

# Perceptions of Player in Game Design Literature

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## ABSTRACT

Few studies have examined the role of players in game design. The objective of this paper is to provide some clarity on the issue of player-centred design by analysing the notions on player in current game design literature. This research also discusses the potentials a multifaceted approach on players can offer for the design of games. The article starts by analysing different approaches on player from abstract ideal player to player profiles and players as co-creators. Later, the benefits of involving players in different phases of design process are examined. As a result the paper produces a grouping of different designer-player relationships that reflect the different design ideologies and traditions. This article contributes to the new field of game design research by producing clarity to some of the inarticulate and ambiguous issues related to the role of players in games and their design. At the same time, the analysis is relevant to the larger understanding of players as game cultural actors.

## Author Keywords

Game design research, player research, game design literature, player-centred design

## INTRODUCTION

It is not entirely uncommon to argue that all game design is player-centred. If we agree that game design is much about challenging the player's skill and creativity, game designer is deeply engaged in the battle of wits with her players [12]. If we agree that all design is in the end about having a conversation with the intended user it would be ridiculous if the design of games – systems that rely on player's active participation – would not have a player focus [10].

At the same time, there is a growing amount of evidence that professional game designers still in many occasions primarily rely on personal experience and intuitive sense of market demand. Further, games are often claimed to be designed primarily for game designers themselves. [9, 5, 12]. In the words of Ernest Adams: "In eight years of working for Electronic Arts, I never once saw a really thorough, properly-conducted market survey. Our understanding of our players was based on guesswork and hunches." [1] What all this highlights is a need for more rigorous and organized study of meanings and roles attached to players in game design.

This research poses the following question: how players are represented in professional game design? This is of concern since there is not very much information available on the topic. Academic studies focusing on this subject matter are rare and most of the industry studies are never made publicly available. One can still identify various ways to gather information on the role of players: examining the implied player of different games, by interviewing the designers, through participatory observations or via a detailed analysis of the design process. In this study I have, however, decided to examine the recent game design books written to teach the fundamentals of game design. These books form a multifaceted source of accumulated knowledge, are based on practical experience and therefore provide an interesting spectrum of tested design approaches. I suggest game design books can be more influential than we recognize at the first glance. They are not only read by critical game designers, but also used in teaching the fundamentals of game design to the upcoming generations of game industry professionals. Thus, the precise research question of this article is as follows: what are the different perceptions on player that can be found in recent game design literature?

The article should not, however, be read only as a literature review. The objective is also to discuss the potentials a multifaceted approach on players can offer. The lack of earlier meta-discussion on the topic necessitates that I nonetheless have to start with a mapping of the current literature. This analysis aims to 1) address the common claims shared by most of the game design books and 2) to expose the key differences between the current approaches. This article contributes to the new field of game design research by producing clarity to some of the inarticulate and ambiguous issues related to the role of players in games and their design. At the same time, I find the analysis highly relevant to the larger understanding of players as game cultural actors. It is clear that the designers' formulations of "imagined player" not only shape the design process but also have an influence on the freedom of action players have with the finalized product [17].

## BRIEF INTRODUCTION TO PLAYER-CENTRED DESIGN

Game scholars have recently expressed a growing interest on player-centred design. Involving players more in the design of games is suggested to increase the diversity of

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games and inject a shot of originality to the development of commercial games [6].<sup>1</sup>

Often the approaches that emphasize the significance of players draw their inspiration from the tradition of user-centred design. A number of known user-centred design techniques, such as focus groups, usability testing and participatory design, can surely benefit the design of games. At the same time, the particularity of games poses new challenges. Digital games are used voluntarily, they are expected to challenge the player and her skills, and games are not entirely about the ease of use but more about the well-balanced difficulty. Therefore the user-centred methods need some tuning when applied to game design. [8, 11, 16]

TL Taylor argues strongly in favour of participatory design and commitment to in-depth user participation and sees the “serious inclusion of players” as the central future design challenge [17]. Not all writers, however, share this enthusiasm on participatory design which highlights the fact that there is no clear consensus of the definite status of player-centred design [15]. In any case, there is a growing number of research projects where players are involved from the early phases of game design process [6, 14, 18]. These experimental projects have an important contribution to the development of archive of appropriate player-centred methods.

It is too early to evaluate the impact these player-centred game design research experiments will have on large-scale commercial projects. There are, however, early hints that professional designers are starting to take the player issue seriously. An indicative example can be found from the writings of the noted game developers Ernest Adams and Andrew Rollings. While they no doubt discuss players in their game design book from 2003 there is no indication of a particular player focus. In a recent revised version of their work Adams and Rollings, instead, openly state that they “favor and approach called player-centric game design” [2].

## GAME DESIGN LITERATURE

The ten game design books analysed in this article are as follows:

- Bartle, Richard A. (2003) *Designing Virtual Worlds* [BAR in the following]
- Bateman, Chris and Richard Boon (2006) *21st Century Game Design* [BAT]
- Björk, Staffan and Jussi Holopainen (2004) *Patterns in Game Design* [BJÖ]

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<sup>1</sup> Player-centred approaches are not, however, equivalent to design-by-consensus or design-by-committee.

- Crawford, Chris (2003) *Chris Crawford on Game Design* [CRA]
- Fullerton, Tracy; Christopher Swain & Steven Hoffman (2004) *Game Design Workshop: Designing, Prototyping, and Playtesting Games* [FUL]
- Koster, Raph (2004) *A Theory of Fun for Game Design* [KOS]
- Mulligan, Jessica and Bridgette Patrovsky (2003) *Developing Online Games: An Insider's Guide* [MUL]
- Rollings, Andrew and Ernest Adams (2003) *Andrew Rollings and Ernest Adams on Game Design* [ROL]
- Rouse, Richard III (2001) *Game Design: Theory and Practice* [ROU]
- Salen, Katie and Eric Zimmerman (2003) *Rules of Play: Game Design Fundamentals* [SAL]

This “canon” of game design was constructed in order to delimit the object of study. The selection process included a few formal requirements. I decided to focus on monographs that provide an overall picture of game design and limited the entries to one book per writer. Since the recent popularization of massively multiplayer online games (MMOGs) I wanted to include a couple of books that focus on the particular challenges these games pose. There are certainly important game design anthologies and works that focus on particular branches of design (e.g. storytelling, character design or level design) but for the sake of clarity they are excluded from this article. I am aware that a different collection of books could be picked and possibly fairly different results could be drawn. The body of literature discussed here is, however, not completely a result of my subjective taste. Instead, during the selection process I have consulted both individuals working in the industry and scholars studying and teaching game design and therefore the collection can be argued to be relatively representative.

The number of game design books has in the past few years grown considerably.<sup>2</sup> The style of the books ranges from practical ‘how to’ guidebooks to more theoretical works that find their inspiration in academic research. Thus, the emphasis and tone varies but without exception the books

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<sup>2</sup> There was a long pause in book-length presentations after Chris Crawford's *The Art of Computer Game Design* (1984). However, today the production of game design guides can be characterized as an industry. At the same time this genre is perceptibly new and almost every writer is eager to produce an extensive model of the field. Further, other game design literature is often referenced at best sporadically.

under study introduce fairly extensively the formal elements of games. One of the reasons for this analysis of game components is the identified need for critical design vocabulary. Other issues commonly discussed in the books include the game design process, the skills required from a game designer, a short history of game design and introduction to some landmark games. There seems to be, however, no clear consensus on the innermost nature of the activity of designing games. Some writers passionately support the idea of games as an art form and equate game design with artistic expression. Others argue that the requirements for game designer actually bear more similarity to the demands traditionally made for entertainers, engineers, researchers, social directors or craftspeople. [ROL, 4-5, FUL, xv.] The different conceptions of game design, however, indicate relatively different approaches on players. I will come back to the issue of designer-player relationship in the latter part of the article but first I will take a general look at the ways players are treated in game design literature.

### INTRODUCTION TO THE PLAYER ISSUE

Based on my research data it would be a mistake to argue that game designers are not interested in players. On the contrary, players are mentioned frequently in various connections. Some writers cover the player issue in a dedicated chapter or part of the book [BAR, BAT, MUL, ROU]. Others [BJÖ, CRA, FUL, KOS, ROL, SAL] allow players to roam more freely on the pages and call them into view as particular themes are discussed. More often than not the player is, however, a theoretical figure that is directed and guided through particular design decisions. Although almost every single book has a definition for 'game' and 'game design', a clear explication of 'player' is often nowhere to be found. Most of the time readers have to content themselves with an ideal player who surely has abstract needs, expectations and capabilities but is seldom further discussed.

In the more formally oriented books players mostly remain structural components of the game. Björk and Holopainen define players as "the representations of the different agencies that are competing (or cooperating) in the game to achieve their goals" [BJÖ, 24]. From this structural perspective players are presented mostly as design choices (how many of them, what kind of roles, player vs. player or player vs. system etc.) [FUL, 43]. Answering these questions surely has a significant effect on the overall design but reveal very little about the flesh-and-blood players. Rollings and Adams argue that "[w]hen designing any game, the first question you have to ask yourself is, what is the player going to do" [ROL, 430]. To answer this question one should be able to define the available player interaction patterns. In a similar manner players are in various occasions considered indirectly. They are discussed in a varying degree at least under the following topics: play, gameplay, interactivity, and user experience. Unfortunately I can't fit a comprehensive analysis of all these topics in

this article but would gladly see someone to do it in the future.

Both the relation between the player and the game and the relations between players are covered in a varying fashion. On average, the issues of player identity and player community that are diligently discussed among game scholars get perhaps understandably a relatively practical treatment. Salen and Zimmerman consider the relationship of player and character in the light of sociologist Gary Alan Fine's model of different "levels of meaning". They caution designers of the so-called immersive fallacy, the idea that players would identify completely with the character and to "become" the character they play. [SAL, 453-455.] Bartle also ponders player identities from different perspectives but otherwise the issue inspires mostly very practical takes on character design and development. The issue of community gains most attention from the perspective of MMOGs. Mulligan and Patrovsky have actually quite a few things to say about managing community relations and supporting player-run communities [MUL, 259-271]. Sometimes I, however, find it difficult to avoid the cynical conclusion that the communities are needed primarily to keep the players coming back and paying their monthly fees.

Several books agree that it is important for a game designer to understand and specify her audience [ROL, 41; BAR, 125-128, BAT, xiv-xv]. At the same time there seems to be no mutual understanding of the practical ways of acquiring this understanding. Thus, I will in the following move on to analyze the central viewpoints presented in this discussion.

### APPROACHES ON PLAYER

#### Ideal Player

As mentioned earlier, it is relatively common to write about players in a collective and abstract manner. The various games-related needs discussed in the books are often addressed by "many players" or "most people". In the beginning chapter titled "What players want" Rouse discusses the different motivations of players. The list of player wants is quite extensive<sup>3</sup> but there are no clear guidelines how it is supposed to be used. One has to ask if it is enough for a game designer to memorize this list in order to understand players. The chapter also introduces a similar list focused on player expectations [ROU, 8-18]. Even though the discussion on wants and expectations is very sensible it is not clear where all the claims and facts come from. There is a good reason to question whether all this talk about players is actually just a clever strategy to bolster designers' self-confidence: a good designer knows endogenously what players want. This interpretation is supported in the end of the chapter when readers are encouraged to "create their own list of *what they think*

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<sup>3</sup> According to Rouse, players want 1) a challenge, 2) to socialize, 3) a dynamic solitaire experience, 4) bragging rights, 5) an emotional experience and 6) to fantasize.

*gamers want*” [ROU, 19]. Thus, the ideal player is often produced by reducing players into a collection of needs and capabilities. The attributes connected to this ideal player are mainly based on anecdotal evidence, solitary cases, analogies, personal experience and common knowledge. The value of this information should not be underestimated but the problems start to occur when it is used to draw generalizations.

Another popular approach among the textbooks is to perceive players in the light of popular cognitive science. From this perspective players are taken into account through mental models, memory capacity, pattern recognition, reaction times and other features dependant on human brain. Both Koster [KOS, 12-33] and Crawford [CRA, 41-53] take an interest in the ways brain works and connect this to the ways people play. Koster builds on psychologist Howard Gardner’s theory of different forms of intelligence<sup>4</sup> and goes on to explain how game designer can target each of these dimensions. Therefore, since people learn in different ways they will be interested in different games “because of their natural talent” [KOS, 100]. Further, according to Koster “players tend to prefer certain types of games in ways that seem to correspond to their personalities” [KOS, 104]. Be it different brain types, personality types or learning patterns, these divisions have a potential to produce an ever-increasing number of different player types. Thus, the introduction of different predispositions and talents highlights the need for player categories.

## Player profiles

### Marketing segments

The most rudimentary popular division of players is made between novice players (newbies) and experts (experienced players). This classification is primarily useful when setting the difficulty of the game and tuning up the interface to serve players with varying levels of experience. Another basic model is to group players into hardcore and casual gamers. Hardcore players can be described as game literate people who play as a lifestyle preference and spend substantial amounts of time and money on games. Casual players are understood to be a more diverse group. They play for fun or to kill time, have little knowledge about game conventions and play few games.<sup>5</sup> [BAT, 16.] This hypothetical split is primarily market-oriented and widely known in the game industry. A reference to hardcore and casual can be found in most of the game design books. Mulligan and Patrovsky argue that in case of online games

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<sup>4</sup> According to Gardner the different forms of intelligence are: linguistic, logical-mathematical, bodily-kinesthetic, spatial, musical, interpersonal, and intrapersonal (internally directed, self-motivated).

<sup>5</sup> ‘Casual players’ described here should not be mixed up with ‘players of casual games’.

the players should actually be divided into three separate segments: hard-core, moderate, and mass-market. In this case the moderate gamers are something between hardcore and mass-market (casual): they tend to spend quite a bit of money on games but are concerned about of getting as involved as hardcore gamers [MUL, 10-11]. According to Bateman and Boon the audience model of Electronic Arts is actually very similar to the one introduced by Mulligan and Patrovsky. EA, however, refers to the moderate segment with the term Cool Gamers. [BAT, 19-21]. While these basic player groupings are used relatively unproblematically in design literature, a few writers also identify a need for categories that go beyond the popular concepts.

Different genre models can be interpreted to be an indirect way of categorizing players. Market-wise the genre system is based on a conception that certain players buy games of a particular type. While the genre system can arguably be used to acquire data of the relative sales of different genres, this reasoning should not be taken too far since games are neither bought nor played merely on the basis of genre. [BAT, 17-19.] The most comprehensive audience model found in the data is introduced by Bateman and Boon and I will in the following move on to discuss the background and details of their approach.

According to Bateman and Boon the central objective of the book is to introduce “the first detailed audience model produced specifically to inform game design decisions” [BAT, 1]. Their approach titled *demographic game design* is based on a conception that all game design inherently targets an audience. Therefore, in order to produce successful products, the first step of game design is to study audiences. [BAT, 14.] This analysis of audiences is based on so-called Myer-Briggs dichotomies<sup>6</sup>. The personality typing system based on these dichotomies was originally developed in the 1940s and it is based on the work of Carl Jung. According to the writers the typology is publicly recognized and widely utilized among the major U.S. companies. In case of Bateman and Boon, applying the dichotomies to survey data results in four different clusters of play. *Conqueror play* focuses on winning and “beating the game”, *manager play* revolves around a strategic and tactical challenge, while *wanderer play* involves the search of enjoyment and fun experience. About the fourth category, *participant play*, the writers have surprisingly little to say. People involved in participant play are told to prefer participating either in the story of the game or in social experiences with other players. One particularly interesting observation concerning this continuum of play styles is that each of the classes includes both hardcore and casual players. The rest of the book then applies the model into

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<sup>6</sup> The Myers-Briggs system is built on four pairs of traits: introversion – extroversion, sensing – intuition, thinking – feeling, and judging – perceiving.

different parts of game design and analyses the relations between particular play styles and different game mechanics.

First of all, it has to be said that the model Bateman and Boon introduce is refreshing. Even though similar models may have a long history in other markets many of the arguments are fresh when discussing the design of games. It is also important and exceptional that the authors actually spend some time to inform their readers about the hypotheses and research behind the model. Nevertheless, it is not entirely insignificant that the authors persistently use the term *audience*. It is clear that in this book the players are discussed first and foremost as customers who buy games. And if the needs of the customers can be anticipated and classified into categories, these relatively passive figures can be satisfied with new products. Further, the model introduced in the book can at best be a preliminary one since the authors openly admit that they have in some occasions difficulties in drawing conclusions about the insufficient data [BAT, 69]. In any case, the contribution of Bateman and Boon surely provokes important new questions concerning the understanding of players in design. While their player profiles are primarily based on personality typing we will in the following take a look at player categories that find their inspiration in different playing styles.

#### *Play styles*

To give context and produce vocabulary to discussions about game systems Fullerton et al. introduce a 'play matrix' that plots games on two axes. The horizontal axis represents a continuum between skill and chance, and the vertical one a continuum between mental calculation and physical dexterity. The matrix can be used not only to chart games of different kind but also to identify different player motivations by asking people to place games they enjoy in different quadrants. [FUL, 208-210.] The matrix is somewhat suggestive of the famous game classification introduced by anthropologist Roger Caillois<sup>7</sup> and highlights the interconnectedness between game types and play motivations. Further, other somewhat related lists of different player roles can be found. Salen and Zimmerman turn to play theorist Brian Sutton-Smith's model of social play roles [SAL, 464-465] and Fullerton et al. list a variety of potential player types [FUL, 90]. These models are, however, not developed further or extensively applied.

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<sup>7</sup> In his book *Man, Play and Games* (1961[1958]) Caillois develops a classification of game types based on whether the role of competition, chance, simulation, or vertigo (being physically out of control) is dominant. A short introduction to Caillois's classification can be found in Salen & Zimmerman's book (pp. 307-309). Also Boon & Bateman discuss the categories of Caillois (pp. 84-88).

Salen and Zimmerman also introduce a player typology where player groups are defined by their relation to the rules of the game. *The standard player* follows the rules and plays the game as it was designed to play. *The dedicated player* studies the formal structure of a game and is able to exploit unusual strategies in order to win. *The unsportsmanlike player* follows the rules but violates the spirit of the lusus attitude. *The cheat* violates the formal rules of the game in order to win the game. *The spoil-sport* refuses to acknowledge the magic circle and attempts to ruin the game. [SAL, 267-285] If Salen and Zimmerman focus on the relation between player and the rules of the game, Mulligan and Patrovsky introduce a grouping based on the relations between players. *The general players* obey the rules and are fairly neutral, much like the standard players of Salen and Zimmerman. *Barbarians* exploit the bugs (cheat) and get their enjoyment from ruining other players' experiences (grief). *Tribesmen* focus on their micro-community. They help other players but can also cause problems if that is beneficial for their team. *Citizens* are described as "the good people" who are likely to help new players, lend their resources for greater cause and always have a nice word for other players. [MUL 216-220] While both these formulations can surely help designers to anticipate player behaviour they still remain relatively abstract and are based more on personal experience than empirical data.

The most thorough and influential model based on play styles is introduced by Richard Bartle. In the beginning of the long chapter focusing on players Bartle makes a following statement: "Players are all different, and they all behave differently. Nevertheless, there will be general playing styles that they adopt [--]." [BAR, 127] Based on his earlier article<sup>8</sup> Bartle then introduces four different player types: *achievers*, *socializers*, *explorers*, and *killers*. This taxonomy has been very influential both among online world designers and game scholars. Both Salen and Zimmerman [SAL, 465-466] and Rollings and Adams [ROL, 521-522] discuss the categories in their book. Further, the player perception of Mulligan and Patrovsky is entirely inspired by Bartle's player types<sup>9</sup>. The merits of Bartle's model are not limited to identifying the four things people typically enjoy in online worlds but he also discusses the dynamics between different player types [BAR, 133-137]. It becomes clear that these relations between different playing styles and balancing between them are of great importance in case of multi-player online worlds. The potential problems with the model rise from the fact that the original categorization was concluded from

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<sup>8</sup> Richard Bartle (1996) "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs", available: <http://www.mud.co.uk/richard/hcds.htm>

<sup>9</sup> The original article by Bartle is actually reprinted in Mulligan's and Patrovsky's book.









