Beyond the Rulebook: An Autoethnographic Journey into the Craft of Game Design

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ABSTRACT

This paper is an entry into the recent discussion (Miltiadis, 2023; Perez, 2023) within game studies about the apparent disconnect between the theory and practice of game design. In response to a call for the field to embrace a research through design methodology to strengthen the dialog between game scholars and designers this paper explores the potential of autoethnography for examining the practice of game design in terms of the ability to reflect on game design from a perspective more immediately relatable to game design practitioners. The paper demonstrates how the autoethnographic method and style of writing may provide new types of productive encounters between the theory and practice of game design.

Keywords

Game Design, Board Games, Autoethnography, Methodology,

INTRODUCTION

"Yes, but how do you know what to do to make a good game?"

This question came from one of my students in a Design for Play master's class at Kolding School of Design, Denmark, after we discussed game mechanics through Miguel Sicart's *Defining Game Mechanics* (Sicart, 2008). It caught me off guard, because I had read this text years ago, back when I was a student of Miguel's at the IT University of Copenhagen. At the time, I appreciated how it advanced the language and understanding of game design, and I still do. But I realized, as I stood there, that the text didn't quite answer the question of: *"Yes, but how?"*

I had spent a considerable amount of time curating readings for my students—texts meant to teach them the craft of game design—but none of them addressed this fundamental, and admittedly naive, question. In that moment, I offered a response along the lines of:

"Well, it is practical to think of game mechanics as tools the player uses to overcome the challenges in the game. If the player's actions aren't fun or at least interesting, the game won't work."

Luckily, the student didn't press further, but that question stayed with me, haunting me for the better part of a year.

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Eventually, I decided that the only way to answer the "how" of game design was to *do* it—create a game and share the reasoning behind my design choices. What follows is an account of my struggles to design a game. Initially, this was just meant for my students, but after reading Constantinos Miltiadis' paper in the 2023 DiGRA proceedings, I reconsidered. Miltiadis argues that game studies have focused largely on games as artifacts, studied empirically, which has led to a discussion of the formal properties of games (Miltiadis, 2023). He draws from Kultima (2015) to highlight a disconnect between game studies and actual game design practice, advocating for a "research through design" methodology (Frayling, 1993; Stappers & Giaccardi, 2017). Miltiadis argues that this approach would serve to bridge theory and practice in game studies. Enrique Perez's paper from the same conference also supports this view, suggesting that "research through design" could push game studies beyond an analytical approach and better integrate the practice of game design (Perez, 2023). Inspired by these calls, I decided to reflect on my game design process through an autoethnographic lens—examining my personal experience of turning a vague idea into a playable game.

Autoethnography, as a methodology, is well-suited for this task because it invites readers into the lived experience of the researcher. It embraces the messiness, doubt, and uncertainty inherent in navigating complex situations (Bochner & Ellis, 2022; Goode, Lumsden & Bradford, 2023). By doing so, it offers a more subjective, and perhaps more relatable, account of game design. My focus is therefore not to examine what a game is, but rather my own experience making a game and the reflection and sensemaking involved in the creative process (Neil, 2023).

I'm aligned with Perez's call to shift from analyzing finished games to exploring the practice of design itself. However, I take a different approach. Perez proposes a structuralist approach to the understanding of the design process in the shape of the C-K Theory (Hatchuel & Benoit, 2003) and while it does appear productive I fear that such frameworks may end up reproducing the same distanced formal description that both Perez and Miltiadis want game studies to depart from. Autoethnography, in contrast, intends to embrace the messy nature of design, offering a more intimate perspective on the subjective decisions involved.

As a product of my own ludologist (Frasca, 2013) upbringing, this methodological shift is also an experiment for me. Through autoethnography, I hope to present a more evocative, personal account of the craft of doing game design—one that leans into the messiness rather than attempting to smooth it over. This is an attempt to explore how autoethnography could help reframe how game studies engage in a productive dialog with the practice of game design.

Since this project originated as a teaching case rather than a formal research study, I have constructed this autoethnographic account retrospectively by revisiting my notes, sketches, paper prototypes, and digital artifacts created throughout the design process. These materials, together with my memory of key sessions, constitute the empirical basis for reflecting on my lived experience of designing the game. I acknowledge that a more structured, pre-planned approach to data collection would possibly have strengthened the study, but the ad hoc circumstances that brought this project into being made that impossible.

LOCKING ONTO THE TARGET

"On the one hand, it [the initial concept] *is informed and takes properties or characteristics from already existing knowledge of the designer or the stakeholders of the project; and on the other hand, points at a desired unknown object, whose characteristics or properties must be defined to complete the design."* (Perez, 2023)

After having decided that I wanted to make a game for teaching purposes. I knew straightaway that I wanted to make some sort of abstract strategic board game. My students, primarily from a traditional design background, often produce games that, at first glance, seem impressive. But once played, the quality of the gameplay often falls short, highlighting a need for teaching focused on how to shape gameplay through the creation of a system of rules (Salen & Zimmerman, 2003). In Jesper Juul's terms, I wanted my students to give as much attention to designing rules as they do to creating the fictional worlds (Juul, 2005). With that goal in mind, I immediately knew I wanted to design a game that would emphasize the rules over the visual aesthetics and narrative. As Chris Crawford argued long before the academic field of game studies emerged: *"You want to concentrate on the guts of the game, the architecture and game mechanics. How do the little gears and levers inside the game operate?"* (Crawford, 1984)

But beyond the rational teaching goal, a less flattering impulse drove my decision—a personal desire to create something beautiful, something I could be proud of. I wanted to tackle the challenge of making a game that didn't rely on a compelling narrative or attractive visuals—a type of pure game design in the vein of traditional board games such as Chess, Go, Backgammon etc. that does not rely on much of a theme to enthrall the player, but rather a form of gameplay where Sid Meier's popular saying that *"a game is a series of interesting choices"* actually rings true (Rollings & Morris, 2004).

Yet, with this ambition came the pressing question of how to innovate the genre of abstract strategic board games enough for my game to appear a relevant addition and a worthwhile undertaking. And so, I felt the burden of the creative maxim of originality—the generative underpinnings of any design practice that demands novelty (Perez, 2023).

Determined to live up to this obligation and avoid a nightmarish student response along the lines of: *"Okay, so you kind of made chess, but worse."* I began thinking about what I might bring to the table (figuratively and literally) that would genuinely set it apart. Following Perez's suggestion, I turned my attention to what could be considered neglected dimensions within the genre (Perez, 2023). After much deliberation, I settled on a unique feature: introducing the modern RPG trope of leveling up game pieces, allowing them to acquire new game mechanics over time (Sicart, 2008; Järvinen, 2008). And for some reason, I also decided that my game needed to include a ball.

"Okay, so you kind of made Bloodbowl, but worse."

In the following I will detail the iterative process of conceptualizing and refining my game with a focus on the designerly way of knowing (Cross, 1982) that was involved in moving from a vague idea to a playable game.

THE SEDUCTIVE CONTOURS OF POTENTIAL

So that was the initial idea: an abstract strategic ball game where pieces level up. And while I was painfully aware how far this idea was from a finished or even playable game it somehow felt as if it already existed, shrouded though, behind a thousand veils, allowing me only to glimpse its vague contours in my mind's eye. Nonetheless I would start picturing two players caught in the mental gymnastics of making clever moves and countermoves, their pieces growing in complexity, building to some crescendo unique to this game.

But it was a blurry vision at best—more of a feeling than a plan. While it helped me narrow down the type of player experience, I was after, it offered little to clarify how the pieces would move, what the upgrades might do, or how the ball would fit into all of it. But even though it felt like hunting a shy and elusive creature that I knew almost nothing about, the vague idea had a magnetic pull—attractive and full of potential which motivated me to begin the process of uncovering the qualities that the game would need to render my flimsy vision a reality.

My first step was simple: how would the game look in action? How would the pieces be shaped to evolve with new mechanics and interact with the ball? Leaning on the inspiration from Chess, I sketched a piece resembling a rook, with rings to represent upgrades and a ball resting on top. It wasn't much, but it pierced the veils a little, offering me a clearer mental picture of the game. Even though I still had no idea about how the pieces would move, what the upgrades might do and what the purpose of carrying the ball around would be, it somehow felt like I was getting significantly closer. I especially liked the idea of having abstract Chess-like wooden pieces rather than the plastic miniatures or cardboard cutouts that tend to populate modern board games. It seemed that it would give more gravitas to the game as a serious intellectual contest and that it would be juxtaposed nicely by the introduction of the modern RPG level-up mechanic that players would likely know from video games.

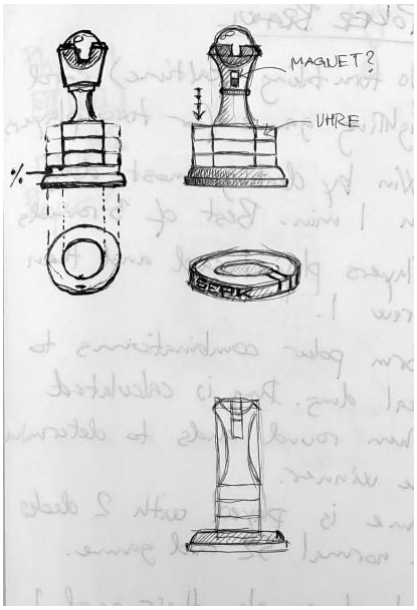

Figure 1: Notebook excerpt showing early concept for game pieces.

The next puzzle was the ball. How would it function within the game? I figured that there would be plenty of complexity in the game on account of the continuous introduction and possible stacking of new upgrades to the pieces. Therefore, I wanted the rules regarding the ball if not simple then at least easily understandable for the players.

In my class I have introduced the concept of *mental tax* as a way for my students to become mindful of the cognitive burden that befalls the players when we add rules to a game. The sentiment is that any rules need to be learned, remembered and administered by the players within a limited budget of cognitive or attention resources (Calleja, 2022). This is especially relevant to analogue games where none of the rules can be automated. In my opinion, one of the most unsatisfying experiences with board games is when one player goes: *"wait a minute, that can't be right."* before breaking up the flow of the game for 15 mins while consulting the rule book only to find out that they have been playing the game wrong for the past 30 mins.

If rules come at a cost, it becomes imperative that any rule somehow outweighs its cost in terms of improving the gameplay. Also, game designers should think about how to lower the cost of their rules by making them easier for players to understand.

It was with this concept of the mental tax in the back of my mind that I was contemplating how to make sure that my players would spend their mental energy on playing the game rather than understanding a complex hierarchy of goals. The decision of having the pieces being upgraded with new abilities meant that I would constantly be throwing new rules at the players. The saving grace I thought might be that the rules would enter the game gradually, letting players familiarize themselves with the rules little by little rather than having to know everything from the beginning. Nevertheless, I didn't want the rules regarding the ball to be too taxing, so I decided to lower the cost by relying on some familiar conventions in applying a footballesque metaphor to the game.

This provided a clear goal—fight for the ball and get it to the opponent's back rank to score. It was simple and effective. The players would immediately understand what they were trying to do, allowing them to focus on the much harder question: how to accomplish it. This decision set off a chain reaction, ripping through layers of uncertainty and pulling the game into sharper focus.

At that moment, the game wasn't just an idea anymore. It was real. I could almost see it in front of me. My notes read: *"13x9 rectangular board. Ball spawns at the center. 5 pieces per player. Enough for combos, but not too crowded."*

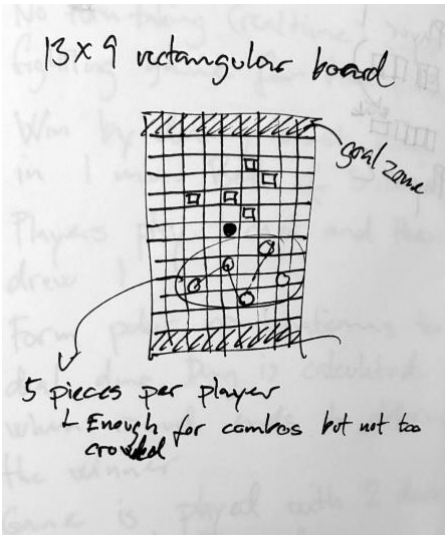

Figure 2: Notebook excerpt showing early concept for game board and number of game pieces.

The game was beginning to take shape but in doing so it made it even more pressing to figure out the core mechanic (Sicart, 2008) specifying exactly how these pieces would move around the board and score points with the ball. I knew of course that this would be the primary riddle to solve since most game designers are aware that *"If the core mechanic is not engaging, it is unlikely that the rest of the game will be."* (Calleja, 2022).

I had just been pushing it off since I also knew that it would be the most difficult. I had been hoping that if I just continued working on the other parts of the game that somehow my subconscious mind would be working on it in the background and magically hand me the answer at some point.

But it hadn't. Not yet, and now I was getting to a point where it seemed very difficult to make much progress without the centerpiece of the puzzle.

And so, I was stuck for a few days.

MAKING MOVES

"Done well, movement rules are easily understood, yet lead to emergent gameplay. But movement rules are hard to get right. Dealing with questions like blocking, line of sight, terrain types, movement along a diagonal, and more can turn what seems like an elegant and simple concept into a tangle of conflicting and confusing rules." (Engelstein & Shalev, 2022)

I knew from the outset that I didn't want rigid movement patterns like those in chess. Instead, I craved something more dynamic—unpredictable, even. The thrilling element of chance seemed to fit the ballgame metaphor, but I also wanted the game to retain its strategic essence. This tug-of-war between skill and luck is a persistent challenge in game design, and I found myself wrestling with it. Caillois poetically named them: *Alea*—games of chance—and *Agôn*—games of skill and echoing Nietzsche's concept of Apollo and Dionysus being two forces in perpetual conflict yet fundamentally intertwined (Nietzsche, 1872/2008) he writes: *"Alea and Agon are*

therefore contradictory but complementary. They are opposed in permanent conflict, but united in a basic alliance." (Caillois, 1961). It felt like I was in the midst of this Gordian knot, trying to balance them just right, as so many designers have before me.

I thought about games that manage to blend luck and skill gracefully. Games such as Backgammon and Texas Hold'em Poker, which mix calculated decisions with unpredictable outcomes. That was the kind gameplay I was searching for. Something that would allow for the exciting uncertainty of fate while preserving the meaningful engagement of skillful effort.

I wish that I could explain how I arrived at the first idea for how the pieces should move, that it was a deliberate and gradual process of working my way to a solution one rational decision at the time, but I can't say that it was. The idea arrived unexpectedly—not as a logical progression of deliberate steps but as a sudden, electrifying flash of insight. I wasn't even actively working on the game at the time; I was playing my guitar, experimenting with a menacing riff that leaned heavily on the flat 5, when the thought crystallized. What if players rolled five dice and assigned the results as action points to their pieces? The concept felt so immediate and promising that I set the guitar down mid-phrase and turned my full attention to sketching it out.

This initial iteration of the core mechanic for piece movement went like this:

Both players would roll five standard dice. Then, they would take turns choosing one of the dice rolls and assign the number rolled as action points to one of their pieces, using those points to move them around the board or to activate abilities.

I was really pleased with the idea of rolling all 5 dice for the 5 pieces. It seemed natural and straightforward while balancing luck and skill nicely by providing the players with random chunks of resources but with a meaningful choice as to how to assign those resources to the individual pieces in response to the game state.

In hindsight, I should have paused to examine this mechanic more critically before rushing forward. But in that moment, the momentum of discovery carried me. With the central engine of the game in place, the rest of the design unfolded quickly.

I decided that the pieces could move orthogonally (up, down, left, right), but passing the ball would be a more dynamic option, moving three squares in any direction for the cost of a single action point. This rule not only made the ball more fluid on the board but also encouraged players to think strategically about passing, adding layers of complexity and excitement.

The ideas for possible upgrades came easily. I figured that I could balance the upgrades by adjusting how many action points it would cost to activate them. I decided that after each goal, two random upgrades would spawn on each side of the middle rank of the board, forcing players to fight for the upgrades in addition to the ball itself.

That night, as I lay in bed reflecting on the day's progress, I felt a surge of satisfaction. It seemed like I was well on the way to chase down my initial vision for an original game honoring the classic board games while adding some modern fireworks.

The hard part was over, or so I thought.

SOMETHING IS ROTTEN IN THE STATE OF DENMARK

When I reviewed my work the next morning, in the cold light of day, it didn't seem quite as magnificent as it had the night before. It was still good, I told myself—I just needed to tidy up a few loose ends that had slipped through the cracks in the euphoria of last night's triumph.

The first issue that caught my attention was the way I had designed the spawning of new upgrades. I didn't like the idea that one player could pick up both upgrades, as it seemed like it could lead to a snowballing advantage that might make it nearly impossible for the other player to recover. So, I added a set of relatively complicated rules: once a player had claimed one upgrade, the remaining upgrade would be reserved for the other player. But then questions started piling up: What if the upgrade wasn't picked up before a new goal was scored? Would it stay on the board, with only one new upgrade spawned? Would it still be reserved? What if neither upgrade was picked up? While all of these were solvable, they certainly came at the cost of increasing the mental tax for players diverting their attention from playing the game to managing all these rules.

Far more concerning, though, was my growing suspicion that a defensive dominant strategy (Juul, 2005) could emerge—one in which players kept their pieces on their own half of the board, playing a waiting game for the opponent to expose themselves. If this became the dominant strategy, it would mean few goals would be scored, and fewer upgrades would enter the game. That type of idling waiting game could not be further from my vision of an explosive and dynamic game where the pieces and the ball would zip around the board using all kinds of cool abilities.

Please have a seat, sir.

Sir? Please, I think you want to sit down for this.

There's no easy way to say this: Your game has been diagnosed with a dominant strategy.

At first, we hoped that it might just be a benign slightly advantageous strategy that would allow for other strategies to be viable, but unfortunately that seems not to be the case here.

In fact, it looks to be an aggressive dominant strategy that if left untreated will take over your entire game and suffocate all the emergent qualities that makes interesting strategic choices possible. Ultimately, it will make your game boring.

It is located in the core mechanic, but it has already spread to the entire system of rules. I recommend we begin treatment immediately.

Are you alright, sir?

As I realized the magnitude of the problem, a sinking feeling of failure set in. How could I have missed this? How could I not have seen that the core of the game might be fundamentally flawed? The promising vision of players deeply engaged in the exciting emergent gameplay of the game faded in favor of one in which they were bored out of their mind moving the pieces meaninglessly back and forth, starving for

anything interesting to happen. It served as a cruel reminder of George Bernard Shaw's famous line *"Those who can, do; those who can't, teach."* (Shaw, 1905).

But I am good at this.

This is what I do.

Right?

In desperation, I set to work to save the game—and, by extension, my professional pride. I decided that the best course of action was to encourage offensive play rather than punish defensive play. I feverishly began inventing ways to incentivize players to move their pieces out onto the board and counteract the defensive strategy that was threatening to dominate the game.

First, I divided the playfield into three sections: homefield, midfield, and outfield, relative to each player's side of the board. To encourage players to move their pieces onto the opponent's side, I implemented a secondary scoring mechanic. Drawing inspiration from American football, where touchdowns score 6(+1) points and field goals score 3, I decided that scoring with the ball on the opponent's back rank would earn 3 points. But capturing an enemy piece would earn 1 point—provided the piece was captured in the outfield. This would encourage players to move pieces onto their opponent's side of the board and penalize players for leaving pieces in defensive positions, where they could be captured and give up points.

This new secondary scoring mechanic also introduced a host of new rules. Captured pieces would be out of play until the next round, when the player whose piece had been captured would need to spend 3 action points to respawn it on their back rank.

In addition, I implemented a rule restricting pieces to moving onto a given square only once per turn. This would prevent players from wasting action points by moving back and forth between squares, staying in the same position rather than actively engaging with the board.

To add further risk to defensive positions, I even created an upgrade allowing pieces to swap positions with any other piece on the board. This made it dangerous to leave pieces near the back rank, as the opponent could use a swap to bring their ball-carrying piece into scoring range and easily score a point.

Once this massive rescue operation was complete, I stepped back to evaluate the result.

We have an expression in Denmark that immediately came to mind: *The operation was a success, but the patient died.*

It was a brutal hack job that, in the most heavy-handed way, tried to force a specific type of gameplay into a game whose core mechanic simply didn't support it. The elegance that I had initially felt was quickly evaporating, replaced by an ungainly mess of rules that added unnecessary complexity and a lot of mental tax for the players.

Sicart's (2023) recent discussion of the aesthetics of rules popped into mind. There was certainly no beauty to be found in what I had just done to my game. My euphoric sense of accomplishment from the night before turned into bitter disappointment. As

I put the game away—for what would turn out to be a long time—I couldn't help but recall the famous quote when Frankenstein's monster confronts his maker exclaiming:

"Accursed creator! Why did you form a monster so hideous that even you turned from me in disgust?" — Mary Shelley, Frankenstein (1818/2012)

THE STUFF THAT GAMES ARE MADE OF

"My way of learning is to heave a wild and unpredictable monkey-wrench into the machinery." — Dashiell Hammett, The Maltese Falcon (1930/2005)

As time passed, the sense that the game was nothing but a broken mess faded and soon I felt compelled to give it another shot. I figured that an outsider's perspective might help me decide how to rework and salvage the game, so I traveled to Malta to seek advice from my former teacher, Gordon Calleja, a foremost expert on both the theory and practice of board game design.

So not unlike Luke Skywalker who had to shake off a humiliating defeat and travel from the ice planet Hoth to the Dagobah system to finish his training with Yoda, I journeyed from the cold Danish spring to the Mediterranean island state of Malta, hoping to find clarity. I also had a guest lecture lined up at the Institute of Digital Games, where Gordon teaches, so I arrived a few days early to prepare for the lecture, and dust off the game. It was my first time in Malta, and I found staying in Valletta, the old town, to be incredibly striking. The city was completely untouched by modernist architecture—ancient city walls, taverns, churches, palaces, and gardens, all constructed from the same weathered stone. The air was thick with history. Squinting to obscure the tourists' modern clothing as they came rolling off the cruise ships, I could almost convince myself I had arrived in Minas Tirith, Baldur's Gate, or King's Landing. The city itself greatly helped me reconnect with the game as it appeared to me as exactly a place fit for an abstract strategic board game that would be used to settle disputes between the wizards of the high council.

With the inspiration from this drastic change of scenery, I spent my nights trying to make the game as presentable as I could. I hadn't seen Gordon in 15 years and didn't want to disappoint him with a half-baked idea. I was prepared to make radical changes based on his feedback, but there were a few elements I felt were set in stone: the addition of upgrades to the pieces, the ballgame metaphor, and the idea of rolling one die per piece and taking turns assigning the rolls to them. Changing these would feel like making a completely new game.

After a few lovely days lecturing and discussing games and academia with Gordon, the time came to sit down and review my game. I find that sharing your incomplete work with another designer whose opinion and expertise you respect may be both daunting and rewarding. This experience was no exception.

Though I initially felt insecure about the game, sitting down with someone who immediately understood both what I was trying to achieve and the problems I was facing was incredibly affirming. After I explained the basics of the game along with my concerns, Gordon got straight into the discussion, and we began making fixes right then and there.

As I recall, it felt like two surgeons working quickly to save a life, making informed decisions under pressure. If a documentary were to show a reconstruction of our conversation based on my notes and memory but using better looking actors, it would sound something like this:

Gordon: *"Okay, you need to make the board smaller. This posturing on either side doesn't work. When the game begins, the players need to get into it right away."*

Me: *"I've also been considering whether the dice rolls should be concealed or visible to both players."*

Gordon: *"No, they should be concealed. You don't want this to be a game of perfect information because it will discourage aggressive play and slow the game down."*

As I folded the prototype to adjust the board size, I had an idea.

Me: *"What if, instead of action points, the dice would show Tetris-like shapes that specify movement patterns that players assign to their pieces?"*

Gordon: *"Yes, that's good. It will force players to move their pieces more, and it adds some nice pattern recognition to the game."*

We tested various scenarios using the prototype, discussing mechanics for blocking, passing, and possible upgrades. But the most significant changes had already been made. In less than an hour, we had reduced the board size, concealed the dice rolls, and—most importantly—replaced action points with dice that determined movement patterns.

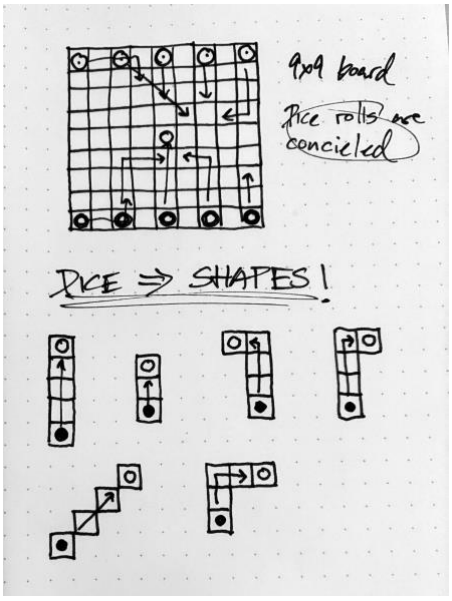

Figure 3: Notebook excerpt showing reduced game board and new movement mechanic.

This core change in the movement mechanic was where everything clicked. The game suddenly felt like it had come together, with all the parts interlocking in a satisfying way.

This experience, I feel, is very precisely expressed by architect Bjarke Ingels in a recent conversation between him and music producer Rick Rubin discussing the creative process (Rubin, 2024):

"*What we strive towards in our work is that it comes across with an air of effortlessness. And sometimes it's very laborious to arrive at effortlessness because if something feels laborious […] it's exhausting and maybe clumsy and overelaborated then, but when it feels effortless, it has just this kind of air that you can feel* [...] *And to get to that point where every decision almost takes itself. Where the overall idea extends into every decision, then everything functions in concert and everything becomes more than the sum of the parts. It takes a lot of care to arrive at effortlessness.*

[...] *there is a kind of eureka moment where everything clicks, and that moment is this moment of great relief and clarity."*

At the time, I experienced something very similar: a creative implosion, a change that sparked a great coming together of the parts. A wonderful alignment from where purpose and meaning emanates. By making what seemed like simple changes—reducing the board size and replacing action points with movement shapes—the game regained its focus. The core movement mechanic now allowed for much more natural and engaging gameplay without the convoluted secondary rules I had previously added. No more need for complex secondary scoring or the laborious respawning rules. Now, simply balancing the movement shapes with the board size meant that players would naturally traverse the board, making defensive, low-scoring strategies obsolete.

From a moment of frustration to one of great clarity and relief indeed.

Figure 4: Updated prototype showing dice with movement shapes.

LOOKING FOR BEAUTY

It has been clear that the vision of a certain type of gameplay experience has been a guiding star throughout the process against which different ideas for rules have been measured. My entire design process can be understood as an effort to materialize that image of two players engaged in a contemplative cognitive battle of making moves and countermoves, weighing odds, trying to orchestrate their pieces to move the ball across the board to score a goal while adding new abilities to the pieces over the course of the game. It has been a process of trying to capture this type of gameplay experience in a net of rules that would suspend it perfectly. By appreciating the target gameplay as a particular experience of striving for agency it has allowed me to judge rules with respect to their aesthetic value in affording such a pursuit of agency.

This process resonates with Sicart's concept of the aesthetics of rules (Sicart, 2023). His argument is that if we accept games as an art form of agency (Nguyen, 2020) then it follows that the rules that give shape to gameplay have aesthetic value. Importantly, this proposes that games—and rules in particular—may be considered for their beauty outside of the enactment of games but rather in and of themselves. According to Sicart the beauty of a rule centers around its ability to give form to agency and we may appreciate it for how it inscribes the game with potential and intentionality regarding agency (Sicart, 2023).

From the practical perspective of designing my game the beauty of rules felt tied to their potential for making the strive for agency more interesting in an elegant way. Here I take the term elegant to mean that the rule performs its function in shaping the gameplay in a manner that creates harmony in the system of rules and without making the playing of the game needlessly complicated for the players. This finding echoes the sentiment of Stenros & Montola who argues that: *"Elegant rules do big things with few words. Concise statements bring about clarity and set up immense possibilities."* (Stenros & Montola, 2024)

When I compromised the aesthetic value of my rules in an attempt to eliminate the dominant defensive strategy, the issue wasn't that the new rules didn't shape agency or weren't open to creative interpretation. The problem was that it was an inelegant solution. The proactive, dynamic gameplay I sought to encourage didn't naturally arise from the core mechanics. Adding complex rules to compensate for that became a desperate, clumsy move. These additional rules introduced a jarring imbalance, filling the game with convoluted incentives and restrictions that felt forced and, ultimately, made the system incoherent and overly complicated. It was a disruption of the harmony within the system of rules.

When I managed to rework the core movement mechanic—shifting from action points to Tetris-like shapes—it felt different. I immediately recognized the aesthetic value in this change. It was a striking and unmistakable feeling that something fell into place as the system of rules settled into a much more harmonious form.

Sicart argues that *"a rule closely connected to the core mechanic of a game could be evaluated in the ways it creates a form of agency that enhances the purpose of that mechanic."* (Sicart, 2023). The new core movement mechanic did exactly this. It refocused gameplay on the movement of pieces and simplified the game, rendering the convoluted incentives for proactive play redundant. The gameplay I was aiming

for was now supported directly by the core mechanics, rather than being forced through layers of complicated additional rules.

The rule felt more elegant to me not only because of its individual quality in shaping agency and promoting creative exploration, but also because of its relational quality. It connected the system of rules into a more meaningful and harmonious whole. While my experience largely supports Sicart's theory, the notion of harmony may present a slight contradiction. Sicart distinguishes between rules like the one in football, which states that putting the ball in the opponent's goal scores one point, and the offside rule. According to Sicart, the former has little aesthetic value because it *"is not conductive to expressive practices of agency."* (Sicart, 2023), while the latter does.

Even though I might also feel that the new core movement mechanic is more beautiful than for instance the rule specifying that a point is scored by bringing the ball to the opponent's back rank, it's clear that the aesthetic value of rules in shaping agency is entirely dependent on their relationship to other rules. Taken out of context, the earlier version of the core movement mechanic of my game would be no less beautiful than the current one. Rather, it is in relation to the other rules about scoring, board size, upgrades and the number of pieces that we may appreciate the reworked core movement mechanic for having greater aesthetic value. It is a gestalt that underlines the practical pursuit for harmony.

WHEN ALL IS SAID AND DONE

In the end, the design journey recounted here is more than a simple tale of trial and error—it is an exploration of game design that recognizes it as both a discipline of creating systems of rules and as an embodied attempt at capturing beautiful forms of agency. Game studies must also reflect this deeply aesthetic pursuit if it is to resonate with the actual practice of game design. While the formal description of games as systems may reinforce the notion of design as a scientific endeavor—often depicted as a rational problem-solving process unfolding in well-defined phases according to standardized methods (Simon, 1969)—my experience illustrates that the practice of game design exceeds this constructive, Apollonian reasoning. It is more akin to navigating a stormy, Dionysian sea, where methods, theory, and prior experience form a fragile raft guiding you through the turbulent waters of actual creation. As such, my exploration of game design has not been concerned with reflecting on game design as an abstract design process and its formal structure. Rather it has come to be an exploration of game design as a craft foregrounding the interwoven dialogic character of thinking and making (Sennett, 2009; Ingold, 2013).

My autoethnographic account illustrates Cross's notion of a "designerly way of knowing," in which tacit judgments and iterative tinkering coexist with rational problem-solving (Cross, 1982). It reveals how theorizing and making entwine in real time and with reference to Ingold's notion of "making as thinking" (Ingold, 2013) it further underscores that the practice of doing game design is grounded in embodied, materially experimentation.

From the mostly intuitive decision to make some abstract strategic boardgame centered around a ballgame metaphor and accumulating upgrades, it has been a difficult process of trying my best to capture this illusive idea in a net of rules that attempts to bind these elements together into a harmonious whole. It has been comprised of endless cycles of spontaneous breakthrough ideas formulated intuitively

based in personal taste, experience and convictions with more theoretical and rational scrutinization and testing in between. It has been an instructive embodied experience of the complex relation between making and thinking that has shown theoretical reflection not to be valuable for informing or determining what to do but for attempting to understand what is being done as the making unfolds.

Based on this experience, I will argue that a research-through-design methodology, coupled with autoethnographic writing, allows game studies to begin to capture the aspect of the craft of game design, where subjective feelings, ambitions, personal convictions and pride in one's work significantly shape the outcome. By recognizing the affective, human experience of designing games, we can tap into a largely underexplored potential for forging stronger connections between game studies and the practice of game design. As demonstrated, the entanglement of theoretical concepts with the act of doing game design—as facilitated through autoethnography—offers a valuable meeting point for theory and practice, one that is both accessible and productive, and lets game designers take part in the academic discussions on game design directly through their practice of making.

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