Deployment mechanics in analog and digital strategic games: A historical and theoretical framework

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ABSTRACT
This paper presents a historical and theoretical analysis of deployment in analog and digital military-themed strategic games. Deployment can be described as the phase in which players place their forces on the board or in the simulated world of a digital game, thus making them active. We argue that approaching a genre via a close reading of one of the genre's constituting phases may help us discuss wider historical and theoretical issues regarding these games. More specifically, we use deployment metonymically to discuss the modifications in game design and gameplay that military-themed games underwent with their digitization. Furthermore, we discuss deployment within the framework of en-roling, that is the act of assuming a role in a specific context, including a simulated digital or analog ludic environment.

Keywords
Strategy games, deployment, metagames, wargames, en-roling, liminality

"On returning from a second
careful inspection of the lines,
Napoleon remarked:
'The chessmen are set up,
the game will begin tomorrow!'"

Leo Tolstoy, *War and Peace*

INTRODUCTION
This paper proposes a micro-analysis of the 'deployment' phase of strategic analog and digital games, with a specific focus on non-professional[i] military-themed ones. Our endeavour can be described as an attempt at a micro-analysis of a set of specific game mechanic; this micro-analytical approach, we argue, may function metonymically to discuss larger-scale issues. In this perspective, our approach to the object of this study is informed both by Bogost's (2006) use of the notion of 'unit operation' as the lowest common denominator of digital game analysis and critique, and by Boluk and Lemieux's (2018) micro-analysis of seventeen seconds of a *Dota 2*

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(Valve Corporation 2013) match. The latter worked, for us, that works as an index for the analysis of the game's social implications.

More specifically, we argue that a narrow focus on cultural and technological legacy and the theoretical implications of deployment in strategic games has a threefold benefit for the research agenda of game studies. First, it highlights what Crogan (2011) describes as the 'transductivity' of games and military interests, that is an ongoing, mutual influence and reinforcement between these two domains (see also Pötzsch and Hammond 2016, Lenoir and Caldwell 2018). Second, by virtue of being a trans-technological feature (that is, one that occurs in both analog and digital strategy games), deployment allows us to discuss technological continuities and ruptures across different media. Finally, as an inherently liminal play activity – as we will claim, deployment happens on the cusp of gameplay – this phase allows us to articulate a theory of liminality that intersects a number of relevant theoretical contributions in game studies (see Boluk & Lemieux 2018, Fassone 2017, Gualeni & Vella 2020).

This paper is divided in four parts. After an introduction to the notion of deployment, and a clarification of our understanding of this term, we will offer a typology of deployment acts in analog wargames. We will then proceed diachronically and discuss the relevance and meaning of the legacy of analog deployment in digital games. Finally, we will articulate a number of theoretical considerations on deployment to discuss liminal states of gameplay more in general.

WHAT IS DEPLOYMENT?

For the purpose of this paper we define deployment as the phase in which players place units or other entities on the play field in strategic games. In the case of analog games, the play field is usually a board that represents a map of some kind, while in the case of digital games it is the bi- or tri- dimensional virtual world in which the game takes place. In both cases, deploying a unit means placing it and turning it into an active entity within the game world. We specifically use the word 'unit' here, since our work refers for the most part to military-themed games. We chose this specific subset of strategy games for three reasons:

- they seem to consistently include the act of deployment,
- the manuals and meta-language related to these games use the word deployment – likely as a legacy term from its military origin, and
- deployment can be observed both in analog and digital games of this type.

We understand deployment as substantially different from generic set-up actions that, in the case of board games, include all those operations that are performed before the start of a game such as placing markers or tokens, dealing cards, and preparing other materials. While these set-up actions act as prerequisites for the start of the game and have no strategic value, deployment of units may happen at any stage of the game and may entail strategic decisions, since placing one's units in different locations, or at a different time, may result in significantly different outcomes. In other words, while set-up actions are pre-ludic actions performed in order to start the game, the deployment of units in strategic games is a ludic action that requires a level of discretionality and strategical thinking from the player. Set-up actions can be observed also in digital games, and may include various types of graphical adjustments and the fine-tuning of other preferences. These generally pertain to the realm of what Galloway (2006, 12) describes as 'nondiegetic operator acts', actions that take place outside of gameplay and serve the purpose of optimizing the play experience. In this perspective, in Galloway's terms, deployment happens across the borders of gameplay; placing one's units on an analog or digital battleground with a

degree of discretion is certainly relevant in terms of its 'gamic' (Galloway 2006, 1) repercussions, but arguably happens in a liminal moment in which proper gameplay is either yet to start or on hold.

Within the context of a potentially wider analysis of strategic game design, we understand deployment as a specific mechanical unit within what Juul (2016), following Björk and Holopainen (2004), describes as a 'design pattern'. In other words, the genre of strategic military themed games can be seen as a combination of several mechanics that are refashioned over time, thus constituting specific design patterns. Among these mechanics, deployment seems to be consistently present in games of this genre, and modifications in its relevance and characteristics within single games or group of games can act as an index of wider historical transformations in design patterns.

Finally, a clarification on the use of the word 'strategic' in describing the kinds of games we will analyse. In analog wargames communities, the term strategic is often considered as being in opposition to 'tactic'. It is implied that strategic-level games deal with the simulation of major conflicts fought on a large scale, while tactical-level games allow players to interact with localized, smaller scale operations[ii]. In this paper we will use the term strategic to describe both kinds of games, as we recognize that despite the differences in the scope of the modelled conflict, "both 'tactical' and 'strategy' games need a similar skill set" (Dor 2018), that is the ability to manipulate complex systems in order to reach a precise, functional goal (Dor 2014). For this reason, we will use wargames only when referring to analog games, while our wider ontology is that of strategic military-themed games. With the word 'wargame' we indicate a game that simulates the major features of a real battle, such as terrain effects, logistics, weather, the different qualities and capabilities of the various national armies and units involved, etc. Games such as *Chess* or *Asalto*[iii], albeit war related, are not wargames, because they offer a very stylized, non-simulative representation of warfare. As Sharon Ghamari-Tabrizi (2016, 331) puts it: "Wargames are synthetic experiences–substitutes for real life."

DEPLOYMENT IN ANALOG WARGAMES

According to the U.S. *Department of Defense Dictionary of Military and Associated Terms*, deployment is "the movement of forces into and out of an operational area" (DOD 2019, 64). Commanders deploy their forces and place support capabilities according to a plan in order to achieve a specific result. The plan must consider various factors, such as the quality and quantity of friendly forces, the (often merely supposed) characteristics of enemy forces, the features of terrain, supply lines, the goal that must be achieved, as troops are deployed on the field either to launch an offensive or to defend a position. Deployment actions are the first steps of a process, and it is followed – or can be followed – by manoeuvre and combat. How troops are deployed on the field is crucial for the ensuing operations. For example, Frederick the Great writes:

> If a Prussian army is inferior to that of the enemy it need not despair of success: the general's dispositions will compensate for the lack of numbers. A weak army will always select difficult and mountainous country where the terrain is confined, so that the enemy finds his superior numbers useless. […] The choice of ground is my first concern; the arrangement for the battle itself is second. Here my oblique order of battle can be employed to good advantage. By refusing or holding back one wing to the enemy and reinforcing the attacking wing, you can hit the enemy wing that you wish to take in flank with the bulk of your forces. (Luvaas 1999, 176-177).

In analog wargames, deployment is the action of physically placing counters representing military units on the board. We can divide this action into two main sub-categories. The first – and by large more relevant – sub-category is the initial deployment, the moment that the majority of wargame rulebooks refer to as 'set-up'. The second kind of deployment is the arrival of reinforcements, which is present in the vast majority of analog wargames.

Initial deployment represents a key process in wargames, precisely because they are simulative games that aim at reproducing in detail the complexities of warfare. We are not saying that in non-simulative war-related games initial deployment is inevitably irrelevant. In some cases, deployment is a relatively banal procedure that goes almost unnoticed. In *Chess*, for example, not only players are bound to deploy their pieces according to a fixed scheme, but, differently from wargames, the position of black and white forces is strictly symmetrical. In this case, deployment represents a 'zero-hour' state that precedes the game. Here, initial deployment fully coincides with set-up, as players place pieces on the board following standardized procedures. On the contrary, in other non-simulative war related analog games, such as *Asalto* deployment – which is free for the player defending the citadel – has profound strategic implications.

There are two main types of unit deployment: historical and free deployment. In the first type of deployment, players cannot choose where to deploy their forces. Here, counters are placed in the areas where the units they represent were at the outbreak of hostilities, and their disposition, being dictated by the game's rules, has no strategic value. For example, in *Paths of Glory* (GMT, 1999), beside two minor exceptions (Bulgarian and Romanian forces, that are allowed a partially free deployment), all units are placed exactly where they were in the August of 1914. In *Paths of Glory*, at least for experienced players, deployment is just a formality, more or less like in *Chess*. But for first-time players, things are typically very different. Wargames are complex games that require a process of learning. In order to master the rules, setting the game up is a very important exercise. Wargame designer James Dunnigan suggests always starting with placing the units on the map: "[o]nce you have an understanding of what is supposed to be going on in the game, you should immediately set the pieces up and have a go at it" (Dunnigan 2000, 36)[iv]. Placing pieces on the map means starting to get acquainted with units, each one with its own specific capabilities, as well as with the map, whose terrain features have a variety of connections with gameplay, from movement to fighting, from supply lines to victory conditions. As clarified in the introduction, in this paper we are only considering recreational wargames. This operation, however, caters for the same functions in professional wargames: "[p]layer activities may include physically placing game pieces on a large map display to facilitate awareness of space, time, and forces consideration" (Burns 2015, 24).

Leaving its ludic function aside, i.e. setting the game in motion and taking preliminary strategic decisions, initial deployment in analog wargames may possess a specific kind of aesthetic appeal. Maps and counters (i.e. units) are not merely functional components of gameplay. Visual and tactile pleasure are also involved. Discussing her work on *Napoleon's Triumph* (Histogame/Simmons Games, 2007), game designer Rachel Simmons (2016, 202) claims that she chose wooden pieces over cardboard counters precisely because she thought they were more appealing to the eye. Organizing and looking at counters, studying the map, manipulating pieces and placing them on the map, all this represents a pleasure *per se*.
Being well-acquainted with specific games, experienced players can develop a specific interest in some units, even a 'passion', as in Roberto Bolaño's *The Third*

Reich (2011), a book titled after *Rise and Decline of the Third Reich* (Avalon Hill 1974), one of the most popular wargames ever published.
The novel's protagonist has a 'favourite counter' (by no chance, always belonging to the German armed forces) in every game he plays:

> My favorite counters: the First Parachute in *Anzio*, the Lehr Panzer and the First SS LAH in *Fortress Europa*, the eleven counters of the First Parachute in *Omaha Beachead*, the Seventh Armored Division in *France '40*, the Third Armored Division in *Panzerkrieg*, the First SS Armored Corps in *Russian Campaign*, the Fortieth Armored Corps in *Russian Front*, the First SS LAH in *Cobra*, the Grossdeutschland Armored Corps in *Third Reich*, the Twenty-first Armored Division in *The Longest Day*, the 104th Infantry Regiment in *Panzer Armee Afrika* … (Bolaño 2011, 200-201)

Of course, the aesthetic pleasure of initial deployment reaches its peak in miniature wargaming. Here, the pleasure of preparing the terrain and the armies is part of the pleasure of play. According to Deterding (2010, 27) "the buying and painting of their own tin army and the construction of model landscapes are as integral an activity as the gameplay itself".

When deployment is partially or completely free of historical constraints, initial deployment is also a key moment of strategic planning with interesting theoretical implications. In the abovementioned *Third Reich*, a game on WW2 in Europe and North Africa, players are required to deploy a minimum of forces in specific areas. The rulebook calls it 'deployment limits'. For example, in the campaign scenario, which starts in the fall of 1939, Germany has no restrictions and can place its forces at will inside the Reich's borders, while Italy must deploy at least one infantry unit in Albania and two in Libya. The Axis player can choose where to place the bulk of the Italian forces, either in Libya, to attack the British in Egypt, or on the Alps, in order to join the Germans in the attack against France. It is self-evident that, if the Axis player can place their forces (almost completely) where they please, a key detail is *when* they place them. The game has an order of deployment, which reads: Poland, Italy, France, Britain, Russia, Germany[v]. So, if the Axis were planning a sneak attack on Egypt, the Allied player would know it advance; and the British could place more troops in Egypt to reinforce the small garrison required by deployment limits. *Third Reich*, as all wargames, is structured on a dialectics between historicity and playability[vi]. Its (partially) free deployment works in favour the latter. Historical deployment games are more simulative in their premises, while free deployment games favour gameplay affordances. In these cases, initial deployment, shaping the flow of the first turns, can assume crucial strategical importance, with its repercussions resonating throughout game.

Free initial deployment also poses another question, that of the absence, in analog wargames, of the so-called 'fog of war'. In real military operations, even in our times, with surveillance satellites and drones, generals are never totally sure about the location and entity of enemy forces. As military thinker Carl von Clausewitz writes: "[t]he only situation a commander can know fully is his own; his opponent's he can know only from unreliable intelligence" (Clausewitz 1984, 84). On the contrary, in analog wargames (with the exception of block wargames and certain peculiar games such as *Panzergruppe Guderian* [SPI 1976]), players usually have total knowledge of enemy forces.

Figure 1: In block wargames such as *Hammer of the Scots* (Columbia Games 2002) the players cannot see the strength of enemy units.

In some games, for example *War and Peace* (Avalon Hill 1980), players are not allowed to inspect enemy stacks. Nevertheless, this is a relatively minor hindrance, as players have complete knowledge of the opponent's forces position at all times. The difficulty to reproduce the informational asymmetry intrinsic in real military operations leads us to the second subcategory we mentioned: that of reinforcements. In analog wargames players have very precise information regarding enemy reinforcements, something unimaginable in real warfare. There are games where reinforcements represent a vast majority, or even the totality of a player's forces. In *Arnhem* (SPI, 1976), a game on Operation Market Garden (1944), history's largest airborne operation, the Allied player starts with no units on the map. All Allied forces enter as reinforcements, either by road or by air dropping. The German can inspect the list of Allied reinforcements, and position their forces on the map in order to contain the menace. In the rulebook of his game on the battle of Gettysburg (RBM Studio 2018), designer Mark Herman openly addresses the question of player unrealistically trying to block the entry hex where enemy reinforcements are going to arrive: "*Gettysburg* gamers love to try and interdict enemy reinforcements at the map edges. Simply stated you cannot, and I have written these rules to reflect this situation. Any loopholes that you perceive are misperceptions" (RBM Studio 2018, 6). While, in the case of Herman's game, it is the game designer who needs to spell out rules and exceptions in the rulebook, the digitization of wargames reconfigured deployment actions, their affordances, and their implications in a radical fashion.

Figure 2: In *Panzergruppe Guderian* Russian units are marked with a question mark, since at the time of deployment their strength is unknown to both players.

OBFUSCATION AND SIMPLIFICATION IN DIGITAL GAMES

In 1981 game designer and scholar Chris Crawford published an article that detailed his hopes and previsions for "the future of computer wargaming" (Crawford 1981, 3). Crawford is referring here to what he perceives will be the inevitable consequences of the diffusion of computer technologies in wargaming communities, and offers some speculations concerning the implications of designing and playing wargames in the era of the personal computers. The early 1980s are usually considered the start of the decline of the industry of analog wargaming (Costikyan 1996), which considerably shrunk due in great part to the competition with domestic video games. Despite this narrative, it may be said that the hobby did not disappear, but rather underwent a veritable 'digital exodus' (Deterding 2010, 29), a technological reconfiguration that relocated the design practices and play customs of wargaming from the board to the computer screen. As noted by Deterding (2010), this migratory movement is marked by a set of continuities – for examples in terms of themes and aesthetics – and a number of discontinuities, namely in the production pipelines and industrial arrangements.

A number of primary sources (Simonsen 1977, Crawford 1981) allow us to locate a process of co-existence and, then, a *de facto* takeover[vii] of digital wargames over analog ones in the late 1970s and early 1980s. Far from being merely a technological adaptation of pre-existing conventions and game design patterns, this shift implied the employment of several adaptation strategies both in terms of game design and game play. Nevertheless, the act of deploying troops or units remained a pivotal phase in most digital military games. In other words, in a diachronic, trans-technological reading of military games, deployment can be described as a fixed unit within a series of concurrent design patterns that underwent a series of changes due to historical and

technological factors. The act of deployment can thus fruitfully be used to discuss these changes and frame the effects of this technological shift on military games.

The 'digital exodus' generally entailed two major shifts, which can be provisionally defined as black-boxing and simplification. According to Deterding (2010, 35-36) black-boxing refers, in this context, to the obfuscation of rules via their embedding in computer procedures. In other words, while analog wargames required extended rulebooks detailing every procedure to be executed by the players, their digital equivalents made most of these moving parts essentially invisible, as they were performed by the game code rather than the human players. Despite making rules less accessible for players to tweak and hack, the process of black-boxing lead to a substantial simplification of military games, as players were no longer required to learn complex rulesets and refer to esoteric mathematical charts. According to Myers "the rule models of combat simulators receded into the background of gameplay, rising to player awareness and concern only when called upon to adjudicate player decision making" (2016, 396).

These entangled processes of black-boxing and simplification can be peculiarly observed in deployment phases. In the aforementioned article, Crawford embraces a spirit of enthusiasm towards the digitization of wargames and enumerates a series of advantages for players and designers. More specifically, Crawford (1981, 4) offers a peculiar reading of the black-boxing process when he writes: "the computer will allow us to have (at long last) true limited intelligence wargames. […] Limited intelligence applies not only to unit positions and strengths, but also to terrain effects, movement speeds, logistics effects, and the effects of weather". With 'limited intelligence' Crawford points at the possibility of recreating the effects of fog of war in a digital context. In this sense, the notion of black-boxing percolates from the game rules into the play experience, as the presence of the fog of war effectively black-boxes the opponent's strategy. This is peculiarly visible in deployment mechanics. Let us consider, as an example, two mechanically similar games with different technological affordances. *Squad Leader* (Avalon Hill 1977) is an analog wargame that simulates tactical combat in WW2. Two players deploy and operate a number of units on a map representing a relatively small portion of terrain, furnished with buildings, bushes, and roads. Rules for deployment allow players a certain degree of strategic freedom when placing their units on the map. As an example, buildings offer some degree of cover for units, and hexagons in or behind buildings are thus strategically advantageous deploy spaces. Nevertheless, due to the material constraints of an analog game, players always maintain full knowledge of the units, both friendly and opposing, on the map. This substantially influences deployment strategies, as possessing full knowledge of the status of the units on the field at any time, allows for reactive deployment, as players mutually adapt their strategies to their opponents' actions. *Xenonauts* (Goldhawk Interactive 2014)[viii] is a digital game that is very similar in its premises to *Squad Leader*. The player controls a team of soldiers that operate on a relatively limited battlefield and are pitted against computer-controlled enemies. The game proceeds in alternating turns, in which the player and the computer-controller opponent move and conduct attacks with their units. Differently from the player of *Squad Leader*, the player of *Xenonauts* is subjected to the effects of fog of war, and cannot know where the enemies are located. The player can deploy their units within a range of positions, but is forced to do so on incomplete information. In other words, deployment becomes speculative rather than responsive, as player is forced to guess what the best starting strategy is, basing their intuition on known variables such as the conformation of the visible portion of the terrain and unknown factors such as enemy positions and strength.

As noted earlier, simplification operates as a bi-product of black-boxing, and this process is clearly visible in deployment mechanics. In the case of a game such as *Squad Leader* (see Figure 3), deployment rules are spelled out in scenario-specific rulebooks. For example, the first scenario for *Squad Leader*, titled *The Guards Counterattack*, informs players that the 308th Rifle Division must be deployed in certain buildings on the map. Nevertheless, the scenario notes that "in *all* [sic] scenarios units may deploy anywhere within the designated building, not just the designated hex used to identify the building" (Avalon Hill 1977). This allows players to strategically deploy units within a range of hexagons in a building, assuming that certain deployment formations will be more advantageous than others. Deployment rules and restrictions are conveyed to the player via the game's meta-ludic (Carter et al. 2012) apparatus (rulebooks, scenario cards, etc.) and their execution requires the player to consult these materials and then implement instructions into the game. In *Xenonauts* the rules for deployment are turned into both diegetic 'gamic' elements (Galloway 2006), i.e. they are transported from the rulebook into the projected game world by a specific ludic device[ix]. Positions available for development are highlighted, thus made immediately visible to the player (see Figure 4). This process of simplification is reflected through the game in the use of synoptic devices (such as statistics and percentages in the game's user interface) that stand in for analog wargames' often-cumbersome CRTs (combat result tables), that the players are required to consult in order to solve combats scenarios.

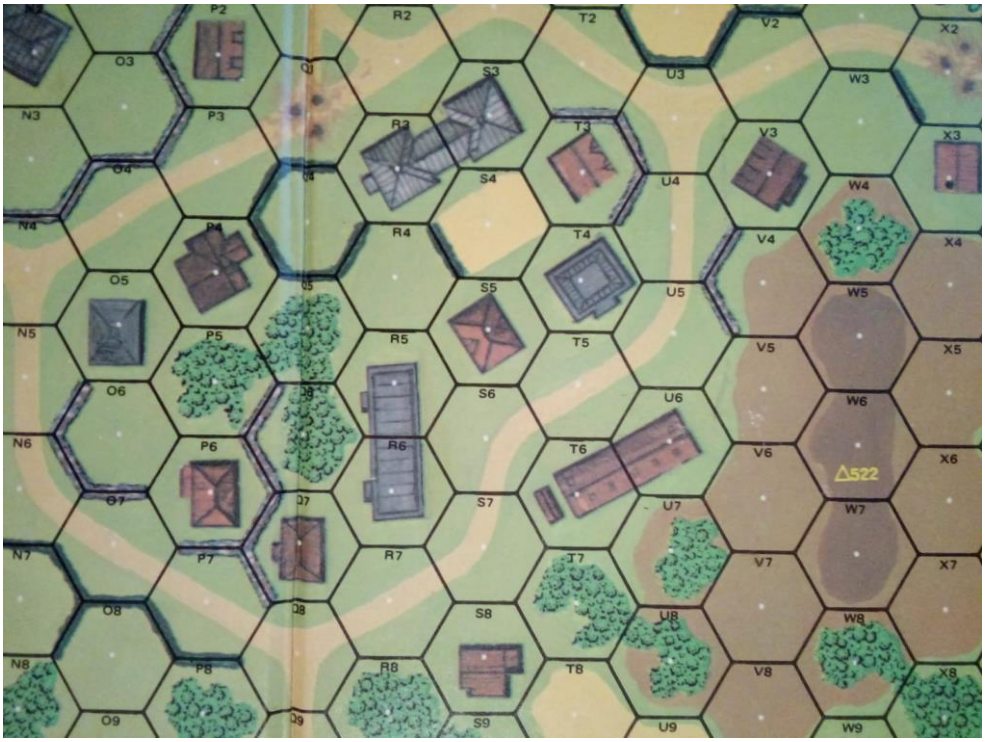

Figure 3: The map of *Squad Leader*

The compounded effect of black-boxing and simplification generates significant repercussions in the way in which deployment is perceived by players and can be interpreted critically. In the following section we will offer an interpretation of deployment in military-themed digital games that accounts for their exceptionality (Fassone 2017) as digital artefacts.

While in this paper we focus exclusively on turn-based games (due to their direct genealogical link with analog games), it should be noted that deployment is a relevant feature in real-time games as well. In these games the deployment of units is usually connected with what is commonly known as the 'build order', which can be framed as a form of continuous deployment that happens consistently throughout the game. In other words, real-time strategy games can be understood as a peculiar sort of deployment-only games, in which this action holds specific strategic implications that should be discussed in their own right.

Figure 4: Units ready for deployment in *Xenonauts.* The green and red square indicate positions available for deployment, while the black portion of the screen represents the fog of war.

DEPLOYMENT AS A PRELIMINARY, TRANSITIONAL PHASE OF GAMEPLAY

Several existing approaches in game studies draw on notions such as immersion, embodiment, and incorporation with the purpose of conceptualizing the player's sense of existence in digital game worlds (see Grodal, 2003; Klevier, 2006; Bayliss 2007; Leino 2010; Calleja 2011; Vella 2015; Kania 2017 among others). Despite the relatively large amount of academic work done on those notions, the wider, transitional stages of becoming involved in a virtual world remained largely undertheorized (see Vella & Gualeni 2019). Those stages, as discussed by Gualeni and Vella, are crucial for what concerns the player's internalization of who they are within a certain game world, their goals and possibilities (2020).

In this section of our paper, we propose to understand the deployment phases of gameplay in military-themed digital games to be paradigmatically transitional. In other words, we will outline an understanding of deployment as a ludic activity that is designed to separate (or, rather, segment the transition between) an initial phase of our engagement with the game apparatus and a relationship with the game that is embraced as an existential situation (Vella & Gualeni 2019, 2, 3; Gualeni & Vella 2020).

The various moments and aspects of a digital game that contribute a player's adopting and internalizing an existential relationship with a certain gameworld (that is, a certain role within it) are referred to as processes (or techniques) of 'en-roling'.

According to Vella and Gualeni (2019), these processes can happen at three different levels:

1. **External en-roling processes:** through which players 'en-role' in a game without directly engaging with its gameworld, but that still inform their eventual engagement with its gameworld (e.g. having experience with digital games in the same genre before, having played the previous instance the same games franchise, or, in the case of military-themed games, being familiar with the simulated historical processes).

2. **Threshold en-roling processes:** that mark the transition between being engaged in the actual world and being absorbed by a virtual world (e.g. experiencing paraludic material such as game manuals, introductory videos, the game box art, the artwork on arcade cabinets, the game's trailers etc.).

3. **Internal en-roling processes** are ways to come to terms with one's role and aspirations within a gameworld that are part of the direct experience of the gameworld itself.

In understanding the gameplay phases of deployment in military digital games as a moment of 'en-roling', we must clearly position them among the 'internal' processes of 'en-roling', albeit as a preliminary one within that category. Preliminary phases segment the transition from being outside of a game world to being part of it, and tend to be characterized by the possibilities of making a variety of aesthetical choices (for example the insignia of one's battalion, the tone of the skin of one's character, or the name of one's digital pet), but very limited possibilities for interaction. In general, those interaction possibilities are clearly indicated and identifiable from an aesthetical standpoint, and are typically revocable. The deployment phase of *Into the Breach* (Subset Games 2018) can be fruitfully recalled here as an example of such transitional qualities in the deployment phase of a strategic game. In the pre-deployment phase of *Into the Breach* (see Figure 5), the player is given the possibility to choose the difficulty, the types of units the player will control in this particular mission, the colour of each unit, and one of the pilots (the Time Traveler).

Figure 5: An instance of the pre-deployment phase of *Into the Breach*.

In the deployment phase proper (see Figure 6), the player is given an aesthetic indication (i.e. particularly bright tiles) as to which areas of the game terrain are possible to be used for the deployment of units. As previously observed, the decisions the players take in this phase of *Into the Breach* are revocable, and can be indefinitely reconsidered and retaken.

It might be interesting to notice, at this point, that the simplified gameplay that characterizes the deployment phases can be harnessed by the designers to meet functional as well as expressive goals. For example, their offering a reduced number of initial choices can contribute to achieving an acceptable level of fairness in a strategy game's starting options (for example by not allowing forms of deployment that might be considered too aggressive and cornering, or too defensive and turtling). Also, as we claimed earlier, limited interactive possibilities during the deployment phases can be employed in games that value historical accuracy to constrain the players into reproducing actual scenarios.

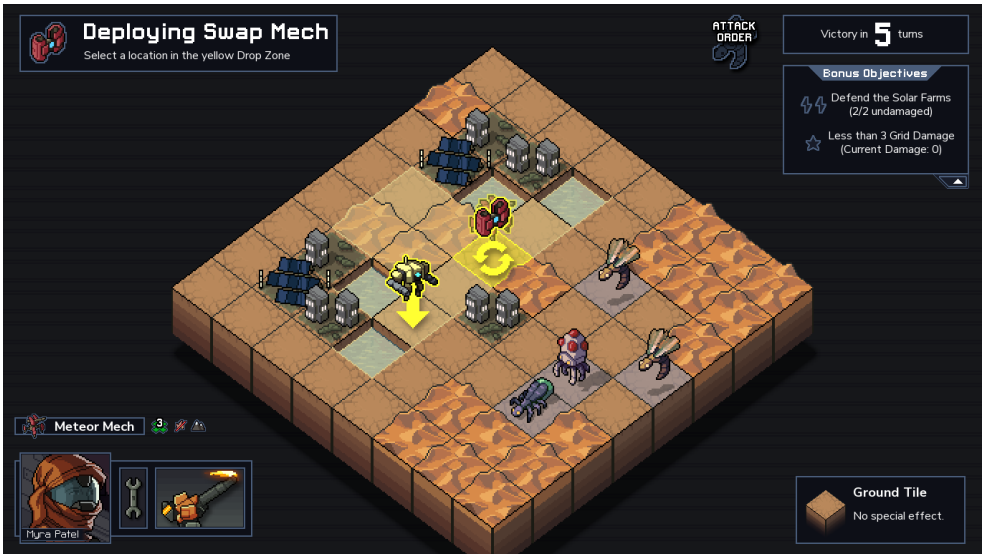

Figure 6: With rare exceptions, units in *Into the Breach* can only be deployed on highlighted areas. Their position can be reconsidered and adjusted before confirming the chosen deployment configuration.

An interesting analogy can be drawn between deployment phases and another phase of the gameplay of digital games that can also be considered transitional: character creation in RPG digital games. Similar to other preliminary, transitional phases, during character creation the players are prompted to choose among a limited amount of options. Some of those options are relevant to in-game performance (usually concerning race, class, and gender), while a wide variety of aesthetical choices with no functional relevance are solely designed to allow the players some degree of aesthetic self-fashioning. Among these, it might suffice to mention the character's hairstyle, the shape of the bridge of her nose, the eventual presence and position of tattoos, etc. Existing literature in cognitive and behavioural approaches to game studies established a correlation between the possibility of making expressive choices concerning players' avatars and the level of empathy that the players will feel towards them (Koehne et al. 2013; Turkay & Kinzer 2014). The same can certainly be argued for the possibilities to personalize the name of a battalion, its distinguishing colours, insignia, etc.

What we are arguing in this section is that preliminary, transitional phases of gameplay (and we consider deployment to be among them) are crucially important in three separate ways:

1) they accompany and further segment the transition of the players from their everyday way-of-being in the actual world to a new and extraordinary way of being, shaped by the activities and projects that are possible within the gameworld in question (see Gualeni & Vella 2020), and

2) they play a crucial role in stimulating and upholding the psychological investment of the players with regard to the ludic activities at hand (for example in the faith or one's avatar or one's troops).

3) they allow players to engage in liminal, but strategically relevant, activities, further complicating the separation between ludic, meta-ludic, and configurative activities (Galloway 2006; Fassone 2017).

A higher degree of connection with the in-game characters and investment in the in-game situation is deemed to increase the personal investment of the player in the

virtual experience as a whole (Koehne et al. 2013; Turkay & Kinzer 2014, Gualeni 2015). It is therefore likely that aspects of ludic pleasure are enhanced by the presence of a reasonable number of preliminary phases such as deployment and character creation. In the specific context of this paper, we argue that the retention of notions and characteristics concerning historical conflicts would also be facilitated by the ways in which transitional phases contribute in making those conflicts personally relevant.

CONCLUSIONS

In this paper, we analysed the phase of deployment – as it exists in military-themed strategic games – with the intention of using it as a metonymy and a test case for a number of relevant themes within game studies. More specifically, we argued that this phase is rooted in the history of analog wargames, but adapted and survived the digital transition that the genre underwent in the early 1980s. The persistence of this specific phase allowed us to highlight the effects of changing technological and material conditions on the ways in which these games simulate warfare and, in turn, players engage with these simulations. We found that the deployment phase peculiarly highlights processes – involving both design and play – of black-boxing and simplification that characterize this technological shift.

We also argued that deployment phases constitute a specific instance of en-roling, that is the process by which players are invited to assume a role within the simulated world of the game, and adopt their ludic subjectivity. In this case, we found, deployment acts both as a strategically crucial act and as a liminal moment of a play experience, found on the cusp of configuration and 'proper' gameplay. The deployment phase can thus be constructed as an example of what Galloway (2012) describes as an 'interface effect', that is a liminal moment in which a mediation happens between the player and the simulated world they are about to enter. While this happens in all games in which players are required to cross a threshold and en-role in a certain virtual world, in the games we have discussed deployment represents a condensation of this process in a specific phase of play.

The implicit assumption of the paper is that by analysing recurring phases or mechanics found in a particular genre it is possible to discuss the genre's legacy and historical trajectory, and propose a theoretical approach to a wider corpus of games. In other words, in this paper we attempted to demonstrate the relevance of a micro-analytical method – one that takes into consideration a specific phase or set of mechanics within a game or a group of games – in the context of game studies.

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[i] Wargames have a long history of professional use by military agencies and civilian think tanks (Kirschenbaum 2014). For this paper we will only focus on recreational wargames.

[ii] Wargames have a third, intermediate level, between strategy and tactics: operational level games, that represent a single campaign of a larger conflict – more than a battle (tactics), but less than a war (strategy). See Perla 1990, 168-172.

[iii] *Asalto* is a traditional boardgame that appeared in Germany in the late eighteenth century. In the mid nineteenth century, in England, it was published as *Officers and Sepoys*. See Parlett 1999, 190-192.

[iv] While we chose to distinguish between set-up and deployment, it should be noted that most rulebooks, and certainly those written by Dunnigan, employ the two terms interchangeably.

[v] In the advanced version of the game, published in 1992, the order is different in the sense that it favors the Allies, with Britain and Russia deploying last.

[vi] Of course, the dialectics between historical and free deployment works only in wargames that simulate real events. In wargames that portray possible wars, in a near or distant future, as well as in wargames with a fantasy setting, this dichotomy is essentially irrelevant. The historicity vs. playability question is central in studies on wargames. An introduction to this dialectic is offered by Palmer 1980, 37-45.

[vii] The hobby of analog wargaming never really vanished, but large numbers of players happily migrated to the convenience of digital play. On this historical process see Peterson 2016, 25-30. For a critical approach, see Costikyan 2016

[viii] The digital games we use as examples are for the most part set in non-realistic scenarios. While several digital games engage in the reconstruction of historic scenarios (e.g. *Unity of Command* [2x2 2011], *Panzer General* [Strategic Simulations 1994]), they generally do not rely on strategically significant deployment mechanics. This may be due to the fact that in the attempt to reach historical accuracy, these games present scenarios in which most, if not all, units are already placed on the map, with very little room for free deployment.

[ix] In *Xenonauts*, as in many other games of this genre, deployment is further made diegetic by placing units that need to be deployed in the hull of an aircraft, so that they don't appear out of thin air.

[x] In referencing analog and digital games, we followed the format suggested by Gualeni et al. 2019.