

Situational analysis as a method for qualitative inquiry of games

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ABSTRACT

This article presents a sketch for a methodology for situational analysis of games. Situational analysis is a research practice originating in the social sciences. It is based on grounded theory and inspired by post-modern theory. This article argues that situational analysis is a fruitful approach to game analysis, as it addresses key challenges in game analysis: how to contain the dynamicity, heterogeneity, and composite quality of games, and how to make sense of the analyst's position. It bypasses the distinction between analysis of games as objects and analysis of what players do and has a distinct focus on the role of materiality. The article will consist of two parts. Part one offers a discussion of current problems in game analysis and the potential of situational analysis. Part two offers a case study of a situational analysis of three play sessions of a selected game.

Keywords

Game analysis, Situational analysis, Methodology, Dungeons & Dragons,

INTRODUCTION

Games represent a difficult object of analysis and have spawned numerous analytical approaches focusing on different aspects of what games are. Among these are Konzack's (2002) descriptive seven layer game model, Aarseth's (2003) approach that includes a three dimensional model and a basic method for playing as research, Aarseth, et al.'s (2003) typology for game description and classification – and Elverdam and Aarseth's (2007) revision of it, Zagal et al.'s (2007) formal ontological framework for game analysis, Consalvo and Dutton's (2006) framework for qualitative, critical analysis of games, Leino's (2010) phenomenological approach to playing analysis, Arsenault and Perron's (2008), Karhulahti's (2012), Arjoranta's (2015) and Aarseth and Möring's (2020) hermeneutic approaches and Fernández-Vara's (2019) extensive guide for textual analysis of games; not to mention the many works dealing with the analysis of specific aspects of games or phenomena within games, such as platforms (Montfort and Bogost 2009), Interfaces (K. Jørgensen 2013), spaces (Nitsche 2008), actions (Galloway 2006), representation (I. K. H. Jørgensen 2020), characters and player figures (Vella 2013; Blom 2020), narratives (Carr et al. 2006; Carr 2019; E. Aarseth 2012; Calleja 2009). In addition to this, we may find a varied set of approaches for empirical player analysis, often building on well-known methods from the social sciences and cultural studies such as interviews (e.g. Calleja 2011; Wirman 2012; Shaw 2011), ethnography and online ethnography (Boellstorff 2006; Pearce 2006; Mortensen 2018), discourse analysis (Ensslin 2011; Gee 2015).

All these approaches bring forth significant insights to the study of games, but each also carries explicit and implicit assumptions about what games are and how they

should be studied. In Fernández-Vara's (2019) approach, games are texts that may be delimited from their context, whereas in Aarseth's (2003) playing research approach, games are first and foremost contextual. Similarly, Consalvo and Dutton (2006) takes games as an object of manipulation, but still assumes that meanings are embedded in this object. It is beyond the scope of this article to offer an in-depth review of the rich landscape of game analysis approaches. Instead, I will introduce key challenges to the task of doing game analysis and then discuss how situational analysis (Clarke, Friese, and Washburn 2018) may address these issues. In the latter part of this article, I will present a practical example of doing situational analysis

CHALLENGES TO GAME ANALYSIS

The approach to game analysis presented in this article rests on the view that the analysis of games is faced with three critical issues that the analysis method therefore must respond to. These three issues are (1) that games are dynamic, infinite and composite objects, (2) that the term game covers a range of heterogeneous phenomena and (3) that the analyst occupies a privileged, yet ambiguous position as both a function of the game and somebody who studies it from the outside. In the following, I will elaborate on these three challenges:

The dynamicity and composite quality of the game object:

The first challenge is the dynamic, composite quality of most games. As Aarseth (1997) observes, games are not stable texts, but rather textual machines. The textual output of these machines is determined by the operational mechanisms of the game, as well as what the player does. This is further complicated by so-called procedural content generation, in which the content of games is generated from algorithmic rules that increases the variability of games, making every playthrough unique in some respect. Regardless of whether this variability is caused by player action or procedural rules, bottom line is that games are unstable, in the sense, that two or more instances of the same game title are seldomly completely identical. In addition to this, we need to account for the temporal aspect of many games. The state in which a game appears, depend on *when* it is analyzed and how much play lies behind or ahead. There is a great difference between analyzing a game after having completed the main quest line or having just played 20 minutes. Similarly, some games do not have a narrative structure that one can play through, but still, the amount of play time, as well as what one has done in this time, affect the specific game state that is analyzed. To offer a simple but illustrative example, in a game such as *Minecraft* (Mojang 2011), there is a difference between analyzing the game from the first time the player joins a server or analyzing after many hours of play and accumulation a variety of materials, objects and tools. To sum up, the dynamicity of games makes it impossible for even the most diligent and persistent analyst to obtain complete knowledge about them, save from the most minimal games. In addition to this, games are, as Aarseth and Calleja (2015) suggest composite objects consisting of a variety of different components and actors: player(s), technological hard and -software, rules, text, imagery, sound, possibly a story with a variety of narrative components, and finally social components such as discourses, power structures, values, and desires. These are highly different elements, but they are all important and interdependent. The exact components of course depend on the game, but also of the research question. This composite quality results in a great amount of non-trivial choices about what the analyst should include in the analysis and what should be left out.

The heterogeneity of games:

The heterogeneity of games represents a problem to game analysis, not only because the term games cover a diverse set of objects, but also because it is possible to approach games from very different analytical angles, from texts, narratives, social platforms, activities, systems, or media. There is significant difference between seeing games as

formal structures, as Debus (2019) does, Barthian texts, as Carr (2019) does, or cultural artifacts as Consalvo and Dutton (2006) does. Some approaches may impose a certain perspective, such as narrative theory, onto games, whereas other may rest on assumptions about a game ‘essence’ that might also be challenged. It is important to stress, that this is not necessarily a critique of these analytical methods. Each of these approaches can produce important insights about *some* games or some *aspects* of games. The point is just, that the analyst should be aware that they necessarily also frame games in a certain way, and therefore might be best suited to analyze certain games or answer certain research questions. In other words, the analyst should be aware that her preconceived ideas – which may be a product of a predetermined analytical framework – may make her blind of certain aspects of the game, such as say, the material basis, the social negotiation of rules and player behavior.

The analyst’s position:

The analyst’s position is a crucial issue. Aarseth (2003) argues, in order to know a game, the analyst needs to play it. How players make sense of their experience of the game has been theorized by Arsenault and Perron (2008), Karhulahti (2012), Arjoranta(2015), Aarseth and Möring (2020), among others, who in different ways conceive of the process of play as a hermeneutic. In other words, it is possible to consider the playing of a game as an analysis. The analyst however occupies an ambiguous position. Scholars have pointed out that player and game are not two separate entities. The player has for example, been conceived as a function of and ‘implied’ position in the game (Aarseth 1997). This motivates Leino (2010) to develop a sketch for the study of games from a first-person perspective, as played. According to Leino, from this perspective, the player analyzes not the ‘ideal’ game object (E. Aarseth 2009), but rather the particular experience, that is the game as it appears to the player through play. The current analysis method does not concern only the single-player computer games that Leino is interested in. However, what I do take from his approach is the idea to take the “empirical target constituting the object of study at face value”(Leino 2010, 10) . Still, studying the game ‘as played’, requires analytical effort that may go beyond ‘playing well’. The situational analysis method proposed in this article is a way to structure this analytical effort. However, before I will elaborate on this method, let me just point out, that one important notion of Leino’s call to study games ‘as played’ is, that it does not make sense to distinguish between the game text and its context, as textual methods such as Fernández-Vara’s (2019) do. As Aarseth (2003) argues, with games there is no central text, merely context.

Situational analysis of games

The idea of considering games as situations is heavily inspired by Vozaru (2022), and her object-based situational analysis framework, while my conceptualization of the situation differs from hers. The situational analysis I employ is a research method developed by Clarke (2018) as an extension to grounded theory (Glaser and Strauss 1967). Grounded theory works on the assumption that data is somehow self-explanatory and that theories should therefore emerge from the empirical data rather than be imposed on it. In comparison, situational analysis is more interpretive and is inspired by Haraway’s (2003) concept of situated knowledges and Latour’s (1996) idea of the actor-network. Another thing that sets situational analysis apart from grounded theory is that the former is concerned with actions whereas the latter is interested in the *situation of action* (Clarke, Friese, and Washburn 2018). Building on Dewey (1938), Clarke explains that the notion of ‘situation’ stresses that objects or events are not experienced in isolation but in connection with a greater situation and through their relations to other objects, events, discourses and actants within this situation. Analyzing a situation differs from analyzing an object (such as a text) in relation to its surroundings or context. Clarke instead observes that “The important so-called contextual elements are actually *inside the situation itself*. They are constitutive of it,

including structural and power elements, and we can map and analyze them *as such*” (Clarke, Friese, and Washburn 2018, 50 emphasis in original).

Applied to games, situational analysis makes it possible to approach games in ways comparable to what Taylor (2009) has described as an assemblage. What distinguishes the current approach, however, is its notion of situation, its focus on the (player) analyst as an embedded point of view, as well as the idea of analysis through map-making (which will be explained shortly). There are only few existing attempts at applying Clarke’s situational analysis¹ to games. Szablewicz (2011), for example, have made a situational analysis of the discursive construction of games and gaming in Urban China, considering games to be a non-human actant in a situation that also involves media discourses, government policies and participatory practices of players. The current approach differs from Szablewicz’, by employing a closer focus on the situation that unfolds during the act of play and positioning the analyst as a player within the situation. Situational analysis of games addresses the three challenges described earlier in the following ways. First, it does not conform the empirical phenomenon to a pre-existing ontology, or ‘ideal object’, but grounds the analysis in the phenomenon, as it is available to the player, and only that. This also means that results cannot, in virtue of the analysis alone, be used to say something about other games – or the same game title, as it is experienced by other players. Second, the notion of situation is an invitation to depart from considering the studied phenomenon a finite object or process with an inside and an outside, a central text and a context, a beginning and an end, and as means and ends, and a certain regularity. Finally, this therefore means that the analyst does not consider the phenomenon from the outside (like the reader to the text). Instead, the analyst is situated in the phenomenon and implicated among other actants, which can be human as well as non-human, symbolic, material and so forth. The analyst becomes a point of view, materially conditioned by, but also conditioning, the situation itself. But how do we define a situation? Here I want to stress, that I consider ‘situation’ not as an ontological category describing a temporal or configurative state of the game, but rather an analysis perspective. My use of situation should also not be mistaken for what Eskelinen (2001) calls the ‘gaming situation’. What is part of a situation depends on the analysis and lines of inquiries, and as it should be clear from the following case study, a situation may also change during a study. The notion of situation is by purpose not static. Apart from this epistemological issue, situational analysis of games is first and foremost an approach to *doing* analysis. It does not hinge on a particular analytical framework or taxonomy. Instead, it prompts the analyst to understand a situation by mapping it out. Map-making thus constitutes the central analytical practice, and maps are analytical instruments rather than means of communicating the results of the analysis. *Situational maps* are lists of all the ‘components’ that are present in a situation. Components should not be understood as the formal, structural elements of games, identified in the various ontological models of games (e.g. Zagal et al. 2007). Rather, the components are analytical objects, and they may vary greatly and include the formal and structural game elements and how they are communicated; and elements that extend beyond what is colloquially considered either game ‘form’ or content.’ Situational maps may initially be messy but should later be categorized following some logic derived from the analyzed situation itself. The second type of map is relational maps. *Relational maps* show the relations between the different components of the situational maps. These relations are not static and depends on what is considered the focus of the analysis. Therefore, it is possible to draw several relational maps of the same situation but focusing on different components. Relational maps can therefore be understood as lines of inquiries about a given component and its effect on a situation. Therefore, the purpose of relational maps is not to offer a complete overview of a network, but rather to constitute ways of thinking. Whereas situational maps analyze what is present in a situation, relational maps analyze how elements in a situation operate on one another depending on the

perspective of the analyst. Clarke, Friese and Washburn (2018) propose additional maps, but in this article, I will only discuss situational and relational maps. The reason for this is, that I consider the strength of situational analysis of games to be its ability to offer an overview as well as a fine-grained and particular description of a game situation, which may be used early in a research project. Situational analysis can be used as a standalone analytical method by constantly iterating on or redrawing the situational- and relational maps until the analysis reaches a *point of saturation*. However, the version of situational analysis of games that I propose in this paper is an explorative-analytical approach into the particularities of the empirical situation, rather than explanatory and theory building. As such, it is designed to be used in the early phase of a research project to come to know the empirical object at hand. As I see it, situational analysis of games does not necessarily substitute but instead complement existing analysis methods, such as those mentioned in the introduction. In this case, situational analysis may help qualify and nuance the research question, give the analyst a thorough understanding of the forces that are present within a game, which may in turn guide, challenge and condition a later analysis. Situational analysis can be used on all games independent of their material basis. It can be used to unpack and denaturalize the sometimes seemingly seamless compound that constitutes the experience of the computer game, or to draw together the distributed mess of events, artifacts and actants that makes up the involvement with many non-computer games.

SITUATIONAL ANALYSIS IN PRACTICE

I will now present a practical example of a situational analysis of games. I decided to use *Dungeons & Dragons* (hereafter *D&D*) (Wizards of the Coast 2014) as a case study. The reasons for this were mostly programmatic: at the time, I had relatively little experience with the game, and tabletop role-playing games more generally, save from a few individual play sessions. This lack of a priori knowledge seemed like a benefit to a grounded theory-inspired approach. Another reason was, that *D&D* seemed like an interesting case was that the game is not played on a single piece of software, but instead distributed among several, unlike materialities and practices, thus exemplifying the three challenges to game analysis pointed out in the introduction. However, I want to stress, that although I have not chosen a game encoded in software, the method, and the challenges motivating the method not only applies to tabletop games. This will be further discussed in the conclusion.

The primary purpose of this case study is to exemplify what situational analysis looks like in practice. In other words, a full account of the study, and a discussion of how it adds to existing knowledge in game studies is beyond the scope of this case study. Therefore, the focus will be on the analytical activities of map making and how these may generate interesting insights into the game, rather than connecting these insights to existing theoretical and empirical works.

D&D – a case study

Three play sessions of *D&D* constituted the starting point of this analysis. These sessions were played in December-March 2020/21, by me and four other players, one of which functioned as the Dungeon Master. While *D&D* is typically considered a non-digital game and often referred to as a tabletop roleplaying game, there exists several so-called virtual tabletops, software programs that assist the players in keeping track of some parts of the game, such as the character sheet, die rolls, maps etc., and afford remote play. For this continued game of *D&D*, we used a virtual tabletop called *Roll20* (Dutton, Jones, and Zayas 2012) along with *Google Meet* (Google 2017). The level of know-how and experience with *D&D* varied among players. The game was played for amusement purposes, and was continued even after this case study ended, but all players agreed to have the play sessions recorded and used for research purposes. The study included the following three sessions: an initial character creation session, as well

as two regular campaign sessions, during which we played pre-written campaign called *Lost Mines of Phandelver*, which comes with the *D&D*, 5th edition starter set. During the sessions, all players would be logged on to *Roll20* where they could interact with game objects including, characters, maps, dice, imagery and so forth. In addition to this, all players would join a call on *Google Meet* to transmit a video- and audio feed from their physical location.

Practical setup

The three play sessions were recorded using screen-recording software that could also capture audio. The recordings were made on a standard laptop. While two different applications (*Roll20* and *Google Meet*) were used for playing the game and transmitting a video- and audio feed from players, only the video feed of one of these applications would be captured by the screen-recording software at a time. In practice, this was mostly what took place on *Roll20*, since players interacted more actively on this application. The audio from *Google Meet* was recorded during the entire sessions. *Google drawing* (Google 2011) was used to make both the situational- and relational maps, as I found it to be a convenient tool for managing and editing the sometimes quite complex maps.

Map-making

For this study, I created 6 situational maps and 9 relational maps (**Table 1**). The first would be a messy map based on the initial character creation session. This messy map was then made into an ordered map where I sorted components into analytical categories such as ‘Individual Human Actors’, ‘Collective Actors’, ‘Technologies and applications’, ‘Discourses’, ‘Socio-Cultural elements’, ‘Non-human Actors’ and so forth. I then created an ordered situational map of the first campaign session, that were based on the categories of the first map of the character creation session. The work with the first situational map of the campaign session prompted me to iterate on the latest version of situational map of the character creation session. What was added was components pertaining to the individual characters, that I had not paid enough attention to in the initial map, as well as aspects related to the technologies we used during play. I then came back to the first campaign session and created my second version of this map by adding new components and moving others from one category to the next. Finally, I made an ordered situational map of the second, and last campaign session, which did not produce any major changes to the last version of the situational map of the first campaign session.

Based on these 6 maps I then began creating relational maps. While the situational maps were tied to individual play sessions, most relational maps would be based on all three sessions. Some of the relational maps I created would be focused on components that was not present in all sessions though. It would have been possible to make relational maps that was more strictly linked to only one play session at the time, but I decided not to do this, as the sessions that preceded a particular play session not only affected how play unfolded in the current session, but also informed the insights I got when making the relational maps. This would be especially true for the two campaign sessions. The character session was, unsurprisingly, the session that deviated mostly from the other sessions, and therefore, I also decided to make two relational maps focused on the player, where one would be based on the character creation session only, and the other would be based on the two campaign sessions. It would be possible to do the same with other components in the sessions, that could be assumed to change substantially over the three sessions. For example, the role of the Dungeon master was significantly different in the character creation session than in the campaign session, and similarly, although dice are rolled in a similar way across these two types of sessions, their function, and the value we associated with the rolls would differ. However, as this is not a stand-alone study of D&D, but only an illustrative example

of a method, I decided to only make different versions focused on the player. However, it is important because it made me reflect on the situatedness of my knowledge of other components as well. Since map-making is first and foremost an analytical instrument rather than a communicative object, I will only show a single example of a situational and a relational map (**figure 1 and 2**). Note that the figures are small, difficult to decode and for illustrative purposes only.

Name of map	Type of map	Connection to play session
Character creation V1	Messy Situational map	Character creation session
Character creation V2	Situational map	Character creation session
Character creation V3	Situational map	Character creation session
1 st Campaign session V1	Situational map	1 st campaign session
1 st Campaign session V2	Situational map	1 st campaign session
2 nd Campaign session	Situational map	2 nd campaign session
Computer relations V1	Relational map	All
Computer relations V2	Relational map	All
Dungeon Master relations	Relational map	All
Roll20 relations	Relational map	All
Dice relations	Relational map	All
Dungeon map relations V1	Relational map	1 st and 2 nd campaign session
Dungeon map relations V2	Relational map	1 st and 2 nd campaign session
Player relations	Relational map	Character creation session
Player relations	Relational map	1 st and 2 nd campaign session

Table 1: List of maps made in this study, their type, and relations to play sessions.



Figure 2: Situational map of the 1st campaign session, version 2. Components are categorized under different headings and symbolized with different shapes.

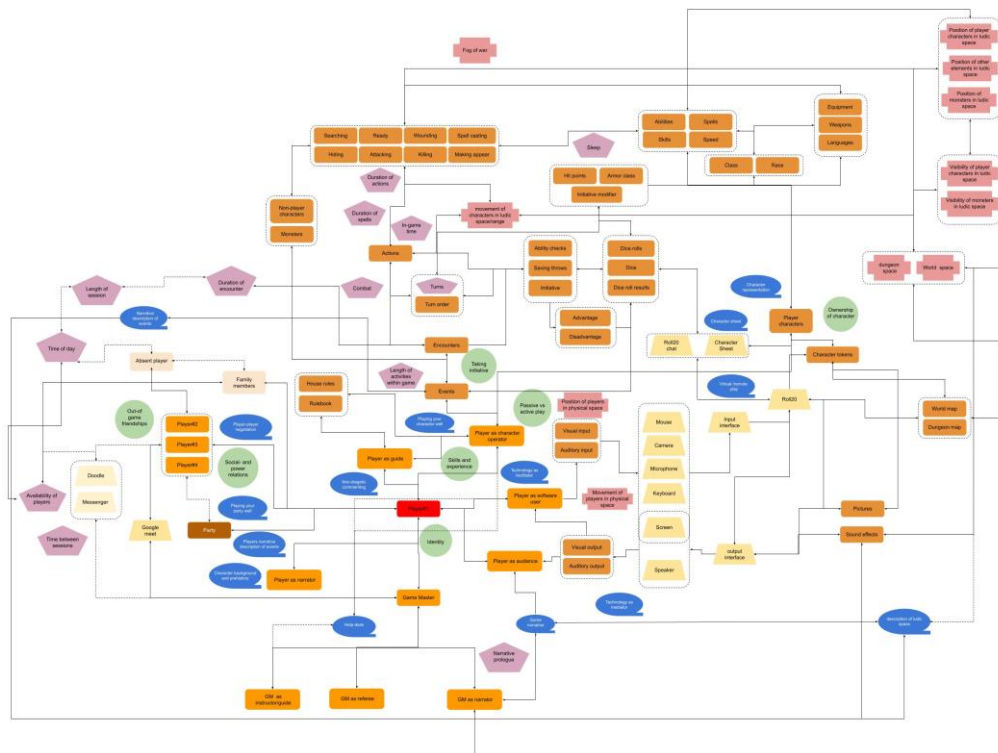


Figure 2: Relational map centered on the player and based on the 1st and 2nd campaign sessions.

Outcomes of the map-making process

The process of making the situational and relational maps generated many insights on the play sessions. In the following I will go through the analytical process and outcomes related to first situational maps, and second relational maps.

When I mapped the components in the *situational maps*, I began by asking myself basic questions about what was happening in the situation, who or what acted, how, why, and what was the effect of these acts. Note that, drawing on actor-network theory, I considered objects and other types of components as phenomena that could act, in so far as they exerted an effect on a situation. Building on Clark, Friese and Washburn's (2018) suggestions, I also paid attention to possible 'silent actants' who might not explicitly act in the situation but who would still affect it. For example, my own child would be such as silent actor. While she did not participate in the play sessions (that took place in the evening), during one session she briefly woke up, which caused me to move my setup and continue playing from her room. This had significant implications on play. First of all, because this location required me to dim the lights on my computer, making it difficult for me to see the other participants on google meet and for them to see me (it was also dark in the room), and navigate the virtual map. I also had to limit my vocal participation in the game to, to avoid disturbing her sleep. This meant that I kept silent, except during my own turn in combat encounters, where I restricted my participation to the simplest actions. I therefore did not take part in any other decision making on a party-level, and only choose actions that I knew would not require any follow-up dialogue with the DM or with the other members of the party. To identify components, I watched the recorded sessions several times while I added components to the map and moved them around between categories. The aim was not to list only significant and important components, but rather everything I could think off. Still, **the first ordered situational map of the first session** would contain only relatively simple components: the five participants (one Dungeon Master) were listed under 'Human actors', 'Non-human actors' included the rulebook, house rules, the characters, and character sheets, their skills, equipment and weapons, spells etc. A category called 'Technologies and applications' contained components such as the computer, camera, microphone, screen, and the *Roll20* website. Technologies and applications were listed in a separate category rather than simply under non-human actants, as I wanted to emphasize that that these components are perceived in a complicated manner by participants. Technologies are in part discursively constructed and associated with certain expectations of use. They not only act and affect a situation, but also function of a mediator of participants wishes to act. At the same time, they also affect and shape what participants sees as their possibilities for action. This way, their way of acting on a situation is often complex and obscure. The expectations of participants would not necessarily depend on whether they in fact succeeded in their acts. A failure of the technologies to comply with the wishes of the participants would cause frustration but would not cause them to stop considering them technologies. The category 'Discourses' contained discourses on how to create the best character, the best party, the stories we would tell about our own character and its relation to other characters. The character sheet was also listed as a discourse on the character. I also created a category called 'Socio-cultural elements' which contained components such as experience and skill level and the power relations among participants. In this situational map, the category 'Spatial elements' contained mostly things about the location of players. The initial situational map from the 1st play session differed from this, as it would be based on a situation which required of players to not only operate their characters in space and in relation to other characters, but also collaborate with other players and negotiate actions in the game. This was reflected in the situational maps that now included among 'Non-human actors', not only the properties of the characters but also how they could act in the game, the different types of events (encounters, turns, dice rolls, and the effects of their actions, such as when they killed

or wounded monsters). The 1st campaign session also introduced various non-player characters into the situation, the maps on which we played, and the tokens that represented our characters and party on *Roll20*. In the analysis of the **1st play session**, I also moved the character sheet from the category of ‘Non-human actors’ to the category of ‘Technologies and applications’. This reflected how the character sheet gained a special role in the campaign sessions. Now it was not only a sheet that discursively and practically defined our characters and their ways of taking part in the game. On *Roll20* it also became an interface that we could operate. Through the character sheet, we could attack, cast spells and so forth. Operating this interface proved to be a continued challenge during the play sessions. The category ‘Spatial elements’ were also expanded significantly in the mapping out of the 1st campaign session, as spatial elements associated with our character tokens, their position, movement and visibility on the world- and dungeon maps became relevant factors in the situation. So did the visibility of monsters and other non-player characters, as well as the availability of the map itself. In this situational map I also added a whole new category of ‘Temporal elements’ that included duration of the play session, the duration of individual events in the game, such as encounters, combat mode, turns, actions and rest. I also added temporal elements such as the time between play sessions and time of day. The category ‘Socio-cultural elements’ was also expanded with components such as character ownership, inclination to take initiative and more generally inclination to play actively or more passively. In the category ‘Discursive components’, I added discourses on how to play your character well, and here cheating also emerged as a distinct discourse. The Dungeon Masters’ and the players’ storytelling of game events was also considered discourses. Moreover, I noted a discourse I called ‘help-desk’ which was closely associated with the discourse on playing well. These various discourses were one of the reasons I began to consider the nuances of human actors. Previously, I had just included in this category the players and Dungeon Master, but in the **2nd situational map of the 1st play session** I began to list the various functions and roles they filled out. Therefore, I added to this category components such as ‘player as narrator’, ‘player as audience’, ‘player as character operator’, ‘player as software user’ and ‘player as guide’. For the dungeon master I added the same five roles and in addition to this, a component I called ‘Dungeon master as referee’. The differences between the 1st and the 2nd version of the situational map of the 1st campaign session, and the 1st version of the situational map of the 2nd campaign session were mostly, that a few more components was added in the category non-human actors. The aim of the situational maps is not to arrive at a final, complete list of components but rather to train myself in identifying what exerts an effect on a situation and how ephemeral these actors are, since components could move from one category to the next depending on my analytical perspective.

When making the *relational map* I started out by thinking about which components could be interesting to explore further. Ideally, I would have created a relational map centered on each of the components in the situational map, but as some versions of the situational maps contained more than 130 components and I had produced maps of tree different situations, I considered this a too time-consuming exercise that could not be justified by the potential insights this could have generated. Still, I would consult my situational maps several times to decide on components to study further. The components I chose to analyze was not necessarily things I deemed very important in the play sessions. It could be components that I thought seemed insignificant and therefore wanted to explore in more detail. It could also be convoluted components that I wanted to unpack further. The first versions of the situational maps of the character creation sessions contained a component simply called ‘computer’. However, when I started making a relational map centered on this component, I soon realized that it was necessary to distinguish between the in- and output interfaces, hardware components such as the keyboard, mouse and screen, and also consider how these elements gained

different functions in relation to players at different points during the sessions. Similarly in comparison with the first version of my relational map centered on the player, the last version, which I made late in the analysis process, is significantly more complex and includes different roles of the player, and thus also makes it possible to relate the player component to more other components (**figure 3**).

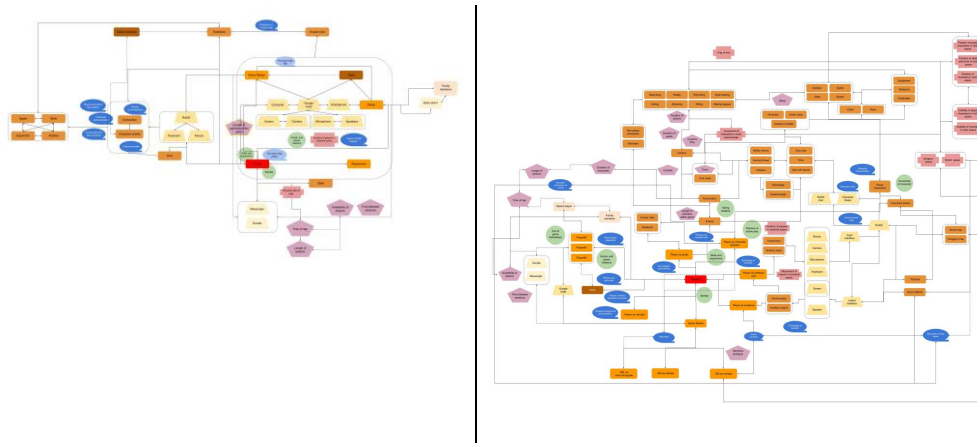


Figure 3: Early relational map centered on the player (to the left) compared to a second version I did later in the analysis process (to the right).

When making the relational maps, I would ask myself how a component acted on the situation and what other components it related to. I would also consider what characterized this relationship. I copied all components from my situational maps onto the canvas of my relational map to force myself to include in the network as many components as possible. However, I would start with the most obvious connections I could think off. When I analyzed the relations of a human actor, I would start by relating this actor to the other human actors in the situation. Then I would begin positioning the non-human actors and consider if a relationship between two components would be in virtue of other components. Players would typically be related to a monster or non-human actor through some event in the game. If the relation between player and monster would be via an encounter, I would add components such as initiative rolls, turn order, ability checks, saving throws, the result of dice rolls to this network. I decided to group together components that I thought was closely connected to each other, such as different actions available to take in a turn. After having related as many components as possible from the categories ‘Human actors’ and ‘Non-human actors’, I would begin to consider how technologies facilitated or mediated these relationships. Various hardware components, and *Roll20* as both in- and output interfaces, facilitated the players’ relations to a variety of non-human components, that in turn was related to character, their position on the game maps and their actions within the game. However, in considering how players related to each other (Including the Dungeon master), it was important not only to analyze what took place on *Roll20*. Also, *Google Meet* functioned as a facilitator of player-negotiations on what to do in the game, how to play well, and help-desk discourses along with the oral narration of events of both Dungeon master and players. After I had placed the components of the category ‘Technologies and applications’, I would add temporal and spatial components before placing the various discursive and socio- cultural components and components from the category ‘functions and roles.’ Visually, these components were often not placed in a direct relation to human- or non-human actors and technologies, but rather close to a particular line of relations. The reason for this was, that these components typically acted more indirectly on the rest of the

components, by qualifying, modifying, or specifying a given relationship or by addressing a particular aspect of it. Social- and power relations was a factor that modified how players related to each other, and how a player would relate to the component of the 'party'. Similarly, the skills and experience of a player would qualify his or her capacity to act as a guide to other players. An example of how discourses may work on relational maps, can be found on the relational map centered on the Dungeon map. Here the discourse of cheating (which was not prominent in the three sessions) addressed an aspect of the physical site of play, and the players position within physical space. The reason for this was, that the Dungeon master could obscure certain parts of the dungeon map for individual players, based on the position of their characters on the map, and abilities of characters to for example see in the dark. Me and my partner was positioned in front of separate computers but was sitting next to each other. The discourse on cheating affected how we acted in physical space. At one point, I would turn my computer screen away from my partner, so he could not see the dungeon map on my screen, since my character had better dark vision than his, and thus had a greater view of the dungeon. In another map centered on dice, the discourse on cheating would be placed around the non-human components 'dice rolls', 'dice roll results', the spatial component 'physical site of play' and the application *Roll20*. The reason for this was that some participants would roll dice by pressing a button on the *Roll20* website, which then displayed the result to all players (or just the Dungeon master). Sometimes however, a participant would choose to roll an actual dice in physical space, and verbally transmit the result to everybody else. This, in principle made cheating possible, as the player would now be able to lie about the dice roll result. The discourse on cheating, however, did not emerge through serious accusations of such lying, but rather as tongue-in-cheek teasing.

Just like the situational maps is not aimed at producing a full list of all components, the use of the relational maps is also first and foremost processual. It was through the process of making these maps, that I began to think more concretely and in detail about the how components worked on one another. At several points in my analysis, I would revisit a relational map and redraw the relations, as new things had come to my attention, or I had started to think about a component in another way.

Using maps to qualify further analysis

As mentioned earlier, the situational analysis of games presented in this article is explorative and aimed at early stages of research. I consider it to be relevant in cases where the researcher is working with a research question that is still very open and does not hinge on a specific theoretical framing of the object of study but might rather be motivated by an empirical observation. In this case situational analysis may be used to further qualify the research question by guiding the analyst on what to look for. While the case study presented here was motivated by an aim to illustrate the method of situational analysis, it is easy to imagine it being carried out as part of actual research. For example, by a researcher who wants to study how tabletop games such as *D&D* is affected by remote play practices. To do this, situational analysis may make her aware of how materialities, technologies, spatial, temporal, socio-cultural and discursive components exert an effect in a specific set of empirical play sessions. Based on this she may then refine and narrow her research by taking these components as a starting point for further inquiry through interviews, observations, and more game analysis (maybe comparing remote play sessions with play sessions in a shared physical space). Situational analysis can also be used by researchers who have already decided to approach a game from the perspective of a specific theoretical framework. It might be that the researcher wants to do a narrative analysis of the game. In this case, situational analysis may help her become aware of many different components that acts on the 'narrative' of game, such as *The lost mines of Phandelver*. These include not only the narrator (a role that is delegated to both game master and players), but also non-human

actants shaping the story (component of the game system determining what kind of actions a player might take, for instance), human operators of this game system (actually making the choices), maps, character sheets and character tokens mediating parts of the story, and finally discourses and socio-cultural components that influences what happens during the game. This may in turn make it easier for the researcher to ground a subsequent narrative analysis in the empirical object.

CONCLUSION

In this article, I have presented a method for doing game analysis based on Clarke, Friese and Washburn's (2018) *situational analysis*. Situational analysis of games is a potentially beneficial method in game studies, for several reasons. It departs from traditional analyses of finite objects and artifacts and, inspired by the social sciences, views the games-as played, as unfolding situations. This acknowledges the elusive and transient character of game play and firmly positions the researcher in relation to this situation. This method is aimed at students and researchers not well-versed in game studies, and it aims to make apparent some of the assumptions guiding experienced game scholars. Situational analysis of games builds on the practice of map-making. Here maps are not the products of analysis, but a reflective tool. Situational analysis of games is therefore explorative and open-ended and can complement existing analytical frameworks within game studies. Situational analysis is an analytical perspective that can be applied to all types of games and play situations, but in this article, I have presented a case study based on three play sessions that was part of my playing of a campaign in *Dungeon & Dragons* 5th edition. It should be noted that this does not mean that situational analysis is best suited for analogue role-playing games. While these types of games distribute to their human players, many elements of play that are otherwise encoded in the game software (such as storing and displaying the game state, enforcing, and communicating rules, mechanics and affordances of objects within the game), a similar analysis of actors/actants and agency, and how human and non-human agency is intertwined during play can be made on games played on a computer.

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ENDNOTES

¹ Handford (2017) develops a method for the analysis of player experiences he calls 'situational analysis'. Handford's situational analysis however, builds on reader-response theory and is significantly different from Clarke's extension of grounded theory.