

# Rhythm and Subjectivity in Digital Games

Johan Kalmanlehto and Pauline von Bonsdorff  
University of Jyväskylä

## Introduction

The aesthetics of digital games is traditionally approached with a focus on the game as a designed object, including rules, visuality, narration, soundscape etc. More recently however, there has been approaches that focus on the very experience of playing a game (e.g. Cremin 2016, Kirkpatrick 2011, Leino 2010), and even on agency (Nguyen, forthcoming). With a view to aesthetics, the gaming experience seems to differ significantly from classical forms of contemplative appreciation through its interactive and even to some extent creative character. Also infancy research suggests that the aesthetic dimension is an integral and fundamental constituent of human subjectivity, and its scope has been extended from the contemplation of objects to the very agency of the subject (Malloch and Trevarthen 2009; von Bonsdorff 2018). From the perspective of philosophy and theory of art, these novel initiatives can be contextualized as part of a turn towards performativity.

In this paper, we approach aesthetic agency through one of its key constituents, namely rhythm. In both continental philosophy (Lacoue-Labarthe 1979, see also Benveniste 1982 and Heidegger 1976) and infant research rhythm, or “forms of vitality” (Stern 2010), has been singled out as a fundamental element of subject formation and subjectivity. Moreover, rhythm is fundamental for intersubjectivity, whether in the polyrhythmic space of the womb, in an urban setting (Lefebvre 1992) or in various social exchanges where we, partly unwillingly, adapt to the rhythms of others. However, granted that we respond mimetically to rhythms, what does this mean in the context of digital gaming? More precisely, what does a mimetic response to rhythm mean for how we understand subjectivity in digital gaming?

We proceed by first outlining Philippe Lacoue-Labarthe’s ideas of rhythm as a fundamental, but at the same time evanescent element of subjectivity, and one that resists theorization. Second, we look at theorizations of rhythm in early human development and interaction in infant research. While these approaches have similarities, they also suggest different interpretations of the significance of rhythm, especially with regard to subjectivity, in digital gaming. We problematize this topic through a discussion of three examples of digital games, namely *Life is Strange*, *The Witness*, and *Hollow Knight*. Finally, we wrap up the paper with some tentative suggestions and questions that call for more work in the future.

## Lacoue-Labarthe on Rhythm

The notion of rhythm considered in this paper is based on a philosophical context that stems from Philippe Lacoue-Labarthe’s thought. Lacoue-Labarthe emphasizes the empty character of

the subject who lacks a proper self, since patterns are always taken up from others, and constantly transformed in endless repetitions. While this lack deprives the subject of originality, it also enables a free play of differing rhythms that endlessly modulate the subject's appearance (Lacoue-Labarthe 1986/1989, 28–29/259–260). With rhythm, Lacoue-Labarthe refers to the production of subjectivity as a differing repetition, through which the subject is continuously forced to produce identity anew. Because the subject has no proper substantiality, self-presentation must be appropriated from others. Hence, the appearance of a subject is not a repetition of the self but a repetition of the other. Lacoue-Labarthe calls the structure of copying and substitution mimesis, which is the general condition of subjectivity and selfhood.

The subject is characterized by traces of others, who constitute the self even before conscious decisions concerning self-identity; the subject receives rhythm from the mother already in the womb (Lacoue-Labarthe 1979/1989, 296–297/205–206). Unable to partake in its own becoming and irredeemably belated in regard to itself, the subject is already constituted by someone else before a sense of self can properly emerge. This renders the innermost essence of the self the most distant and foreign – the nothingness at the bottom of self-presentations is in fact a loss of something that the subject never had in the first place. In this view, subjective existence can be described as an empty chamber in which the voices of others resonate. Lacoue-Labarthe calls such understanding of subjectivity a transition from Narcissus to Echo, which means that instead of someone obsessed in their own image, the subject is cursed to repeat the voices of others. This transition to an auditory register is meant to detach the ground of subjectivity from the eidetic notions of self-image, visual forms and conceptual thought into the pre-subjective realm that is characterized by attunement and affect instead of conscious thought. In Lacoue-Labarthe's terms, the subject is rhythmized through echoes of the others. This condition that is received before birth, haunts the subject and also renews itself through conscious attempts of self-production, which is always based on conscious or unconscious imitation of others.

In more tangible terms, subjective identity can be thought of as a stamp that is imprinted on the subject. The origin of this imprint are the others, who act as models for identification. However, Lacoue-Labarthe insists that the subject is at its bottom properly empty – there is no baseline substantiality, a pre-existing subjecthood, which would act as a malleable material upon which identity is imprinted. The subject presents itself through masks that are borrowed from others through both active self-production and passive copying. Because mimesis is at work already before any emergence of self-consciousness, it is characterized especially as an involuntary adaptation of models. In Lacoue-Labarthe's terms, human existence is produced as a subject of Bildungsroman, who consciously produces itself through life experiences, and a subject of tragedy, whose fate is pre-programmed from the outset (Lacoue-Labarthe 1979/1989, 251–252/166–167). This does not mean that subjective identity is sealed in advance – on the contrary, while mimesis gives means to appropriate identities, it also breaks all attempts to create a stable self-presentation by rendering the original essence of self foreign and uncanny. The repetition of the imprint is a monotonous pulse, but a rhythmic beat that strikes every time a new figure.

Lacoue-Labarthe states that the unstable and uncontrollable appropriation of models corresponds to the truth of Being itself, replacing the Heideggerian notion of *aletheia* with mimesis. The endless circulation of the differing self-representations modulates the subject's appearance into a deformation, whereas the proper identity of the subject withdraws into a nothingness (McKeane 2015, 154–155). Human existence as a subjective identity oscillates between such a withdrawal and an endless proliferation of differing representations. Existence itself is only a pure and empty ability to all forms; rhythm is its characterization and becoming to something. (Lindberg 2010a, 536–537.) Rhythm gives form, but only momentarily, as its beat produces every time a new figure. Instead of a self-image, rhythm characterizes the subject as a changing figure, such as the different forms produced by a dancing body. However, the rhythmic ground of subjectivity does not occur as figural reflection, but resonance and attunement, in the sense that Heidegger used the term *Stimmung* (Lindberg 2010b, 234–235).

The stamp of identification is not a monotonous repetition of the same but a repetition of difference. This thought is based especially on Jacques Derrida's notion of *différance* as a deferral intrinsic to all meaning making. However, Lacoue-Labarthe does not provide a concise definition of rhythm because he thinks that the phenomenon is completely untheorizable. While rhythm denotes temporariness over spatiality and musicality over the figural – Lacoue-Labarthe proceeds from a Nietzschean context in which music has been thought as the most proper expression of subjectivity – it is not reducible into a strictly musical category, but “something between beat and figure” (Lacoue-Labarthe 1979/1989, 292–293/202).

Lacoue-Labarthe's conception of rhythm is based on a critique of Heidegger, which Susanna Lindberg has elaborated in greater detail. Turning shortly to Heidegger helps to clarify the existential aspect of Lacoue-Labarthe's understanding of rhythm. Heidegger stated that rhythm must be understood not as flow but as an imprint and associated it with form. In “On the Essence and Concept of φύσις in Aristotle's Physics B, I” (Heidegger 1976/1998), Heidegger notes that according to sophist Antiphone, *rhuthmos* gives form to protean things and separates them from the arrhythmic and unstructured elementary ground of being. Aristotle's distinction between *hyle* and *morphe* repeats this differentiation. The move from *rhuthmos* to *morphe* makes the changing things, that come into being and perish, the true physis. This movement of changing appears as stability – however the movement is not anymore that of time-space, instead it is the coming to appearance and emergence of things, that is prior to any opening of place. (Lindberg 2010a, 531–532.) According to Lindberg, the Heideggerian interpretation of *rhuthmos* as *morphe* defines rhythm as a pulse of being and non-being, appearance and disappearance, which shows the appearance of a figure: subjective human existence or an artwork. However, Lacoue-Labarthe's interpretation of rhythm in terms of mimesis is contrary to the Heideggerian conception, because it emphasizes how rhythm deconstructs figures instead of producing them. Rhythm is not only the character of being-in-the-world, but a fundamental feature of the world itself. (Lindberg 2010a, 541–542.)

Lacoue-Labarthe's view draws also from Émile Benveniste, whose etymological study of rhythm points out that originally, the Greek term *rhuthmos* did not mean rhythm or regular

movement but form, figure and disposition. However, *rhuthmos* differs from other expressions of form, such as schema, *morphe* or *eidōs*: whereas schema designates fixed form, *rhuthmos* refers to form in an instant of fluidity, without organic consistency. The form created by rhythm is always improvised and momentary. Benveniste notes that since Plato, rhythm has denoted “a continuous activity broken by meter into alternating intervals” (Benveniste 1971, 287).

This view of the subject is constructed upon a discourse that stems from German Romanticism, which, although deconstructed in Lacoue-Labarthe’s writing, adds historical weight to it. While his argument that the subject is properly empty and comes to being only as a copy of the rhythms of others might suggest that there is no proper agency, this emptiness also enables endless variation of rhythms without restrictions. Because rhythm precedes the emergence of a subject or any kind of self-consciousness, emptiness is a condition that underlies the subject’s presentation of itself but cannot be encountered directly.

### **Infancy and Aesthetics**

As we have seen, Lacoue-Labarthe points out that the subject receives rhythm from its mother already in the womb. The importance and ubiquity of rhythm, as articulated but varying temporalities, during gestation and infancy appears strongly from infancy research, but with somewhat different emphases as compared to Lacoue-Labarthe, especially when it comes to multimodality and intersubjectivity.

Infancy research suggests that preverbal and multimodal, rhythmic and mimetic responses and initiatives are key resources for communication in infancy. Moreover, they are important for the formation of the subject in self-other relationships. In this section, we briefly outline some key points from infancy research that are relevant for rhythm and subjectivity. This discussion draws on empirical research in what we refer to as “existential”, as opposed to cognitivist, infancy research (see von Bonsdorff, forthcoming) and the philosophy of Maurice Merleau-Ponty, who throughout his career synthesized findings from the life sciences and philosophy.

In his last book Daniel Stern (2010), psychiatrist, psychoanalyst and a classic in research on the infant mind and the infant’s relationship to others, suggests that temporal structures are basic carriers of affective meaning. He points out that the foetus performs gesture-like movements already from the tenth week of gestation (i.e. before it has a proper brain) and that the movements appear intentional around the 16<sup>th</sup> week of gestation (ibid., 101-5). Moreover, such movements have a similar structure across human communication and performative arts such as dance, music or theatre. Stern calls these fundamental, meaning-bearing articulations “dynamic forms of vitality”. They closely resemble the “aesthetic concepts” Frank Sibley (1959) suggested are central in our appreciation of visual artworks.

Now at birth, the newborn comes from a world traversed by rhythms to one where many of these continue and others are added. As Léfèbvre (1992) pointed out, our lifeworld is

polyrhythmic. In the prenatal world, many rhythms of mother and infant, as well as affective and other bodily states – tension, relaxation, movement, etc. – are shared, although some are different. Due to prenatal experiences the newborn is, right after birth, able to recognize its mother’s voice, as well as its mother tongue. When it comes to rhythms, the infant grasps them cross-modally; for instance, auditory and gestural movements seamlessly work together.

The most radical change from pre- to postnatal life is probably the visible appearance of other people in space, and the possibility to interact with them. Recordings and observations of infant’s interactions with adults in natural and experimental situations have shown that infants are willing and capable to communicate practically from birth. These interactions draw upon dynamic forms of vitality, rhythms, and multimodal performative expressions. In a landmark contribution to infant research, Stephen Malloch and Colwyn Trevarthen (2009) coined the term “communicative musicality” to refer to infant’s ability to participate in and contribute to vocal and multimodal, gestural exchanges with adults. The particular mode of vocalization used by adults or parents in these situations has been termed “motherese”<sup>1</sup>: a soft, melodic, expressive and responsive vocalization mostly using the mother tongue. Yet verbal meaning is less important than the expressive modulation of feeling. Analyses of auditory recordings have shown that newborns contribute to these vocal exchanges, which take the form of musical narratives (ibid.).

Infants often greatly enjoy the repetition and sharing of stories, action songs, or small everyday rituals that are idiosyncratic and may belong to a particular parental relationship. Importantly however this is not a process of mere mechanical copying, repetition or imitation, but involves variation, spontaneity and improvisation. The fun of performing is in presence and engagement, in doing this fully here and now – and, additionally, being aware of the performance in a double role of actor and audience. Infants’ sensitivity to even minute delays in the parental response, not to speak of frustration if this response goes missing, has been shown experimentally in the so-called “still-face experiment”, originally by Edward Tronick. Overall, the interactions seem to be means of communication in the double sense of sharing and dialogue, with elements of improvisation. Thereby, the infant acquires resources for articulating similarity and difference with others.

According to infancy research the mimetic impulse is, as in Lacoue-Labarthe, as much about variation as it is about repetition. However, following infancy research, rhythmic responses arise with others rather than just from others. This is related to a different analysis of subjectivity and intersubjectivity in early development; an analysis which becomes even more important if we extend it beyond infancy and childhood.

Based on infancy research, it is likely that early subjectivity is non-dualistic and connected, and that the boundaries between self and others are less clear than later on. Margaret Donaldson

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<sup>1</sup> Originally described by Mary Catherine Bateson.

(1992, 36-64) suggests that an initial “point mode” of subjectivity, a deictic but highly situation-sensitive existence, later develops into a more temporally extended “line mode”. Stern (2000) likewise describes a gradual emergence of the sense of self where intersubjective experiences, as articulations of “ways-of-being-with”, are key. On the basis of Merleau-Ponty’s philosophy we could however also suggest that the early self is precisely “aesthetic”, and that while rational capacities develop with language, the aesthetic dimension nevertheless does not go away. We would then have a layered subject, where rhythm can function as carriers of other types of meaning, including complex intentions and conscious agency. Such a self is, to borrow one of Merleau-Ponty’s favourite terms, ambiguous.

Infancy research seems to indicate preverbal modes of reflectivity and (self-)awareness in interactions that build on earlier, similar exchanges. The very fact that it is a repetition and variation of an earlier, internalised “script” makes the nuances of the present performance clearer. Involved here might be both a desire to be similar to the other and different, as well as to create a variation of one’s own earlier performance. Vasudevi Reddy discusses toddler’s sense of humour or “funniness” and Trevarthen suggests that there is a sense of irony before language. In all these cases, there is a simultaneous occurrence of being in a situation and following it, as it were, from outside.

The mimetic response is important for subjectivity, but it is a subjectivity in the making, and one that never was autonomous. Instead of emptiness, the starting point is relationality through structures that connect rather than separate. In this context, we might remember Susanne K. Langer’s – who influenced Stern – suggestion that expression in art is an articulation in the world rather than a “pressing out” of some subjective felt content (Langer 1957 and 1953).<sup>2</sup> Expression as articulation or modulation is also the direction in which Merleau-Ponty was working during the 1950s (Merleau-Ponty 2011). This approach implies that the subject or self are not “inner”, at least not in a self-enclosed way, but situated and relational as well.

### **The Rhythm of Gameplay**

Through artworks, different rhythms can be confronted, and engaging with art might even touch upon the rhythmic constitution of the early self. Lacoue-Labarthe (2015) has argued that especially music has the power to remind us about the prenatal state. Similarly to a musical experience, digital gameplay touches upon the rhythmic constitution of the subject through attunement (see Ash 2013). Gameplay has been considered as action (Galloway 2006), and an improvised play with forces that produce affects (Cremin 2016). In gameplay, the subject emerges as a hybrid product brought about by the confrontation between the rhythms of the game and the player. Imitating the modes of agency proposed by the gamic system, the player confronts the developer through the machine’s autonomous functioning.

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<sup>2</sup> For a critique of subjectivist theories of expression, see Tormey 1971.

Digital games have their own rhythms, which organize the player's interaction with the algorithmic system that constitutes gamic functionality<sup>3</sup>. Through the rhythm of gameplay, the player becomes a subject of gamic agency, which is momentary and cannot be appropriated by the player, because it is a product of both the player's and the computer's actions. The agonistic relation between the gamic system and the player results in an unresolvable conflict over the appropriation of gamic agency, which causes the subject of that agency to oscillate between the human and the machine, who both participate in its formation. The situation might be looked upon differently, however, if we accept a view of the subject as hybrid rather than either autonomous and independent or "empty". From the point of view of infant studies, with its emphasis on intersubjectivity, we could suggest that digital games offer a restricted arena of aesthetic agency due to the set character of the game: the subject can only make variations on the same theme, rather than variations on earlier variations (etc.). However, games differ, and finally the balance between performing and agency needs to be decided case by case. We will now introduce three examples of different games in order to highlight how their rhythms produce different agencies. *Life is Strange* (Dontnod Entertainment 2015) could be characterised as a narrative-focused adventure game, *The Witness* (Thekla, Inc. 2016) a puzzle game, and *Hollow knight* (Team Cherry 2016) an action-adventure game.

In *Life is Strange* the player's agency is restricted to altering the course of the game's narrative through pre-given dialogue choices. The player can navigate freely within the constraints of the representational space of the gameworld, but this has no effect upon the proceeding of the main narrative. This situation pertains to most games that focus on narrative or puzzles, such as *The Witness*, in which improvised spatial exploration is often required to solve the puzzles, but their rigid structure of finite solutions restricts the player's agency. Games that emphasize action and encourage the player to attempt different playstyles against the obstacles provide a greater degree of agency: *Hollow Knight* allows experimentation with multiple techniques to find a playstyle that best suits the individual player. However, even such choices are limited by the algorithmic structure, which can be escaped only by playing the game in a way that was not intended by the developers. While such "counterplay" might occur even involuntarily, when localized everyday rhythms confront the algorithm (Apperley 2010, 132–136), we will focus on the rhythm of gameplay as the player's interaction with the algorithm as a differing repetition of gameplay actions. While this bears resemblance to Costello's (2018b) investigation of the musical rhythm of gameplay, here the notion of rhythm is based on a more abstract notion.

Following Bernard Suits's analysis of games, Thi Nguyen (forthcoming) has formulated a notion of striving play, which refers to play for the sake of struggle. Striving gameplay produces an "aesthetic experience of one's own activity" as a solution to a particular puzzle. Nguyen

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<sup>3</sup> For example, the rhythm of gameplay has been considered as a cyclic pattern between player actions and game responses, which creates a sensation of synchronicity and freedom to play with the rhythms of gameplay (Costello 2018a, 2018b). Tom Apperley (2010) has investigated gameplay and rhythm with Matthew Fuller's notion of "media ecology" and Henri Lefebvre's "rhythmanalysis." He focuses on empirical cases of localized gameplay situations and uses the notion of cybernetic subjectivity to describe the tension between control and creativity in digital gameplay. This conception of rhythm is built upon the idea of the rhythm of everyday, in which the cyclical rhythms of nature and the linear rhythms of society are coordinated (Apperley 2010, 19).

distinguishes games from other forms of art in terms of the object of aesthetic appreciation, which in aesthetic striving games is the player's own activity. Similarly to Colin Cremin (2016), who thinks the game as a figurative canvas for the player's composition with forces, Nguyen suggests that the game is an environment that is designed to trigger certain type of activity – games inscribe different modes of agencies into clearly defined rules and goals, helping players to find new kinds of agencies.

Agency in digital gameplay has often been thought as a product of spatial exploration, which in many games is the least amount of freedom allowed by the gamic structure (see e.g. Murray 1997; Aarseth 2001; Manovich 2001). This pertains especially to games that present a two- or three-dimensional navigable space. While the act of navigation itself gives players freedom to act within the gameworld as they wish, this action must be engaged in such a way that leads towards the predetermined goal of the game. There are games that have no gameplay mechanic outside spatial exploration, such as *Dear Esther* (The Chinese Room 2012), but here the focus will be on games that focus also on narrative choices, puzzles and combat. The rhythms of these games stem from the gameplay mechanics that enable certain types of gamic agencies.

*Life is Strange* focuses on narrative and has simple gameplay mechanic. The player is in control of the playable character which, outside cutscenes, can move freely within the boundaries of the gameworld, interact with objects, take photographs and discuss with characters. Dialogue proceeds by choosing a line or an action from pre-given options and viewing the consequence. The character has an ability to rewind time, hence different actions and choices can be explored freely. The sense of agency is created through these explicit choices and the freedom of spatial exploration. Some events disable the ability to rewind and include a possibility of failure. An example of such situation is at the end of Episode 2, in which the player can convince a character not to take her own life. This is achieved by choosing the correct dialogue options, which can be deduced if the player has payed enough attention to details during the episode. The outcome is dependent on the player's skill regarding the gameplay mechanic that involves recognizing, pointing and clicking interactive elements in the gameworld, as well as memorizing details of narrative information. Alternatively, the player can choose not to save the character. However, the outcome does not affect the proceeding of the main narrative and only alters the tone and details of subsequent episodes. Such choices and challenges are presented throughout the game, but they rarely affect the course of the main narrative. Most puzzles must be completed for proceeding in the game. The freedom of navigating the representational space produces a sense of agency, but the constrained nature of the puzzles does not leave space for creative and improvised gameplay, even though different options can be freely explored within the constraints of the dialogue system. This condition is typical for games that focus on narrative or puzzles, because in both cases progression is based on a predetermined structure that does not enable improvisation or emergence. Hence, *Life is Strange* forces the player to a rigidly structured mode of agency beneath its ostensible freedom of choice.

Puzzles in *Life is Strange* are relatively simple but solving them is tied to player agency both within the gameworld and the dialogue structure. A common feature of adventure games

involves exploring the environment and finding clues or items that are required for progression. *Life is Strange* requires also exploration of the dialogue structure, allowing the players to gain information, rewind the event and then use that information to manipulate the situation. Through the ability to repeat actions in differing ways, *Life is Strange* produces a rhythmic experience of reversed and repeated actions, paced by the free-form exploration in the gameworld.

*The Witness* combines spatial exploration with puzzles, which are often solved by paying attention to the environment, which can contain a clue, or even be a part of the puzzle itself. The main gameplay mechanic is solving puzzles that are clearly demarcated from the surroundings as panels through which the player must draw a line according to certain rules. However, the game begins quickly to blend parts of the puzzles with the environment. The puzzles might be broken, missing a piece, or obstructed by the surroundings, forcing the player to find a creative solution. A series of puzzles requires the player to align the character's point of view in such a way that the environment reveals the proper solution to each puzzle, and then distorts this mechanic and forces the player to improvise a new kind of solution. There are also hidden environmental puzzles that require the player to find a proper point of view that reveals a traceable line in the landscape itself. In this way, *The Witness* anticipates the player's spatial exploration and converts it to a performance of a predetermined goal.

*The Witness* contains no textual information about its rules and teaches the puzzle mechanics by starting with easy ones and the gradually heightening the difficulty. This muteness can lead to a frustrated wandering around the gameworld in search for a solution. The main rhythm of *The Witness* stems from the interaction with the puzzles, a differing repetition of drawing a line through a panel, which is syncopated by failures, retries, and sometimes aimless wandering in search for a solvable puzzle or a new perspective.

Like the previous examples, also *Hollow Knight* is based on exploration of the gameworld, which is often required in order to find a way to proceed in the game. The gameworld can be explored seemingly freely, but progression is restricted by limiting the playable characters ability to move. Acquiring new abilities, such as dashing through air, leaping from a wall and jumping again in mid-air, allows the player reach new pathways in already visited areas. In addition to the exploration, *Hollow Knight* involves combat, in which these abilities are used to evade enemy attacks. The playable character wields a nail that can be used to strike enemies, either with regular attack, or slower but more powerful special attacks. The player can also obtain offensive spells that consume soul, a substance gained from striking enemies with the nail. The combination of these abilities alone enables the player to explore multiple different playstyles. However, the character can additionally equip a limited number of items called charms, which give various offensive and defensive bonuses to the character. Different combinations of charms support diverse styles of play. While the game can be completed without equipping charms, equipping them can give a sense of agency over gameplay. These characteristics are common in combat-focused games, which allow variations in attacks, movement and character abilities. In *Hollow Knight*, the complexity of the gameplay mechanic

results in a more varied rhythm, which the player can alter by developing different playstyles. In addition to the combat, the explorational aspect of the game has its own rhythm, which stems from moving back and forth between different areas.

All these examples produce different rhythmic experiences due to the varied nature of gamic action enabled by their rules and programming. The sense of agency is produced through different aspects of gameplay and through variations in the freedom of choice, which creates a sense of being in control of the rhythms of gameplay. However, when playing each of these games, the player is programmed according to the specific rhythmic pattern, which becomes part of the circulation of the player's self-presentations. The rhythm of gameplay and the proper freedom of self-production is more a result of playing different kinds of games than becoming engrossed within a particular game, that in the end demands the player to perform according to its predetermined structure.

According to Daniel Vella, digital gameplay is characterized by a double perspective: “the subjective ‘I’ established for the player within the gameworld that is, both ontologically and experientially, distinct from the ‘I’ of the player’s own identity within the player-world” (Vella 2015, 75). While the presence within the gameworld, especially when it occurs through a playable figure, is distinct from the player’s identity outside the game, the player’s actions that are represented through the figure are the player’s own. From a Lacoue-Labarthean perspective, the subject can come to appear only through an external figure, a supplement that supplants the original agency of self-presentation and forces it to withdraw into nothingness. In gameplay, the subject is presented as the agent of gamic action, which occurs through the figural entity within the gameworld. While the figure, through which the player’s actions are represented, is distinct from the corporeal being of the player outside the game, there is only one agency that produces these actions, which occurs as a hybrid entity between the player and the algorithm that enables gameplay.

We draw this conception of hybridity from Alexander Galloway’s (2006) four moments of gamic action. Galloway distinguishes machine actions, which are enacted by the computer, from operator actions, which are performed by the player. These moments are further divided into diegetic and nondiegetic acts, i.e. acts that occur either within the diegetic space of the game or outside it. According to Galloway, digital games are defined by action, because a game comes to being only through the active participation of the player and the machine. The “grammars of action” are located into the gestural vocabulary of the controller, and into the code beyond it (Galloway 2006, 4).

The machine’s diegetic action is “pure process”, an ambience act that occurs when the game is left running by itself. Nondiegetic machine actions are performed outside the diegetic space and affect the player’s performance in accordance with the game’s rules. The player’s action within the gameworld results in spatial transitions and interaction with objects. Nondiegetic operator actions are configuration acts that the player engages outside the gameworld – Galloway thinks

that such acts enable the player to enact the algorithm, whereas games dictated by ambience acts submit the player to the rhythms of the algorithm (Galloway 2006, 18–19). Galloway’s account has been continued by Colin Cremin (2016), who suggests that the notion of affect describes better the essence of digital gameplay. Drawing from the philosophy of Gilles Deleuze and Felix Guattari, Cremin argues that digital gameplay is force which produces sensations. The game is a framework, like an empty canvas, from which an instance of gameplay creates a new artistic product. This view emphasizes gameplay as improvised and artistic action, which is not a performance of the algorithm, but a rupture between the developer’s design and the player’s experimentation.

Gameplay undeniably has a rhythm that can be perceived from the relation between player and machine actions as the game’s responsiveness to the player’s inputs through the physical controller. However, the interpreting rhythm as the structure of self-representation suggests that rhythm is not clearly perceived from the event of gameplay. Rather, the measure between the rhythms of the game and the player occurs through attunement, a subterranean reverberation that cannot be grasped through conscious thought. In digital gameplay, this is exemplified by the fact that the gamic system as such, on its algorithmic level, can be grasped only as an incomplete and approximated understanding based on the functioning of the gameworld.

Gameplay produces a sensation of agency through the possibility of action that is represented through the screen, but the underlying algorithmic structure remains out of reach for the player. As Vella (2015, 105–106) notes, the gameworld is not simply an interface that represents the underlying system. Gamic agency is produced through the combined actions of the player and the machine, which results in a hybrid subjectivity; the subject of gamic agency consists of both the player’s and the computer’s actions. On a visible level, players consciously produce themselves by attempting to control the rhythm of gameplay, but on the unperceivable level of computer operations, the rhythms of the machine become part of the player’s gamic self-presentation.

## **Discussion**

The mimetic response to rhythm is a fundamental constituent of subjectivity in digital gameplay, because both gamic agency and subjective existence are traversed by and even based on rhythms. We are subject to rhythms already in the womb, and newborns respond to the world and other people through mimetic impulses in rhythmic variations. Regardless of whether the subject is properly empty, affective and rhythmic experience seems to determine the early stages of human subjectivity. Because rhythm touches the self on an affective and pre-subjective level, mimetic responses to rhythm can always occur involuntarily. This is emphasized especially by Lacoue-Labarthe, for whom the rhythmic ground of subjectivity is out of reach of theoretical thought. Thus for him the question whether there is any actual agency in playing and experimenting with the rhythms of a game, or whether it is always an adaptation to the pre-programmed constitution of the game, cannot be answered through investigations of rhythm itself.

The problem of player agency – whether games provide only an illusion of agency while actually assimilating their rhythms to the player, or whether the player has control over the produced agency – is well-known in game studies. However, the juxtaposition is perhaps too simplifying. Investigating aesthetic agency through rhythm suggests that the subject is a hybrid entity between autonomous and pre-programmed agency. The occurrence of agency through gameplay requires both the player's and the computer's participation, which together open the game to be experienced. This agency is conditioned by the player's attempt to perform according to the algorithm, but it can also bring forth awareness of the hybrid character of subjectivity.

A single-player game demands repetition of its rhythmic structure in order to produce a certain type of agency. While games like *Hollow Knight* allow different gameplay techniques and playstyles to tackle their obstacles, this variation is still part of the game's rhythms, to which the player must adapt in order to succeed. Games like *Life is Strange*, that create agency by allowing the player to shape the narrative, have even stricter rhythms, because the gameplay mechanic itself remains the same regardless of narrative choices. Lastly, puzzle games like *The Witness* offer the least degree of rhythmic variation in its gameplay. However, such differences do not give justification for determining the artistic quality of these games, or their effect on the player's subjectivity.

If we approach the player's subjectivity as layered, we could suggest that through its emphasis on subjective agency and mimetic response to the algorithmic system, digital gameplay touches upon the rhythmic and affective layers of mind, which underpin later narrative senses of self and various forms of cultural and contextual meaning. If rhythmic experience provides a fundamental contact to others, the incentive to play digital games might stem from this aesthetic, elementary ground of intersubjectivity. While this view might apply also to games in general, interaction with a computational system results in a specific rhythmic experience that is orchestrated by the algorithmic structure. Gaming may – or may not – extend our repertoire of “ways-of-being-with”, to borrow Stern's phrasing. Differences among games certainly demand closer analysis in this respect.

Moreover, while playing a digital game produces agency within the gamic system by demanding the player to respond to its rhythms, multiple gameplays of different games result in a rhythmic modulation of agencies that expose the subject to the plurality of self and others. From a Lacoue-Labarthean perspective, while the flow of repetitions cannot be fixed into a stable substance, the subject might have limitless possibilities to take any form. Also infancy research suggests that we should wave goodbye to the ideal of an autonomous subject. However, instead of emptiness it emphasises connectedness, dependence, and intersubjectivity. As aesthetic rather than rational agency, rhythm in this context points to participation and co-creation in movements that traverse and extend the subject rather than give it a stable form.

## Games

DEAR ESTHER. The Chinese Room, PC, 2012.

HOLLOW KNIGHT. Team Cherry, PC, 2017.

LIFE IS STRANGE. Dontnod, PC, 2015.

THE WITNESS. Thekla, Inc., PC, 2016.

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