

Computer Games in Art History. Traditional architecture and painting presented in virtual reality

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Abstract

Aim. The aim of the research is to show the applications of art reception in computer games. Moreover it is important to show a game as a visual object worth being analysed by art historian, because of complex structure and relations with traditional artistic media like architecture and painting. Many disciplines, such as ludology, narratology and culture study research computer games, but we can see a large lack in the state of research in visual aspects of games, which should be supplemented.

Methods. The subject of study are five games belonging to different game genres. The first, *Assassin's Creed II* is set in a historical context, the next *Witcher III* and *Dark Souls* embedded in the realities of fantasy and finally, two games in an independent games category. The basic method is *iconographic identification* of the object and comparative difference and similarity between original source of inspiration and transposition of this in computer media. Therefore basic tools gained from history of art are used, which are necessary for visual analysis of a piece of art. A notion of commonplace forming a frame for images from different media is also important.

Results. Indicated examples show that classic art has a strong influence on numerous computer games. The citations and allusions from art bring an additional narration completing the story in the game. Objects of architecture or paintings also give symbolic meanings, influencing the interpretation of the whole game. Game developers oscillate between education in the history of art and the use of these references to create your own world.

Conclusion. The examples presented in the article are only part of the rich area of art inspirations that can be found in many games. This should become a contribution to further research, not only taking into account the indicated types of references, but also the visuality of the games themselves. The visual complexity of the games would require separate, more extensive research that would bring a lot into the perception of games and researching them.

Key words: computer games, ludology, history of art, commonplaces

Introduction

Computer games should be perceived as a crucial cultural phenomenon which, in its 60 years of development, has turned from simple forms of electronic entertainment to modern visual masterpieces. Despite the fact that a lot of contention remains about the specific date marking the advent of the game as the medium, we can certainly trace it to the 1950s. At the beginning, however, the attempts to create computer games were made by a narrow group of academics, and it took years until the medium became more common. B. Kluska considered that Oxo (Noughts and Crosses) from 1952, can be called the first computer game (Kluska, 2008, p. 11), S. Rabin indicates *Tennis for two* (Rabin, 2010, p. 4) and Wolf states it is only a Spacewar can be considered the first game (Wolf, 2005, p. 1). The last decades have seen a dynamic development of graphic design in games, turning them into markers of technological progress. Marcin Petrowicz goes as far as to claim that the place games occupy in the modern culture will shortly make them the most important medium in Western societies. According to him, video games – just like the novel in the 19th century and the film in the 20th century – will be the most significant *imaginarium* of our era (Petrowicz, 2016 p. 157). It means an imaginary world, transported reality in some kind of media [from latine imago, image in English].

This term captures the essences of computer games as a medium representing virtual reality. By no means should the technical nature of computer tools be an obstacle in seeing games as works of creativity. On the contrary, one could argue that precisely these tools endow games with an ability to follow in the footsteps of different artistic media and offer even more than they do.

Increasingly advanced tools used by game designers turn games into complex works of art that need to be analysed separately from, but in relation to, other works of culture. In this sense, games fall under the broad category of the so-called “visual culture” (Mirzoeff, 2000, p. 1). As a result, scholars who realise the more and more urgent need for comparative studies will be able to study games in various representational contexts. At the same time we are fully aware that a computer game is a total work of art – a phenomenon of its own – that can be studied equally successfully without any references to other forms. Nevertheless, the question of the relationship between computer games and other artistic media has not been answered so far and unjustifiably so, for the answer to this question could reveal a lot not only about references to art present in computer games, but about computer games themselves.

Issue description. Basic features of computer games and research on games

Therefore, art history presents itself as a perfect tool for the study of computer games not only because of its continuously increasing potential to embrace new subjects, but also because of its historically-proven usefulness in the

analysis of various visual artifacts. Paradoxically, however, art history and art historians have yet to discover a discursive potential offered by computer games – the potential discovered by other humanistic disciplines already in the late 1990s. Hence, it is worth providing a short overview of selected aspects of computer games studies that have been published in the last two decades. In his 1997 study *Cybertext: Perspectives of ergodic literature*, Espen Aarseth, the precursor of the discipline, defines games as part of the so-called “ergodic literature” – the term “ergodic” being a combination of two Greek words: *ergon* meaning “work” and *hodos* meaning “path.” The etymology of the term indicates that, on the one hand, games bear the stamp of stories as they are told in the “traditional” literature. On the other hand, the stories in games are developed through an active participation of the player whose decisions shape the plot of the story. Therefore, both “work” and “path” refer to the medium whose existence depends on the presence of the player – by all means important feature that distinguishes games from other visual media. As a consequence, Aarseth makes a distinction between games – part of ergodic literature – and the so-called “nonergodic literature”, i.e. books, where the role of the reader is, in his opinion, limited to thinking and page-turning (Aarseth, 1997, pp. 1-3). In an article published two years after the publication of Aarseth’s study, Gonzalo Frasca postulates the need to create a new discipline that would study different, but mostly electronic, types of games. Since then, the discipline has been referred to as ludology, from Latin *ludere* meaning “to play” (Frasca, 2001), but the appearance of the term itself can be traced back to Johan Huizinga’s 1938 book *Homo Ludens*.

The key motivation for scholars involved in the new discipline was to study the gameplay mechanics, i.e. elements behind the structure of a game. At the same time, the narratological perspective was being developed to study narration in games and analyse the ways in which stories were constructed. As Frasca meticulously explains, this was faced with resistance on the part of some scholars, but he himself understood the need for this type of analysis. However, he also treats games as simulations based on a model of reality constructed by the player’s actions. Frasca contrasts simulation with representation which, according to him, is related to more traditional media. The contrast is presented on the example of a plane, with a photo of the plane being an example of representation, a document about the plane an example of narration, and a flight simulation an example that represents a completely separate category (Frasca, 2003, pp. 223-224).

Toward to games aesthetics. Visibility as form of story and graphic realism

The proposed perspective, while reflecting the crucial feature of all video games, cannot be the only criterion for their interpretation. This becomes

even more true if we consider the graphic element in games, which introduces its own visual quality while simultaneously adapting forms already introduced by other media. So far, contrary to the concept of simulation, little attention has been paid by game studies scholars to the category of representation. Hence, possibilities arise to study games as visual artefacts existing in relation to other, more traditional works. By no means should this be an indication that the subject has remained completely ignored. Some scholars have touched upon it, but the scope of their discussion leaves much room for further research.

Henry Jenkins, in his article "Game Design as Narrative Architecture," discusses how the design of the game space and objects within that space affects gameplay or creates embedded narratives. The author treats the aesthetics of the game space as the means of storytelling. Jenkins' concept of "environmental storytelling" (Jenkins, 2004) is truly interesting, for it introduces new possibilities to the study of modern games. Simultaneously, the unconditional acceptance of Jenkins' view results in treating the visual aspect of games as a mere carrier of information and means of storytelling. What it does not allow for, however, is the study of the design of game levels perceived as key structures that are capable of generating their own meanings.

In philosopher Grant Tavinor's book on the aesthetics of video games, the discussion is limited to the mimetic characteristics of games and the aesthetic experience linked to the exploration of the virtual world (Tavinor, 2009, pp. 2-3). The author defines games as forms of art without referring to any specific examples and arguments, but simply presenting the categorisation of designs of particular game levels. Overall, the book is a collection of open-ended conclusions, lacking any in-depth problem analyses, based on references to one set of examples (Tavinor, 2009, pp. 72-73). Apart from that, the literature on the subject raises the notion of "the art of video games," which refers to the interference of media artists in the original version of the game and to the so-called "game patching," leaving aside the visual aspects of games (Strużyna, 2015, pp. 216-217; Ronduda 2006, pp. 186-187). Studies also include references to the film language; game designers strive for realism and, while creating the atmosphere in a game, use tools similar to the ones used by film makers, e.g. various depths of focus, motion blur, and other movie-specific conventions (Petrowicz, 2015, p. 1). Other features that speak to the similarity of the language of films and that of games include the use of cut-scenes as well as various takes of one scene, depending on the point of view of the protagonist.

Games as a object of research for history of art. Commonplaces and imaginary places

I believe, however, that studies published so far do not exhaust the visual potential present in video games; the potential that can be discussed in relation to more traditional artistic forms. This is when art history enters the game, bringing its own analytical tools that may prove invaluable especially in the study of the relationship between video games and well-known painting conventions, styles, or specific paintings or buildings. In the eyes of an art historian, the abundance of references in games turns them into mirrors of the history of art that reflect the works of culture created across the ages. Equally important is the study of the ways references function in the virtual world of the game and the meanings they evoke. Such an approach generates the need to introduce the term "commonplace" which, in the ancient times, meant both a physical and an intellectual space based on a community of thought (Bogdanowska, 2008, p. 23). These days, the term is employed while speaking of motifs or themes that recur in different, at times completely separate, cultures (Curtius, 1997, p. 5). In the visual world, the "commonplace" refers to individual representations as well as the reception of a given style or artistic thought of a particular period.

The notion of the topos, despite being associated with mythical and imaginative spaces, may as well refer to real spaces and objects existing in the collective consciousness. Artworks that function in a specific context enter the collective consciousness due to their popularity and presence in photographs, documentaries, and fiction films.

As a result, works of art – including works of architecture – undergo a transformation into new media images. The "commonplace" – reproduced on a massive scale – turns into a stereotype and the physical space is transformed into an "imagined space," conception proposed by H. Belthing (Belthing, 2009, p. 1055), i.e. a space well-known to us, even though we might have never seen it in reality. Video games also partake in this process by taking the player outside their own medium and, by doing so, create "commonplaces." Hence, I do not see the relationship between games and disciplines such as architecture or painting as the one between virtual artifacts, but the one between artifacts that come to life in the real space. In fact, artworks may be coming from different media, but they all comprise a shared field of representation.

Create a commonplaces. Picture dialogue in computer games. Historical art in "Assassin's Creed"

I would like to begin with a discussion of high-end productions, whose aim is to present the virtual reality as realistically as possible. One of the crucial

examples is a famous series *Assassin's Creed*, with each of its parts being set in a different historical period. Game designers remain as truthful as possible in their rendering of famous sites from a given city and a specific period. Moreover, game producers set the plot within the context of actual historical events, but introduce a fictional narrative based on a conflict between the Assassins and the Templars, who have their representatives in each period as the plot progresses. Importantly, the plot of the series, despite being focused on the past, takes place in the present and the past alike. For the purpose of this essay I have decided to choose one part of this multi-part series, the one set in Renaissance Italy. The protagonist, Desmond Miles, is a descendant of Florentine nobleman Ezio Auditore, who experiences his ancestor's memories as they are unlocked in his DNA through a device called "Animus"(Ubisoft, 2009).

This process could be described as a simulation of the past, in which the player is an active participant. At this point it would prove useful to refer to Lev Manovich's definition of "simulations." Manovich noticed that simulations connect the physical sphere with the virtual one, contrary to representation which draws a clear line between the two. For a scholar, an example of representation would be an easel painting, the reception of which requires the spectator to stand still. On the other hand, in Manovich's view, an early example of simulation could be seen in mosaics and frescoes which, in order to be fully admired and understood, require the spectator to move around a particular space (Manovich, 2006, pp. 197-198). The co-existence of the two spheres in the process of simulation can be observed in the game itself, where the concept of the Animus device can be treated as a perfect metaphor of reconstruction practices historians and art historians engage in their work.

In fact, Desmond's recollections of the past not only influence the state of his knowledge, but provide him with practical skills he can use in real time. A device-led simulation is supported by programmers who create arrays of reproductions of well-known renaissance artworks, Leonardo da Vinci's designs, or maps of the cities from specific periods. In this way, the visual content supports the process of simulation in which the player is present. This process visualises itself when the city starts taking shape out of a topographical map, pointing to its origin inside a computer system.

Walking the city streets, the player passes numerous famous sites, easily distinguishable in the otherwise monotonous landscape. On passing a place of interest, the player is notified about the possibility of finding out more about a given place by accessing the database. Database entries are updated as the player encounters historic buildings. In Florence, for example, the player can see Cattedrale di Santa Maria del Fiore with the dome engineered by Brunelleschi, Ospedale delgi Innocenti, Palazzo Vecchio, or the façade of Santa

Maria Novella designed by Alberti. In Venice, famous buildings include the Doge's Palace and Saint Mark's Basilica.

Equally iconic historic monuments surround the protagonist when he walks the streets of the Renaissance Rome. In *Assassin's Creed Unity*, on the other hand, set in Paris during the French Revolution, the player can enter the Notre Dame or the Sainte-Chapelle. Game creators used all the technology at their disposal to render the details of the monuments – the details which not only serve as the background for the gameplay, but become the very part of the gameplay as a result of the protagonist's ability to climb every building. Apart from historic monuments, the game features countless references to the art of the period in the form of, for example, Da Vinci's designs and paintings. During the protagonist's first conversation with Leonardo, the player can see Leonardo's painting *The Virgin and Child with St. Anne* in the background and, on exploring the artist's studio, one can spot numerous anatomical sketches and two versions of the map of Imola – a town near Bologna. In the game, Leonardo puts to life one of his designs and constructs an ornithopter the protagonist needs in order to complete one of his missions. In real life, this design was never produced, just like most of Leonardo's projects.

Assassin's Creed II features a lot of well-known renaissance artworks – including Perugino's Portrait of Francesco delle Oppere, Botticelli's Primavera, and da Vinci's *St. John the Baptist* – that the player can purchase from art dealers and then see on the walls in the protagonist's villa in Monteggiori. Individual references place the game in a historical context, giving the player an impression that they take part in the reconstruction of real events. This should of course be taken with a grain of salt, for game creators consciously manipulate the facts for the purpose of the plot, but still manage to successfully render the historical-artistic reality of the period. One of the examples of how the context of the specific space is built are the catacombs of the Santa Maria Novella church, whose walls and vaults are covered in Early-Christian paintings, including iconographic motifs such as Christ on a donkey and Christ the Good Shepherd. However, the two motifs appear repeatedly and often incongruously with other images such as that of God with a scythe – a direct reference to the mythological Cronus. Moreover, game designers introduce a hooded figure as an element of the engraved portal in the catacombs. The figure refers to eponymous assassins, but also – due to its location and representation – to the figure from August Rodin's *The Gates of Hell*. Thus, rather than constituting a real space, all these elements create general picture of a given culture and its art.

Between fiction and reality. Historical references in "Witcher III"

Apart from the *Assassin's Creed* series, there are games which are fantasy

by principle and do not aspire to represent the reality of any specific period, but do include numerous references to famous art. A perfect example of such a game is *The Witcher 3: Wild Hunt*, a Polish production which, thanks to its gripping plot and excellent layout, has earned exceptional recognition worldwide. The production, based on a series of novels by Andrzej Sapkowski, is a role-playing game set in an enormous, diverse and open world that can be explored horseback or on foot. Partially based on Slavic beliefs, the world is full of magic and dangerous creatures (*The Witcher 3: Wild Hunt, Cd Projekt Red, 2015*), but remains abundant in references to real cultural artifacts detached from their historical contexts. One of the spaces the player explores in *The Witcher 3* is Novigrad, a city with features of numerous European medieval cities. The most conspicuous reference is a building located in the city's harbour, whose architecture reflects that of the famous Crane in Gdańsk. The two constructions differ when it comes to the building material – the crane in the game is made entirely of wood, while in Gdańsk, the only wooden part is the crane itself, located in between two fortified brick towers.

Despite this difference, the structures and locations of two buildings are very similar. By referencing such an iconic monument, immediately associated with Gdańsk, game designers provide the player with some information about the reality of the world around them. Another, quite straightforward reference to the architecture of the Polish port city is the building that resembles the Great Mill. The resemblance exhibits itself in the roof descending almost to the ground as well as a similar shape and arrangement of windows. There is also the chimney, in both versions similarly incorporated in one of the two walls, gradually widening from the top. Unavoidable discrepancies occur, such as those in the shapes of the chimneys or the numbers of windows on each floor, but the recognisable inspiration succeeds in introducing the player to the real-life architecture. Analogies to Gdańsk are strengthened when Novigrad is being referred to as the Free City of Novigrad. Undoubtedly, this is a direct reference to the Polish city, despite the fact that the name “the Free City of Danzig” was coined as late as in the interwar period and was used in a different political context.

The examples discussed above could be defined as visual quotations unassumingly “written” into an urban tissue. The game also includes more general references that do not draw on specific objects of inspiration, but nevertheless suggest specific periods and styles. Looking at the centre of Novigrad from the river bank, we can spot a couple of half-timbered buildings jutting out over the water. The location and characteristic construction features of the buildings bring to mind examples of German architecture, such as *Altes Rathaus* in Bamberg, Germany, with its half-timbered part overhanging the river. Solutions known from the history of architecture present themselves on the player's way to Oxenfurt, where a bridge connected to a characteristic

gate tower bears strong resemblance to Charles Bridge in Prague. The formal resemblance exhibits itself not only in the rather uncommon solution in the Middle Ages, i.e. the tower and the entrance gate in one, but also in tented roofs crowning both towers.

Considering the time of the creation of monuments that inspired the creators of the game, we will be able to situate the virtual world somewhere between the 14th and 15th century. On the other hand, a large part of the world in *The Witcher* is nothing but wooden architecture, which suggests a different sort of inspiration. One of the more interesting examples is the Crow's Perch occupied by one of the characters – the Bloody Baron. Its wooden gate and a palisade wall used to be indispensable elements of a fortified settlement. (One of the most well-known examples of this type of structure is the reconstructed Biskupin settlement in Poland.) The interesting thing is that a central part of the settlement, located in the inner circle, is built of brick. What is more, in the Polish version of the game, the Crow's Perch is referred to as "Kasztel Wrońce", with the word "kasztel" being the equivalent of Latin "castellum", the name that refers to early modern rather than medieval architecture.

Inside taverns and peasants' cottages the player can see wall paintings and under-the-ceiling installations made of faux flowers – elements immediately associated with the décor typical of Łowicz folk culture. What this means is that game authors create representations of rural folklore on the basis of the culture the features of which they believe to be representative of a broadly-defined folk character. An interesting iconographic element in the form of heraldry complements the visual world equally well. On the walls of the Castle in Vizima – the capital of the Kingdom of Temeria – we can spot a recurring motif of the golden lilac, which is a direct reference to the fleur-de-lis – a symbol unanimously associated with the French monarchy since the early Middle Ages. Also, shields and tents feature a configuration of three lilacs on a shield – a reference to a symbol used for the first time by Charles V in 1378 (Hermard, 2009, p. 2). The motif of the black sun related to a Germanic tribe called Alemanni recurs in reference to a fraction of the Nilfgaardian Empire that occupies the lands of Temeria. Historically, the motif was used in the Nazi symbolism, e.g. it was part of a floor mosaic at the castle of Wewelsburg, once the headquarters of the SS. All in all, while *The Witcher 3* makes no attempt to render the historical reality of a given period, it does include numerous references that carefully build the context of a seemingly fictional world.

Symbolic meanings medieval architecture in "Dark Souls"

Like *The Witcher 3*, a 2012 action role-playing video game *Dark Souls* (From Software, 2012) includes individual references to art in the form of buildings and structures inspired by historical architecture. However, references in

Dark Souls function differently, giving rise to different meanings. The dark fantasy game has a unique world, whose design often seems to draw on styles of Medieval Europe by interlacing the Romanesque and the Gothic. The feeling of *medievalism* is strengthened by the music in the game, with its mystical undertones and choirs, as well as by the graphic design that takes the symbolism in the game to an eschatological level. I use the medievalism as the term created in XIX age, understood as the phenomenon of reference in culture to the image of the Middle Ages, stereotypical fantasy about it, and not nostalgia for a real historical epoch.

In the game we can see a synthesis the realistic, historical objects with medievalism vision, whose excellence is illustrated by the one of the first locations, known as Undead Burg. This location features an enormous castle, the shape of which resembles the structures of English castles. The main gate, fortified by two polygonal flanking towers and with an entrance crowned with a Tudor arch, evokes associations with Henry VIII Gate, one of the main entrances to Windsor Castle since 1511. The castle leads the player to a differently designed location known as Undead Parish. A road, flanked with a row of ancient columns on both sides, would look like ancient ruins if it had not been for a building located next to the road – the decoration and structure of which resemble a Christian basilica.

The resemblance is blurred, however, once we enter the aisles where the sculptures immediately bring to mind the images of Pallas Athene. The combination of different cultural motifs is everywhere in the game. References to different cultures are incorporated freely, even in one building. These references are in no way relevant to the plot building – Romanesque in style, with two towers on both sides, and the avant-corps in the centre – reminds of the Westwork of Corvey abbey. In the game, however, the central avant-corps looks different from the one in Corvey, with two parallel sections of the wall projecting from the face of the wall. Despite this slight alteration, the central part of the façade remains visible, just as in Corvey.

Like the Corvey towers, the two towers in the game are divided by cornices, but they lack windows. Both buildings share locations among trees and narrow roads lined with low stone walls, even though, in the abbey the walls are further from the road. The form of the westwork, which in itself could be described as a separate space “attached” to the church, in a way corresponds to what we can see in the game. In *Dark Souls*, however, the stairs lead down to the west side of the facade, thereby revealing that east and west sides of the westwork are not located on the same level. Apart from that, some striking differences can be noticed as far as the structures of west and east facades are concerned. The symbolic importance of the building is also crucial; while inside, the protagonist can light a campfire in order to be reborn in it once he dies.

Such references show that architecture becomes a vital part of the gameplay. We can see it in the design of a cathedral in a location crucial to the storyline – the city of Anor Londo. The importance and role of the cathedral is foregrounded by its similarity to Milan Cathedral visible in the façade articulated by tall pinnacles, which resembles an open-work structure when looked at from above. The division of the façade and the rose window above the main entrance are inspired by elements of Westminster Abbey. There is no denying that all the resemblances are general in nature, for the location in the game has been deliberately transformed and enlarged. The introduction of a wide stairway in the game, for example, changes the spatial contexts of the two cathedrals. Importantly, Anor Londo is the only location, whose exterior and interior alike are permanently suffused in sunlight.

This characteristic underlines the meaning assigned to the cathedral, the former headquarters of the emperor of the world of the undead, with the large part of its interior being Gothic-esque in style. In this context, the cathedral becomes a sacred space, while the motif of the omnipresent light becomes a travesty of the Christian idea of theophany, i.e. an emanation of God through light (Perl, 2007, p. 104). The discussion of the symbolic messages carried by references in *Dark Souls* would not be complete without mentioning the last location in the game – the Kiln of the First Flame. The gray-coloured landscape unfolds in front of the player's eyes, with remains of trees providing background for the ruins of an ellipse-shaped construction. The shape of the construction is evocative of the biblical image of the Tower of Babel present in the European art, with Pieter Bruegel the Elder's 1563 painting being the most famous rendering of the motif. The reference to the tower attaches strong connotations to the game's storyline.

The last opponent the protagonist has to confront is Gwyn, Lord of Cinder, formerly known as the Lord of Sunlight. The protagonist's task is to take the Lord's place and rekindle the First Flame. In this context, the reference to Babel strengthens its inherent symbolism by alluding to the fall of a once glorious empire. Obviously, in the context of the game the fall is not linked to the God's punishment of humans for their pride (Biblia Tysiąclecia, Rdz 11,1-9)⁵. Nevertheless, the unfinished construction, like the Tower of Babel, symbolizes the dawn of a certain empire and the existence of a universal cycle, in which even the greatest civilizations eventually collapse. Indisputably, the provided examples do not account for all the connections between the world of art and the world of the game, let alone the whole *Dark Souls* series. They do illustrate,

⁵ Rdz 11,1-9 In Biblia Tysiąclecia, trans. Jakub Wujek, Kraków 1962.

however, a much greater phenomenon that would require a separate study, which is set in an alternative world, but they remain symbolic in their power to create the sacral atmosphere in the game. These sacrum places are created by inspiration of sacral architecture, magnificent music and iconography taken from many religious, but especially from Christianity.

On the screen plane. Painting by Beksiński and Giger in “Tormentum: Dark Sorrow”

At this point, I would like to focus on independent video games, commonly referred to as indie games, usually created by individuals or small teams and quintessentially different from high-end productions. As far as the visual aesthetics of indie games is concerned, interesting is the employment of painting techniques as well as the presence of numerous direct references to specific works of art. A perfect example is *Tormentum: Dark Sorrow*, (OhNoo! 2015), a game inspired by the works of Zdzisław Beksiński and Hans R. Giger.

References do not take the form of simple, individual “quotations”, but they constitute a much more complex transposition – a synthesis of visual experiences gathered while looking at different paintings, all of them joined in a unique artistic form. A compilation of different works of art is illustrated on the example of a demonic figure transmuting into a gate-like form, drawing on Giger’s aesthetic visible in his *Game II*, a painting based on similar compositional premises. A person held by a diabolic figure could be associated with the crucified Christ as portrayed in *Satan I*, while the figure itself could be the devil, also portrayed in the painting. Giger-esque inspirations are also visible in references to the figure of the Alien created by Giger for Ridley Scott’s movie. What is more, the game includes obvious references to Beksiński’s art, such as the swinging dead horse with its partially exposed skeleton evoking associations with a half-dead horse from one of Beksiński’s paintings. Apart from that, the structure of a castle where the protagonist is brought at the beginning of the gameplay brings to mind cathedrals portrayed in some of artist’s works. Finally, *Tormentum* features a reference to Rene Magritte’s 1928 *Lovers*, a painting completely different in its aesthetic from Beksiński’s and Giger’s works. Game designers use the motif from Magritte’s painting, but rework it in their own, dark fashion, eventually endowing it with a different meaning. In Magritte’s surrealist painting, two individuals kiss each other with their faces enshrouded in white cloth, but in *Tormentum*, the two individuals do not kiss, white cloth pulling their faces in opposite directions. The romantic vision of blind love is replaced with the vision of sorrowful lovers.

Black figure greek painting. Stylistics of vase painting in “Apotheon”

Apotheon is the last indie game I would like to discuss. The game excels in the

quality of its graphic design, based on Greek vase painting, the black-figure pottery style in particular, with occasional touches of the red-figure technique. In *Apotheon*, Greek artistic motifs are not simply transposed to the world of the game, but they dominate the graphic design entirely (AlienTrap 2015). As a result, the aesthetics of the game corresponds to the story it tells. Game designers bring life to mythical events by presenting them in a new medium. Thus, *Apotheon* merges two narratives – that of words and that of images – into one, adding to it an element of movement, entirely controlled by the player. By transposing the visual imagery from Greek vases to the medium of the game, designers stress its two-dimensionality. Greek vase painting lacks the depth of perspective, but the lack is compensated for by the tridimensional shape of the vase. In the game, however, the vase is no longer the medium, its matter being incorporated directly onto the gameplay. The title screen itself gives the player a taste of the aesthetics of the game by featuring two gods resembling the iconography from the vases. Hephaestus, for example, is portrayed with the labrys (Trevor, 1985, p. 307) in his hand, an image exclusively present in the black-figure pottery. Also, Zeus's thunderbolt is rendered differently than in the majority of animations and drawings, for it takes the form of a grain ear, just as it does in Greek vase-painting.

The design of the tutorial itself follows the black-figure painting conventions while the aesthetics of the cut scenes follows the visual aesthetic of the game, assuring the consistency of the virtual reality. Usually, high-end productions aim at making cut scenes much more realistic than the game's aesthetics. Moreover, *Apotheon* makes references to specific types of boats. For example, we can notice visual renderings of the Dionysus's boat painted on a patera or an episode from the *Odyssey* illustrated on one of the vases. Importantly, the gameplay mechanics is faithful to the aesthetics of graphic design, e.g. a spiraling meander appears every time the protagonist hits an opponent during a fight. Similar references can be seen in details such as the image of the Ceryneian Hind or the Gorgon on a shield. Unquestionably, all the virtual examples may have different real-life equivalents because of the prevalence of the discussed motifs in Greek vase-painting. Each level in the game contains decorations and divisions known from ancient pottery, with the colors changing for specific locations such as the kingdom of Poseidon. Even here, however, the sea wave is presented in the form of a stylized friese, a common form of Greek ornamentation.

Summary

The examples in the article illustrate how strong an inspiration can the world of art be to game designers who, with a creative flair, weave artistic references into the structure of the game. By no means are these references part of the

artificial background in the virtual reality. On the contrary, they endow these virtual realities with unique forms, enriching locations left to be discovered by the player. Some of the games discussed in the study draw inspirations on what has already been done in a different medium. Nevertheless, this is not simple copycatting in the service of game designers willing to fill the world of the game with something. All the inspirations show the creative potential hidden in video games which, as every other artistic form, exist in an infinite and complex relation to other works of art. Aware of these relations, game creators take the animations in their works to a new, undiscovered level. In this respect, the aesthetics of places explored by the player is not just a collection of patterns, but an element whose importance equals that of the gameplay. By exploring fictional yet more or less real locations, the player can see how the real world and the world of art turn into one.

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