, and thus games “challenge us to develop new analytical tools” (Gee, 2006). A second common theme relates to the new ways of playing, particularly massively multiplayer online gaming transforming both social and cultural practices, as well as the potential ways of studying them. Or like Dmitri Williams, an American online communications scholar argued: “We need to provide theory and data on these new phenomena before pundits in the mass media create the stereotypes that will frame thinking on networked games for the next decade” (Williams, 2006). Concern about the potential misunderstanding and misguided appropriations of game culture surfaced often in the early Game Studies writings. Finally, in the inaugural editorial by Aarseth as well as in the *Games and Culture* essays, the new expressive and artistic potentials and the massive popularity of digital games appear intimately linked with an overall need for developing a comprehensive understanding of games. Games are too important to ignore, because of their increased visibility, economic value and overall socio-cultural impact, in addition to their stimulus to academic thought.

Modern Game Studies

Certain pioneering studies provided starting points and alternative theorisations for emerging Game Studies. Influential works include, perhaps most notably, *Cybertext* by Espen Aarseth (1997), *Hamlet on the Holodeck* by Janet Murray (1997) and the anthology *From Barbie to Mortal Kombat*, edited by Justine Cassell and Henry Jenkins (1998). The key lines of thought that these works were tapping into included the theoretical and conceptual traditions rooted in the analysis of hypertexts, interactive cinema studies, as well as cultural and gender studies, respectively. A few years later James Paul Gee published *What Video Games Have to Teach Us About Learning and Literacy* (2003) and Katie Salen and Eric Zimmerman their *Rules of Play: Game Design Fundamentals* (2004), which introduced further elements of game literacy, semiotic theory and game design research into the vocabulary of Game Studies. The shared focus in all these publications was on understanding the powerfully expanding and highly diverse field of computer and video games – ranging from the early text-based adventure games and arcade video games to the 2D and 3D action-adventures, first-person shooters, strategy, simulation, MMORPG [LINK: MMO] and many other game types that had emerged and continued to change the landscape of game culture during the 1980s and 1990s. Early on, Game Studies featured both works like the above books, which primarily focused on the analysis and close reading of games, as well as research work that more emphasised the active role of different players and their practices (Bartle, 1996; Mortensen, 2003; Taylor, 2003; 2006; Yee, 2005), and, thirdly, also research that was discussing the impact of other screen-based media, such as cinema, on video games (Krzywinska & King, 2002). Considered as a whole, a wide range of theories and methodologies were introduced at this point for making sense of the different aspects of digital games. The psychology of gaming had already received academic attention, notably in the work of sociologist and psychologist Sherry Turkle (1984; 1997).

Academic seminars and conferences are important sites for developing the academic culture and for debating and distributing the key concepts, approaches as well as analytical and theoretical contributions. The Digital Arts and Culture (DAC) conference series, which started in Bergen in 1998, was one of the early influential sites where discussions of Game Studies

began to emerge. The DAC conferences were organised in Northern Europe, the United States and Australia until 2009. Several conferences that were solely dedicated to Game Studies and important for the emerging academic community were organised in the early 2000s, for example, the Computer Games & Digital Textualities (Copenhagen, 2001), *Playing with the Future: Development and Directions in Computer Gaming* (Manchester, 2002) and the Computer Games and Digital Cultures conference (Tampere, 2002). In the Tampere conference, the initiative to establish an academic association for digital games research was put forward, and the first DiGRA conference was organised in the following year (Level Up, 2003) by the Utrecht University and the newly founded Digital Games Research Association.ⁱⁱ The DiGRA conferences have since been implemented in many countries, on different continents, followed by other dedicated conference series, such as the Foundations of Digital Games, which was first organised by Microsoft (2006–2008), and then by the Society for the Advancement of the Science of Digital Games (2009-).ⁱⁱⁱ Also, larger academic associations and disciplines with more general orientations have responded to the growing visibility of, and interest in digital games, including the Computer Science organisation ACM SIGCHI (ACM Special Interest Group on Computer-Human Interaction), which started organising their series of CHI PLAY conferences in 2014.^{iv} The International Communication Association (ICA) established a Game Studies interest group already in 2005, and the European Communication Research and Education Association ECREA has also been running a “thematic section” dedicated to digital games research since 2011.^v

Similar to conferences, the publication venues on Game Studies also expanded greatly in the early 2000s. As mentioned above, the open-access, peer-reviewed journal *Game Studies* was established in 2001, and the launch of the *Games and Culture* journal followed in 2006, with a series of other publications soon after, including, for example, *Eludamos* (2007-), *The International Journal of Role-Playing* (2008-), *GAME – The Italian Journal of Game Studies* (2012-) and *Journal of the Philosophy of Games* (2018-). Several academic book publishers have also responded by establishing dedicated publication series in Game Studies, such as the game studies books published by The MIT (1998-), *Approaches to Digital Game Studies* series by Continuum/Bloomsbury (2012-) and the Routledge *Advances in Game Studies* (2016-).

Game Studies’ identity as an academic discipline is often most clearly articulated in degree programs and textbooks, which by their nature are aimed to be coherent, articulate and comprehensive introductions to their fields. There are no great numbers of academic degree programs dedicated to Game Studies, though. Games are an area of education in many universities, but like the gender and game studies scholar Bonnie Ruberg has commented (from a United States perspective), “currently the only available graduate degrees specifically dedicated to games focus on game making – that is, game design and development – not on the academic study of games” (Ruberg, 2016). In Europe, it is possible to focus on the theory and analysis of games throughout one’s undergraduate and postgraduate studies, concluding with a Game Studies PhD. Some master’s programs carry Game Studies in their title, as in the Tampere University.^{vi} There are other, more broadly titled, critical and research-focused degree programs where Game Studies is available as an orientation, as in the MA in New Media & Digital Culture of the Utrecht University.^{vii} There have been some suggestions for establishing a common curriculum for Game Studies, but a wide variety still prevails (Ferdig, Baumgartner & Gandolfi, 2021a; 2021b; Mochocki, 2020; Rocca et al., 2002).

The academic textbooks on Game Studies provide individual interpretations of what the graduate student should know about the field. The common elements in the textbooks include discussing the different ways of defining games and their relation to play and players, the history and evolution of video and computer games, with some short introductions to specific research methodologies as well as to the societal and cultural issues surrounding games. The textbooks often highlight that a comprehensive understanding of games requires both abilities to analyse games through their formal and aesthetic properties, as well as being able to contextualise and interpret the uses and meanings of games for different people in different cultural settings. Some often-used textbooks include, for example, *Understanding Video Games: The Essential Introduction* (Egenfeldt-Nielsen, Smith & Tosca, 2008), *An Introduction to Game Studies: Games in Culture* (Mäyrä, 2008) and *Introduction to Game Analysis* (Fernández-Vara, 2014). There are also several handbooks, theory readers and method guidebooks that are used in some Game Studies courses, or as a reference, for example, *The Video Game Theory Reader* (Wolf & Perron, 2003), *Handbook of Computer Game Studies* (Raessens & Goldstein, 2005), *The Video Game Theory Reader 2* (Perron & Wolf, 2009), *The Routledge Companion to Video Game Studies* (Wolf & Perron, 2016) and the *Game Research Methods* anthology (Lankoski & Björk, 2015).

Summary: Towards the Polyphonic Game Studies

The early years of modern Game Studies are often introduced from the perspective of the so-called ludology vs. narratology debate (Frasca, 2003), but a more comprehensive historical account must conclude that there always have been multiple interconnected intellectual traditions informing both the emergence of Game Studies, and the directions in which it has been evolving. It is nevertheless obvious that there are several differences in emphasis both in the knowledge interests and in the practical and political commitments between the many individuals and intellectual sub-communities operating in this field.

The few existing sociology of science-style and bibliometric analyses of Game Studies point to how not only the background of game scholars is interdisciplinary (Mäyrä, van Looy & Quandt, 2013), but that both game research topics and related publishing cultures have clustered into several, loosely connected sub-fields of their own. For example, in a bibliometric analysis, the educational and “serious games”-focused work appears largely disconnected from the technical, more Computer Science-oriented work in game research, as well as from the humanities, social sciences and cultural studies end of the Game Studies’ spectrum (Melcer & al., 2015). A more recent keyword and co-citation analysis of over 24,000 game research articles concluded that the deepest division lines in the game research field are between “effects” and health-focused research versus research clusters focused on the humanities, culture, social sciences and education themes on one hand, or technology and computer science-themed work on the other (Martin, 2018). Design researcher and gamification scholar Sebastian Deterding has even argued that academics who arrived at Game Studies from larger and institutionally more established disciplines such as communication research, computer sciences or human-computer interaction have been abandoning the field, ironically due to Game Studies having been successful in legitimizing the academic study of games, so it can now be practised within other disciplines as well (Deterding, 2017).

While the shortage of dedicated degree programs makes it look like Game Studies has not managed to become institutionally as established as some other, older fields of scholarship, or other areas of arts and culture studies, it has already had a rather wide impact in academia. The trends of interest and publication activity in Game Studies are difficult to estimate reliably, but while the general interest in Game Studies as a “hot new area” in academia appears to have been at its most intense during the first decade of the 2000s, the academic publishing in the field still shows steady growth numbers after two decades.^{viii} There are no published analyses of the mailing list subscriber and membership numbers of related academic associations available, but DiGRA’s Gamesnetwork mailing list, for example, had continued to have more than two thousand subscribers for over a decade at the time of this writing, in 2022.^{ix}

A visible trend in Game Studies has been increasing the diversity, specialisation and particularly the growing role of critical theory in the study of games and play in society. In contemporary academia, ‘critical theory’ stands for a collection of influential political, philosophical and social theories that are oriented toward changing society, critiquing its power structures and empowering human beings (for a general overview of the various areas of critical theory, see, e.g., Falluga, 2015). Such subfields (or, arguably, alternative research paradigms) as Queer Game Studies and Game Production Studies have aimed to refocus Game Studies in order to reveal and challenge established power structures – both in game cultures as well as in game scholarship. Deriving from earlier feminist and cultural studies-informed analyses of games, works such as those featured in the *Queer Game Studies* anthology (Ruberg & Shaw, 2017) have managed to open alternative perspectives into the history of games, highlight the diversity of game players and challenge the canons in game culture and theorisation alike. Similarly, the volume of *Game Production Studies* (Sotamaa & Svelch, 2021) continues the tradition of critical work into power analyses of the political economy of the games industry (e.g., Dyer-Witthof & Peuter, 2009), thereby providing a wider contextualisation of the close analyses of affordances of historical digital gaming technologies that is practised in the Platform Studies line of games research (Montfort & Bogost, 2009).^x

Postcolonial theory has also stimulated the emergence of work that questions the established Western-centred narratives of gaming history and critically explores both non-Western games, games with colonial themes and mechanics as well as the realities of those millions (perhaps even billions) of people who play games in formerly colonised countries (Mukherjee, 2017). More perspective-shifting work in Game Studies has been created in dialogue with critical race theory, particularly under the heading of Black Game Studies (Grace, 2021; Gray, 2014; Gray & Leonard, 2018). While such politically committed and socio-culturally contextualised critical readings of games and game culture continue to transform the intellectual landscape of Game Studies, there are multiple other existing discourses, some with distinctly different priorities.

The work situated within computer sciences, engineering and various subfields of behavioural sciences (e.g., those that apply cognitive neuroscience, psychology and economics) often prioritises empirical experimentation and is focused on finding solutions for various commercial, health-related or societal challenges with either applications of purposeful game design, “gamification” or “ludification” of everyday life (cf. Bogost, 2007; Deterding, et al.,

2011; Hamari, Koivisto & Sarsa, 2014; Raessens, 2006). The ethics, implications and aims of gamification remain a debated and heterogeneous field as the commercial and even governmental applications of games and gamification continue to gather momentum and evoke both enthusiasm as well as serious concern (Walz & Deterding, 2015).

While the alternative applications and contextual framings of games continue to expand the theoretical frameworks, discourses and research questions of Game Studies, there is also a strong vein of work that continues to focus on understanding the diverse functional, formal and dynamic characteristics of games. Since 2005, the Game Philosophy Network of scholars has organised a series of conferences and published a journal that focuses on the fundamental questions of games and gaming, and on the philosophical inquiry with and through games more generally.^{xi} There have also emerged lively communities of scholarship that are focused on some distinctive genres of games, as in the Role-Playing Game Studies field (Deterding & Zagal, 2018) and the Historical Game Studies Network.^{xii} Game scholars have also aimed to further the theoretical and methodological understanding of games by examining both games as designed products as well as with explorations of game design as a special kind of activity in the field of Game Design Research (Lankoski & Holopainen, 2018).

The overall trajectory of Game Studies can thus be described as polyphonic – a multi-voiced, unmerged yet mutually interconnected and in a complex manner interacting and networked, modern disciplinary formation and research field. The wide range and heterogeneity of Game Studies can be interpreted in different ways, emphasising either the positive potential in its adaptability, flexibility and intellectual resilience, or as a continuing challenge for its further academic establishment and institutionalisation.

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Author Information

Frans Mäyrä is a Professor at the Tampere University, Finland, Director of the Centre of Excellence in Game Culture Studies, as well as the founder of the Tampere University Game Research Lab. He is also the founder and the first President of DiGRA, Digital Games Research Association. His work discusses issues related to the cultural study of games, play, self and textuality, with a specific focus on themes such as fantasy, science fiction and role-play. His home pages are at: www.unet.fi.

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ⁱ "Academic Disciplines." *Encyclopedia of Education*. Retrieved January 24, 2022, from Encyclopedia.com: <https://www.encyclopedia.com/education/encyclopedias-almanacs-transcripts-and-maps/academic-disciplines>.

ⁱⁱ See: <http://www.digra.org/>.

ⁱⁱⁱ See: <http://www.foundationsofdigitalgames.org/>.

^{iv} See: <https://sigchi.org/conferences/conference-history/chiplay/>.

^v See: <https://www.icahdq.org/group/gamestds> and <https://ecrea.eu/Digital-Games-Research>.

^{vi} See: <https://www.tuni.fi/en/study-with-us/game-studies>.

^{vii} See: <https://www.uu.nl/masters/en/new-media-digital-culture>.

^{viii} Some indications of these can be seen, for example, by comparing results from the search interest in ‘game studies’ in the Google Trends analysis

(<https://trends.google.com/trends/explore?date=all&q=game%20studies>) on one hand, and on the Scopus publication database (<https://www.scopus.com>) on the other. While the search trends show the general interest to be steadily declining from 2004 to the present day (2022), the number of academic publications with ‘game studies’ in their title or abstract has continued to grow strongly all those years, rising from c. 10-50 in the early 2000s per year, to the over 100 annually listed ‘game studies’ publications in the 2020s.

^{ix} See the Gamesnetwork mailing list at: <https://lists.tuni.fi/mailman/listinfo/gamesnetwork>. The author has been a list administrator for the Gamesnetwork since its establishment in 2002.

^x Platform Studies is mostly associated with the book series of the same name, published by the MIT Press: <https://mitpress.mit.edu/books/series/platform-studies>.

^{xi} See: <https://gamephilosophy.org/>.

^{xii} See <https://www.historicalgames.net/> and the Facebook group “Historical Game Studies Network”: <https://www.facebook.com/groups/1400379086948140/>.