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# **Caillois Revisited**

## **Towards a General Theory of Games and Rules**

"Playing" and "games" are universal concepts in most languages, to an extent that makes it almost impossible to tell their literal from their metaphorical meaning.<sup>1</sup> This makes each of them, on the one hand, a tremendously powerful inspiration as well as a tool for a great number of discourses, as the other contributions to this volume undoubtedly show. On the other hand, their ubiquitous natures leads to a certain vagueness that makes them almost impossible to define. Luckily, defining them is seldom necessary: The tremendous success of economic game theory has shown that it is well possible use "play" as a metaphor for human behavior in general without even considering a definition of playing or games.<sup>2</sup>

If we want to understand how games work however, we need a theoretical basis. Reflections upon the nature of playing can be traced back to Plato, yet few theorists have succeeded in describing games in their entirety. In the past decade, the realization that computer games may very well be a narrative medium that is neither textual nor representational, thus challenging most common conceptions of storytelling, has led to a renewed

<sup>&</sup>lt;sup>1</sup> Matuschek (1998) offers a comprehensive overview of this problem, as does Huizinga (1956).

interest in understanding games. The idea that games are able to tell stories is at odds with the widespread perception of games as purely procedural, as mere action.<sup>3</sup> Therefore, games in general have to be re-assessed in their quality as a procedural **medium**, that is an activity that conveys meaning.

But before understanding the communicative possibilities of games can be an issue, one has to understand how games work. There are three central (and rather obvious) questions that need to be answered.

I What are games?

II What types of games are there?

III Which are the common elements of games?

There are obvious and simple answers to all these questions, but in order to understand how games work in general, we have to find a comprehensive and universally applicable system of description.

I am going to present you with my own approach, which is informed by structuralist tendencies. By strucuralist, I mean the notion of explaining phenomena by what can be identified as their inherent properties and structures, as opposed to approaches concentrating on surface-level aesthetics or hermeneutical analyses of content.<sup>4</sup> What I am trying to achieve is a method of dividing games into meaningful units, thus making the perceived complexity of their inner workings tangible. Only if the common structure of all games is identified, we can start to understand how playing, rules, goals, and even stories interrelate. Drawing heavily on the

 $<sup>^{2}</sup>$  In what may be called a typical approach, Zwick; Erev; Budescu (1999) do not even hint at the necessity of discussing the term "game" itself when outlining the central issues of economic game theory.

 $<sup>^{3}</sup>$  Cf. Frasca (2003). The *ludology* movement – a school of thought within computer games studies – adheres firmly to this distinction, perceiving computer games are fictional, but no stories.

<sup>&</sup>lt;sup>4</sup> By focusing on deep structures, the similarities rather than the differences of games and stories can be foregrounded. This is especially obvious with concepts such as game worlds (cf. Caillois (1958): 13-14) and storyworlds (cf. Herman (2002): 14-16).

theories of Roger Caillois, I will outline one possible understanding of how games work by giving concise answers to the aforementioned questions.

### I What are games?

To answer the first question of "What are games," we need a consensus about what distinguishes games from other human activities. Each definition of playing and games starts with an attempt at identifying their opposites. Even though there are differences across the languages, two concepts universally emerge as antonyms of play: "work" and "duty."<sup>5</sup> Most of us would probably agree that when people play games, they are clearly not working, and even with sports professionals, playing will hardly be called their duty. But what is the rationale behind this?

What sets apart the concepts of work and duty from play is the notion of usefulness. The reason for working is usually to financially support oneself. If a task is perceived as a duty, this means that something depends from us doing this deed. Having enough to eat and a roof over one's head – the most rudimentary purposes of working – or going to war for ones nation – the proverbial "doing one's duty" – are objectives *extrinsic* to the actual work or duty performed. Shoveling coal aboard a ship crossing an ocean is a very concrete activity that may be both work (one gets paid to do it) and duty (one may help one's nation's cause). But there is no immediate connection between what is being done and the effect one tries to achieve.

Playing, on the other hand, is something we do "just for fun," that is: because we are enjoying doing it. The effect of activities we perceive as playful is in themselves, which is why even the most serious work might be interrupted by "playing around" with something. Playing is, just like

<sup>&</sup>lt;sup>5</sup> Cf. Kotte (2005): 14 and Caillois (1958): 12.

sleeping, an urge that we still do not fully understand, but it obviously is not directed at goals outside the activity itself – an intrinsically motivated activity.

There are two common objections to this view: First, that gambling is a game, where money and therefore an outside factor is at stake, and second, that games are beneficial, as they are an opportunity of learning. The particular nature of gambling is indeed a touchstone of every theory of games, but it will be addressed in depth later. Considering playing a form of training for – what in that line of argument is usually called – "the real world," is actually not a contradiction to the autotelic nature of games. "Playful learning" is a concept based upon the participants assuming that they are only playing, while the game is set up in a way that will teach them something. Clearly, for the players, learning is not the reason for playing, but at best an acknowledged side effect. If play is not voluntary, it ceases to be play, and becomes either work or duty.

This binary distinction of work/duty and games raises the question whether there are non-work activities which cannot be classified as games. Theater and rituals come to mind, but recent studies in those fields have collectively shown that the traditionally perceived differences between them are negligible in comparison to their common traits. Games, theater, and rituals can be easily mistaken or misread for one another by outside spectators, depending on their expectations, which leads anthropologists to suggest that they are distinguished by perspective, not by their properties. The scope of what is conceived as play in those specialized discourses mirrors this, including activities not usually thought of as playing, yet bearing reasonable similarities to games.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Cf. Kotte (2005): 54-56.

Closely connected to the intrinsic motivation of games, which is one of the central arguments of Johan Huizinga's "Homo Ludens," is their lack of consequence.<sup>7</sup> Not only is playing not directed at an outcome apart from enjoying the game, players also assume that their actions will not be in any way detrimental to themselves or others. What is more, actions within the game have no consequence to the world outside the game: Best friends may be fierce competitors when playing without harming their relationship.<sup>8</sup>

Among the reasons for this separation of play from real life with its consequences is that games create mental spaces, in which all actions are situated. This mental space, which I call the "game world," is the abstract level on which the processes happening in physical reality are evaluated in respect to the rules of the game.<sup>9</sup> Let's take soccer as an example: The game needs a number of entities – a field, goals, a ball – and agents – the players. Ideally, there are two teams of eleven players, a well tended grass field with chalk marks, robust metal goals of standard size, and a well pumped leather ball. But everybody knows that it is very well possible for four people to play soccer on a street with nothing but a couple of stones for markers and an empty soda can for a ball. In both cases, the players relate primarily to a mental construct detailed in the rules of the game, of which the playing field and all equipment are merely a physical representation.

To sum up, play and games are intrinsically motivated, have no consequences, and create mental spaces called "game worlds."

<sup>&</sup>lt;sup>7</sup> Cf. Huizinga (1956): 16-19.

<sup>&</sup>lt;sup>8</sup> Cf. Kotte (2005): 44.

<sup>&</sup>lt;sup>9</sup> Cf. Huizinga (1956): 17 and Caillois (1958): 13.

## II What types of games are there?

Having identified the common attributes of play and games, we are faced with the task of categorizing games. Of the various existing approaches, Roger Caillois's method is the most universally applicable.<sup>10</sup> While other theories focus on certain types of games, his approach does not even stop at games in the strictest sense, but includes the whole domain of playful behavior. Instead of describing the perceived properties of games – for example how many players can participate and what equipment is required –, he isolates the motivations or underlying ideas for different kinds of games and two radically different ways of playing. This yields a system powerful and diverse enough to put all types of play into relation. I will now try to give you a succinct overview of his types of games, before explaining the ways of playing he identifies, and then combining both in some examples.

<sup>&</sup>lt;sup>10</sup> For an overview of theories of game and play cf. Scheuerl (1990).



Fig. 1: Caillois's four basic types of play

Caillois distinguishes four basic types of play, which are governed by competition, luck, make-belief and vertigo respectively. He calls these types agôn, alea, mimicry and ilinx, carefully chosing terms that do not denote any concrete games, but evoke abstract concepts.<sup>11</sup> While the first three categories of competition, luck and make-belief are evident enough, the category of *ilinx* has left many students of Caillois's theory puzzled, not the least because it describes experiences not usually associated with playing. The definition of *ilinx* is a state of intoxication or willful loss of control, which result in a state of pleasurable panic. What may seem like an odd category at first is only the inclusion of activities that involve the sensation of speed and gravity – seesaws, swings and roller-coasters for

<sup>&</sup>lt;sup>11</sup> Caillois (1958): 20-36.

example – and other visceral sensations. It is what Caillois includes in his seemingly evident and clear-cut categories which expands his scope: *mimicry* is not only the pleasure of becoming another person by donning a costume, it also encompasses identification with fictional characters; *alea* covers gambling, but also every voluntary act of relying on one's luck; and while agôn obviously describes competitive games, it also encompasses related notions of fair play outside sports and games. While most other approaches concentrate almost exclusively on what Caillois calls agôn, that is games of competition, he conceives recreation and entertainment as a whole of non-work (and therefore playful) activities, including chivalry, theater, and fiction.<sup>12</sup>



Fig. 2: Caillois's two ways of playing

<sup>&</sup>lt;sup>12</sup> Caillois (1958): 31.

His four basic types of play identify four ends to which people play, that is four urges they want to satisfy by playing, but not the way in which they play. This he perceives as a quality independent of these subconscious goals. Caillois identifies two ways of playing, which he calls ludus and paidia.<sup>13</sup> Ludus is regulated play: The game in question has a proper name, which denotes a set of rules and certain requirements for play. There is a consensus about what is needed to play the game, how to play it and what to strive for, as illustrated beforehand with soccer. The most important trait of *ludus* is that it is goal-oriented, in a way that conforms to the initial observation that games are intrinsically motivated: the player imposes an arbitrary goal upon him- or herself, the achievement of which is the whole point of the game. The opposite way of playing is *paidia* or free play, which is not governed by fixed rules, does not tend toward winning or losing, and is usually not identified by a proper name. Most fairground attractions and playground games are *paidia*, as is flying a kite: an activity without a proper name - it is a description, not an evocative name like "chess" or "soccer" – that is not geared at achieving anything in particular, except for feeling the wind tug at the ropes and controlling a flying object, which are sensations, not achievements. Paidia is not about winning or losing.

<sup>&</sup>lt;sup>13</sup> Caillois (1958): 43.



Fig. 3: A three-dimensional representation of Caillois's system

The four types of play and the two ways of playing interrelate in a complex fashion. First of all, some of the four basic types can mix, while others can not: No game of competition can completely forego luck, while there is little or no competition to be found in *ilinx*. Second, each of the four basic types can mix with *ludus* or *paidia*: Soccer is a highly regulated

game of competition, therefore it is a combination of *ludus* and *agôn*, with some elements of luck or *alea* like the weather, for example, which cannot be influenced by any amount of training and preparation. Theater or cabaret are *mimicry*, but they can tend towards the unruly and pointless, as in independent street performances, or the highly regulated and formulaic, as in Japanese Kabuki – that is, they can be situated anywhere in between the poles of *ludus* and *paidia*. Third, there are games of pure *ludus*, which show little motivation apart from completing something inherently pointless, but difficult, a crossword puzzle for example.<sup>14</sup>

I think, it is obvious how powerful Caillois's system is: With just six categories, neatly organized into three axes, it can define every kind of game.

### **Expanding on Caillois**

While the core of Caillois's theory is, to my opinion, of unparalleled value, there are some aspects of play he only deals with in passing. He does, for example, not arrive at a solution to the problem of gambling. Also, Caillois formulates a number of exceptions to his system which can be integrated without a problem, once his central oversight has been realized. He does not perceive playful activities **within games** as separate from those **without**, be it those of spectators, trainers, or bookmakers, although they are obviously connected, but distinct processes.

Again, soccer offers an excellent example: The game itself, a single match of 90 minutes, adheres to the rules of "soccer." As soon as a number of games are played in succession, a second level of tournament rules applies, influencing both tactics – the line-up reflects not only the current,

<sup>&</sup>lt;sup>14</sup> Cf. Caillois (1958): 39.

but also the next opponents' strength – and results: the relative value of winning a single game – gaining a certain number of points or advancing to the next tier – is not a rule of soccer, but of a given tournament or league. The tournament is a meta-game, taking place on level above the matches. If we consider the match the first level of play, the tournament becomes a second-order game.



Fig. 4: First-order and second-order play

Likewise, the identification of spectators with teams and players, their sympathy and compassion, are a second-order game of *paidia* and *mimicry*, a separate game that can be played with sports events, TV shows, or general fandom. Gambling is a second-order game as well, governed not by *alea*, but by *ilinx*: The motivation behind gambling is not being lucky or

not, but betting and the possibility of losing of winning something valuable. The uncertainty, the danger, the tension and its resolve are intoxicating experiences. Everything can be subject to a second-order game of betting, first-order games of competition as well as games of luck.

This layering of different games is one concept easily derived from Caillois's work. The other is a structured understanding of rules.

### III Which are the common elements of games?

Rules are common to all games, but not all rules are alike. Consider these two rules: "only the goalkeeper may touch the balls with his hands" and "scoring a goal affords you a point." Obviously, they refer to quite different areas of the game in question: one defines an approved manipulation of the games' central element, while the other attaches a certain value to some occurrence in the game. Some scholars have therefore proposed a distinction between manipulation rules and goal rules, which is indeed an improvement over a simple understanding of rules.<sup>15</sup> The regulations of what one has to do to win govern different aspects of games than the underlying principles of what one is allowed to do. But some rules are not covered in this distinction; especially the role of sanctions against players remains unresolved.

The solution to this problem is to devise an even more elementary distinction. While retaining the concept of goal rules, I would propose to complement it with a class of "world rules." While manipulation rules describe actions that are allowed within a game, world rules define all actions that are **possible** within the game world. What at first may seem like a very subtle alteration is a necessary step in adhering to the concepts

<sup>&</sup>lt;sup>15</sup> Cf. Frasca (2003): 230.

of Huizinga and Caillois, while at the same time allowing for seamlessly integrating computer games into game theory. The benefit lies in stressing the relevance of conceptual game worlds as mental frameworks in which all play is situated.

One of the essential properties of all games is, as mentioned in the beginning, that they construct mental spaces, of which the actual playing field is only a physical representation. This becomes especially evident with computer games, which do not have physical representations, but virtual ones. Because of their technical nature, they are frequently perceived as simulations. The idea of simulation may be very well applicable to games in general: A game world (and its physical counterpart) are specialized environments for performing actions that bear resemblance or are adaptations of real-life activities. Chess or backgammon are highly stylized simulations of battle and retreat, reducing the complexities of reality to their strategic framework.

This idea of game worlds as simulated places also enables a connection to storyworld concepts in current narratology, thus resolving the game-narration dichotomy.<sup>16</sup> But that would be the subject for another talk.

Primarily, conceiving the game world as a simulation makes evident the need for laws of physics in this world, which is what I mean by my thesis that world rules define what can be done in the game-world. In sports, the laws of physical and conceptual world must overlap almost completely, because the players move in the physical world. In board games on the other hand, there is no such need: the movement of a pawn or a knight are purely symbolic, yet unquestionable laws of movement on the chessboard. It is possible to move a piece arbitrarily over a chessboard, but

<sup>&</sup>lt;sup>16</sup> Cf. Ryan (2005).

not within the rules of the game. In the world rules of chess, there is only one way a knight can move – it is not a question of something being allowed or prohibited, but a question of possibility within a specialized and stylized simulational world.

Conceptually, we are very aware of this, even in sports. Imagine a ball leaving the playing field in Tennis or Soccer. For all intents and purposes of the game, this ball ceases to exist – conceptually speaking – within the game world. Of course the physical ball in the physical world continues to exist, but if it bounces off something and re-enters the playing field, this has no relevance to the game. Play does not continue, because the conceptual ball has ceased to exist, no matter what the physical ball does. The ball has to be re-introduced into the gameworld.

This seemingly formalistic notion explains some otherwise problematic point, for example, why it does not matter, whether the physically same ball or another one is used to continue play. Moreover, the act of reintroducing the ball, or in more abstract terms, the reprisal of a game after a disturbance of its game world, is where world rules and goal rules intersect. The reason that the act of reprising a game is regulated, lies in the need of protecting the integrity of the game world, so that the difference of game world and reality cannot be exploited. Only if a willful attempt at this is detected by an authority outside the game world – an umpire, for example - a player will be punished. This is the essence of all sanctions in games: to remind the player that rules of the game world are (conceptually and therefore only theoretically) an unquestionable entity. No matter what the goal of the game – exploiting the fact that things are possible in the physical world which are impossible in the game world must not be tolerated for play to remain meaningful. This explains why

sanctions are only necessary in games of *ludus*: *paidia* has no goals, and therefore no incentive for cheating.

The argument presented here is obviously not an end in itself, but a pledge to reevaluate Caillois's theory of games, which is easily modified to form a groundwork for narrative gaming studies, or to offer a different perspective on reader-response theory. At any rate, few theories further our understanding of how games work as much as that of Roger Caillois.

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