
Game Feel: The popular yet elusive properties of game design

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Abstract

This paper addresses the perspectives of game industry and academia on the topic of “game feel”, its purpose, scope and applications. It aims to reveal the existence of game design knowledge addressed in a large body of literature, for which one common language is not yet found. This leads to difficulties in meaningfully distributing this knowledge and operating on it. The conducted desk research highlights the purpose of game feel in the industry, followed by justifications for nuanced and contextualised treatment of the topic. The evolving academic research is used to start a discussion on the utility of expanding the dialogue around game feel, unifying the participating domains via a common language, and furthering the applications of the underlying principles.

Author Keywords

Game design; game feel; juice; context; consideration; definition; holistic.

Introduction

Talks on game design by practitioners often address “game feel”, adjacent concepts such as “juicing”, or specific aspects of it (M. Brown, 2015; Dutch Game Garden, 2013; Jonasson & Purho, 2012; GDC, 2015). “Game feel” is commonly considered to describe aesthetics (Andersen et al., 2011; Hicks et al., 2019), player control and feedback loop (Dahl &

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Juicing – the polishing aspect of game feel

Juicy game design commonly refers to amplification and exaggeration of interaction feedback (Hicks et al., 2019; Jonasson & Purho, 2012; Kao, 2020).

Various practitioners recommend application of common visual and aural effects that contribute to a “juicier” game (Jonasson & Purho, 2012; Sakurai, 2022).

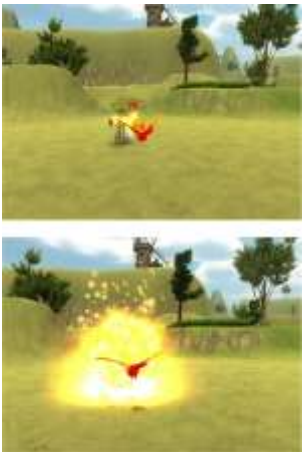


Figure 1: “No juiciness” and “high juiciness” action character attacks used in the research of Kao (2020).

Kraus, 2015; Dutch Game Garden, 2013), but no standardised holistic definition exists yet (Hicks et al., 2018; Pichlmair & Johansen, 2022). This impedes meaningful research and industry discourse on this topic (Pichlmair & Johansen, 2022). In turn, misuse of commonly discussed principles results in lower quality games (L. Brown, 2016; Manning, 2023). Therefore, this paper justifies the need for finding a more precise vocabulary for discussing game feel and for understanding it in context to apply its principles meaningfully.

The paper elaborates on the purpose of the “game feel” topic for industry and academia and explores its broad, multifaceted nature. It describes game feel through commonly addressed aspects. Considerations for fitting contexts for achieving better game feel are included here. This leads to a discussion about possible contributions towards structuring existing knowledge about game feel for its future holistic usage.

Methodology

General desk research was conducted to find academic and industry materials concerning various aspects of the “game feel” topic. These references were then used to identify relevant points of view through which the topic is summarised here. Not only works with “game feel” explicitly in the title were considered, but also ones addressing “juice”. Materials analysing specific aspects of gameplay, such as jump properties and camera behaviour, are also included if the work is focused on achieving better game feel.

Source materials consist of research papers and articles, but also of videos of talks and written articles from the industry. The former were discovered through the Google Scholar database and by processing citations of/by related papers in

the past and the future. The latter are considered credible for this paper if they have been referenced in research papers, or are created by recognised experienced practitioners or presented at credible conferences. This consideration is necessary because game feel lacks a standardised definition, and perspectives of game designers are valuable for an informed perspective in academia (Swink, 2008; Hicks, 2020).

Purpose of game feel in the industry

Starting points for game feel are often anecdotal examples – imagine the popular game X (Swink, 2008), look at the unknown game Y (M. Brown, 2015). These examples are then assessed on whether the moment-to-moment interactions can be perceived as fun, both for fundamental gameplay and for polish. A game may incorporate the basic elements of a genre and be complete to that extent, yet it would be considered to have good game feel only if the game controls and output on impact enabled the player to have a visceral reaction to their interaction with the environment. Inversely, another common informal description for game feel highlights that “when it’s there, nobody notices it, but when it’s not there, everybody notices it” (GDC, 2015). Outstanding examples in industry talks on game design are there because they incorporate some facet of game feel in an impactful manner – Nuclear Throne for polishing such as screen shake and hit stop, Mario and Super Meat Boy for tight controls, Celeste for player forgiveness mechanics (M. Brown, 2015; see also M. Brown, 2019; Pichlmair & Johansen, 2022). This designates game feel as an expression of player-oriented game design and a trait of successful games.

However, caution must be taken when talking about achieving better game feel or focusing on its more tangible

polishing aspects as a goal. Pichlmair and Johansen (2022) argue that game feel is a “value-neutral expression” and that “good game feel” is inappropriate phrasing, since positive effects of “negative moments” in gaming (Sivak, 2012) must also be researched and considered.

Balance and context in the design approach

While forerunners of game feel such as Jonasson and Purho (2012) and Nijman have focused on “juicing up” games to make them better, recent works have been seeking to contextualise design for game feel. Juul and Begy (2016) and Kao (2020) have empirically examined juiciness and concluded that a juicier version of a game may lead to worse player performance and decreased play time. Varying amounts of juice may either increase or decrease player experience and game ratings. L. Brown (2016) examines a slow and relaxing game where common advice for better game feel and “juicy” polish does not apply, but still justifies the possibility to juice it in ways appropriate to the messages of the game. This is contrasted with student games, where common advice for juicing is applied, but does not address the intended feeling of the games. The result is “something doesn’t feel completely satisfying”. M. Brown (2015) summarises this consideration for basing polish on the main game content as “doubling down on whatever your game is about”.

This indicates that the context of both a game itself and its target audience influences the decisions to be made while designing the game. In turn, no single set of tips and tricks can be used to ensure a better player experience for every game. Thus, efforts for advancing the field of game feel and passing down the knowledge to beginners should instead focus on fostering a context-aware mindset that can then use

gained experience to make informed design decisions in future games.

Related academic work

Academia expresses interest in the topic of game feel similarly to the industry. The nature of game feel connects it with areas like Human-Computer Interaction (HCI) and human psychology. Since principles of game design such as gamification expand to non-game contexts (Tondello et al., 2016), and elements of HCI like User Interfaces and User Experience apply to various interactive systems, findings in these areas and findings about game feel as an expression of player experience influence each other (Hicks et al., 2019; Hicks, 2020).

A common starting point for researchers is the lack of understanding on how aesthetics and positive feedback affect players (Andersen et al., 2011; Kao, 2020; Hicks, 2020). This is then based on lack of sufficient empirical research. Papers that proceed to place themselves in this part of the “game feel” field must then contextualise their work via a definition of “game feel” or “juiciness”. Following are multiple references to industry literature, which is then criticised for definitions that are too vague or too narrow (Carter, 2022; Pichlmair & Johansen, 2022). At the end, reflection about future work often considers further exploration of test setups (Hicks et al., 2019), alterations of juicy effects (Juul & Begy, 2016), game genres (Kao, 2020) and cultural factors (Dahl & Kraus, 2015), which highlights that researchers acknowledge games as holistic experiences, but are not able to describe or research them as such.

Attempts for a holistic understanding of game feel can be attributed to Dahl and Kraus (2015) and Hicks (2020). They respectively define game feel and juiciness via the

vocabulary used by surveyed players and game designers. This allows them to make considerations for future work that are based on these perceptions and are therefore relevant for the disciplines behind them.

Discussion and conclusion

The reviewed examples in this paper reveal that game feel is a generally desirable property in game design; however, the “goal” state of a game that wants to have “good game feel” can only be determined in its own context. Attempts to share the knowledge from such individual experiences to other domains have troubles overcoming their own context and generalising their insights to the broader game design field.

This paper attempts to bring awareness of this problem to a wider audience in order to facilitate mindfulness over design advice and its applicability. Even though plenty of knowledge exists on how to improve one’s design or juice one’s game, it must be discussed and applied meaningfully. A discussion starts from defining the subject matter in a way that all participants understand. Working towards common vocabulary capable of encompassing the abstract quantity of “game feel” can aid in achieving a more holistic perspective on game design across more people. There already exist some examples on how to hold this discussion, such as Pichlmair and Johansen (2022) – a lot can be learned from its summative presentation on this topic. With a wider spread awareness of the existing literature on game feel and its applications, both industry and academia can advance and improve their work.

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