# **Player Types and Gamification**

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#### Abstract

This paper presents a brief history of the concept of player types starting with Bartles's work on MUDs and continuing to more recent, empirical research. Player types are not a defined concept and any categorization of players or users needs to occur within the context of a particular application or domain. Play-personas are suggested as a useful tool that can be used to put player type research into practice as part of the design process of gamified systems.

## Keywords

Gamification, Player Type, Personas, Play Persona

# Introduction

In Hearts, Clubs, Diamonds, Spades: Players who suit MUDs Richard Bartle [1] made his now famous observations about player types in the early MUDs (Multi-User Dungeons/Domains). He pointed out that not all players play for the same reasons, or play in the same way. He outlined the four types of players socialisers, achievers, explorers and killers - each with different motivations, in-game behaviours and play styles.

For at least a decade this was the only research of its nature. Recently significantly more research has become available in this area.

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#### What are Player Types based on?

The idea of Player Types assumes that there are distinct player-related phenomena that can be categorized, for example: motivations, play styles, behaviours, genre preferences and pleasures. These are then formalized or grouped as: categories, typologies or taxonomies. The means by which these categories are reached is mixed, from formal statistical methods to more interpretative approaches. For example the Bartle four types model is based on player behaviour and pleasures and was obtained through long-term, game-based focus groups.

Bartle's work, and many others' is based on particular games or genres. It is difficult to generalise outside the context that the research was carried out in.

There is also a methodological problem in interpreting in-game behaviours as specific motivations or play preferences without actually engaging in qualitative research with players.

Players each have different strategies for play and that as well as large-scale groupings of behaviour around preferred playings, there are also many hidden, appropriative or resistive types of gameplay that are worth considering [11].

## A Critique of Bartle's Model

Bartle's model was an early foray into player studies, but has some issues. The first issue surrounding Bartle's four types was that it was never intended to be a general typology of all digital game players, however it is often referenced out of MUD context and applied to game design generally [8,12], and also recently in gamification [6]. Although it is both an insightful model for MUDs, Bartle's model suffers from a number of weaknesses. First that the components of each player type may not be correlated. Secondly that the types may be overlapping or mixed, yet Bartle asserts that they are mutually exclusive. Lastly, it is not an empirically based model that can be validated [15]. However there is recent work that has built on these early ideas.

## Empirical work in player types

Nick Yee has carried out a long term, quantitative study of Massively Multiplayer Online Roleplaying Games (MMORPGs), gathering data through a series of questionnaires [16]. One small part of this involved a validation, or exploration, of Bartle's original model [15]. As the question generation is based on Bartle's work it can be seen as an empirical grounding and refinement of those original four types. Yee's updated model of player motivation has three main components and 10 subcomponents.

- Achievement: Advancement, Mechanics, Competition
- Social: Socialising, Relationship, Teamwork
- Immersion: Discovery, Role-playing, Customization, Escapism

This work shows that the Killer type is not separate, but instead correlates strongly with the competition subcomponent. It also shows that the activities characteristic of Bartle's explorer type are split between the mechanics and discovery subcomponents.

This new model develops, and empirically grounds the model Bartle proposed. It is also contextually valid as there is a historical link between MUDs and MMORPGs. Yee is careful not to describe his work as player types. They are overlapping sets of psychological and social 'motivations' based on player behaviour and preferences. The research also shows strong correlations between particular motivations and gender.

Another example of this approach is an ethnographic and interview based study of the BBC's online game *Adventure Rock* [7]. A taxonomy of children's 'orientations' to the game was created that includes: Explorers, Self-stampers, Social climbers, Fighters, Collector-consumers, Power-users, Life-system builders and Nurturers. This research also highlights specific gender and age preferences in these categories.

Kallio, Mayra and Kaipainen [9] take a much broader view and through a detailed study created a model of player mentalities for all digital game play. Because it is much more generally about games it loses the specificity in gameplay behaviours that both the Yee and Jackson focus on. It is a study in the general social and cultural motivations that cause people to play digital games.

Using a set of nine heuristics, they determine nine different player behaviour types. These are based on the length, regularity and social context of the game play. These are grouped into three sets.

- Social Mentalities: Gaming with Kids, Gaming with Mates, Gaming for Company
- Casual Mentalities: Killing Time, Filling Gaps, Relaxing
  Committed Mentalities: Having Fun, Entertainment, Immersion

Another approach is one typified by the work of Canossa and Drachen [5]. They carried out a clustering analysis of gameplay metrics collected via XBox Live [14], from players of the game *Tomb Raider*: *Underworld* [13]. Using metrics such as completion time and number of deaths they create a simple taxonomy of players' behaviours explicitly to help in game design.

All of this recent work shows the range of detailed, empirical and formalized research that is going on in the area. There are also less formal and more industry focused pieces of research. Klug and Schell, present a collected list of nine player types used in the industry [10]: Competitor, Explorer, Collector, Achiever, Joker, Director, Storyteller, Performer and Craftsman.

## **Play-Personas**

Rather than thinking of player types as being some form of absolute play preference a more useful way is to use them is as personas within the design process [2]. These can be applied in the same way as personas are normally used in User Centred Design [3] and are something that interactive designers are familiar with. In this situation we don't have to be too concerned with differentiating between motivation, behaviour or preferences as personas are intended to be a rich story to be used in design. For game design these tools are becoming increasingly important as the types of players being designed for are becoming less and less like the game designers themselves [4]. However the creation or personas is very contextually situated and needs to be based on rigorous, application specific, qualitative and quantitative research.

# **Conclusions and Future Research**

It is tempting to create a generalised schema or taxonomy of player types. However the insights generated and the types of behaviours are constrained by the particular games and the game cultures around each. Kallio et al [9] carried out a large-scale study and the focus necessarily shifted to the social situations that surround games rather than play style or behaviour.

Achievement and socialisation are two common components of the models described above and these are also the common patterns and mechanics that gamified systems are relying on [17].

Gamified services present an exciting and ready-made opportunity for data-intensive, quantitative research due to their client-server nature.

One of the clear things that many of these studies highlight is that both gender and age play important roles in game playing motivations and behavior.

Lastly, all the research described here is on digital games, not gamified services. Although some aspects can be extrapolated from one domain to another, not all research about digital games can be applied directly to the gamification of other applications. There is also real danger that the design of gamified systems will continue to be based on non-empirical research from the wrong context, ultimately leading to commercial failure and user disappointment.

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