INTRODUCTION: WHAT IS GAME STUDIES?

If we apply to science our definition of play as an activity occurring within certain limits of space, time, and meaning, according to fixed rules, we might arrive at the amazing and horrifying conclusion that all the branches of science and learning are so many forms of play because each of them is isolate within its own field and bounded by the strict rules of its own methodology. (Johan Huizinga, 1938/1971, Homo Ludens)

Making sense of games

Playing games can be interesting and fun, but also challenging in many ways; game studies shares the same characteristics. The aim of this book is to guide its readers into the part of analytical appreciation and enhanced understanding of games. This is a textbook of game studies, which is a new field of study focusing on games, particularly in their different digital forms. As an introductory text on contemporary subject matter, it is best thought of as a ‘portal in paper’: it is designed to give a compact overview of the field, and equip its readers with the key tools necessary for continuing into more detailed and advanced lines of inquiry. Therefore, it will provide several information boxes with pointers into sources of further information, with more such information provided in the accompanying website (www.gamestudiesbook.net). The book is also designed to be used as a companion piece in an introductory course of game studies, and to facilitate that use, as well as self-study, at the end of each chapter there are concluding chapter summaries and a few sample assignments, with notes on related methodologies, which are also discussed further in the final chapter.

The structure of the book is both conceptually and historically organized. Some of the history and key approaches of game studies are introduced in the two initial chapters, after which the book will attempt to familiarize the reader with the key historical phases of game culture, and related, most important game forms. Rather than aiming to be encyclopaedic or generic, the discussion of games contained in this book is based on individual and concrete, representative examples of games, chosen to open the road into more comprehensive appreciation of the diversity of the field. The historically and thematically oriented chapters each introduce key concepts that are useful...
for understanding a particular type of game; the discussions of this kind of specific concepts are embedded at the points where they are useful within the overall historical framework. The main framework focuses on distinctions between gameplay and representational aspects of games, and on discussing various dynamic aspects of games.

There are many ways how games and their study could be presented, partly owing to the breadth and diversity of games themselves, partly because the discipline is a newcomer, and there are several perfectly valid approaches to the study of games. My own twisty road as an academic trained originally in textual and art studies, who then moved into teaching and studying digital culture, and then into heading an interdisciplinary research laboratory on game studies, has of course an effect on what kind of approach is adopted here. Rather than being mostly a book about making games, or one analysing only their structures or functions, or a study that investigates the business or legal aspects related to games, this work’s principal starting point is on games as culture. This means that the artistic and creative dimensions of games are taken rather seriously, but since the concept of ‘culture’ has undergone many changes as researchers from several disciplines have contributed to its formation, the view presented here is necessarily and inherently interdisciplinary. The views that intersect in this book can be grouped into: (1) study of games, (2) study of players, (3) study of the contexts of the previous two (see Figure 1.1). In reality, these three spheres of inquiry cannot be separated, but must be seen both as mutually interacting and complementary, and informed by historical processes. In some earlier studies (Juul, 2005: 37) a three-partite division focusing on relations between the game, the player and the world is used, but here ‘context’ is used as a more general concept that includes multiple frames of reference, and thus also multiple possible realities.

A context relevant for understanding a game might be informed by the developments within and between particular genres, while in order to understand typical practices of play it might be necessary to take into account a certain way that distinctions between private and public spaces influence playing practices.

![Figure 1.1](image.png)

Figure 1.1. The focus of game studies in the interaction between game and player, informed by their various contextual frames.
for example. The vision of game studies informing this book can be described as multidisciplinary and dialectical; if and when we understand anything, it is by making connections that open up new directions for thinking about games. Bringing into contact existing but previously separate ideas, concepts, and frames of thought, we can proceed to create a synthesis of them, and see our grasp of things evolve. As new concepts are introduced, they will also re-contextualize our understanding of game–player relationship. In this way, analytical studies of games can also have an effect on the way we play games, or perceive each other as players. During the course of this book, this starting point will be examined from multiple viewpoints, concluding with a view of games in culture—which is, a particular model of sense-making for digital games that is aimed to help distinguishing the multiple layers and processes of meaning involved in playing and discussing them.

This basic dialectical structure applies to the aims and structure of this book as well. To start, there are at least two key terms any practitioner of game studies needs to be familiar with: that of (1) game, and that of (2) study, as in scientific and scholarly practice—both of them rather complex and diverse concepts. One only need to compare a classic board game like the Chinese Go, Dungeons & Dragons, a fantasy role-playing game, Solitaire (style of card games popular also as a digital version installed with the Windows operating system), and a contemporary video game like Grand Theft Auto III (Rockstar Games, 2001), to realize that many concepts that are very useful for describing one game can be rather useless when describing another. Similarly, scientific practice has evolved into numerous forms and there are many different approaches which one could apply into the study of games and produce interesting and valuable outcomes. Thus, even if this book presents certain concepts and approaches as useful starting points for game studies, the most important lesson it should provide for its readers relates to the fundamentals of scientific research itself: when systematically applied and critically tested, there are multiple ways into knowledge. Scientific practice is continuously created, maintained and corrected by the academic community, and the never-ending ‘approach to truth’ describes it much better than a declaration of any single absolute truth.

A friend of games should find this basic character familiar enough, since deep down, science and scholarship are much like games. Players are drawn into games because of their challenges, and playing involves creating, testing and revising strategies as well as the skills necessary for progressing in the game. Academic study can captivate in the same way, and largely for same reasons: it requires facing challenges by setting up hypotheses, forming research questions and strategies, and then revising them, as even the most promising directions can lead into blind alleys. And even the occasional discovery or breakthrough usually opens up doors into new directions and new challenges.

At the same time, it is important to realize the differences and institutionalized limitations to the ‘play impulse’ within scientific work. The quote of
Johan Huizinga opening this chapter is illustrative; the ‘horrifying conclusion’ of science becoming ‘merely a game’ is quickly dispelled by Huizinga: he points out that scientific work is not confined in its own reality or ‘magic circle’ (see Chapter 2), and the ‘rules’ of its play are constantly challenged and results tested against those from alternative approaches (Huizinga, 1938/1955: 203).

Thus, rather than just playing a ready-made game, the work of a scholar is actually much more like that of a game designer, who must develop and implement a systematic structure for new ideas, and then see how the creation is ‘played with’ by members of the academic community. The aim is that by the end of this book, the reader will have a better conception of the key elements and steps that are required to successfully engage in academic study of games. Particularly the last chapter will provide further directions into the practical and methodological issues related with embarking on a game studies project.

Game studies is a young discipline, and there are scholars who would not grant it the name of ‘discipline’ at all, and would rather prefer to talk about a multidisciplinary research field that is focusing on games. Regardless of how we call it, game studies has reached the point where it has become established both as a field of scientific inquiry, and as a branch of knowledge that is formally taught at universities. It has its own subject of study – games and playing in their multifarious manifestations – and also its own theories, methods and terminology, which have entered into the usual process of academic application, evaluation and reformulation. In institutional terms, developing into a discipline means that a learned community has formed around game studies, with the shared aim to evolve knowledge on games. Such institutionalization is also advanced by the associations, conferences and journals which have been created in this field. At a certain point, disciplines also become realized in the form of education offered in academic degree programmes, and even if game studies at the time of writing (in 2006) has not yet reached this stage in many universities, there are already a few such degrees in existence, and hundreds of courses and minor degrees turning up, as the wide interest of both teachers and students is expanding the field.

There are many reasons why game studies is expanding in popularity. One of them is obvious: the popularity of games themselves. With the rise of digital media and information technologies, millions of people have found games as one of the most fascinating uses for these new interactive devices. As new hardware and software are being produced, games continue to be the most challenging and popular application for all those advanced features of new technology. Games push the envelope in various areas of media technology, and have been a major factor in information technologies entering homes in the first place. Today, digital games are a significant cultural force, which has a prominent role in the lives particularly of those people who are living in industrialized countries. The commercial success of the games industry also cannot be ignored; even if it is a volatile and risky industry, games development and publishing nevertheless has grown into a global creative powerhouse, with
a global market value regularly cited as exceeding 30 billion dollars annually. There is now also an entire generation of academics entering the faculty who grew up surrounded by arcade and home video game consoles and personal computers, and who have dedicated plenty of time both in their youth and adult life into playing games. Thus, the two key factors were there for a new wave of game studies to emerge: an important and challenging, and largely yet under-researched phenomena, plus a fair number of young researchers with the expertise and enthusiasm necessary for embarking upon study on this field.

A (very) short history of game studies

Game studies is faced with the double challenge of creating its own identity, while at the same time maintaining an active dialogue with the other disciplines. As long as there are only a few institutions dedicated solely to the study of games, the majority of game studies will continue to be practised by individuals who are nominally situated in some other field: in literary, film or media studies, or in departments of communication research, sociology, psychology, computer science, or in some other of the numerous fields where game studies is currently exercised. In a lucky case, they will find it easy to apply the traditions of their native fields into the study of games without compromising their real interests either in terms of games as their central subject of study, or without conflicting with the core identity of their discipline. In many cases, the road is not so easy, and students focusing on games may find it hard to get the advice, support and understanding they need while engaging in the academic study of games. In career terms, specializing in game studies has been a difficult choice, as there have been very few job opportunities for games researchers in most universities (See Box 1.1).

Box 1.1 GAME STUDIES RESOURCES ONLINE

- Digital Games Research Association – DiGRA: www.digra.org
- DiGRA conferences: www.gamesconference.org
- International Simulation & Gaming Association – ISAGA: www.isaga.info
- Game Studies Journal: www.gamestudies.org
- Games and Culture Journal: www.gamesandculture.com
- Journal of Game Development: www.jogd.com
- Digiplay Initiative: www.digiplay.org.uk
- Game Research website: www.game-research.com

For more online sources, see the companion website www.gamestudiesbook.net
The situation is changing, and in the future the issue is likely to be put the opposite way – why should there not be game studies represented in a modern university? Failure to address games in academic education may also lead into research lagging behind more generally. The international academic community is directing their energies into understanding games not only because of their personal enthusiasm for them, but also in order to learn important lessons about the forms social life and creative practices are taking in late modern societies. After all, games are the most successful example of information and communication technologies becoming domesticated, which means that they evidence being integrated into the everyday life and practices of groups of people. Study of games and our near-universal fascination with them can also teach about the human nature and about our attraction to interactivity. Games are interactive by heart, to the degree that it is tautology to use the expression ‘interactive games’. The makers of software and new technology in general can study games to learn about ways to make interactivity an enjoyable experience. To a certain degree this has already happened: there is a change in the ways technology is discussed by experts, and some have started to speak about design of experiences rather than features or applications. Games may even have important effects on the ways particularly the younger, ‘gamer generations’ think and operate, and to the direction our societies are developing. It is easy to come up with several answers for the question ‘Why study games?’

Giving a clear-cut definition for game studies is much harder. On a general level it is simple: game studies is a multidisciplinary field of study and learning with games and related phenomena as its subject matter. It is only when one starts to organize this diversity into a collection of theories, methodologies, or form it into a single body of knowledge to be communicated in teaching and publication, that things get complicated. It is impossible to include all theories and approaches from every possible academic discipline even if they potentially could be useful also for a researcher of games; a ‘science of everything’ can just as easily lead into confusion and become a ‘study of nothing’. Therefore we need to understand why and how game studies has emerged in a certain form, and why some questions appear more central for the practitioners of the field than do others.

When we define something, we trace out the boundaries and state what is included and what excluded. Sociologists of science point out that disciplines are actually social formations, developing their own language, shared perceptions of the world and even ritualistic conventions. The identity of game studies is also a historical process, and it is evolving in time. There has been academic study of games actually for a rather long time already, particularly within such disciplines as history and ethnography. To point towards two of the classics of the field, ethnographer Stewart Culin’s Games of The North American Indians was published in 1907, and a History of Chess by an Englishman, Harold James Ruthven Murray in 1913, both of them still useful and impressive works of
learning. Various games have also had an active role in the private and social lives of university students as well as academics, for a long history spanning several centuries. During these years, when professional and personal interests collided, research work sometimes sprang up, but there was no institutional support or discipline to encourage such activities.

Looking at the early disciplinary formations, it should be noted that games have a close relation to simulation (imitation of operations of a large system by other simplified system) and in this subfield the roots of the academic attention to games reach long into history. There exists a rich tradition of using various kinds of simulations for learning purposes – learning by playing may even be called the oldest learning method there is. After all, even animals learn by imitation, and play behaviour that is simulating hiding or fighting is familiar to anyone observing small kittens or puppies learning skills necessary for later life. History of research into the systematic design of games for learning purposes can be traced back to certain tactical and strategic writings from eighteenth century Germany. Helwig, a master of pages at the court of the Duke of Brunswick, adapted chess into an early war game in 1780; he also wrote about his goal to design a game to create an ‘agreeable recreation’ for young pages, which would render ‘sensible, not to say palpable, a few principles and rules of the military art’ (Avedon and Sutton-Smith, 1971: 272). Later, different varieties of war games were developed and discussed, both in military and also increasingly in leisure contexts. A group of American war gamers formed in the 1950s the East Coast War Games Council, an organization which arranged a series of symposia and also published proceedings including presentations from these meetings in the 1960s. Following a later expansion, the name of the group was first changed to the National Gaming Council, but since the society was composed largely of educators interested in using particularly simulation games to enhance learning, a new name – the North American Simulation and Gaming Association (NASAGA) – was adopted. In other countries, similar developments were taking place, and the simulation and gaming research community expanded into an international network of national associations. An umbrella organization, International Simulation and Gaming Association (ISAGA) was established in 1970, and has organized over thirty annual conferences since then, bringing together researchers focusing on games and simulations and their use for various applied purposes. An academic journal, Simulation & Gaming has been published since 1970, making it the oldest regular publication in the field (Duke, 2003; Knuth, 1994).

Another group of North American scholars gathered together in Minneapolis for the first time in 1973 and soon formed an association focused on the study of play in 1974. Changing its name to The Association for the Study of Play (TASP) in 1987, the group has been publishing proceedings of its annual meetings from early on (the original name of the group was ‘Cultural Anthropology of Play Reprint Society’). A series of journals produced by the association has also been an important venue for developing and publishing

There are several other routes for game studies as well, most importantly in the fields of play behaviour research, the offshoots of computer science studying graphics, simulations and artificial intelligence, and in the humanities computing field. It was particularly from the last of these where the contemporary wave of game studies started to emerge. Many of the people working within this paradigm approached computers as a potential new medium. Early thinkers such as Vannevar Bush had already in the 1940s discussed their ideas concerning a tool or device that would operate in associative manner like the human mind, rather than in a strict linear or category-based fashion. Theodore Nelson provided the name ‘hypertext’ for such a way of interconnecting written or pictorial material that ‘could not be conveniently presented or represented in paper’ (Nelson, 1965/2003: 144). The advances in human–computer interaction and the increasing availability of computers in public and private use played a role as artists and humanistic scholars embarked on examining the potentials and implications of these new technologies. For the literary scholars, digital media appeared, opening new interesting directions particularly in the experiments of hypertext fiction, and interactive fiction in general. In 1997, the Norwegian scholar Espen Aarseth published *Cybertext: Perspectives on Ergodic Literature*, suggesting that hypertexts, adventure games and MUDs (Multi-User-Dungeons, see Chapter 7) provided a fresh perspective to a form of textuality that requires ‘nontrivial effort’ from their readers to traverse the text. The same year saw also the publication of *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*, by Janet Murray, an influential work discussing the future possibilities for interactive drama and narrative. Together, these two works also function as symbols for the two alternative approaches which collided in the first major debate animating the young game studies community a few years later.

Debates can be useful in making even slight differences of opinion stand out more clearly. That is also true of so-called ‘ludology-narratology debate’. Ludology is a term suggested by the Uruguay-born games researcher Gonzalo Frasca in an article published originally in 1999; taking its model from narratology, which was a concept ‘invented to unify the works that scholars from different disciplines were doing about narrative’, Frasca proposed the term ‘ludology’ to refer to the ‘yet non-existent “discipline that studies game and play activities”’ (Frasca, 1999). However, ‘ludology’ appears to have been in occasional use already before this. Also in 1999, the young Danish scholar Jesper Juul completed his Masters Thesis, ‘A Clash Between Game and Narrative’ which is one of the clearest statements of the ‘ludologist’ position in its early form. In contrast to some other researchers working in the field, who had set realizing interactive fiction as their goal, Juul considered
interactive fiction as a utopia (even if an interesting one), because of the fundamental conflicts between the player-controlled interactivity happening in present time, which is at the heart of games, and narrator-organized representation of events, at the heart of narratives. Juul not only claimed that ‘you can have a computer game without any narrative elements’, but he even concluded that ‘it is then the strength of the computer game that it doesn’t tell stories’ (Juul, 1999/2001: 7, 86). Several researchers were nevertheless willing to continue pushing games into exactly that direction, developing the potentials of games for interactive drama and as a storytelling medium in general (see Box 1.2).

A student of this part of intellectual history of game studies should pay attention to the fact that many of the ‘ludologists’ are actually coming from the field of literary studies and narratological research, and perhaps precisely for this reason particularly sensitive to the limitations of those approaches. Nevertheless, games are clearly different from any traditional narrative, and the counter-narratology reaction arising from the early, literary studies based ludology has helped to make those differences more distinguishable. Ludology as

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**Box 1.2 ON HYPERTEXT, CYBERTEXT, AND INTERACTIVE FICTION**

Well, by ‘hypertext’ I mean non-sequential writing – text that branches and allows choices to the reader, best read at an interactive screen.

As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways (Nelson, 1980/1990: 0/2).

In ergodic literature, nontrivial effort is required to traverse the text. […] A cybertext is a machine for the production of variety of expression. […] Cybertext is a perspective on all forms of textuality, a way to expand the scope of literary studies to include phenomena that today are perceived as an outside of, or marginalised by, the field of literature – or even in opposition to it, for (as I make clear later) purely extraneous reasons (Aarseth, 1997: 1, 3, 18).

Not everyone will immediately agree with the assertion that a work with aspects of a game, and with a history so involved with the entertainment software market, should be thought of in literary terms. Isn’t the pleasure of the text adventure purely a ludic pleasure, or a pleasure related to mastery – one that comes from overcoming mental challenges formed as the verbal equivalent of jigsaw puzzles, with only one set of solution? There are in fact other aspects of interactive fiction that prevent an easy affirmative answer to this question.

For one thing, the puzzles in a work of interactive fiction function to control the revelation of the narrative; they are part of an interactive process that generates narrative (Montfort, 2003: 2–3).
A novel concept also helped to highlight how games, when considered in their own terms as forms of art and culture, were in some sense unique, and in need of their own theories and methodologies of research. This was an important realization, and at the turn of the millennium an energetic phase of theorization and research had started. An important venue for this was opened by the establishment of a new online, peer-reviewed journal, *Game Studies*, which was first published in 2001 and saluted as ‘Computer Game Studies, Year One’ by the editor-in-chief Espen Aarseth. The formation of the journal coincided with a series of mostly European games research conferences and then with the formation of the academic society to support the research community – Digital Games Research Association (DiGRA). The years 2003 and 2005 saw the first two world conferences organized by DiGRA, and a proliferation of research papers, reflecting intensive academic work, which soon also surfaced in book-length publications, as academic publishing houses started to provide room for the work of games scholars.

Despite the differences of approach, there are no real ‘schools of game studies’ in existence, not at least in any more substantial sense, and researchers are continuing discussions about the fundamental concepts and methodological issues across disciplinary boundaries. Even the ‘ludology-narratology debate’ has turned into discussion whether it ever really happened in the first place (see e.g. Frasca, 2003; Pearce, 2005). No one actually seems to be willing to reduce games either into stories, or claim that they are only interaction, or gameplay, pure and simple, without any potential for storytelling. But the different emphases and foci for the study of games remain, and that is the single most valuable contribution of this debate for game studies: games can be several different things, depending on how one approaches them. Looking for narratives, one can find (or construct) them, and it is equally possible to search and find the essence of games in their interactive character – in their gameplay. Applying this lesson in practice, the different chapters in this book will each introduce concepts relevant for study of games and play through discussions of certain influential games. A rather general overall framework will be developed during these discussions, but no single ‘master theory’ will be provided to contain all conceptual aspects, since the reality of games and play does not fit in any narrow model. Games, players and their interactions are too complex and interesting in their diversity to allow for all-powerful simplifications.

Looking at the history of game studies from a geographical perspective, it is apparent that the international scope of this research has been broad from the start, but the majority of the internationally available academic activity has centred on Europe, North America and Australia – an obvious effect of language barriers. However, broadening of the field and increasing interaction is taking place also in this respect; currently particularly the East Asian countries, Japan, South Korea and China are entering the research community, contributing research based on their rich native gaming cultures. South America, India,
Africa and other parts of the world will probably be following the lead at some point. There is no country or society where games would not be played and enjoyed.

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**Summary and conclusions**

- Game studies is a new academic field and interdisciplinary field of learning, which focuses on games, playing and related phenomena. Its recent rise is linked with the emergence of digital games as a cultural force, but it is not restricted to any technology or medium.
- There are several disciplines and approaches which have contributed to the study of games, ranging from history and anthropology to psychology, sociology, educational sciences, computer sciences, and lately particularly literary and art studies. It has been suggested that the study of games and play activities should form a scholarly approach of its own, called *ludology*.
- Recent years have meant growth for the international game research community, as research publications, books, seminars, conferences, journals and associations have been created in the field of game studies. The history of games research, however, extends far in several fields of learning.

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**Suggested further reading**


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**Orientation assignment: Personal game history**

This is an introductory assignment, designed to start you off into the appreciation of games and play cultures; and as it has been said, the foundation of all true knowledge is self-understanding. It was already known as the first piece of advice provided by the Oracle of Delphi for those seeking wisdom: ‘Know Thyself’. For a researcher of qualitative phenomena such as games and playing them, self-understanding has an important double role: on the one hand, understanding the tilt produced by one’s personal history and background is paramount for any informed self-critique. Researchers or professional experts are rarely ‘typical’ or average representatives of wider demographics, and it is good to know where one stands, as compared to various other groups with different backgrounds. (This is something we will discuss later, in Chapter 8.)
On the other hand, in order to really understand the fascination of immersive gameplay, or to be able to make qualitative distinctions between games with very different look and feel, we need to experience games and play ourselves. Understanding what are the strengths and possible weaknesses of ourselves as a research instrument are important steps in making us better in evaluating, researching and developing games.

Start by making some notes or a map on a large piece of paper on your personal games history – just try freely to jot down names and titles of games you have played. It might help if you engage in some small-scale archaeology and look into the boxes in the attic or in a cupboard for some traces of games and play sessions of years passed. Have you remembered to put down also childhood street-plays, and board games played at home? How about card games, poker, or a lottery? Some of the multiple forms of games can easily escape our attention.

Write a text where you describe your personal relation to games and playing. It might be impossible to fit all the key moments, highlights and phases into a short account, but try to focus on creating an accessible summary, where you reflect on the kind of gamer you represent – or, alternatively, explain why games have not played such a major role in your life personally. Have you noticed that age correlates with interest in certain kinds of games? Have you been similar, or different from other people you know in terms of your game playing? Do you have some particular field of expertise or certain favourites among games?

This is suitable as a joint orientation assignment for the entire course, and will also work as an introduction which helps students, tutors and teachers get to learn to know each other. Everybody is encouraged to actively discuss and comment on each others’ histories, pointing out both similarities and differences between them. To summarise jointly your findings, do you consider yourselves a typical sample in terms of your generation and cultural background?

(Associated research methods: qualitative methods of social sciences, biographical methods, memoir, group discussion.)

Notes

1. Note on terminology: this book uses the expression ‘digital games’ to refer to all kinds of contemporary games utilizing computing technologies within its operation. This includes, but is not limited to, the video games played with home console systems, arcade video games, computer games played with mainframe or personal computers, mobile games for mobile phones and various new digital devices. In some contexts and countries ‘computer games’ or ‘video games’ are used as similar umbrella categories, but ‘digital games’ is here being adopted into use as the most neutral of the available terms.