Archaeology
A Virtual Adventure

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Abstract. Computers and gaming stations and with them videogames of all kinds (in this article the term videogames refers to games made for computers and gaming stations) have become an integral part of our everyday life. Accordingly the significance of this medium in respect to social and cultural processes has gradually become more widely recognized (DiGA 2004). In my opinion it could also be very profitable for archaeologists to take a closer look at form and content of videogames. Therefore this article deals with the utilisation of archaeology, the archaeologist and archaeological themes. This subject is relevant not only because it helps archaeologists to understand how the broader public perceives their profession, but also because it has a close connection to the creation of 3D reconstructions and virtual walkabouts.

1. Preliminary Note
To deal with archaeology and its relation to videogames suggests itself for different reasons. Computers and gaming stations are present in nearly every household and therefore play a part in the socialization of children which can hardly be underestimated. Videogames form visual habits and hence some knowledge about them is crucial for everybody who wishes to create a 3D reconstruction for instance for a Museum. Videogames themselves are used in museums for information purposes. The techniques used to generate videogames and 3D reconstructions are the same respectively resemble each other. Out of it result many interactions (cf. below). It is also remarkable that archaeology has appeared in the virtual worlds of videogames right from the start. To my knowledge the first game with an explicit archaeological background is The Mask of the Sun released in 1982 by Ariolasoft. Thus it is interesting to analyse why archaeology is so commonly used in videogames. To answer this question it is necessary to uncover the underlying mechanisms which determine the depiction of archaeology in this medium.

In order to make the focal points clear I shall split the article into two parts. The first part deals with the depiction of the archaeologists and their methods, the second part describes the usage of archaeological topics (taken from different ages, for instance the antiquity) in videogames. The article starts with a short introduction into the theme.

All games mentioned in the article are primarily made for entertainment purposes. Thereby it was possible to decode the often unconscious patterns, which underly the depiction of archaeology in videogames.

In my opinion it also becomes easier to estimate Educational (videogames made for information purposes) on this basis.

2. Introduction
Videogames are a quite small but vivid branch of entertainment media. Therefore it is necessary to give some general remarks on the notion of archaeology in the media. These remarks are by no means complete for more information cf. Felder et al. 2003.

According to the content and dramaturgy of works of the entertainment industry archaeology and archaeological themes are often depicted in a distorted and unrealistic way. Many stereotyped notions are associated with archaeology in the public mind, among them the archaeologist as adventurer, the discovery of great treasures and mysterious artefacts and so on. Usually people do not get the opportunity to encounter archaeologists in person on an excavation. In this way they gain knowledge about archaeologists and archaeology which has not much in common with reality. This problem is intensified by the lack of profound information, mediated by documentary films or popular scientific journals which could draw a clearer picture of this science. If a scientist directly addresses the public it is of great importance to know about the expectations and imaginations of the public, in order to develop meaningful projects.

3. About the Depiction of the Archaeologist and Archaeological Methods in Videogames
The utilisation of archaeologists and their profession differs in the respective genres. Thus the individual genres are dealt with separately.

3.1. Adventures and Action Adventures
Adventures and Action Adventures share a high potential of identification between player and character. The player has the fascinating opportunity to experience the life of a virtual archaeologist.
He has to control the virtual hero to solve puzzles, often literally by assembling different parts of artefacts (e.g. in The Dig, LucasArts 1995), and question persons in order to survive the adventure. As a rule the player sees the virtual world of the game not really through the eyes of the character (as it is often the case in First Person Shooters) but from a Third person’s perspective.
Nevertheless a complex and lifelike virtual environment makes the identification of player and character easy. Another alliance between Adventures and archaeology is the motive of the Quest. The titles of Adventures like Space Quest (Sierra Online Inc. 1986) and King’s Quest (Sierra Online Inc. 1984) show the significance of this theme. In videogames, as in films, the archaeological fieldwork is often reduced solely to the hunt of important artefacts with destructive or salutary powers (e.g. in Indiana Jones and the Emperors Tomb, LucasArts 2003; Tomb Raider series, Eidos Interactive 1996–2003). In most cases the Artefact is used to advance the plot but its very nature is totally unimportant. In short it functions like Hitchcock’s famous Mc Guffins (Day 1997:22–24). It is particularly interesting that videogames feature the myth of the Quest for the Holy Grail in more than one case. It is crucial for the comprehension of this fact to understand that literature and videogames focus on the quest for the Grail and not on the grail itself. “The grail is a space open to various means of being filled” / “It is more the search than the grail itself that has been the fascination” (Mertens 2003:10). Furthermore the Grail is dealt with not only in videogames (e.g. Indiana Jones and The Last Crusade, LucasArts 1990; Gabriel Knight 3: Blood of the Sacred, Blood of the Damned, Sierra 1999; in films: e.g. Indiana Jones and the Last Crusade , Paramount/LucasFilms 1989), as an object which is not a literary invention but a real object which potentially could be found by archaeologist. Thus the grail can be functionalised in videogames according to the above mentioned pattern.

The likeness of the archaeological and the criminological method has been analysed before (Trümpler 1999). Videogames also use this analogy (e.g. Dagger of Amon Ra, Sierra 1992). As mentioned above, adventures inherit a detective element (investigations and the questioning of persons are integral parts of all adventures). It seems that the association of archaeology and criminology is sometimes so close that archaeologist and detective become convertible. The game The Cameron Files 2: Pharaoh’s Curse (Dreamcatcher Interactive 2002), in which the detective Allan Parker Cameron investigates the mysterious disappearance of the archaeologist Moira Mc Farley, is a good example for this. Cameron not only solves the mystery of an ancient curse which the archaeologist was investigating when she disappeared, but his outward appearance also resembles the famous celluloid archaeologist Indiana Jones. Such collage-techniques are very common in videogames. It seems that bits and pieces of clichés, which have formed about the respective sciences are isolated and assembled in a new way. Another example, also taken from the game The Cameron Files 2, concerns the usage of the motive of an ancient curse, originating from the genre of horror films (cf. also Felder et al. 2003) which is in this case combined with a detective story. This combination of widely known stereotypes which trigger certain associations is useful in videogames because it is often not possible to spend much time on telling a polished background story; everything has to be told in short.

A similar technique is used to include archaeological findings, sites or methods and so on in order to give it more credibility and authenticity (e.g. Riddle of the Sphinx: An Egyptian Adventure, Dreamcatcher Interactive 2000, cf. also below) From the point of view of the archaeologist this approach can be problematic, because especially videogames with a background originating in fringe archaeology often have a very realistic look (Riddle of the Sphinx: An Egyptian Adventure, Dreamcatcher Interactive 2000; Timelapse, GTE Entertainment 1996). The clever mixture of facts and fiction is a phenomenon which is well known from fringe sciences. Especially some branches of Science Fiction are connected to the point of view of fringe archaeology. For instance the idea that extraterrestrial super races fostered human evolution surfaces in videogames very often (e.g. in Star Trek Hidden Evil, Activision Publishing, Inc. 1999). Often the residents of the legendary Atlantis or their descendents are aliens themselves (e. g. in Timelapse GTE Entertainment 1996). But the alliance of Science Fiction and Archaeology is not restricted to adventures (cf. below).

Very much akin to Adventures are Action Adventures. But Action Adventures focus much more on physic abilities like climbing and fighting than on a filled background story. The archaeologist as an adventurer who undergoes endless dangers in exotic places all around the world is the characteristic stereotype of this genre. The plot (and archaeological fieldwork) is solely reduced to the hunt of the artefact (cf. above). In any case the respective artefact holds great powers and thus has to be saved from the hands of villains (from Werner von Croy in Tomb Raider: The Last Revelation, Eidos Interactive 1999; from the Nazis in Indiana Jones and the Last Crusade, LucasArts 1990 and countless others). By using superlatives regarding the age and attributes of the artefact this conflict is amplified (e.g. in Star Trek Hidden Evil, Activision Publishing Inc. 1999).

It is interesting to remark that Action Adventure is a new type of game which emerged in the 90ies and features a kind of hero who started to dominate the movies about the same time. This type of hero, attractive, cheeky, intelligent, and physically strong, is quite a novelty regarding the depiction of women (e.g. Lara Croft the heroine of the Tomb Raider series). As for the portrayal of men it only accentuates the well known stereotype of the adventurer. All in all it can be stated that the reference to archaeology is perhaps the least developed in Action Adventures and is nearly lost in the depiction of a more generally applicable type of adventurer. Certainly it is no coincidence that many people recognise Lara Croft but do not know that her profession is archaeology.

3.2 Strategic Games and Simulations

In these games archaeology is utilised in different ways than in Adventures and Action Adventures, because the dramaturgy and contents differ as well. In strategic games it is most important whether the researches and inventions grant the player an advantage which enables him to win the game or not. An artefact with mighty powers could provide such an advantage. In these games archaeological research is only one factor among many others and accordingly archaeologists and their profession play a minor part in strategic games. Archaeologists are not used as protagonists because according to the structure of these games it is the process in which
knowledge is gathered that is important and not the archaeologist as a figure to identify with. Moreover, other fitting role models are already established, for instance that of the pilot in space flight simulations (e.g. Wing commander Origin 1990) and that of the ruler or even God in build up strategic games (see also below; e.g. Tropico, Gathering of Developers 2001; Populous, Electronic Arts 1989). Because archaeology surfaces only at the margins of strategic games and simulations it is very hard to identify games with archaeological content in this genre. Thus it is probable that there are far more games existing than the two examples which are briefly described below.

In the strategic game Tropico (Gathering of Developers 2001) the player has to incorporate the ruler of an Island in the Carribean. The promotion of excavation sites and Museums and the building of hotels in their neighbourhood encourages tourism and is therefore an important economic factor. Archaeologists appear in the game as highly paid specialists. To my knowledge this is the only case of a connection between tourism as an economic factor and archaeology in videogames. The space flight simulation Freelancer resorts to well known patterns. Artefacts which have been created by an old civilisation on a distant planet are of major importance. They grant the player an advantage in fulfilling his tasks as a pilot. But it is interesting that the decision of the protagonist in the game to become a pilot is partly determined by his interest in mysterious artefacts. This fact mirrors the public fascination, which may lead people to take a closer look at archaeology as a science.

### 4. About the Utilisation of Archaeological Themes in Videogames

In contrast to the previous part of the article not Adventures and Action adventures but strategic games and simulations feature archaeological themes on a regular basis. Especially build up strategic games are interesting to analyse because they also use elements of simulations, like historic battles. Therefore they will be in focus in the following.

As a rule build up strategic games are played from an isometric perspective. Thus the player has a good overview and can act fastly. Games of this type usually follow a certain pattern (of course there is a myriad of modifications in the individual cases). It is the goal of the game to advance from a little dwelling to an empire. This progression often leads to different stages, like the stone-, bronze-, and iron age.

To establish an empire it is necessary to promote economy (e.g. trade), cultural, and social aspects (e.g. theatres, schools, hospitals), and to defend the dominated area against enemies. Regarding the framework of build up strategic games it seems compelling to use historical backgrounds in them. While historic dates and events are logically mainly taken from the science of history (in this article the term science of history is used in a restricted sense, the question to which extent archaeology is a science of history as well can not be discussed here), the outward look of the virtual world is allied to subjects of archaeology. If one keeps in mind that the goal of build up strategic games is to build an empire, it is not surprising that mostly high civilisations are used as role models (e.g. the Aztecs and the Romans in The Age of Empires series, Microsoft 1997–2001). In videogames which focus on the simulation of historic battles, the plot takes place at locations and times which are known for many conflicts (e.g. the Middle Ages in Europe; e.g. Medieval Lords: Soldier Kings of Europe, Strategic Simulations 1991). Protagonists of these games are nations which are proverbially martial, like the Vikings (e.g. Medieval: Total War Viking Invasion, Activision Publishing Inc. 2003). Accordingly, tribes or less structured societies can appear in build up strategic games as villains.

Another important feature which nations have to exhibit to be included in a game of this type is something that can be described best as some kind of trademark. As stated before it is often not possible to give lengthy descriptions in videogames, but it is very important for the player to know instantly who is acting on the screen. That is one of the reasons why easy recognisable highly stereotyped images are used so often. A good example for this are the Vikings – a helmet with two horns is enough for most people to identify them without doubt. In doing so (from the point of view of the producers of videogames) it is completely irrelevant whether the Vikings actually wore such helmets.

Some build up strategic games are rather simulations, because they try to reconstruct an ancient society in great detail, others deliberately mix facts and fiction and disintegrate historic standards beyond recognition.

An example for the first case is Caesar II (Sierra Online Inc. 1996). Already the cover with its picture of the famous Augustus statue of Primaporta indicates that the game is modelled on historic standards. Many types of buildings in the game resemble existing buildings like the Circus Maximus and the Colosseum in Rome (or rather their reconstructed versions) in order to create a lifelike environment. Furthermore the producers implemented a lot of information in the game. For each type of building the player can learn something about its function in antiquity. Other games demand more artistic liberty in using perceptions of archaeology and the science of history. They single out some bits and pieces of ancient societies and assemble them in a new way according to the principle of pars pro toto – a pyramid stands for ancient Egypt, a crown of laurel stands for the Roman Empire. Moreover a lot of fantastic elements are added. Thus a world is created which is exotic and fascinating but still has some points of reference to the real world which allow easier access. There are many examples for this type of game, for instance the Settlers series (Blue Byte 1993–2001) and the Nations series (JoWood Productions 1999–2002) often the covers already show an adventurous mix of different elements and styles.

Some games that utilise archaeological themes do not fit into the pattern described above. In the following, some examples are briefly introduced because these games establish new insights or underline already given statements.

In some cases the only function of archaeology is to add a touch of adventure and exoticism to a game with a well known principle. The design of some tables in the game 3D Ultra Pinball – The Lost Continent (Sierra Online Inc. 1997) seems to be vaguely inspired by historic standards. Therefore it is
impossible to identify specific objects or buildings – pyramids and dinosaurs appear together and also the title indicates a rather fantastic treatment of archaeology (The Lost Continent probably means Atlantis or something similar; cf. above).

The Racing game Circus Maximus – Chariot Wars (Encore Software 2002) takes place in ancient Rome and chariots are used instead of cars. It is clear that this game is no simulation because on the cover a Minotaurus-like creature which obviously acts as a charioteer is displayed.

A good example for the usage of well known clichés is the action game Prehistorik (Titus Interactive 1991). A club swinging Neanderthal is the protagonist of the game and, moreover, he lives in direct neighbourhood to dinosaurs (cf. Kempen 1997).

At last it is necessary to give some remarks about the connection of videogames and 3D reconstructions respectively virtual walkthroughs.

Videogames and digital reconstructions are created by similar techniques. Mainly in the 90ies games were provided with real 3D environments (e.g. Uru: Ages Beyond Myst, Ubi Soft Entertainment 2003) and earlier than that the number of real-time strategic games increased (Dune II: The Building of a Dynasty, Virgin Interactive Entertainment 1993; Command & Conquer, Virgin Interactive Europe 1995). It should be noticed that the term real-time refers here to the management of fights. So in this context real-time is the opposite to round based, but some games like realMyst: 3D Interactive (Mattel Interactive 2000) use techniques like 3D real time rendering to create a lifelike world and are therefore rather comparable to digital reconstructions. The outward look of videogames especially in the case of simulations or photorealistic games and digital reconstructions is alike because the are created using the same techniques. Furthermore the aesthetics of videogames forms visual habits and therefore influence the perception of digital reconstructions. On one hand these facts disclose the fascinating opportunity to reach target groups mainly consisting of young people, who normally do not visit museums. All perceptions of archaeology are fragmentary and this is often confusing especially for laypersons and by means of reconstructions this can be compensated at least a little. On the other hand, all reconstructions hold the danger that the model is equated with reality. This problem is reinforced by the outward likeness of videogames and digital reconstructions. As stated before, many games look very realistic but this does not implicate that the historic information embedded in the game is necessarily correct. But it is often hard for the player to discover this discrepancy.

Finally, I would like to emphasise that it is not my aim to demonise videogames or the entertainment media, but if they remain the only source of information for the layperson a distorted image of archaeology in the public mind is the result.

I hope this article can help to create a basis for discussion and practical work which will help to communicate archaeology to the public.

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