User-Centric Studies in Game Translation and Accessibility

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Chapter 2

The problems with the current taxonomies and definitions used in games studies and possible solutions

Terminological unraveling for use in quantitative research on games, gamers, and players

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2.1 Introduction

Games are both a cultural artifact and a popular activity: they can be purely for leisure or purposefully educational, they are part of popular culture, part of a thriving economic market, and wholly interesting to academics. This protean phenomenon has been studied for years in different fields, including Game Studies. Nonetheless, while they were many attempts at defining what is at the heart of ludic experiences – by scholars (e.g. Wittgenstein, 1953[2021]; Huizinga, 1955; Suits, 1978), videogame industry practitioners (e.g. Crawford, 1984; Tekinbaş and Zimmerman, 2003), and various game users – the idea still comes back that the underlying issue is yet to be resolved. At the moment, if everyone thinks that they understand what games are, we still lack a clear and universally accepted definition of what constitutes a game, and this ambiguity impacts both scholarly discourse and practical application. Indeed, this definitional challenge is not merely academic, even though it directly affects any study on games, most notably because it extends into the cultural and societal perceptions of those who engage with games, whether they are deemed to be *players* or *gamers*. For one, while the term *gamer* presupposes someone who engages with video games – in a constant and dedicated manner, might we add – the *player* is broader, but those distinctions seem more artificial than practical.

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Moreover, any person who plays might be reluctant to adopt these labels as they often carry negative connotations, shaped by stereotypes and biases that portray gaming as an antisocial, unproductive, or even harmful activity (Stone, 2021). This stigmatization has profound implications, not just for the individuals who engage in games but also for the broader understanding and acceptance of games as a legitimate field of study and an important cultural medium that operates on a global stage. In effect, studying games on an international scale and studying the diverse communities of people who game or play games in translation is rooted in more fundamental problems. First, no one can be certain as to what counts as a game. Second, nobody can be sure as to who counts as a *player* or a *gamer*. Under this apparent terminological problem lies a crucial bias when it comes to conducting game reception research (qualitative or quantitative): any person who accepts or is accepted to contribute to game user research is probably perceived as belonging to the category of a gamer or a player.

While the current volume aims to focus on researching the various users of translated video games, this chapter seeks to unpack some of the more fundamental complexities surrounding the definition of games and the implications of this ambiguity for academic research more generally. Simultaneously, it delves into the societal biases against gamers, examining how these perceptions influence the identity and community dynamics of those involved in gaming. By exploring these themes, this chapter contributes to a deeper understanding of the challenges and opportunities within Game Studies, Audiovisual Translation, and game reception research, advocating for a more inclusive and nuanced perspective on what it means to engage with games in the modern world and the adoption of new approaches to recruit participants, conceptualize research variables, or analyze the retrieved data, with a particular focus on areas relevant for the basis of video games translation reception research.

2.2 The difficult definitions: games, players, and gamers

2.2.1 Games

The concept of games has been approached from various angles, each offering a distinct perspective that contributes to our understanding of this multifaceted phenomenon. The differing definitions usually reflect the diverse disciplines that study games, including psychology, sociology, cultural studies, and computer science, among others.

One of the common points of entry in Game Studies for an investigation on the concept of games is what Wittgenstein has labeled the "family resemblance" (1953[2021]). In typical analytic philosophy musing, he discusses that an essential definition for a concept as complex as games is

tedious because they encompass a wide gamut of activities with a plethora of varied features. Through the concept of "family resemblance," the author argues that what games share are a series of overlapping similarities, like members of the same family, but that there is no single trait that games have in common. As such, some games can be competitive (soccer or Multiplayer Online Battle Arenas [MOBAs]), while others are cooperative (most roleplaying games, board games such as *Shadow over Camelot,* or video games such as the *Borderlands* franchise). Certain games require skills (from chess to most video games, whether they rely on reflexes or other talents), luck (coin flipping being the perfect example), or a mix of both (from *Go Fish* to award-winning board games such as *Wingspan*). Some games have clear objectives and winning conditions while roleplaying games might not. While Wittgenstein's "family resemblance" theory for defining games is inclusive and adaptable, it lacks specificity and clear boundaries, which can be problematic and already highlights definitional issues. Thus, despite its broad applicability, the need for more exact definitions becomes evident in various professional and practical areas.

At their core, games can be seen as a platform for social interaction, learning, and identity formation. They are arenas where individuals can experiment with roles, strategies, and problem-solving, often reflecting and impacting their psychological and social realities. To quote Dutch historian and cultural theorist Huizinga "all play means something" (1955, p. 1). As animals play too, it can be said that playful activities are ingrained in our societies in a more elementary way, and that they are essential to our development (for a recent study on that specific topic, see Garaigordobil et al., 2022). Indeed, one of the foundational definitions of games comes from *Homo Ludens* (Huizinga, 1955), where they are presented as a voluntary activity, conducted within certain fixed limits of time and place, according to voluntarily accepted but absolutely binding rules, with their aim being in themselves (autotelic) and accompanied by a feeling of tension and joy. Similarly, the French sociologist Caillois, in *Les jeux et les hommes: le masque et le vertige* (1958, later published in English under the title *Man, Play, and Games*), classified games based on characteristics like competition, chance, mimicry, and vertigo, emphasizing the role of play in human culture. Those two definitions, which are still often cited, emphasize the activity made possible by the games and do not really consider the physical object that games can be in and by themselves, a field that seems to be taken more by historical approaches of games as socially relevant artifacts (for a recent example, see Spanos, 2021).

Moving into the late 20th and early 21st centuries, after the advent of videogames – which often offer immersive experiences that blend the boundaries between traditional game forms and digital entertainment – Suits (1978) proposes an early modern perspective, describing games as "the

voluntary attempt to overcome unnecessary obstacles," which highlights once again the voluntary and challenging nature of games. This definition begins to bridge the gap between the traditional and more contemporary understandings of games, but as we will show, most definitions seem to underline the inherent competition or challenge that games entail, rather than focusing on other aspects, including their social or artistic components.

For example, in *Rules of Play: Game Design Fundamentals* (2003), Tekinbaş and Zimmerman offer a rather structured definition: they describe a game as a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome. This definition highlights the structural aspects of games, focusing on rules, systems, and outcomes, central to understanding game mechanics and player interactions… but leaves open the interpretation that, for instance, duels could be seen as games. In the same vein, Fullerton et al. (2008) define games as "a closed, formal system that engages players in a structured conflict and resolves its uncertainty in an unequal outcome", highlighting once again the structured and uncertain nature of games. Schell (2008) sees them as "a problem-solving activity, approached with a playful attitude", linking back to the idea of games as platforms for learning and identity formation. Juul (2011) expands on this by describing games as

> a rule-based formal system with variable and quantifiable outcomes; where different outcomes are assigned different values; where the player exerts effort in order to influence the outcome; the player feels emotionally attached to the outcome; and the consequences of the activity are optional and negotiable,

offering a comprehensive view that encapsulates the emotional and effort-based engagement in games. Meier (2012) simply but effectively defines them as "a series of interesting decisions", focusing on the decision-making aspect in games. Burgun (2013) later describes them as "a system of rules in which agents compete by making ambiguous, endogenously meaningful decisions", highlighting the competitive and decision-making processes within games.

At the other end of the effort to enjoyment spectrum, taking a narrative and simulation angle, game designer Crawford (1984) sees games as interactive simulations where players are given the opportunity to play out various scenarios. This definition emphasizes the role of games as simulations that can represent real or imagined systems, as well as the importance of player agency and interactivity in shaping the game experience. Costikyan takes an approach which emphasizes the artistic side of gameplay by defining games as "a form of art in which participants, termed players, make decisions in order to manage resources through game tokens in the pursuit of a goal" (2005).

This review would suggest that definitions tend to focus on the competitive, which leads us to believe that the process is studied (what we do when we play) and not the games themselves or the end result of the process (not the goal of the games, but the reasons why we play). Obviously, the term used for the central medium of our discussion may be different for non-English languages, which would warrant a separate discussion. This highlights the complexity of this issue that would need to be unpacked for the benefit of conceptualizing such fundamental terms for user-centric research into game localization.

Following up on that thread, Stenros (2017) suggests that video games are seen more as artifacts, and the rest of the games as activities, thus confirming that there seems to be no distinction between games and gaming. He also introduces the caveat that, if sports are usually a category of games, professional sports are not. He then proceeds to analyze sixty definitions found in articles to try and find commonalities, of which there are ten. All games have rules, a purpose, an artifact or activity, they are separate yet connected to the world, they need players, they are (un)productive, there is a competition or conflict, a goal and end conditions, they belong to a category, and have coherence. Out of those commonalities, two of them drew our attention. First, we find it interesting that the only kind of social interaction mentioned is, once again, the idea of competition or conflict. We agree that most games pit the players one against the others, or in the case of solo or cooperative games, against the system itself, but it seems reductive to think that the interactions do not happen outside of the games as well, as the sheer number of ways to chat while playing, even with virtual strangers, indicates that interactions happen outside of the game proper. Second, Stenros himself recognized the (un)productiveness of games as being problematic because serious games or professional players not only put that category to the test but also because certain by-products of the games are inescapable. This bears the question as to why such a debatable crucial point would be included.

While the most approachable definitions might be found in classical dictionaries – e.g. that a game is "[a]n activity or sport usually involving skill, knowledge, or chance, in which you follow fixed rules and try to win against an opponent or to solve a puzzle" (Collins, 2023); another good example would come in *Antidote* 11 (a dictionary/tool used by translators): "an activity in which people compete with each other according to the rules, especially in order to obtain points or a prize" – it is clear that the understanding of games is continually evolving, shaped by the various perspectives and insights offered by different scholars over time. Moreover, the challenge in defining games is further compounded by the sheer diversity of forms and purposes they encompass, from board games to sports, from role-playing games to digital games, each having its own set of characteristics, yet all sharing some fundamental essence of play and interaction.

2.2.2 Players

It may sound almost frivolous to specify that a player "is a person who takes part [in a sport or game], either as a job or for fun" (Collins, 2023), but we believe that a discussion remains necessary on that front. First of all, a player can also be "someone who engages in casual and indiscriminate sexual relationships" (Collins, 2023). Interestingly enough, this meaning entered the collaborative Urban Dictionary in 2005 (the website having been created in 1999) and Google Ngram Viewer shows a decline in the use of the term "player" starting in 2012. It is tempting to see a correlation between the introduction of the term in the taboo/pejorative sense and the decrease in its more general use. However, it would take a separate study to delve deeper into this observation and how it relates to the perception of game players (especially from the perspective that the more taboo or pejorative sense seems to be mostly gendered towards men, which would need to be considered in the discussion). Since other languages have a different distribution of equivalent terms or might even utilize operations like calques and borrowings to refer to what in English would be "a player" or "a gamer", the linguistic effects around local gaming cultures are itself a noteworthy avenue for user-centric game translation research. For example, the French terms "joueur/joueuse" are also polysemic: the second definition concerns betting people and is accompanied by an example leaning towards people addicted to gaming (Le Robert, 2023). That same implication of a betting person is visible in the third definition of "jugador," the Spanish equivalent of "player" (Real academia española, 2023). In the circumstances, there seems to be a pattern of negative connotations linked to adult people who like games, which would be worth investigating. This being said, the English term is at the very least polysemic and helpful for the study of game users only insofar as this kind of linguistic conceptualization finds some intrinsic link between professional athletes, musicians, and players of games.

2.2.3 Gamers

While the definition of gamers is inextricably tied to the definition of games and borders on the tautological as a dictionary definition would find that "[a] gamer is someone who plays computer games" (Collins, 2023), the usual demographic representations of gamers seem stereotypical. Indeed, the issue loops back to the definition of games that have been established in the previous section. While it is broad enough to encompass a wide variety of digital and analog games, there is a need to move beyond what is considered a gamer in the collective subconscious as opposed to what a gamer truly is, if we take the dictionary definition at face value. As such, while games are varied in the casual to hardcore continuum, from the seemingly

simple to the eminently complex or difficult (e.g. *UNO* as opposed to *Dungeons and Dragons* for the analog, or *Candy Crush Saga* as opposed to *Dark Souls* for the digital), there seems to be a received idea that "much of the debate about what constitutes a real game is tied to the content in a game, and particularly its style of gameplay" (Consalvo and Paul, 2019, p. 7). With this in mind, a plethora of games will be considered non-games by a vocal fringe of the gaming community that has been created through what Consalvo and Paul call a "constitutive rhetoric" (Consalvo and Paul, 2019, p. xvii). This idea can be linked to political science in a way as "[…] those listening to political speech are brought into being through a process of identification in rhetorical narratives that 'always already' presume the constitution of subjects" (Consalvo and Paul, 2019, p. xviii). This is important for our investigation as the definitions put forward in our analysis are attempts to move beyond a popular taxonomy of games and gamers that is purely political and consumeristic in the sense of promoting consumer identification and atomization.

A way to move beyond this stereotypical view of what counts as a game and who can be considered a gamer is to adopt a materialistic view and to look at the economy of gaming. Going back to the earlier dictionary definition of gamers, and focusing on the platform, as gamers "play computer games" (Collins, 2023), it becomes clear that this definition is already problematic as games are not only played on computers. While we could argue that console games and any modern digital device are a sort of dedicated computer, this definition is not particularly useful or comprehensive because digital games are inherently technological and tied to hardware and software processes that partake in their complexity: there are some differences in games played on a PC-type desktop computer and games played on a smartphone. Graphics are one of these salient differences, but access and monetization schemes are also different depending on the platform. Thus, smartphone games tend to be more of the "free-to-play" model where a player can engage with the game for free, with the possibility of paying money to progress, get rid of ads, or change specific aesthetics. On the other hand, console or computer games are more likely to be of the "product" or the "game as service" model, where players can purchase a license of the game to engage with it or subscribe to a pre-set payment plan to play a game that is frequently updated. According to a stereotypical definition of what "real games" and "real gamers" are, "[r]eal game developers and studios are expected to respect the unspoken norms and sanctity of games, and not just focus on money and business decisions" (Consalvo and Paul, 2019, p. 39), which leaves "free-to-play" models and smartphone games in the non-real-game category.

With these considerations in mind, industry reports show that of the 187.7 billion US dollars generated by the gaming industry in 2023,

92.6 billion dollars or 49% of this revenue was generated on cellular phones (Newzoo, 2024). As such, should the stereotypical definition of games and gamers be followed, the biggest segment of the industry would be discarded by the idea that casual or mobile games are not real games. This view is nonsensical and impractical if looked at from the perspective of games as a historical phenomenon that predates digital games and that has been practiced by both children and adults across history, from the royal game of Ur (dated 2600 BC-2400 BC [The British Museum, n.d.]) to *Fortnite*.

Moreover, stereotypical depiction of gamers would attribute a gender, and age group to them. While the stereotypical gamer might be seen as young and male, such a perception seems to be becoming increasingly more inaccurate for the entirety of the contemporary global gaming userbase, as highlighted by statistics. Figures show that the gender distribution of male-identifying gamers in the United States ranges from 59% some years ago (ESA, 2017) to 53% in 2023 (Statista, 2023), while age distribution puts an average U.S. user between 35 and 44 years old (Takahashi, 2020). Importantly, analogous figures would differ between regions of the global video gaming industry. But what about smartphone games? There is an imbalance at hand if our way of assessing gamer demographics does not consider the impact of cellphone or mobile types of games, often targeted at female identifying gamers. Indeed, games are designed with certain user profiles in mind, a concept called "designed identity", which should be understood as "[…] a hybrid outcome of industry conventions, textual constructs, and audience placements in the design and structure of video games" (Chess, 2017, p. 31). In line with this argument: games designed for female-identifying players will have different narratives and gameplays than those designed for male-identifying players. Noteworthy, what is considered a gender-specific narrative or gameplay might be different depending on the locale of the game, so on a global scale, this is another factor to consider when thinking about gamer identities. These design decisions are understood through the idea of the "second shift" (Hochschild and Machung, 2012), which refers to the "[…] notion that women often work full-time jobs both in offices and in household management" (Chess, 2017, p. 61). As such, because of this supplementary labor that is implicit in the systemic exploitation of women's work, female-identifying players will have less time to play games and might not have the gaming capital nor the emotional disposition to engage with games in the same manner men do. Thus, games intended for female audiences will have to take this argument into account. The materialization of this notion might however be subject to varying degrees of success depending on territory, which is another parameter to remember when it comes to global industries like video games and their localization. From a Western perspective, however, the

characteristics of games designed for female players will thus exhibit the following characteristics:

1 Thematic congruence: Whether the game maps thematically to topics for women.
2 Collaborative/social: Whether the game has opportunities for experiences to play with friends or strangers in a noncompetitive way.
3 Time positive: Whether the game structures play so that the player does not need to play for long periods of time and can pick it up again easily.
4 Low risk: Whether failure dramatically affects the player's overall experience.
5 Creative expression: Whether there are opportunities to design spaces or characters to show individual expression and style.
6 Lush aesthetics: Whether the game has bright, intense colors; rounded edges; and visual surplus.
7 Non-sexualized characters: Whether all or the majority of characters in the game are non-sexualized, which may include animal characters.
8 Avatar choice: Whether the player is given the opportunity to select and/or design his or her own avatar.
9 Low violence: Whether the game has minimal violent content.
10 Low harassment potential: Whether the game is structured in a way that players cannot easily be harassed by strangers.

(Chess, 2017, pp. 51–52)

At first glance, one can easily categorize the games designed for women with the "casual" label, especially through the "time positive" aspect of design intention. Indeed, casual games are meant to be played in short bursts, during the short breaks women have in their schedule which encompasses their regular job and their "second shift".

While the figures stated earlier are closer to the one person out of two parity which is generally typical of genderized demographical investigations, giving different weight to different platforms might provide the scientific community with more significant representations of the gender of actual gamers across all locales. Given that 49% of game revenue is generated through smartphone apps, it should be possible to envision a world where gaming revenue is generated predominantly by casual gamers, a game classification that typically targets female-identifying gamers playing on their phones. Consequently, the investigation of game translation users would need to consider these aspects of demography even while preparing most basic research operations, such as sampling participants for generalizable results or choosing a representative game translation material to investigate. Likewise, other variables aside from gender may equally be

subject to local variations, such as most obviously the access of the game user population to gaming devices (with mobile phones on a worldwide scale likely being more accessible than desktop or console setups) and the proficiency of local game users with languages most likely to make them able to access games linguistically as well as their ability to tap into global gaming communities via varying proficiencies in lingua franca languages like English. This is important for the present point as both of these would subsequently allow users to engage with the idea of "gaming" and allow them to form identities as "players" or "gamers" or equivalent concepts in the regional languages and/or cultures.

2.3 A short, fair and necessary critique of the current state of affairs in game studies

As we have shown in the previous section, Game Studies in general suffer from a terminological problem that would need to be solved in order to set clear fundaments for moving towards reception studies of game localizations and global gaming.

First, as definitions are at the same time numerous and not especially helpful, we need to be more specific in the types of games that are studied, for example, to exclude professional players or gambling practices which might skew the results, but also to make sure that some are included (e.g. card games or phone apps) and to what extent (*UNO* is a very different game than *Magic: The Gathering*, as the latter is a collectible card game, which means that the financial means of the players, as well as their skill and luck, impact the probability of victory). If, instead of stating that we are studying games, we provide examples and categories, we might help our prospective respondents to decide if they are targeted or not. So, instead of looking for gamers or players, we might ask for "people who enjoy playing games with friends or competitively, whether it is…". The ellipsis would obviously need to be replaced by an exhaustive list, which could be support-based (so instead of looking for gamers, we would ask for players interested in computer, console, and phone games), or system-based (dice, cards, figurines, etc.) or even mechanism-based (roleplaying games would then be understood as both board- and videogames), as well as theme-based (e.g. users might be interested to play a science-fiction or comedy game) or setting-based (e.g. users might be incentivized to play games coming from or set in a specific fictional or factual time and space).

Second, we need to make sure we address the bias in terms of who counts as a player or a gamer. The stereotypical and gendered views are not conducive to user research in contemporary global gaming, and we need to ensure a fairer representation in our surveys, which, as we have suggested above, could be as easy as making sure to count phone apps as games. We

would also need to advocate for a fairer on-screen representation so that players and gamers could be seen as productive adults enjoying a respectable hobby, which might very well lead to more people accepting to recognize that they are, in fact, players. While this is a long-term goal, we believe that short-term solutions exist, and we will get back to it in the next section.

This being said, and in the name of fairness, we recognize that fields such as Game Studies or Player Studies are not the only ones suffering from similar issues. While this chapter discusses issues that are more universal to game studies and in particular games reception research, it is primarily done to lay the foundation for user-oriented game translation research. However, Translation Studies has been, over the years, struggling to define its subject, as well, defined in very different ways, including in a very minimalist one, that states that a translated text is "any target text language which is presented or regarded as such within the target system itself, on whatever grounds" (Toury, 1980, p. 14), which leaves the door open to considering the original Spanish version of Cervantes' *Don Quixote* as a translation if the metafictional narrative is to be believed. That definition has obviously evolved since then, but recent scholars still acknowledge that translation is multifaceted:

> Not only the translation of Hamlet into French, or of oral speech into subtitles, but also communication between dolphins or between a dog and its companion, or moving a statue from one place to another, or rewatching a film are translation processes.
>
> (Meylaerts and Marais, 2023, p. 3)

Moreover, most Translation Studies research bears on the end product and not the process (the translated text, and not the act of translation), in a way that is rather similar to how games and gaming are often intertwined to the point of becoming indistinguishable. Finally, since crowdsourcing and generative AI have entered the translating landscape, we also have to recognize that the definition of what a translator is needs to evolve. Somebody who translates from time to time (for friends or non-profits) and who does not have a diploma in translation might not self-identify as a translator whereas it could be interesting for researchers to know more about their perspective (and numerous books and articles do, in fact, tackle non-professional translation, self-translation, crowdsourcing and community translation, among other topics of interest). Moreover, somebody who has a diploma in the field but does not practice might, once again, not feel included in surveys about translation. We could go on and on, but we think we showed that the question of identity is not unique to games and their users, and we thought it was important to draw that parallel, as we

would not want anybody to construe our criticism as a lack of validity for Games Studies in general (far from it). We just intend to point out what we perceive as major terminological issues to suggest new approaches without having to attempt to find a perfect definition that might never come along.

2.4 A few practical solutions

2.4.1 On definitions and the questionable use of labels

Our position is that we do not necessarily need a generally accepted definition of games, players, and gamers, which would be met by everybody's approbation. Games have evolved a lot over time, and will hopefully continue to do so, which means that the perfect definition is probably a utopia. Barring that, what we need are more specific *explainable* criteria and more systematic, albeit time-consuming, ways of starting our research. First, we believe that we need to be clear about what we are studying: translation as exemplified by game translation, game translation itself, gaming on a global stage, local game users, the global use of games, or the (un)productive end-results that come from the experience of various game localizations? If we are interested in games themselves, how do we want to classify them? By how they are played, which would mean that dice games (including *Yahtzee*) could be opposed to computer-based video games? By mechanism, thus putting strategy games such as *Risk* or the *Total War* franchise on an equal footing? If we want to study the social elements of online gaming practice, are we better off studying the players or the chats they use? Answering these questions will then enable us to (1) express better who should participate in our research (instead of calling all gamers and players) and (2) tailor the way we promote our research so that we can reach our intended targets. Thus, if we also hope to reach people who play exclusively on their phones, or only one specific game during the weekend with the same group of old friends, sending requests on Discord or to Facebook pages focusing on games might not yield the best results. Inversely, sending general requests to other platforms will not necessarily be more fruitful as long as we cannot articulate the type of respondents we hope to gain.

Finally, we eschewed thus far the conversation about serious games, edutainment, and ludotainment, but most adults could in fact be concerned by these categories, thus leading to the average player being more advanced in age than we are usually led to believe. How many companies train their recruits using games? How many courses are based on some form of ludic pedagogy? How many people enjoy, from time to time, as a bonding activity or just for fun, an escape game (either through a board game, *Unlock*-like, or in escape rooms)? How many adults have

learned their second language by playing unlocalized video games during their childhood? How many seniors play cards or *Scrabble* at the hospital, in a retirement home, or just in social clubs? Should this form of education through games be discarded? We believe it should not, as it has been demonstrated that games play an important role to ward off cognitive decline, and since the newspapers reported the news (see for example Allen, 2019), it has become common knowledge, which might mean that a new generation of older players might have appeared as a result.

As we have seen in the previous paragraphs, the way we define games, players, and gamers can influence who will answer, and we have established that the stereotypical labels do not help in getting a fairer representation. We already suggested that we do not think that the solution lies in a better definition, or even in the long-term goal of redeeming in pop culture and elsewhere the representation of who uses games (and games translations), but rather in a clearer vision of what we are hoping to study, so that we can develop in better terms and with lots of examples beforehand (when planning the research and getting an ethics committee approval), during the data collection (to make sure that the participants we would like to reach feel concerned and accept to participate) and after the fact (when analyzing the data and sharing our results), rather than counting on the common perception of our field of study.

2.4.2 On a broader and fairer representation

To address the disparity in gender, researchers have to engage differently with casual players (understood mainly as female-identifying, if we go back to our previous argument about the definition of gamers) as their opinions or preferences are rarely taken into account, even though their gaming activity is the biggest revenue generating segment of the industry. Both the "hardcore gamer" moniker and the definition of what "real games" are supposed to be discard "casual gamers" (mainly women) from the player category. This idea is so ingrained in the discourse that most people do not see themselves as players, which might lead to low participation levels in investigations on games, players, or gamers. This has been observed in a previous investigation of gamer preferences in translation and localization research where 20% (Ellefsen and Bernal-Merino, 2018, p. 25) to 33% (Fernández Costales, 2016, p. 187) of respondents identified as female, or even 37.04% of respondents identified as non-gamers (Geurts, 2015, p. 26). This data and representation of women as gamers is a far cry from the 50% or more parity that has been touted by the industry and the press and that has been found in more general investigations (ESA, 2022; Internet Advertising Bureau 2014 in Jayanth, 2014). Because questionnaire-filling is, in most cases, a volunteer activity and we

could even argue extra-labor, we can surmise that women, who often will label themselves as non-gamers and who are often playing casual games, will not participate in this kind of research due to a lack of time and self-identification. This situation perpetuates the imbalance and does not reflect the reality of the global player base. Player-centric translational research therefore has the opportunity to level this issue out and achieve more valid results by aiming to identify and target issues similar to this one.

2.4.3 On the representation of data: taxonomies based on correlation rather than generalization

Demographic representations of participants often appear as strict categories with set boundaries. However, these categories are more nuanced than most quantitative representations of sampled populations suggest. Even the previous discussion on gender representation in research falls into some generalizations about what "male" or "female" gamers can be. This assumption may also stem from systemic oppression ingrained in education and behavior, which can create such unfair situations. This overgeneralization does not take into account exceptions or the evolution of values and gender-assigned behaviors. As such, there is a need to discuss how to account for this evolution and exceptions in research, so sampled populations and the quantitative research emerging from these groupings are not a list of overgeneralized, almost caricatural, cases. The following discussion will resituate the need to rely on the demographic representation of sampled populations in quantitative research by engaging with another example of taxonomy: age groups.

As stated earlier, and contrary to early and contemporary popular discourse on video games perceived as "kids' toys" (Paul, 2012), the average gamer in the U.S. is 35–44 years old, a far cry from the last 50 years of rhetoric around games. Most quantitative research, being descriptive rather than rhetorical in nature (or at least with a descriptivist approach in mind), takes into account that games are played by a diverse and varied population, with multiple generations of players as demographic representations of age groups. In line with the prevalent discourse on games as "kids' toys" as opposed to an activity practiced across many generations, separating adults from minors is an obvious categorization that takes place in research. This is evident in the notorious "less than 18" category used in some research (Ellefsen and Bernal-Merino, 2018), "less than 20" (Fernández Costales, 2016), or focusing on "teenager to young adult" from age 16 to 30 (Geurts, 2015). Given that the legal age of adulthood varies across locales, from 15 and over in some countries to 21 and over in others, we can already surmise that this type of categorization is limited and does not take geopolitical and individual variation into account.

Moreover, because popular discourse establishes generational categories, e.g., "boomers", "gen X", "millennials", or "gen Z", as people born over a given era, research tends to classify age groups using similar categorizations with regard to age. This type of taxonomy implies that individuals born during a certain era will have been exposed to an established point in time regarding technological evolution (e.g., 8-bit consoles for Gen X versus 16-bit consoles for millennials), audiovisual content such as series and movies (*Friends* versus *How I Met Your Mother*; *Star Wars* versus *Harry Potter*), music (Cindy Lauper versus Taylor Swift), and so on and so forth. While these taxonomies can impact contemporary consumption (in relation to the date the investigation took place), they are difficult to establish and cement as actual categories. For example, the millennial category, as expressed by research from the Pew Research Center, starts with people born in 1981 for "early millennials" and ends 15 years later with "late millennials" born in 1996 at the latest (Dimock, 2019). The implications regarding differences in exposure to content for a generation of people born across a 15-year gap are significant and, as such, show how these categories, while not purely arbitrary, fail to paint a complete picture of the situation. In general, this type of categorization, especially regarding minors versus adults, can be used to discard certain answers and whole groups become irrelevant to better refocus the research or to ensure that ethics reviews are satisfied as minors are considered vulnerable populations.

More importantly, representing demographic categories in reception or user-centered research of any kind serves mainly the purpose of establishing correlations between certain demographics and preferences as expressed in data-collecting tools. As such, what we offer as best practice for user-centered research is to take into account the variation of this kind of categorization across locales but also across individuals. While these categories will necessarily show that a given population is representative enough of a certain group of users in terms of diversity, these taxonomies only become relevant if they can show actual correlations between a certain age group, gender, platform choice, or any taxonomical range. Thus, the onus regarding presenting accurate and representative correlations falls on the shoulders of the researchers, especially at the survey design step. Data collecting and data aggregation tools have significantly evolved and can allow for the representation of individual variation. Instead of creating age, social class, dollar, or time spent on a given activity-based taxonomies, surveys should ask for precise answers. In turn, this would allow researchers to present their findings and create categories according to correlation. Plasticity and flexibility in assessing data are decidedly a better way to represent a diverse and varied user base.

Thus, going back to the previous discussion on age categorization, researchers could find that there are similarities between groups that are

generationally close or far apart in terms of age and bundle them into new categories according to answers to specific questions. Regarding generations, it would also allow long generations such as the 15 year-long early-to-late-millennial continuum more in tune with the diachronic evolution of content and technology. As an example, early millennials, born before the mid-1980s, might have similar preferences to late Gen-X users due to having been exposed to similar content, while late millennials, born in the mid-1990s could show similarities with Gen Z for the same reasons. Even more importantly, some questions might show no correlation between age and specific choices, such as what has been observed in gaming preference and gender in Fernández Costales's study (2016, p. 188). The latter assertion is important as, even though demographic groupings are often used as a way to assert the representativeness of a given population sample, data analysis should be data-based (as opposed to intuition or disciplinary *habitus*-based), descriptive, and ready to face the difficult reality that the original research hypotheses are false or partial truths. This way, instead of moving from a categorization based on *a priori* generalization, the categorization would emerge from the data, thus the actual users.

2.4.4 On the validity of the interpretation of quantitative analysis

Setting aside nefarious P-hacking practices in statistical hypothesis testing (a necessary stage in research based on sampling a population), quantitative investigations often face inevitable challenges due to various factors such as sample size, diversity within the sample, validity test issues, and user self-assessment, among others. These factors can lead to numbers being used to convey inaccuracies or at least facts that do not accurately represent the reality of the user base. Consequently, when presenting the results of quantitative investigations, researchers must be aware that questionnaires and other data-gathering tools measure only the voiced preferences of users, not actual snapshots of reality. The influence of "social desirability bias" (Edwards, 1958) in questionnaire responses cannot be overlooked and should always be accounted for. This concept, originating from psychology, is defined as "[…] the tendency to underreport socially undesirable attitudes and behaviors and to overreport more desirable attributes" (Latkin et al., 2017).

It is important to note that questionnaires and surveys are completed voluntarily, and researchers should not disregard answers simply because they do not align with preconceived notions or external data such as national census-based data. Researchers should consider the value of these responses as idealized representations rather than precise depictions of who the participants are and their real-life behaviors. Additionally, lengthy and tedious questionnaires can frustrate participants who, influenced by

social desirability factors, might provide extreme all-or-nothing responses to expedite the process. To address such issues and engage in more nuanced and meaningful quantitative analysis, researchers should view the results as an "idealistic representation" of the participants, reflecting their desired self-image rather than an exact portrayal of their actual selves. In doing so, researchers can utilize quantitative data to influence decision-makers or transform processes by representing the participants' aspirations, rather than merely presenting what is mistakenly considered "objective reality".

2.5 Conclusion

As concluding remarks, we would like to reiterate the importance of taking into account the multifaceted essence and dynamic definitions of games, players, and gamers as a way to benefit the results of user-centric research in game translation. The exploration of diverse definitional perspectives from various academic disciplines – including psychology, sociology, cultural studies, and computer science – underscores the inherent complexity and the fluid boundaries that characterize the field of quantitative user-centered research in both games localizations studies and games studies more generally. This complexity is further accentuated by the societal biases and stereotypical views that may surround the gaming communities on the local or global scales, particularly the divisive categorization between hardcore and casual gamers which in turn seems to overlap genderized dichotomies.

The discourse presented herein advocates for a paradigm shift in the methodological approach to the study of games and their enthusiasts as globalized and translational phenomena. It calls for an abandonment of rigid, conventional demographic categorizations in favor of a more nuanced, data-driven approach that acknowledges and embraces the diversity of gaming experiences and player identities. This shift is not merely a theoretical recalibration but a necessary step towards achieving academic rigor and representational accuracy in Game Studies and Audiovisual Translation to ensure that research has an impact for the participants and their communities. It demands a recognition of the limitations inherent in current research methodologies, particularly the influence of social desirability and nonresponse biases, and an earnest effort to transcend these limitations.

Furthermore, we hope that this chapter emphasizes the need for a broader, more inclusive perspective in understanding games and gaming culture(s). It challenges the broader community to perceive games not just as mere recreational activities but as complex cultural artifacts that reflect and influence societal norms and values. This reimagined perspective is pivotal not only for enriching academic discourse but also for fostering a more inclusive, equitable, and representative gaming community.

The complex nature of games as cultural phenomena necessitates a continuous reevaluation and adaptation of quantitative research strategies in Game Studies and beyond. We would like to offer a few ideas on how to implement a more robust quantitative analysis for user-centric translation research, and more importantly, to ensure the diversity of the participant base:

1 **Create targeted online surveys**: Questionnaires can be distributed through various online gaming forums, social media groups, and platforms that cater to different profiles of gamers and players, and even to people who would not identify as gamers or players. User-centric game (translation) research might even tackle gaming-adjacent participants such as by including online streamers playing (translated) games or relatives and colleagues that consume (translated) games passively together with players in their households (etc.). While this requires work on the part of the researchers to identify the communities that they want to include, it will generate more representative data.
2 **Incentivizing participation**: While potentially costly and treading on difficult ethical grounds, the possibility of offering incentives that are appealing to different types of users can generate better participation. More importantly, and given the discussion on the "second shift" with regard to gender, giving a reward to potentially overworked participants is a way to give back to a community, given that researchers benefit from the participation of others.
3 **Outreach to casual gaming platforms**: The possibility of reaching out to platforms that are known for casual gaming or indie gaming, such as smartphone app stores or websites hosting casual games can offer better participation. Targeting specific platforms may yield results, although we should mention that game-mechanics based game groups (e.g. visual novels, JRPGs or FPS) or thematic groupings (horror, fantasy, or science-fiction games) might allow better-focused and more representative demographics. Indie and dedicated user-created forums may prove to be ideal sites to contact participants.
4 **Dedicated outreach to underrepresented groups**: Actively seek participation from underrepresented groups in gaming, such as female identifying gamers, game users with disabilities or other accessibility needs, as well as players from diverse cultural backgrounds, by reaching out to communities or groups dedicated to them.
5 **Using stratified sampling techniques**: When selecting participants, use stratified sampling where the gaming population is divided into different strata, such as age groups, gender, gaming frequency, type of games played, etc. Then randomly select samples from each stratum.

6 **Educational networks**: Collaborate with educational institutions to reach younger players or students who might be engaged in gaming, and also to reach people who would not, once again, identify as players or gamers but still benefit from ludic pedagogies.

The strategies proposed for enhancing quantitative research reflect an understanding of the challenges inherent in capturing the diversity of gaming experiences. These approaches should be considered as part of a broader effort to refine and adapt research methodologies in this field. By adopting these methods, researchers can aim to move beyond traditional restrictions and demographic categorizations, offering a more balanced view of the gaming community on a global scale. It is important to approach this with a sense of pragmatic realism, understanding both the potential and the limitations of these strategies. As the field of Game Studies and Audiovisual Translation continues to encompass more user-centric studies and, as highlighted in this volume, studies dedicated to the reception of game translation and game accessibility, so too should the methods used to study it, ensuring that research remains relevant and reflective of the diverse experiences within the gaming world.

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