
Introducing the Playful-Tension Model

Putting Play Theory into Practice



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The author introduces the playful-tension model, a new theoretical concept, to harmonize the gap in play design between general play theory and its actual use in designing playthings. By synthesizing a broad selection of general play theory into a single theoretical concept, the playful-tension model accentuates the delicate interplay of what he calls “handleability” and “unhandleability” as a primary concern for play designers. He asserts that the contribution of the playful-tension model lies in its ability to unify the complex and scattered landscape of play studies into a high-level middle ground metatheory that empowers play designers and inspires them to a more deliberate practice. **Key words:** handleability; intermediate level knowledge; metatheory of play; play design; play theory; playful-tension model; toy design; unhandleability

Introduction

THE CONSIDERABLE CHALLENGES of successfully integrating general theory into design practice are relatively well documented (Stolterman 2008; Goodman et al. 2011). The concern that theory lacks the ability to inform design practice currently haunts discussions in the field of game studies (Miltiadis 2023; Perez 2023). Regarding the discipline of play design specifically, Skovbjerg and her associates (Skovbjerg et al. 2022) have recently published a meta-analysis of papers about play design revealing that general play theory largely consists of predesign justifications for the decision to work on certain projects or postdesign critiques of why projects were successful or not. The meta-analysis finds, however, that the instances in which theory has played an active part in the actual play design practice by helping inform design decisions are very rare, suggest-

ing the relevance of discussing general play theory in terms of accessibility and applicability to play design practice.

Based on my reading of a selection of foundational play theory texts, I propose to address this issue by introducing the playful-tension model as a metatheoretical concept intended to establish a more immediate connection between general play theory and the practice of play design. Here I take the term “play design” to mean the professional practice of making playthings (Fink 2016; Sicart 2022) whether it be toys, games, or playgrounds, that intends to make a particular type of play experience available to the player (Gudiksen and Skovbjerg 2020).

Thus the aim of this article is twofold. First, I plan to offer a theoretical contribution to the understanding and articulation of play design as a discipline, one that carries implications for the practice of play design by providing a particular perspective on the theoretical mechanisms underlying the play experiences the designing addresses. Second, I hope to activate the theoretical contributions of play studies to help inform the practice of play design to a greater extent than is currently the case.

This means that the playful-tension model does not aim to provide a more detailed understanding of the particular topic of each of the theoretical texts about play that informs it. Rather, the playful-tension model seeks to formulate a single concept of play that is accountable across the selected texts while being both applicable and relevant beyond their individual focuses, which would allow play design practitioners to appropriate the concept for any type of plaything.

Because the disconnect between general theory and design practice extends beyond play design, several design researchers have advocated the development of intermediate-level knowledge to address such gaps (Höök and Löwgren 2012; Stolterman and Wiberg 2010; Dalsgaard and Dindler 2014). Consequently, the premise underlying the argument for the development of intermediate-level knowledge holds that design practitioners should be able to contribute to and benefit from a theory relating to their given domain of design. Therefore, design researchers should create theoretical concepts that inhabit the middle ground between general theory and design practice, concepts the value of which exceeds the single instance of design but remains closely tied and relevant to the practice of design.

Informed by this need for intermediate-level knowledge, it appears reasonable to begin hypothesizing why a general theory might be ill-equipped for informing a given design practice. With regards to the problematic relation

between general play theory and the practice of play design, there exist some issues that especially need addressing.

If play designers are looking to play theory to understand play better, the immediate challenge becomes that play has proven to be a notoriously elusive phenomenon. While we all recognize play when we meet it in daily life, it has continued to escape a formal definition (Sutton-Smith 1997; Eberle 2014; Sicart 2014; Henricks 2015). Thus Sutton-Smith famously declared play to be ambiguous in his seminal work aptly named *The Ambiguity of Play*. This is a fundamental problem since knowing what play is seems inherently important to the practice of play design. More specifically it follows that play designers must know the conditions on which play relies if they are to create playthings that afford such conditions.

Looking to the academic field of play studies, no simple answers exist as to what play requires to flourish. The ambiguity of play has opened the phenomenon to countless interpretations from several academic disciplines, making play studies a diverse and somewhat inconsistent body of knowledge with many different ontological, epistemological, and ideological positions (Smith 1997, 6–7). This in turn makes the foundational questions underlying the practice of play design a complicated matter because the field of play studies has produced so many different expressions of play—each emphasizing different aspects and using its own specific terminology and methodology. This, coupled with the relatively long history of play as an object for academic interest, creates a situation in which theoretically curious play designers find themselves dropping into a conversation that has been going on for centuries and carried out in several foreign languages. Picking up some useful knowledge from this bewildering conversation and bringing it into the practice of play design in a productive manner is no trivial matter.

In addition to the highly eclectic character of the field of play studies, another reason play design practitioners may find that general play theory proves less than useful for generative purposes concerns its disregard for the actual design of playthings. Reviewing works that attempt to unify the multidisciplinary efforts on play into a cohesive field of play studies, such as the aforementioned *The Ambiguity of Play*, as well as *Dionysus Reborn* (Spurius 1989), *Tekster om Leg* (Karoff and Jessen 2014), and *The Handbook of the Study of Play* (Johnson et al. 2015), I find it striking that, from the perspective of play design, little to no attention has been paid to the affordance of play via the design of playthings. Rather, these works suggest that the field of play studies is thoroughly concerned

with play after the fact—at least, as it exists and can be observed. The design of playthings, however, has largely been ignored or taken for granted and, in the rare case in which playthings are considered, it is typically for its social or cultural function rather than its explicit function in relation to its role in shaping the play experience itself. This places a considerable burden on the play design practitioner to translate the theoretical knowledge of play into a theoretical knowledge of play design.

On these grounds, I argue that general play theory as appreciated in relation to the practice of play design suffers from being, first, exhaustive—meaning that the considerable volume of knowledge available makes it difficult to locate the knowledge that is relevant to play design specifically; second, inconsistent—meaning that the ideological, terminological, methodological, and epistemological variance within the field of play studies produces contradictions and that any agreements across academic disciplines may be difficult to recognize; and third, perplexing—meaning that the academic disciplines that constitute the field of play studies are largely indifferent to the practice of play design and are writing in a language and according to paradigms and assumptions likely foreign to the play design practitioner.

In response to this critique of play studies from the perspective of the practice of play design, I attempt to synthesize a broad selection of general play theory as represented by nine foundational texts. From this, I formulate a new metatheoretical model of play intended to function as an instance of intermediate-level knowledge that connects general play theory and the practice of play design. Finally, I apply the model to three classic playthings to demonstrate its theoretical and practical fitness.

A Designerly Way of Reading

My theory development follows the principle of synthesis (Hart 1998). With the goal of addressing the exhaustive, inconsistent, and perplexing nature of general play theory, I selected texts I then synthesized into an essence on which play relies. With reference to Cross's (1982) notion of a "designerly way of knowing" in which designers rely on an epistemology of making, this synthesis of the texts might be thought of as a designerly way of reading. This is to say, it employs a pragmatic approach that considers the text as a source of materials, picking from it the concepts needed for creating something new (Biesta and Burbules 2003).

AUTHOR	TEXT	YEAR OF PUBLICATION	DISCIPLINE
Schiller	<i>Over the Aesthetic Education of Man</i>	1793	Philosophy
Nietzsche	<i>The Birth of Tragedy</i>	1872	Philosophy
Huizinga	<i>Homo Ludens</i>	1938	Sociology
Piaget	<i>Play, Dreams and Imitation</i>	1951	Psychology
Bateson	<i>A Theory of Play and Fantasy</i>	1955	Anthropology/Semiotics
Fink	<i>The Oasis of Happiness: Toward an Ontology of Play</i>	1957	Philosophy
Caillois	<i>Man, Play and Games</i>	1961	Sociology
Csikszentmihalyi	<i>Beyond Boredom and Anxiety: The Experience of Play in Work and Games</i>	1975	Psychology
Gadamer	<i>Truth and Method</i>	1975	Philosophy

Figure 1. Literary foundation for play theory development

My selection of texts was informed by the works I mentioned previously that aim to outline the field of play studies: *Dionysus Reborn*, *The Ambiguity of Play*, *Tekster om Leg*, and *The Handbook of the Study of Play*. These works ascribe a particular importance to the texts I selected (albeit to some more than to others) and commonly referenced across the multidisciplinary field of play studies because they arguably have come to enjoy a canonical status as the protoliterature on which new research can be built. Thus, I selected the texts precisely to formulate a concept of play design accountable to play theory at a general level.

I list the selection of texts included in this study in figure 1.

Given the scope of this study, my current selection of texts remains limited. I have prioritized classic texts ubiquitous in play studies, but of course there are many other relevant texts to include in future iterations of the playful-tension model.

A Synthetizing of General Play Theory

For the purpose of synthesizing my selected texts into an essence of play, I find one particular concept of play present in all of them—the understanding of play as a union of opposites. For the scope of this article, I offer the following as an

overview of the findings of my textual analysis. For a more detailed analysis of each text see my dissertation, “Designing for Playful Tension” (Rahbek 2021).

The concept of play as a union of opposites appears first in 1793 in Schiller’s *Over the Aesthetic Education of Man* (1985), in which he argues that the “play drive” mediates and enables a union of the “material drive” and the “formal drive,” representing respectively our biological needs and urges and our rational and moral thought. This introduces the idea of play as a paradox, ascribing to it the ability of making opposites coexist.

In *The Birth of Tragedy*, Nietzsche (1910) built on Schiller’s work arguing that art relies on the struggle between apollonian structure and dionysian chaos. Play studies has widely adopted this assertion to apply to play as well (Spariosu 1989; Karoff and Jessen 2014; Sicart 2014). As such, it adds to Schiller’s notion that play not only enables a union of opposites but also relies on such a union.

Like Nietzsche, Huizinga also offers a paradoxical description of play in *Homo Ludens* (1949), emphasizing that play demands both freedom and structure, that it is both about uncertainty and resolve, and that it is inconsequential but must be taken seriously. Whereas Schiller considers the union of opposites a harmonious goal and Nietzsche sees it as a violent eternal struggle, Huizinga argues that it is a volatile state suggesting that the play spirit is always in danger of collapsing.

Piaget’s understanding of play, as expressed in *Play, Dreams, and Imitation* (1951), is the only text I selected that opposes the understanding of play as a union of opposites. Piaget’s (1952) general theory of intelligence does in fact revolve around a union of opposites as an interaction between the accumulative process of reaffirming the known and the accommodative process of adapting to the unknown. But in *Play, Dreams, and Imitation*, Piaget presented an understanding of play as having to do only with cementing already established structures of understanding and not about adapting to novel situations. This has since inspired much critique within play studies, most notably by Sutton-Smith (1966), who argued that play, in fact, is as much about the unknown as it is about the known. Piaget failed to recognize this because he did not consider play in all of its forms but merely as an act of imitation and reenactment. By including this critique in the analysis, I argue play corresponds to Piaget’s concept of the dynamics between assimilation of the known and accommodation of the unknown.

Both Bateson (1972) and Fink (2016) describe play as a paradoxical union of the real and the imaginary in *A Theory of Play and Fantasy* and *The Oasis of*

Happiness: Towards an Ontology of Play respectively. Bateson argues that the communicative practices between players shows their behaviors and actions to be both real and imaginary, and Fink holds that playthings are experienced on one hand as real-world objects but on the other as fantastical things embodying additional imaginary properties within the play world.

In *Man, Play, and Games*, Caillois (1961) initially presents a more unambiguous view of play when he introduces his four categories of play: “agon” (competition), “alea” (chance), “mimicry” (simulation) and “ilinx” (vertigo). These categories of play further relate to a general continuum ranging from “paidia,” representing free play to “ludus,” representing structured play. This reads like a system of classification that promotes an understanding of play as meant to be categorized as one thing or the other rather than as a paradoxical union of opposites. However, as Caillois develops his argument, he acknowledges that play will, in fact, often display qualities of opposite categories such as the combination of the active and creative agon with the passive and destructive alea or the rules of agon with the freedom of mimicry. The categories of play are, in his own words, both contradictory and complementary, opposed and united. Thus, Caillois comes to describe play as a union of opposites even if his famous second chapter of *Man, Play, and Games* might initially suggest otherwise.

In *Beyond Boredom and Anxiety*, Csikszentmihalyi (1975) presents his theory of “flow,” which is closely associated with the pleasurable and engaging qualities of play experiences. The flow theory proposes that a zone of optimal experience exists in between that which is too difficult and that which is too easy. The text directly extends his previous work on engagement in games (Csikszentmihalyi and Bennett 1971), which centers engagement on the relation between the ability of the player and the challenge and resources posed by the game. Much like Huizinga’s notion of play as a volatile state, the concept of flow does not argue that the optimal experience achieves some specific magical sweet spot between ability and difficulty. Rather, it conceptualizes flow as a zone created by the union of opposites in which it eases toward boredom as problems become less challenging and builds towards anxiety as the challenge grows in difficulty. This suggests that play has a point at which the union of opposites break if one overpowers the other. But up until this point, there remains room for some flexibility and dynamics between the opposites.

In *Truth and Method*, Gadamer (2006) discusses the nature of play in relation to art. His description of play echoes Nietzsche’s concept of a tension between the apollonian and the dionysian when Gadamer argues that play con-

TEXT	UNION OF OPPOSITES	QUOTE
Schiller <i>Over the Aesthetic Education of Man</i> (1793)	Formal - Material	<i>"There shall be a communion between the formal instinct and the material instinct, i.e., a play instinct, because only the unity of reality with the form, of contingency with necessity, of passivity with freedom completes the conception of humanity"</i>
Nietzsche <i>The Birth of Tragedy</i> (1872)	Apollonian - Dionysian	<i>"... the intricate relation of the Apollonian and the Dionysian in tragedy must really be symbolised by a fraternal union of the two deities: Dionysus speaks the language of Apollo; Apollo, however, finally speaks the language of Dionysus; and so the highest goal of tragedy and of art in general is attained"</i>
Huizinga <i>Homo Ludens</i> (1938)	Order - Freedom Resolve - Uncertainty Seriousness - Frivolity	<i>"Here, then, we have the first main characteristic of play: that it is free, is in fact freedom [...] another, very positive feature of play: it creates order, is order. Into an imperfect world and into the confusion of life it brings a temporary, a limited perfection. Play demands order absolute and supreme"</i> <i>"The contrast between play and seriousness is always fluid. The inferiority of play is continually being offset by the corresponding superiority of its seriousness. Play turns to seriousness and seriousness to play"</i>
Piaget <i>Play, Dreams and Imitation</i> (1951) <i>The Origins of Intelligence in Children</i> (1952)	Known - Unknown Assimilation - Accommodation	<i>"... equilibrium between the universe and the body itself, an equilibrium which consists in an assimilation of the universe to the organism as much as in an accommodation of the latter to the former"</i>
Bateson <i>A Theory of Play and Fantasy</i> (1955)	Actual - Fantastical	<i>"Paradox is doubly present in the signals which are exchanged within the context of play, fantasy, threat, etc. Not only does the playful nip not denote what would be denoted by the bite for which it stands, but, in addition, the bite itself is fictional"</i>
Fink <i>The Oasis of Happiness: Towards an Ontology of Play</i> (1957)	Actual - Fantastical	<i>"The plaything's character of being a plaything, that is, its essence, lies in its magical character: it is a thing within simple actuality and at the same time has another, mysterious 'reality'"</i> <i>"It exists in two spheres—but not from forgetfulness or from a lack of concentration. This doubling belongs to the essence of playing"</i>
Caillouis <i>Man, Play and Games</i> (1961)	Structure - Freedom Active/Creative - Passive/Destructive	<i>"... in card games, winning sanctions a superiority composed of the cards dealt the player plus his knowledge. Alea [games of chance] and agon [games of skill] are therefore contradictory but complementary. They are opposed in permanent conflict, but united in a basic alliance"</i>
Csikszentmihalyi <i>Beyond boredom and anxiety: the experience of play in work and games</i> (1975)	Boredom - Anxiety Easy - Difficult	<i>"Poised between boredom and worry, the autotelic experience is one of complete involvement of the actor with his activity. The activity presents constant challenges"</i> <i>"Flow is experienced when people perceive opportunities for action as being evenly matched by their capabilities"</i>
Gadamer <i>Truth and Method</i> (1975)	Playing - Being played	<i>"... a general characteristic of the nature of play that is reflected in playing: all playing is a being-played. The attraction of a game, the fascination it exerts, consists precisely in the fact that the game masters the players"</i>

Figure 2. Play expressed as a union of opposites

cerns both playing and being played. Thus, play centers on a union of opposites in which players exert their wills and project their acts onto play but simultaneously submit themselves to the structure of play. Gadamer argues that the play spirit relies on this to-and-fro movement between this subject-object position of the player both acting and submitting. Figure 2 shows examples of each text's expression of play as a union of opposites.

As illustrated in figure 2, the selected texts can be aligned around the notion of play as a paradoxical phenomenon, characterized by the coexistence of seemingly contradictory elements. Whereas each scholar offers a unique interpretation of this paradox, highlighting different aspects of the union of opposites appears to create a general point of consensus despite the eclectic selection of texts from different academic fields and years of publication.

Modeling a Play Design Theory

Consistently identifying play as a union of opposites for the selected texts makes possible a concept of play design that emphasizes a union of opposites as a primary condition for play. Thus a primary pursuit of play design practitioners becomes making playthings that facilitate this union.

The analysis suggests play to be a volatile state that relies on a certain playful tension between opposites. Although the texts are concerned with different types of opposites, it becomes apparent that they have a common root if we look at the types of unions of opposites. In figure 2, the expressions on the left-hand side of the union of opposites (formal, apollonian, order, resolve, seriousness, the known, assimilation, the actual, structure, active, creative, the easy, playing) all point to some experience of being in control, whereas the expressions on the right-hand side (material, dionysian, freedom, uncertainty, frivolity, the unknown, accommodation, the imaginary, passive, destructive, the difficult, being played) all point to some experience of not having control.

To capture these diverse experiences of being in control or of not having control sufficiently, I favor the Danish word *håndterbar* and its antonym *uhåndterbar*. The dictionary suggests the English translation might be “manageable,” but such a translation does not fully capture its meaning in this case. The first part of the word *hånd* means “hand” in English, and the last part of the word *bar* points to the grammatical practice in English of adding the suffix “-able” to a verb to form an adjective. Therefore, the direct translation of *håndterbar* would

be “handleable,” meaning that which can be handled. And similarly, *uhåndterbar* would be “unhandleable.” Much like the English use of the word “handle,” this translation covers both the literal ability to handle an object in the physical sense of manipulating or steering it and the cognitive ability to deal with a problem or to cope with it emotionally. Essentially, this handling, controlling, managing, dealing with, and coping with in a single word used as an adjective describes, for our present purpose, the play experience from the perspective of the player.

By synthesizing the selection of general play theory into one essential condition for play experiences, we can conceptualize the practice of play design as an effort to create playthings that afford a playful tension between that which is handleable and that which is unhandleable. To operationalize this concept further, I express it as the playful-tension model shown in figure 3.

The playful-tension model proposes that play experiences exist in the overlap between the handleable and the unhandleable. While there may be room for the experience to fluctuate, becoming at times more unhandleable and at times more handleable, there comes a point at which the playful tension breaks and the play experience ends. If the experience becomes too handleable, it breaks as

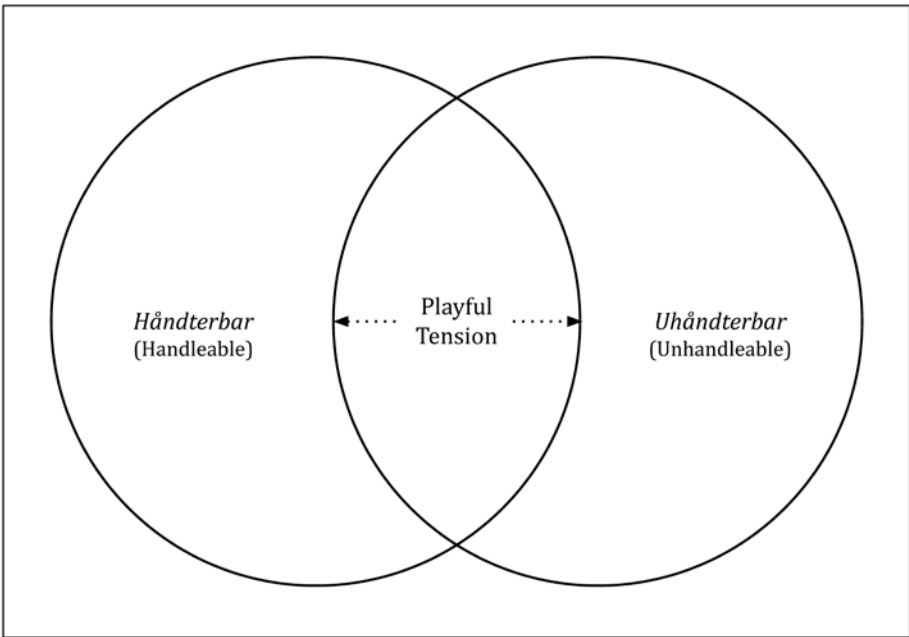


Figure 3. Playful-tension model

things turn trivial and dull; if it becomes too unhandleable it breaks as things turn chaotic, meaningless, or dangerous. These breaking points are naturally highly subjective because they can only be understood in relation to the player who is having the play experience, and they are relative as well to the type of play experience. That is to say, play collapses if the player either gets too much of a handle on things or, conversely, if matters get too out of hand, whether physically, emotionally, cognitively, or creatively.

Consider the example of tree climbing. One player may need to climb very high for the experience to become unhandleable—in this case thrilling and risky enough to be a play experience. Other players might not find it playful were they to do the same. Rather they could find it to be too unhandleable to climb that high, and they would become scared.

However, in a creative narrative type of play the tables might be turned. Maybe here the second group of players could have fun for hours on end playing with a few rocks and sticks, pretending to be characters on a marvelous adventure. They engage in the unhandleable freedom and open-endedness of improvising a story without much structure to lean on. They achieve playful tension by bringing all the structure and meaning to the experience on their own. The first type of player might find the same situation unhandleable because its lack of structure and direction makes it meaningless. Compared to the sticks and stones, the value of designed playthings such as a Barbie doll, a Han Solo action figure, or a Pikachu teddy bear lies in their references to preestablished narrative structures that make the narrative play experience more handleable because it scaffolds improvisation, allowing some narrative directions to appear more apparent and relevant.

Let me restate my goal for the playful-tension model—to make available to play design practitioners a single metatheory that remains true to the individual texts at its theoretical foundation while transcending the specific focus of each text to form a model of play generally applicable across all types of play.

Arguably, each text provides a primordial type of playful tension, as shown in figure 2. Individually, these archetypical playful tensions are more relevant to understanding specific types of play and playthings. Csikszentmihalyi's concept of flow, for instance, provides a detailed understanding of enjoyable challenges, which makes it applicable to games but does little to provide insight into the whimsical, wonderful, and fantastical aspect of play (Legaard 2023). By formulating a metaconcept, the playful-tension model allows play design practitioners to appreciate and differentiate between various types of unhandledable

qualities, whether it be the difficulty of a cognitive problem on a chessboard, the awkwardness of looking stupid in a social situation, or the strange fluidity of squeezing kinetic sand.

As the preliminary examples show, different play experiences may be different exactly because they emphasize different aspects of playful tension by involving playthings that provide different ways for matters to get out of hand and for players to try to get a handle on things.

The playful-tension model suggests that a defining purpose of designed playthings aids players precisely to achieve and maintain playful tension, affording a play experience when they can strive to handle an otherwise intentionally unhandleable situation. This aligns with Nguyen's (2019) recent argument for games as an art of agency in which players take on voluntary difficulties to enjoy an aesthetic strive for agency.

I now discuss different principal aspects of playful tension that present themselves when appreciating playthings as mediators of tension between the handleable and the unhandleable.

Application of the Playful-Tension Model

The practical purpose of the playful-tension model is to provide play designers with a particular perspective of designed playthings as mediators of playful tension. It thus provides a language to question what types of playful tension are being designed for as well as for discussing the outcome of a test of play in which the quality of a prototype gets tested.

To demonstrate how the playful-tension model provides an avenue for play designers to reflect and discuss the relation between the qualities of a designed plaything and the play experience, I briefly use it to compare a few well-known examples of playthings. This use intends to show that the playful-tension model not only helps formally describe a designed plaything but also helps identify principal similarities and differences between different playthings and understand how this shapes player experiences.

I should note that, although the primary purpose of the playful-tension model is to aid play designers in reflecting on and discussing the design and development of new playthings, the following application uses well-known examples to show the type of reflections that the model affords in a context with which the reader is familiar.

Case 1: The Yo-Yo

Outside of the wizardry of highly skilled yo-yo players, the yo-yo enables a simple yet attractive play experience. A player attaches the string of the yo-yo to a finger and continually throws the yo-yo, sending it spinning down along the string before pulling it back up the string to the hand. This creates a cyclical process of dropping and retrieving the spinning toy.

Viewing the yo-yo through the lens of the playful-tension model, we can argue it creates a playful tension between, on one hand, our rudimentary layman's understanding of the laws of physics (if we drop something, it falls to the ground) and, on the other hand, the yo-yo's ability to travel back up the string. It follows, of course, the rules of physics by allowing for potential energy to be converted to kinetic energy and back by way of the principle of inertia of motion. But to the player, this behavior presents an unhandleable quality, because it appears peculiar and almost magical, affording a sense of wonder and sparking curiosity. As with any magic, there is a trick to it—in this case, how to pull at the string at the right moment to propel the yo-yo to come back up. An initial bit of unhandleability exists in exploring how to perform this basic yo-yo play, but as a player grows familiar with the yo-yo, some of the initial strangeness disappears and becomes more handleable. That is, the play experience begins to feel more repetitive, predictable, and uneventful once the player has the yo-yo going up and down without much trouble.

However, as the player builds mastery by resolving this initial unhandleability, new opportunities for increasing the unhandleability reveal themselves. When players learn to throw the yo-yo so that it keeps spinning at the end of the fully extended string rather than retracting immediately (what they call sleeping the yo-yo), they create a small window of opportunity in which they can manipulate the string to perform different tricks before retracting the yo-yo to their hands. This invites new levels of unhandleability because it allows the players to strive for more and more creative agency over a volatile situation by attempting increasingly difficult and imaginative performances while trying not to fumble the yo-yo and end its spinning.

The concept of playful tension provides a perspective for appreciating the yo-yo's reliance on different types of tensions. In this view, the playful tension between our (handleable) prevalent mental models of the physical world and, conversely, the (unhandleable) peculiar behavior of the yo-yo serves to build curiosity and initiate playful exploration. Playing with the yo-yo thus depends on a tension between the mastery of a player and the volatility of a situation that

allows a continuous striving for an agency in which a player attempts to bend the rules of physics to a creative will. Indeed, the yo-yo enables a player to explore the unique qualities and possibilities of the physical world and build a sense of mastery of being in the world. In play the yo-yo becomes a handle that lets a player interact with the rules of physics in a unique way that becomes playful exactly because of the unhandleable qualities of the volatile situation. These qualities make the yo-yo a slippery handle, metaphorically speaking, for the playful tension between feeling both in control and out of control that makes a player strive for the creative agency to challenge the limitations of the physical world.

The concept of playful tension, then, makes it apparent that the yo-yo might share some of its primary qualities as a plaything with, for example, the skateboard, even if we would not otherwise immediately associate these two playthings.

Case 2: Hide and Seek

Hide and seek is a widely recognized children's game that can be played both indoors and out. The game involves two or more players, one of whom is designated as the seeker, while others take on the role of hiders. The game begins when a seeker, eyes closed, counts to an agreed-upon number, allowing the hiders time to find a suitable hiding spot. Having concluded the counting, the seeker attempts to locate the hiders. The round ends when all hiders have been found, with variations determining who becomes the next seeker—sometimes the first player found, at other times the last remaining hider. In some versions, hiders who are found join the seeker's team, actively helping to locate the remaining players.

Hide and seek is asymmetrical, offering distinct play experiences for the seeker and the hiders. For seekers, the game is relatively straightforward: they must search for the hidden players. However, the role of seeker extends beyond simple searching—it is instrumental in creating playful tension for the hiders by simulating the feeling of being hunted. This role-playing dynamic introduces a controlled yet unpredictable element that makes the game engaging.

For the hiders, the game unfolds as an interplay between handleability and unhandleability. The initial challenge consists of finding a good hiding spot before a seeker finishes counting. The countdown itself is a source of handleability—it provides structure and predictability—yet it also introduces growing unhandleable pressure as time runs out. This tension becomes heightened in repeated rounds played in the same environment, as hiders must continuously

find new, creative hiding spots, knowing that previously used locations are more likely to be checked first. This process transforms a familiar space (such as the player's own home) into a dynamic play scape, in which players must reimagine their environment based on what has worked before. The well-known space becomes both handleable (as a physical setting) and unhandleable (as a strategic challenge requiring adaptation).

Another central source of playful tension in hide and seek lies in the emotional experience of being hunted. The thrill of hiding in silence while a seeker searches nearby evokes a deliberate mix of safety and simulated danger. On one hand, hidere know they are not truly in danger (handleable); on the other, the excitement of staying undetected introduces an unhandleable what-if scenario—what if they are discovered at the last second? This tension mimics real-world survival instincts but in a benign and playful context.

A seeker, whether consciously or not, can amplify this unhandleability through dramatic role play. A casual “Here I come!” may create a lighthearted atmosphere, while a slow, ominous “HEEEERE I COOOOOME!”—reminiscent of horror films—can heighten suspense and emotional engagement. The moments the seeker comes near—say, when hidere sit motionless in a closet, holding their breath, peeking through a crack in the door as a light flicks on—are moments of heightened unhandleability. The lack of control in such moments, combined with the anticipation of discovery, makes the game thrilling. If a seeker suddenly lunges under the bed or yanks open the closet doors, the playful tension reaches its peak—only to be immediately replaced by the handleability of relief and laughter when hidere are found.

In the playful-tension model, hide and seek's evident appeal cannot be explained merely through skill versus challenge. The game is not about progressive mastery, nor does it depend on optimizing difficulty to maintain engagement. Instead, hide and seek thrives on emotional unhandleability—the balance between safety and suspense, control and helplessness, anticipation and relief.

Although hide and seek's play design appears minimal, consisting of only a few simple rules, its underlying tensions have been widely adopted into commercial playthings. The game's core dynamics—stealth, deception, and near discovery—are central to entire genres of stealth-based video games such as *Metal Gear Solid* and *Among Us*, interactive hide-and-seek toys, and even social deduction games such as *Werewolf* and *Mafia*. These adaptations illustrate that, even without a physical plaything, well-designed constraints can shape great play experiences by fostering a particular type of playful tension.

Case 3: The Whoopee Cushion

The whoopee cushion is a rubber bladder that can be inflated by blowing air into the bladder through a small opening. It is then typically placed on a chair, perhaps hidden under a pillow, and once an unsuspecting victim sits on it, the air gets expelled, producing a fart-like sound to surprising and amusing effect.

The whoopee cushion differs from both the yo-yo and hide and seek in that it relies primarily on a social type of playful tension between behaving and misbehaving. The unhandleable quality consists of inviting the player to plot against the victim of the prank with the intention to startle and embarrass them. Outside play, such behavior could damage our social relations, but the whoopee cushion combines the transgressive with the benign and humorous. The play experience lets the player violate social etiquette and break the conformity individuals otherwise uphold to preserve their social relations. It creates an uncertainty and excitement in which the player eagerly awaits to see whether the victim will fall prey to the prank and, more importantly, how they will react. Thus, it relies on the playful tension between the unhandleable quality of jeopardizing the social situation and the handleable quality of doing so in a way that is, in fact, not malicious and resolves in comic relief rather than conflict and ill will.

Although young children may find the unhandleability of mischief and taboo that the whoopee cushion provides sufficient for achieving a playful tension and leave them bubbling with excitement, most adults would likely find that there is too little social risk for it to be interesting. However, a party game, such as *Never Have I Ever*, that relies on a similar social playful tension between saving face and losing face allows an interesting dynamic in which the players themselves decide the level of social risk.

In this game players take turns to formulate a (supposedly) true statement about themselves beginning with the words “never have I ever.” If one player says: “Never have I ever run a red light,” any other player who has at some point run a red light must confess and receive a punishment—for example, of having to take a shot of alcohol. The game allows players to be creative in forcing the other players to reveal some embarrassing secret, but they have to maintain a level of playful tension in which the statements provide enough unhandleability for players to risk some embarrassment but not so much that players will lie or quit the game to escape the social repercussions of revealing their secrets. To that effect the whoopee cushion and *Never Have I Ever* are similar because they both rely on a social type of playful tension between constructive and destructive social behavior.

As the examples show, whether the play experience is creative, emotional, social, physical, cognitive, or some combination of all of these, a plaything must help the players achieve a playful tension between some handleable and unhandleable qualities. Maintaining the emphasis on the hand, the concept of playful tension stresses that playthings make the play experience handleable to the player by providing handles, whether literally or metaphorically. Conversely playthings must also provide unhandleability so that the player cannot fully get hold of the handle and tame the situation. That is to say, there must be a playful tension that causes a player to grasp at the handle striving for agency in a purposefully indomitable situation.

As I have noted, the playful-tension model functions as what Nelson and Stolterman (2003) refer to as a “design schemata,” meaning that is not intended to give a formal definition of play. Rather its purpose is to provide a particular perspective on the practice of designing playthings. In response to the challenges of reconciling general play theory and the practice of play design outlined in the introduction, it serves to unify and idealize the relationship between the player, the plaything, and the play activity for the purpose of guiding the designer’s reflection, judgment, and decision making. Thus, I propose it as a tool for thinking about the design of playthings and a prism that focuses the designer’s attention on certain aspects of the design. In doing so, it asks that play designers interrogate their playthings concerning how their constituents may contribute to achieving and maintaining some types of playful tension. This advocates for a practice of play design that questions how the design of each element of a plaything makes the intended play experience more handleable and more unhandleable.

Placing Playful Tension

Having demonstrated the applicability of the playful-tension model and proposed it as a practical lens for reflecting on designed playthings, I think it relevant to discuss how it contests other prevalent perspectives on play.

First and foremost comes Henricks’s (2009) discussion of orderly and disorderly play, which relates most directly to my interest in the paradox of play. Although there may appear to be many rhetorical similarities between the concept of playful tension and Henricks’s text, it is important to recognize a fundamental difference between the two. Henricks is concerned with the ques-

tion of whether a player is in control or without control in relation to the play experience, but the concept of playful tension also proposes the coexistence of the handleable and the unhandleable qualities as a foundational prerequisite for play. Henricks separates the two to argue for the function of orderly play forms on one hand and the function of disorderly play forms on the other. Though he recognizes and refers to the paradoxical nature of play, he ultimately does away with it by applying a macro perspective in which he considers one type of play experience orderly and another disorderly. Despite apparent similarities, this is actually the opposite of the playful-tension model, which insists that the paradoxical nature of play must be considered on a micro level too, that any play experience itself relies on both its handleable and unhandleable qualities to support a playful tension.

Thus the playful-tension model contrasts attempts to categorize play in terms of structure and freedom. This is the case for more discrete categorizations like Henricks's, but also for approaches that seek to categorize and contrast play experiences by placing them on some continuum between opposites. A recent example would be the efforts of Zosh and her associates (Zosh et al. 2018) to redefine play as a spectrum. Although they also aim to better connect general play theory and the field of practice, however didactical, they do so by arguing that we capture the true essence of play better by understanding it as a spectrum ranging from free play to games, which more or less echoes the distinction made by Caillois between *paidia* and *ludus* that I have discussed. Thus, the perspective of the playful-tension model would rather suggest that both free play (which for the same reasons becomes a problematic term) and games are attempts at staging a particular type of structured freedom, a freedom that becomes attractive exactly because of the playful tension between the unhandleable quality of freedom and the handleable quality of structures and goals that makes the experiences meaningful.

The works of Henricks and Zosh and her colleagues are but two examples out of numerous approaches that stand in contrast to the concept of playful tension by applying a categorizing thinking of either-or, in which cases play is either orderly or disorderly, more or less structured or free. All this indicates that, while the concept of playful tension is the result of synthesizing a selection of foundational play theory to reconcile the disconnect between play theory and play design practice, it may not be directly compatible with theoretical frameworks that seek some rational resolve to the paradox of play.

Conclusion

In the ever-evolving landscape of play studies, the marriage of theoretical insights and practical application remains a perennial aspiration. I have ventured into the heart of this juncture, addressing the pronounced disconnect between general play theory and the practice of play design. Building upon the challenges articulated by Skovbjerg and her associates (Skovbjerg et al. 2022) and the methodological argument for developing intermediate-level knowledge (Höök and Löwgren 2012; Stolterman and Wiberg 2010; Dalsgaard and Dindler 2014), I have introduced the playful-tension model as a new theoretical concept poised to bridge this theoretical-practical gap within the field of play design.

I have attempted to build an argument for the significance of the playful-tension model because of its potential to reshape the dialogue between theory and practice within the specialized domain of play design. By accentuating the symbiotic dance of handleability and unhandleability, the model seeks to provide a simple and inviting yet nuanced lens for play designers to dissect and imbue their creations with deliberate intent.

Applying the playful-tension model to three different playthings has demonstrated it not only to be a novel theoretical proposal that challenges prevalent contemporary understandings of play but also a practical framework that can enhance the efficacy and resonance of play design. Its application promises not only to enrich the field's theoretical foundations but also to inspire a more deliberate, thoughtful, and engaging play design practice. I have limited the application of the playful-tension model to a few simple cases to introduce it to the play design community. Now I would call for further application by play designers and researchers to explore and test its practical and analytical value.

By design the synthesis of the classic play theories comes at the cost of losing some of the nuance of each. However, because the goal of the playful-tension model is precisely to develop a middle-ground theory to bridge the practice of play design and general play theory, those nuances are sacrificed in favor of the practical appeal of a simplicity that allows a more immediate application of the theory. As an analogy, the Sony Walkman, the Apple iPod, or a smartphone with a music streaming service were never intended to offer a more nuanced music listening experience than a big and complex HiFi system but simply to make the essence of listening to music more readily available. Similarly, the playful-tension theory's contribution does not lie in providing a more nuanced understanding of the specific aspects of play with which each of the classical play theories are

concerned. The contribution lies in its effort to concentrate this knowledge into an essence available to play design practitioners on the go—not for an extensive analysis after the fact but informing the thinking and discussions during the design process. Compared to the texts that have informed it, the playful-tension model proposes a new perspective that moves the theoretical focus from the nature of play to the concrete qualities of playthings.

Although the playful-tension model aspires to be applicable to playthings in general, I should stress that it is a product of a particular selection of texts and a current reading of them. It follows that this promotes a particular perspective on play and play design, which centers on the notion of tension and paradox, and that other aspects of equal relevance, such as playful aesthetics, are not being appreciated. I call only for the development of more intermediate-level theory for the field of play design and its practitioners.

In the end, the playful-tension model emerges as an opportunity for practicing play design in connection to general play theory while preserving practical finesse. It has the significant potential to propel discussions and reflections in the study of play design, offering a pathway toward a more integrated and holistic approach to the symbiotic relationship between theory and practice.

The study on which this article is based was supported by The LEGO Foundation.

REFERENCES

- Bateson, Gregory. 1972. "A Theory of Play and Fantasy." In *Steps to an Ecology of Mind*, 183–98. Originally published in 1955.
- Biesta, Gert, and Nicholas C. Burbules. 2003. *Pragmatism and Educational Research*.
- Caillouis, Roger. 1961. *Man, Play, and Games*.
- Cross, Nigel. 1982. "Designerly Ways of Knowing." *Design Studies* 3:221–27.
- Csikszentmihalyi, Mihaly. 1975. *Beyond Boredom and Anxiety*.
- Csikszentmihalyi, Mihaly, and Stith Bennett. 1971. "An Exploratory Model of Play." *American Anthropologist* 73:45–58.
- Dalsgaard, Peter, and Christian Dindler. 2014. "Between Theory and Practice: Bridging Concepts in HCI Research." In *CHI '14: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, Toronto, Ontario, April 26–May 1.
- Eberle, Scott G. 2014. "The Elements of Play: Toward a Philosophy and a Definition of Play." *American Journal of Play* 6:214–33.
- Fink, Eugen. 2016. "Oasis of Happiness: Thoughts Toward an Ontology of Play." In *Play as Symbol of the World and Other Writings*. Translated by Ian Alexander Moore and Christopher Turner.

- Gadamer, Hans-Georg. 2006. *Truth and Method*. Translated by Joel Weinsheimer and Donald G. Marshall.
- Goodman, Elizabeth, Erik Stolterman, and Ron Wakkary. 2011. "Understanding Interaction Design Practices." In *CHI '11: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, Vancouver, British Columbia, May 7–12. Doi:10.1145/1978942.1979100.
- Gudiksen, Sune, and Helle Marie Skovbjerg, eds. 2020. *Framing Play Design: A Hands-On Guide for Designers, Learners, and Innovators*.
- Hart, Chris. 1998. *Doing a Literature Review: Releasing the Social Science Research Imagination*.
- Henricks, Thomas S. 2009. "Orderly and Disorderly Play: A Comparison." *American Journal of Play* 2:12–40.
- . 2015. "Play as Experience." *American Journal of Play* 8:18–49.
- Höök, Kristina, and Jonas Löwgren. 2012. "Strong Concepts: Intermediate-Level Knowledge in Interaction Design Research." *ACM Transactions on Computer-Human Interaction (TOCHI)* 23:1–18. doi:10.1145/2362364.2362371.
- Huizinga, Johan. 1949. *Homo Ludens: A Study of the Play-Element in Culture*.
- Johnson, James E., Scott G. Eberle, Thomas S. Henricks, and David Kuschner, eds. 2015. *The Handbook of the Study of Play*.
- Karoff, Helle Skovbjerg, and Carsten Jessen. 2014. *Tekster om leg [Texts on Play]*.
- Legaard, Jesper Falck. 2023. "The Wonder of Play." *International Journal of Play* 12:375–86.
- Miltiadis, Constantinos. 2023. "Other Than Text: Media Used in Game Studies Publications. A Computational Analysis into 20 Years of Publications of the Game Studies Journal, and an Appeal for Research through Design." *Proceedings of DiGRA 2023*. doi:10.5281/zenodo.7944673.
- Nelson, Harold G., and Erik Stolterman. 2012. *The Design Way: Intentional Change in an Unpredictable World*. <http://www.jstor.org/stable/j.ctt5hhcsk>.
- Nguyen, C. Thi. 2019. "Games and the Art of Agency." *The Philosophical Review* 128:423–462.
- Nietzsche, Friedrich. 1910. "The Birth of Tragedy, Or: Hellenism and Pessimism." In *The Complete Works of Friedrich Nietzsche. Volume One*, edited by Dr Oscar Levy. 2nd ed. Originally published in 1872.
- Perez, Enrique. 2023. "Beyond the Old Game Design: A New Design Paradigm in Game Studies through C-K Theory." In *Conference Proceedings of DiGRA 2023 Conference: Limits and Margins of Games Settings*. <https://doi.org/10.26503/dl.v2023i1.1935>.
- Piaget, Jean. 1951. *Play, Dreams, and Imitation in Childhood*. Translated by C. Gattegno and F. M. Hodgson.
- . 1952. *The Origins of Intelligence in Children*. Translated by Margaret Cook. <https://doi.org/10.1037/11494-000>.
- Rahbek, Jess Uhre. "Designing for Playful Tension." PhD diss., Design School Kolding, 2021. <https://www.designskolenkolding.dk/en/phd-projects/designing-for-playful-tension>.

- Schiller, Friedrich. 1985. "Over the Aesthetic Education of Man." In *Friedrich Schiller, Poet of Freedom*, 221–98.
- Sicart, Miguel. 2014. *Play Matters*.
- . 2022. "Playthings." *Games and Culture* 17:140–55.
<https://doi.org/10.1177/15554120211020380>.
- Skovbjerg, Helle Marie, Tilde Bekker, Bernice d'Anjou, Aakash Johry, and Keila Kari Perez Quinones. 2022. "Examining Theory Use in Design Research on Fantasy Play." In *International Journal of Child-Computer Interaction* 32. <https://doi.org/10.1016/j.ijcci.2021.100400>.
- Spariosu, Mihai. 1989. *Dionysus Reborn: Play and the Aesthetic Dimension in Modern Philosophical and Scientific Discourse*.
- Stolterman, Erik. 2008. "The Nature of Design Practice and Implications for Interaction Design Research." *International Journal of Design* 2:55–65.
- Stolterman, Erik, and Mikael Wiberg. 2010. "Concept-Driven Interaction Design Research." *Human-Computer Interaction* 25:95–118.
<https://doi.org/10.1080/07370020903586696>.
- Sutton-Smith, Brian. 1966. "Piaget on Play: A Critique." *Psychological Review* 73:104–10.
<https://doi.org/10.1037/h0022601>.
- . 1997. *The Ambiguity of Play*.
- Zosh, Jennifer M., Kathy Hirsh-Pasek, Emily J. Hopkins, Hanne Jensen, Claire Liu, Dave Neale, S. Lynne Solis, and David Whitebread. 2018. "Accessing the Inaccessible: Redefining Play as a Spectrum." *Frontiers in Psychology* 9:1124. <https://doi.org/10.3389/fpsyg.2018.01124>.