

THE ARCHAEOLOGY OF TIME TRAVEL

EXPERIENCING THE PAST IN
THE 21ST CENTURY

Edited by

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Preface

The present book is the outcome of a project on *The Archaeology of Time Travel*, which we started back in 2007. At the time, we were both at Lund University in Sweden and had agreed that it would be interesting to explore in an interdisciplinary way how more and more people were experiencing the past with all their senses, whether virtually, in varieties of role play, or through other techniques of immersion. We were looking for the past that emerged in-between and indeed beyond archaeological sites and objects – not necessarily tangible, but all the same a very real, embodied, and living past. We decided back then that time travel was the future!

A decade later, we are looking back at the project. A major focus became explorations (led by Bodil Petersson) of how virtual and augmented realities can contribute to time travel experiences at archaeological open-air museums and reconstruction centres. The results were published in the book *Experimental Archaeology - Between Enlightenment and Experience* in 2011 (co-edited by B. Petersson and L. E. Narmo). We jointly organised a number of topical workshops and a seminar on “Archaeology as Adventure” in Lund (2007–2009). We also ran international conference sessions on Time Travel at the 14th Annual Meeting of the European Association of Archaeologists (EAA) in Malta (2008), the 11th Nordic TAG conference in Kalmar, Sweden (2011) and at the 8th conference of the National Network for Research in the Didactic of History at Kalmar, Sweden (2014).

Maybe the most rewarding result of our project is the creation of a network of more than 50 researchers and practitioners in Sweden, Scandinavia and across Europe interested in archaeological time travel from a range of disciplinary and professional perspectives. Although we cannot mention all by name, we wish to thank them for their valuable contributions to the project. The wide competence and broad intellectual horizons of this group is reflected in the contributions to the present book which almost became a *Handbook of Time Travel*.

Another outcome of the project was various other academic publications by either one or both of us (cited in the Introduction and Conclusion of this book), including a co-edited special section of *Lund Archaeological Review* (15–16, 2009–2010, 27–98) to which a number of other network members contributed as well.

As a parallel activity, Bodil Petersson created an academic course for international students on *Archaeology and Time Travel*, which was taught at advanced level at Lund University and subsequently further developed for Linnaeus University at ground level. In total, approximately 60 students learned about and engaged with

our line of research in this way. We hope that the variety of critical perspectives in the chapters and comments that follow will render the present book into a useful one-stop shop for future students to learn more about the field of contemporary time travel.

Over the years we have been granted much support to investigate time travel as a means of understanding the role of the past in the present. We would like to thank the Carl Stadler Foundation, the Crafoord Foundation, the Hainska Foundation and the Krapperup Foundation for generous grants to research and publish on *The Archaeology of Time Travel*. We would also like to acknowledge our editor, Jerryl L. Moreno, who with much patience conducted substantive line editing of the present volume in exemplary fashion. All our authors deserve thanks for the labour they invested in their writing and revising. David Davison and Ben Heaney of Archaeopress ensured the smooth publication of the book both in print and in open access – thank you to you too!

We hope that archaeological explorations of time travel by the authors of the present book and many others will continue and that we will have many interesting meanings, either in the past or in the future . . .

We dedicate this book to the memory of our author and fellow time traveller Ing-Marie Nilsson, a colleague and friend who all too soon left this world.

Bodil Petersson and Cornelius Holtorf
Kalmar, April 2017

Chapter 1

Introduction

The Meaning of Time Travel

Cornelius Holtorf

Abstract

In this introductory paper I discuss the relevance of time travel as a characteristic contemporary way to approach the past. If reality is defined as the sum of human experiences and social practices, all reality is partly virtual, and all experienced and practiced time travel is real. In that sense, time travel experiences are not necessarily purely imaginary. Time travel experiences and associated social practices have become ubiquitous and popular, increasingly replacing more knowledge-orientated and critical approaches to the past. My discussion covers some of the implications and problems associated with the ubiquity and popularity of time travelling. I also discuss whether time travel is inherently conservative because of its escapist tendencies, or whether it might instead be considered as a fulfilment of the contemporary Experience or Dream Society. Whatever position one may take, time travel is a legitimate and timely object of study and critique because it represents a particularly significant way to bring the past back to life in the present.

Keywords: experiencing the past, pastness, popular culture, presence, reconstruction

For at least one afternoon we had all been transported back to the 19th Century. We had been at a Civil War battle site and had taken part in a real battle. . . . I felt that I had finally encountered a Civil War Moment. This made everything worth while. I later found out that most of the reenactors feel that way at various times and events, but this is an individual feeling and normally not everyone has this great experience. When this does happen a person swears up and down that he really was transported back into time and he knows exactly what was going on in the Civil War soldier's mind on that day when he was engaged in a certain battle. (Grunska 2003:60)

Bringing the past back to life in the present

Time travel can be defined as an embodied experience and social practice in the present that brings to life a past or future reality. What is most characteristic of time travel is therefore the possibility in contemporary society to experience the presence of another time period (Figure 1).



Figure 1.1. Land of Legends, Lejre. A modern family temporarily living in the Iron Age, 2011 (Picture taken with my own camera, photographer unknown).

Time travel to the past has become a widespread practice and desire amongst many age groups, with present society increasingly offering relevant opportunities. Prominent examples of popular forms of time travel in contemporary society and popular culture are living history, historical role play, re-enactment and first-person interpretation, often associated with cultural institutions of various kinds. But time travel also occurs, amongst others, in literary fiction, movies, TV docu-soaps, advertising, themed environments and, last but not least, in rapidly improving virtual realities and computer games. Time travel is thus linked to a wide range of contemporary phenomena. It occurs not only within and through people's minds and bodies but is equally the result of specific social practices that support, and indeed allow time travel experiences, especially a range of leisure activities, cultural tourism and the heritage industry as well as shopping, reading, watching movies and TV, playing games, and more and more the use of augmented and entirely virtual realities.

What the underlying proliferation of history and the past in popular culture signifies is, according to Jerome de Groot (2009:248), that the 'academy no longer has a

monopoly on historical knowledge, and . . . that an entirely new way of thinking about history . . . might be necessary'. This assessment reaffirms Raphael Samuel's classic claim (1994:8) that the past in contemporary culture is not the prerogative of the historian but 'a social form of knowledge; the work, in any given instance, of a thousand different hands'. The emerging 'theatres of memory', Samuel argued in his book (1994: part II) are recovering and resurrecting the past in many different ways, sometimes including imaginary pasts and always attracting popular enthusiasm.

Over the past few decades, all these different forms of time travel have become increasingly significant in tourism, entertainment and education, especially museum and heritage pedagogy (see e.g. Gustafsson 2002; Hart 2007; Hjemdahl 2002; Hochbruck 2013; Holtorf 2012; Holtorf and Petersson 2010; Hunt 2004; Kalshoven 2012; Kruse and Warring 2015; McCalman and Pickering 2010; Samida 2013; Sénécheau and Samida 2015; Thompson 2004). Indeed, Kristian Kristiansen (2001) argued that the future of presenting archaeological heritage lies in recreated historical realities and visitor centres at particularly significant sites in the landscape where visitors can experience past realities directly 'where it happened'.

In Eugene Ch'ng's (2009:467) analysis of the prospects for virtual time travel for 'experiential archaeology' he suggests that

it will not be long before the ancient past is brought back to life. Archaeological sites which are no longer in existence or are inaccessible due to time and space could now be accessed by anyone and anywhere, simultaneously... A scenario could be constructed where researchers could gather at a virtual site, taking on the role of a certain person in the past (virtual acting), or of an animal, carrying out their daily tasks while other researchers observe and interpret the scenario... The capabilities of these technologies and its implications for research and for educating the public are massive and are only limited by our imagination.

People have of course long been fascinated by imagining other periods and bringing them to life in some form, as reflected, for instance, in people taking part in historical processions, consuming historical novels, strolling through open-air museums or interpreting historic sites. Certainly there have been staged performances of historic events in the Roman period and during the Middle Ages (Samida this volume; Sénécheau and Samida 2015:35–38). Sites like Pompeii and finds like bog bodies and ice mummies, in particular, have long been seen as 'frozen in time', material objects in which 'the border between past and present becomes porous', and you can meet the past face-to-face as it were (Sanders 2009:224). For certain, a desire for time travelling, retrieving the past or envisioning the future is a cultural theme that goes back some two centuries at least and has occupied authors and scholars alike, amongst them H. G. Wells and Arthur C. Clarke who inspired many (see Chapter 2 in Lowenthal 2015).

The academic study of time travel goes back at least to the 1980s. Important starting points for the existing academic appreciation of the phenomenon of bringing the past back to life in the present are Jay Anderson's (1984) discussion of *Time Machines: The World of Living History*, the classic account of *The Past is a Foreign Country* by David Lowenthal (recently revised, 2015) and the first volume of Raphael Samuel's (1994) study of present-day *Theatres of Memory*. Since then a fair amount of relevant work has been published, as indicated not the least by the references given earlier. Concerning the history of historic open-air museums, Sten Rentzhog (2007) provided a comprehensive discussion from their beginnings with Skansen in 1891 up until the introduction of virtual time travels. Particularly interesting in this context is Bodil Petersson's (2003) research about archaeological reconstructions and their attempts at recreating different periods of the past. She found that in the reconstructed Stone Age, travellers find harmony with nature, simple technology and social equality; the reconstructed Bronze Age holds social hierarchies, fertility rituals and some ecological thinking; the reconstructed Iron Age appeals to some with homemade food, clothes and small-scale village life; the reconstructed Viking Age offers seafaring, long-distance trade and warfare, and even world peace; the reconstructed medieval period, finally, presents the time traveller from the present with markets and cultural festivals, clear social roles and knights' tournaments.

The significance of time travel

In our age, mainly thanks to new technologies and increased demand, time travel has acquired a new level of popularity and societal significance. Time travel does not only represent a new tool for research, as demonstrated by Dell'Untó, Nilsson and Wienberg's discussion (this volume) of the emerging possibilities of digital 3D-visualisations, but it also manifests the changed role of material culture in archaeology generally. As I argue (this volume), in experiences through which the past comes back to life we can observe that bodily sensations and evocative narratives substitute for the study and analysis of material evidence in understanding the past, so that archaeology may no longer be self-evident as the discipline par excellence of things. Now things may merely take the role of props facilitating larger stories and experiences (see also Petersson, this volume).

Time travel arguably represents an alternative way to approach the past in current society in general. Whereas the most common approaches to the past have been foregrounding either knowledge and insight or critique and politics, now credible experience and sensual immersion feature large. In all of this, references to past, present and future are often firmly interconnected – as argued especially by Bodil Petersson (2003 and this volume) – so that in the following, when I mostly discuss time travelling to the past, the future is often at least implied. Let me start by briefly discussing in more detail the differences between the three main approaches to the past I mentioned, so that the significance of time travel becomes clearer.

The approach we are probably most familiar with, not the least from school education and academic textbooks, is the evolutionary one. This perspective offers a long-term historical perspective that ultimately ranges from the beginning of the universe to the present day. As far as archaeologists are concerned, the periods studied stretch from the oldest distinctively human ancestors, living several million years ago, until the 21st century. Ninety-nine per cent or more of the entire human past falls within the archaeologists' remit, whereas historians and many other disciplines deal only with a very tiny proportion of human biological and cultural evolution at the very end of it. According to this approach, the past matters to the present because it explains its origins, where we all come from and how the present, in the long term, came to be the way it is. A special focus is on chronology and historical context. Without reliable dates for archaeological finds and sites it is impossible to contextualise them at the right point in the process of human evolution. Once fixed in time and space, archaeological evidence gains meaning and significance from putting it into a specific historical context that emerges from all the relevant, available information already known. This approach can demand of both archaeologists and their audiences' considerable knowledge about the course of human history, deriving from the accumulated insights of past research, which is why factual knowledge about past periods is so important here. In addition, a sound methodological expertise is required in order to be able to sort good scholarship, which produces valid insights, from bad scholarship which does not. The dynamic in this approach is one of historical causes and effects: 'why do humans walk upright?'; 'why did people become farmers?' and 'what lay behind the beginnings of 'civilisation?'' Although not everything in the human past may be knowable, anything knowable is in principle relevant to this approach. The more we know about the human past, the better we are likely to understand the specific historical context and thus human evolution as a whole.

Another perspective has focussed on the politics of the past, investigating representations and alterations of past remains as phenomena of different presents. Every account of the past mirrors existing norms and expectations of the present in which it was constructed. This political perspective scrutinizes the specific circumstances in which a certain view of the past gains currency in a particular present-day context. Whose interests are served if the past is remembered in this way rather than another? Who controls the past in the present? In recent decades, this approach has become very popular amongst academics not only as part of a growing interest in critical theory but also as a consequence of an increasing interest in the history of research. Critical studies of the norms and rules that govern archaeological practice have led to insights about the politics of archaeology. If the past is defined and constructed differently in each present, the obvious starting point of attention for this approach is the emergence of this contemporary context. For example, it is pointless to ask about the meaning of

prehistory or prehistoric finds for time periods before the 1830s when the concepts of *pré-historique*, or ‘prehistoric’, did not in fact exist. A key notion is critique. We need to ask why there was a need or desire to introduce the concept of prehistory in the mid-19th century and what function it has served ever since then, taking into account that the meaning of the concept may have changed. What this approach demands of both archaeologists and their audiences is the ability to ask critical questions and not take anything as self-evident. This kind of critical assessment demands a high degree of intellectual rigour. The underlying dynamic is one of political means and purposes. Pasts are promoted or adapted because they serve certain ends in the present. Nationalistic politicians aim to support their cause by choosing chauvinistic pasts. Visitors to amusement parks seek to maximise their enjoyment by preferring rides and attractions linked to historic themes that are easy to recognise, simple to grasp, and fun to join. According to this approach, the question is not how much can be known about the past, but what has been known about the past in which context, by whom and why. There is a politics of knowledge.

Time travelling, finally, differs from both these approaches insofar as it is directly linked to the lives and bodies of individuals in the present. It may begin at 8 p.m. on a particular TV channel. We are living in the present, but we are free to enter the past now! This perspective is neither about knowledge of human evolution nor about a critical analysis of our own age, but about our imagination and embodied experience. Key notions for the way in which the past becomes meaningful through time travel include credibility and engagement. The past does not have to be genuine in the sense that it once ‘really’ happened, but it needs to be credible as an authentic experience about a past that *could* have happened. Credible pasts are largely reliant on trust. We trust pasts either when they correspond closely to the past we already know, that is our expectations, or when they are vetted by experts whom we trust. Time travel does not demand a particular intellectual attitude towards either past or present but instead a readiness for an embodied engagement with different realities, involving both body and soul. Time travel is about getting immersed in another world, assuming the perspective of somebody actually living in that world, involving all the senses. A good example is provided by Magali Ljungar-Chapelon’s interactive installation inviting the audience to join a Bronze Age ritual procession with their bodies and thus engaging with a past ‘corporeality’ (see her contribution to this volume).

The dynamic of time travel lies in a constant oscillation between life now and then. On the one hand, the time traveller never leaves the present and remains the person she is, with all the associated baggage in the form of world views, preconceptions and personal life histories. On the other hand, the time traveller is leaving that present and being transported to another reality governed by

	EVOLUTION	POLITICS	TIME TRAVEL
BEGINNING	First humans	Construction of the past	<i>Now!</i>
FOCUS	Chronology Historical context	Contemporary context Critique	Experience Credibility
DEMANDS	Knowledge about human history	Critical thinking	Embodied engagement
DYNAMIC	Historical causes and effects	Political means and purposes	Imagining life now and then
KNOWLEDGE	Anything is relevant	Questioning what is known and why	Importance of what cannot be known

Figure 1.2. An overview of the three approaches to the past (from Holtorf 2007b).

different norms and open to all sorts of fantasies and behaviours that may not be associated with our lived present. As Niklas Ammert and Birgitta Gustafsson discuss (this volume), the confrontation of ‘now and then’ in terms of ‘similar and different’ has a potential to assist pupils and other audiences in making sense of their own place in history. Ironically, many time travellers ultimately seek to find themselves in the past! However, some of the most significant aspects of time travel are based on knowledge that is next to impossible to ever be (re-) gained in a scientific way. Sensual perceptions, embodied experiences, habitual behaviour, emotions, dreams and not knowing what historically ‘came next’ have been crucial to life in any period, but archaeologists and others cannot easily reconstruct these dimensions from the evidence available today. It is hard to avoid imposing our own responses to these issues on other periods and thus constructing the past as an extension of the present. But arguably an extension of the present is precisely what is desired! Interestingly, each of the three ways in which the past is approached in the present can claim for itself to be the most important approach, subsuming the other two (Figure 1.2).

EVOLUTION puts all parts of our present into a long-term historical perspective. The very distinction between ‘the present’ and ‘the past’ as well as the notion of anachronism, deserve historical study and must be understood within the respective historical and cultural contexts in which they first emerged and later continued to flourish (Schiffman 2011). Even POLITICS and TIME TRAVEL are ultimately the outcome of a long evolutionary trajectory. A concern for the politics of the past cannot be appreciated fully without knowledge about critical theory’s development in the 20th century, in particular as a response to fascist and nationalistic ideologies in Germany and elsewhere. Contemporary time travel is arguably a phenomenon arising in its present significance from a widespread fascination with heritage typical for postmodernity. The associated heritage industry is linked to the post-industrial society, first emerging during the final

quarter of the 20th century and still developing today. By the same token, the evolutionary perspective itself can be contextualised. It emerged in its earliest forms during the 17th and 18th centuries within the intellectual frameworks of the Enlightenment, Romanticism and the beginnings of modern scientific thinking. Since the 19th century this perspective has remained fundamentally unchanged.

POLITICS applies as much to EVOLUTION and TIME TRAVEL as it does to any other way in which the past is given meaning today. Academic uses of the past are to be scrutinized in the same way as their purely commercial, ideological and other counter-parts. In each case, it is imperative to ask about the political agendas and interests behind particular phenomena. The most important question always has to be: who benefits? Time travel can be seen in the context of the heritage industry and often has certain commercial overtones (*it sells*). Although nothing may be wrong in supplying people with an experience they desire, surely we ought to be wary of anybody exploiting people's genuine dreams and desires in order to advance the financial and possibly ideological interests of a few. Simultaneously, we need to ask who wishes to travel in time and why? Time travel allows people to escape the present and access another world, thus helping them cope with the social reality in which they live. Similarly, the evolutionary perspective has always been a strong pillar in the secular and scientific world view of the modern world, at all times to a larger or lesser extent competing with religious world views. The political dimension of evolution recently came to the fore when a strong creationist lobby in America had some success in changing school curricula in certain states. Behind the debate on these changes lie fundamental political and ideological divisions in society. Finally, even the political perspective itself is political. It is no coincidence that many of its proponents are associated with the political Left. They are seeking to change not only our understanding of archaeology and other academic disciplines but ultimately society as a whole.

TIME TRAVEL is even at the heart of EVOLUTION and POLITICS. Arguably the past cannot be understood in any way if it was not for some kind of possibility to imagine what life was like in another age. The evolutionary perspective is based on the understanding that scientific knowledge about lived past realities can be gained – however limited and incomplete it might be. No matter how much scientists may emphasise the role of irrefutable facts and objective knowledge, they are at the same time likely to agree on the central role of the imagination in all sciences, including archaeology. Similarly, understandings of the past are politically and socially meaningless today if they do not invite and indeed provoke people to imagine what life was like then. The politics of the past is directly dependent on the power of reconstructions to bring the past to life and

thus to engage and move people. It is precisely the suggested feeling that ‘these people were like we are today’ or that ‘we are not at all like those people’ that makes the past so powerful in society. Ebbe Westergren (this volume) pioneered an educational approach to time travelling which is now implemented in many countries through the organization *Bridging Ages*, which he founded. This method uses the power of bringing the past to life in order to address ‘key questions’ in contemporary society such as gender roles, democracy and social cohesion, illustrating the large potential for improving society by bodily representing the past in the present.

In sum, all three perspectives are able to give meaning and significance to the past in the present. Each can explain the other two, but to some extent they can also be combined with each other.

Is time travel actually possible?

But how can another period, whether past or future, become ‘present’ and a subject of embodied human ‘experience’? Is time travel merely a clever metaphor, or can it be said to describe a social and cultural reality? Initially, it seems obvious that a discussion of time travel carried out while being firmly based in the present can only be either pure magic or a product of the imagination, thus being unreal and contra-factual. No one can *actually* travel either into the past or into the future. But let me unravel these issues in some more depth.

To start with, it is essential to ask what is actually meant by ‘really’ travelling in time. The statement that actual time travel, leaving present-day reality, is impossible employs a common-sense definition of reality: empirical, physical reality. According to this definition, *real* is everything physical, large or small, that we can empirically investigate, whether that may be an atom, a brain or an ancient sword. Within contemporary physics as we know it, there is no time travel allowing us to leave our own empirical reality – although there certainly are some other anomalies regarding time such as the fact that it slows down when travelling at high enough speed. Physical reality is however not the only way to understand reality, and it may not even be the one that is most significant to human beings. Reality might also be defined as the combination of human experiences and social practices. Reality, in this alternative view, is whatever humans experience during their lives and practices as social beings. This definition of reality is particularly pertinent here as it implies that all reality is partly virtual and all experienced and practiced time travel is real.

According to this view, past and future are not physical realities distinct in time from our own but themes that contribute to shaping specific human experiences and social practices in the present (Figure 1.3). Some contemporary experiences



Figure 1.3. The presence of future-ness in a heritage context (Copyright: Citizen Skwith. Reproduced by permission).

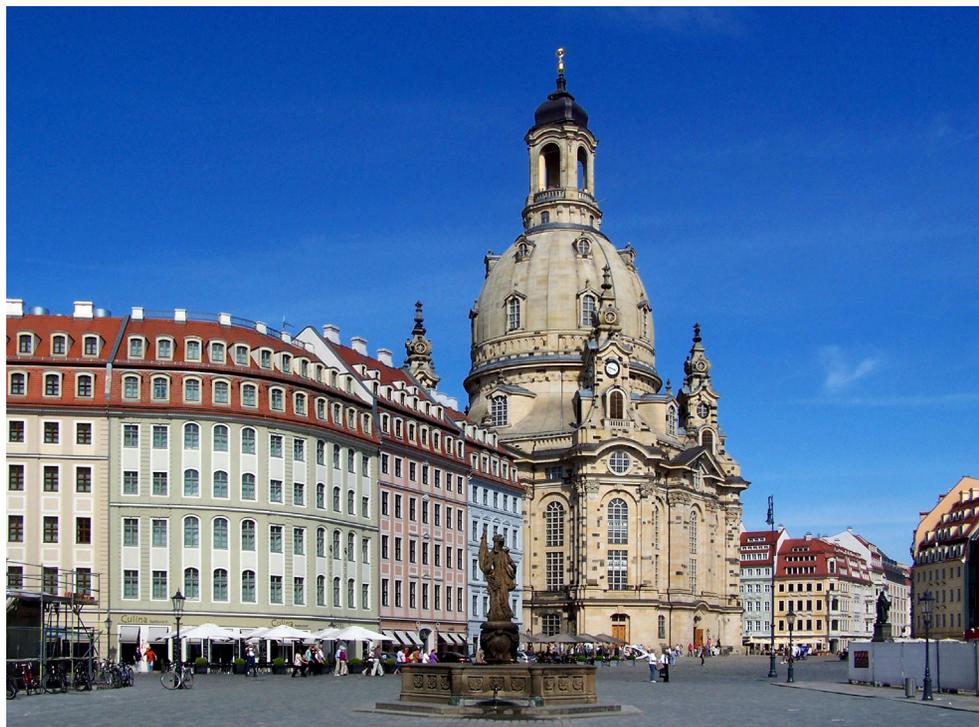


Figure 1.4. The rebuilt past at Dresden Neumarkt: escapism or utopia? (Picture by X-Weinzar, 2011. Reproduced under Creative Commons Attribution-Share Alike 3.0 Unported license)

and social practices may be set at points in the past or the future. For example, the annual Medieval Week on the Swedish island of Gotland is a present event that allows participants to experience bodily aspects of the Middle Ages as a result not only of historical research and tourist management but also of pre-existing perceptions of the Middle Ages amongst the audience (Gustafsson 2002). By the same token, Jack McDevitt's (2001) science fiction novel *Deepsix* is set in the year AD 2223 and allows readers to experience aspects of the 23rd century as a result not only of the publishing industry but also of the author's writing style that is captivating and makes sense for an early twenty-first-century audience imagining the future. In either example, past or future are not being trivialized but brought to life through contemporary experiences and associated social practices and thus are able to make direct contributions to human lives and practices in the present.

Time travel has a lot to do with the presence of *pastness* (and indeed futureness – but my discussion will in the following be restricted to pastness). Pastness is the contemporary quality of an object to be 'of the past'. This quality comes with the perception of something to be of the past and is thus little to do with actual age (Holtorf 2010a, 2013). A case in point is the Neumarkt area in Dresden. Here, largely through a citizens' initiative in the form of a private foundation, an entire historic quarter of the city that was completely destroyed by Allied air raids in February 1945 is currently being rebuilt to match old views of the area (Figure 1.4).

The Frauenkirche at its centre and a large area around it have already been completed. The aim of this grand project has been clearly stated by the foundation behind it: 'We should not lose our unique chance to regain at the Neumarkt a piece of historical identity for our town, for the sake of our children and grandchildren. Let us give the new old Frauenkirche its old setting!' (cited after Holtorf 2007a:42). The terms 'regain', 'historical' and 'old setting' are not used here in a way compatible with linear, physical time. Indeed, most of the buildings referred to were not even built yet when the aim was formulated. Instead, the initiative is about creating a setting at the heart of contemporary Dresden that has the quality of being 'of the past'. In other words, the aim is to create buildings that are not old but manifest the presence of pastness.

But what does 'presence of pastness' mean: a vague perception that something might be old, a persuasive allusion that something actually is old when it is not or a seemingly complete immersion into the past? The concept of presence has in recent years attracted a considerable amount of research within a range of academic disciplines, including IT science, psychology, performance studies, communication science and media studies (Hofer 2016; Lombard *et al.* 2015). The defining notion of presence is a perception of non-mediation or immediacy, that is a perception of 'being there', even though the experience may actually be mediated to a considerable extent. For example, a sophisticated virtual environment provides a sense of presence when it convincingly suggests that you are visiting

an actual place or meeting other people rather than looking at one or more digital screens, which is what you actually do. As with encountering such virtual places or people, whether or not pastness in time travel is perceived as non-mediated will depend on the extent to which

- the past reality presented is consistent and coherent,
- the audience is familiar with the medium and willing to suspend any disbelief,
- the audience's senses are persuaded through rich and vivid impressions, i.e. the underlying technical sophistication creating a sense of immersion,
- pre-understandings and expectations of the audience are matched and
- the audience is involved and engaged in a meaningful way (inspired by Lombard and Ditton 1997).

For children with their vivid imaginations it often takes far less to create believable realities set in the past or in the future (see Figure 1.6 below). Provided these conditions are satisfactorily met, even for adults a perceived presence of pastness and time travel that brings the past to life becomes entirely possible. At its best, the time traveller experiences what is known as 'period rush' or 'magic moments' of when another period suddenly comes to life (see Grunska cited at the very beginning and Daugbjerg, this volume). As I indicated earlier, time travel is a part of many people's lives already. Concerning virtual time travel, Wulf Kansteiner (2005:140) speculated more than a decade ago that 'memories of virtual worlds and virtual interactions will become our most cherished memories and therefore our most powerful and real memories', possibly changing our notions of memory and historical consciousness forever.

It is these emerging realities that now need to be taken seriously and investigated in a variety of social sciences and humanities, especially in the historical disciplines. The other chapters in this book offer examples of the kind of research needed in order to make sense of this popular and increasingly significant way of bringing other time periods to life.

Understanding time travel

Time travel can be conceptualised and different dimensions of time travel distinguished along the two axes representing degree of lived experience and degree of collectivity respectively (Figure 1.5; Holtorf 2012). The past may be played and performed or lived and experienced, collectively through group effort or separately in individual projects. Many forms of time travel combine playful and sincere aspects and have individual as well as collective, dimensions.

In some time travel, the past is a kind of game, a playful and sometimes superficial entertainment drawing on well-known imagery and behaviour commonly

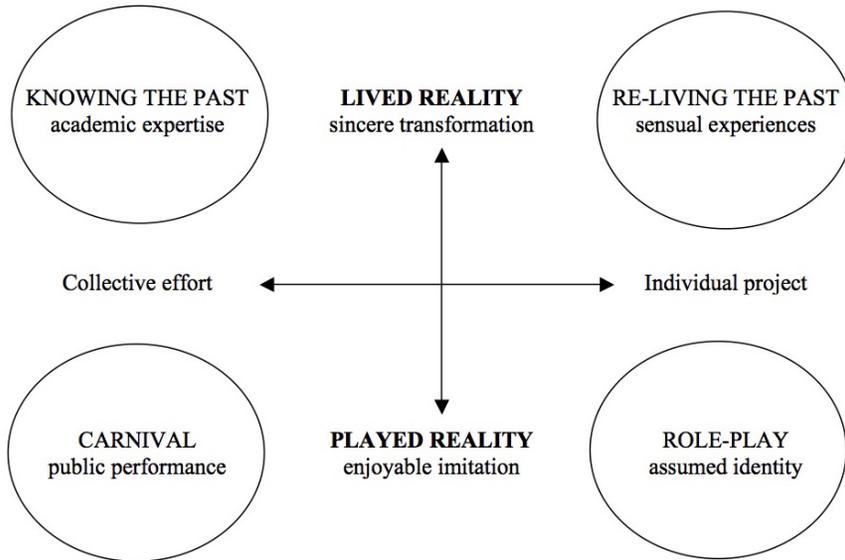


Figure 1.5. A framework for understanding contemporary time travel and its various dimensions (based on Holtorf 2012).

associated with the past. Playing the past can be as amusing and enjoyable for the individual participant assuming a historic role as for audiences of public performances that may be offered in a spirit reminding of carnival. Under the sign of “PLAY” the past is being staged somewhat tongue-in-cheek, and concessions to the present are willingly made for the sake of added fun.

In other time travel, the past is a lived reality, a heartfelt and sincere attempt at effectively representing the past in the present. Recreating past life may be achieved as a personal life project by effectively choosing to embody another person or collectively through the systematic acquisition of expertise and academic insight. Under the sign of “LIFE” the past is serious and given a new authenticity in lived experiences or accumulated knowledge of the present.

Discussing time travel

What many varieties of time travel share is that they bring to life stories set in the past or the future. Indeed, successful storytelling may be the most relevant factor affecting the success of creating immersion within a given space: ‘Story is what holds a space together by linking elements, creating situations, establishing moods, and involving guests’, writes Scott Lukas (2013:155) in his *Immersive Worlds* handbook. Stories that succeed in transporting audiences into a narrative world, for example in theme parks, may result in powerful effects in the real world, affecting attention, emotions, beliefs, attitudes and judgment (Green and Donahue 2009).



Figure 1.6. The popular annual munch-ball match, refereed by the Pope, during Medieval Week in Visby in 2003; genuine engagement with medieval heritage, good storytelling played out in a game, luring tourists to Gotland, or nonsense in bad taste? (Photograph: Cornelius Holtorf)

Similarly, it is the stories and meta-stories of archaeology that lie behind much of the potential and impact of archaeology in contemporary society. Powerful stories well told not only bring the past and archaeological finds to life but also touch people and benefit society so that, arguably, archaeology matters most when its meta-stories matter (Holtorf 2010c).

An important question about both storytelling and time travel in contemporary society is about the criteria that should be used to evaluate different stories and time travel experiences. The answer will in part depend on which specific example we are talking about, but are there certain qualities that are inherently more valuable than others (see Figure 1.6)? Are stories and time travels good or bad depending on the degree to which they are generally most persuasive? . . . Academically true? . . . Emotionally touching? . . . Aesthetically pleasing? . . . Commercially viable? . . . Ethically acceptable? . . . Or politically correct?

It is generally accepted that living history, historical re-enactment and virtual reality cannot bring the past back to life *as it really was*. The significance of this

truism to present-day time travel is however a matter of some discussion (e.g. Hart 2007; Hochbruck 2013; Samida 2013), even amongst those participating (Jones 2010). Some commentators dispute that any time travel could ever be entirely genuine and authentic, however much attention is given to getting the historical facts right. Time travel, therefore, always remains flawed and problematic as anachronistic, to some extent misleading audiences about past realities, effectively representing stereotypes or fantasy and appropriating the past for some contemporary purposes (see also Samida this volume and Daugbjerg this volume). But others contend that all representations of the past originate in the present and are constructed for a specific purpose and in a particular context; historical research appropriates the past too and does not depict the past *as it really was* either. So why not use embodied experiences and the imagination to satisfy our historical curiosity?

The philosopher Kalle Pihlainen (2012:326) argued in an interesting thought experiment that even if we did have access to the past, could make our own observations in past worlds and thus check all the historical facts we wish, ‘at the end of the day, it would still be our responsibility to make of the world what we will, both in terms of interpretation and in terms of actions and their consequences.’ Similarly, Bodil Petersson discusses in the conclusion of this volume how plain anachronism, too, can be a very rewarding and illuminating tool helping us to understand the past in the present. The lessons possible to learn from actual time travel to the past would, therefore, not necessarily provide actual benefits to historical scholarship.

This will be especially true in cases where time travels lead to destinations that in any case are partly or entirely fictional and thus lack a solid factual basis. Should time travels to the lost worlds of Atlantis or Valhalla enjoy the same exposure in society as those to Classical Athens or Ancient Rome? Is it worrisome or encouraging when several thousands are visiting the Swedish region of Västergötland in the ‘footsteps’ of the fictitious historical character Arn derived from Jan Guillou’s bestselling novels and subsequent movies (Mattsson and Praesto 2005)? Should the state provide public-service time travels to carefully vetted destinations with particularly desirable learning outcomes? Can time travel actually lead to inappropriate destinations? Fictional or semi-fictional pasts may be inappropriate destinations – but are not all pasts brought to life to some extent fictional and dependent on partly fictional assumptions? As Dawid Kobiałka argues (this volume), there cannot be any real archaeology without fictional elements.

Another important question is who determines, and on which grounds, which pasts are historically well grounded and appropriate to be used in education, and which are not. In 2011, Chinese authorities effectively prohibited TV dramas

involving time travels for promoting fantasy and superstition in opposition to serious history and potentially challenging the Chinese regime (Kobialka 2013:112–113). Such interference easily gives the impression of political censorship, and this may be a warning to any attempts at regulating time travelling.

There are different reasons why dark and troubled pasts may be inappropriate for time travel. For example, should people travel in time to experience Nazi extermination camps such as Auschwitz-Birkenau, and bring the early 1940s back to life there? Should such a trip be encouraged to remember the victims and keep the memory of the Holocaust alive? Or should it rather be discouraged or even prohibited out of respect for the victims' families and their legitimate expectation of respect? How realistic and educational could it be anyway and what sort of people would be attracted to embody the German perpetrators? In her study of Danish groups re-enacting World War II, Anne Brædder (2015) found that the Danish soldiers could not necessarily imagine to place their bodies inside a German uniform with a swastika on it. Even those representing German soldiers were not prepared to express Nazi ideology, perform the Nazi salute and enact murders, war crimes or deportations of Jews. They are content to embody the ordinary soldier's life in the army, but how content are the rest of us if that is what the Nazi period and World War II are being reduced to? How appropriate is time travel as a medium for bringing to life such dark periods? Arguably, even the negative sides of history have to be brought back to life. Indeed, many time periods are littered with mass murder and all sorts of terrible things that ought to be witnessed but at the same time must not be trivialized or left out. Perhaps we have a particular duty to travel to unpleasant destinations as we may in that way take important lessons and emotions back to present reality. The problem is what lines you have to draw, and how to enforce them, over and above the obvious need to prevent time travellers from committing actual crimes.

Another important issue is whether there are any risks or dangers in time travel, or in other words what a critical perspective on time travel may have to contribute. Time travel makes for embodied experiences that are potentially very persuasive and memorable as well as enjoyable and even delightful. Whereas these qualities may in many circumstances be celebrated, I have already indicated that these qualities may not necessarily be desirable when extreme ideologies or inhuman events of the past are brought back to life. When in 2013 on the 200th anniversary of the Battle of the Nations at Leipzig a particularly elaborate re-enactment of the battle was staged, the artist Bertram Haude responded to the widespread glorification of wartime and soldier life by creating an 'International Shattered Liberation Force (ISLF)'. This 'Force' consisted of a group of injured and demoralized soldiers and was supposed to disturb the picturesque image of the battle (Haude 2015). These defeated soldiers and their behaviour throughout the area of re-enactment reminded

the audience of those events associated with the Battle of the Nations not otherwise remembered in re-enactments: illnesses and injuries, the forced quartering of troops, plundering, raping, widespread destruction and general misery amongst the population. Indeed, what is the message of playing war in battle re-enactments of various periods from antiquity to the 20th century when this occurs at the same time that many thousands of refugees seek asylum from the nightmares of currently ongoing wars and the resulting chaos and human suffering in Syria and elsewhere?

What is more, in the context of the popular American Civil War re-enactments, some critics see a proliferation of reactionary politics glorifying white American resistance and sacrifice while failing to express sufficient distance to racism and slavery: 'By virtue of their own appearance black participants become signs of themselves and their race. As such their appearance alone rehabilitates the narrative told at the event' (Hart 2007:114). And re-enactor Gordon Jones (2010:232) asks: 'Can you really favour racial equality while wearing a Confederate uniform?'

Another issue of concern is that many forms of re-enactment, especially those relating to conflicts and battles, are dominated by heterosexual men. Gordon Jones (2010:228–229) observed about gender roles in Civil War re-enactment that

though many single men still resent any female presence as historically inaccurate, as long as women know 'their place' in 19th century, their acceptance by the majority of male reenactors is generally assured. It is only when women assert 'their place' as 20th century social equals and attempt to enter the male ranks dressed as soldiers that most men – and many women as well – draw the line on grounds of historical authenticity.

Much re-enactment therefore builds on traditional gender roles that contradict present-day ideals to achieve gender equality and ensure equal opportunities (Rambuscheck 2016). By the same token, for Jenny Thompson (2004:XXI–XXIII) on entering a decade of studying twentieth-century war re-enactors, there was no question that she was 'trespassing into a male-dominated territory', and on occasion the male-centred behaviour made her uncomfortable. In 2016, a theatre group performing in the well-known Viking village of Foteviken in Sweden was reported to the police for capturing and selling a woman on a staged slave-action without her consent. A group of archaeologists took the opportunity to point out that some modern Vikings exploited their hobby to live out sexist fantasies that lack any scientific basis (Ahlborn 2016).

An interesting and important question is also whether or not time travelling should in fact be seen as a form of escape from the present: dressing in period

clothes, a changing of daily routines and adopting a different identity and value system while re-enacting historical scenes, or closely observing all of that, make participants and audiences temporarily suspend and forget their ordinary lives (Hunt 2004:399). According to Michaela Fenske's argument (this volume), time travels are spaces of sensual and embodied action and adventure where the alienated modern city dwellers can release some of their frustrations. Similarly, in our discussion with Erika Andersson Cederholm (this volume), she stresses that tourists travelling in time, or travelling in space, can lead to a heightened feeling of being present 'here and now' that many are longing for. In these ways, time travel may compensate for the deficiencies of present society rather than contribute to social improvements, thus rendering it inherently conservative in society. However, it could also be argued that time travel is not an escape from present society at all, but rather its fulfilment. If we really live in an Experience or Dream Society, as has been argued (Jensen 1999; Pine and Gilmore 2011; Schulze 1992), the proliferation of experiences and dreams, for example in the form of time travelling, corresponds to its true character. As Mads Daugbjerg argues (this volume) even scientific experiments may today take the form of embodied experiences. The critical task at hand would then lie in correcting any possible negative outcomes of time travels, not their abolishment. Indeed, time travel experiences of other realities may also popularize social utopias and instil in people very concrete models of alternatives to present society, so that their social impact might be rather revolutionary. All these issues warrant further discussion in the future.

Conclusions

In this introductory chapter I discussed the relevance of time travel as a characteristic contemporary way to approach the past. Time travel experiences and associated social practices have become ubiquitous and popular, in some cases replacing more academic ways of packaging the past for popular consumption. Knowledge-orientated and critical approaches to the past are still around but embodied engagements in time travel have gained a lot of ground in many contexts.

If reality is defined as the sum of human experiences and social practices, all reality is partly virtual and all experienced and practiced time travel is real. In that sense, time travel experiences are not necessarily purely imaginary. Time travel facilitates the presence of pastness (or futureness) in people's lives, emerging from contemporary human experiences and associated social practices and making a direct contribution to human lives and social practice in the present.

My discussion brought some of the implications and problems associated with the ubiquity and popularity of time travelling into view. They include the question by which criteria, and certainly by which institutions, time travels should be assessed and evaluated for the benefit of society. Are there time travel destinations that we

should be warned of or prevented from reaching because of ethical concerns? Does time travel invariably promote the original dominant values (e.g. concerning race, sexuality and gender roles) of the periods of destination? And precisely what are we to make of the often-commercial overtones of some time travel opportunities? Finally, there is a continuing debate on whether time travel is inherently conservative because of its escapist tendencies, whether it might instead be considered as a fulfilment of the contemporary Experience or Dream Society or whether time travel might even popularize utopian visions that could make people want to work actively for a different society.

For all these reasons and ongoing considerations, time travel is a legitimate and timely object of study and critique involving scholars associated with any discipline investigating the past or with heritage studies, tourism studies, social anthropology, sociology, cultural economics, or film and media studies, amongst other fields. Many of these different perspectives are represented in the chapters of this book. All taken together, Bodil Petersson and I hope to place time travel into the larger societal context it deserves as a particularly significant way of bringing the past back to life in the present.

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References

- Ahlborn, Elinor 2016. Arkeologer ryter ifrån mot historielösa vikingar. *Swedish Television News*, 28 July 2016. Available at <http://www.svt.se/kultur/vikingafantasin> (accessed 21 August 2016).
- Anderson, Jay 1984. *Time Machines. The World of Living History*. Nashville, The American Association of State and Living History.
- Brædder, Anne 2015. Kroppen som medium til 2. verdenskrig. In T. Kruse and A. Warring (eds.), *Fortider tur/retur. Reenactment og historiebrug*: 67–89. Frederiksberg, Samfundslitteratur.
- Ch'ng, Eugene 2009. Experiential archaeology: Is virtual time travel possible? *Journal of Cultural Heritage* 10:458–470.
- De Groot, Jerome 2009. *Consuming History. Historians and Heritage in Contemporary Popular Culture*. London and New York, Routledge.
- Green, Melanie C. and Donahue, John K. 2009. Simulated worlds: Transportation into narratives. In K. Markman, W. Klein, J. Suhr (eds.), *Handbook of Imagination and Mental Simulation*: 241–256. New York, Psychology.

- Grunska, Kip M. 2003. *From Farb to Pard. A Story of Civil War Reenactment*. New York, Writers Club Press.
- Gustafsson, Lotten 2002. *Den förtrollande zonen. Lekar med tid, rum och identitet under Medeltidsveckan på Gotland*. Nora, Nya Doxa.
- Hart, Lain 2007. Authentic recreation: living history and leisure. *Museum and Society* 5(2):103–124.
- Haude, Bertram 2015. Krieg als Hobby? Das Leipziger Völkerschlacht-Reenactment und der Versuch einer Entgegnung. *Forum Kritische Archäologie* 4:1–12. Available at http://www.kritischearchaeologie.de/repository/fka/2015_4_1_Haude.pdf (accessed 5 July 2016).
- Hjemdahl, Kirsti M. 2002. History as a cultural playground. *Ethnologia Europaea* 32(2):105–124.
- Hochbruck, Wolfgang 2013. *Geschichtstheater. Formen der »Living History«*. Eine Typologie. Bielefeld, Transcript.
- Hofer, Matthias 2016. *Presence und Involvement*. Baden-Baden, Nomos.
- Holtorf, Cornelius 2007a. What does not move any hearts – Why should it be saved? The *Denkmalpflegediskussion* in Germany. *International Journal of Cultural Property* 14(1):33–55.
- Holtorf, Cornelius 2007b. Time travel: A new perspective on the distant past. In B. Hårdh, K. Jennbert and D. Olausson (eds.), *On the Road. Studies in Honour of Lars Larsson*: 127–132. Stockholm, Almqvist & Wiksell.
- Holtorf, Cornelius 2010a. The presence of pastness: Themed environments and beyond. In Judith Schlehe, Michiko Uike-Bormann, Carolyn Oesterle and Wolfgang Hochbruck (eds.), *Staging the Past. Themed Environments in Transcultural Perspective*: 23–40. Bielefeld, Transcript.
- Holtorf, Cornelius 2010b. On the possibility of time travel. *Lund Archaeological Review* 15–16, 2009–2010, 31–41.
- Holtorf, Cornelius 2010c. Meta-stories of archaeology. *World Archaeology* 42(3):381–393.
- Holtorf, Cornelius 2012. Review article: The past as carnival (Review of A. Dreschke, dir., *Die Stämme von Köln*, 2010), *Time and Mind* 5(2):195–202.
- Holtorf, Cornelius 2013. On pastness: A reconsideration of materiality in archaeological object authenticity. *Anthropological Quarterly* 86:427–444.
- Holtorf, Cornelius and Petersson, Bodil (eds.). 2010. The archaeology of time travel. Special section. *Lund Archaeological Review* 15–16, 2009–2010, 27–98.
- Hunt, Stephen 2004. Acting the part: ‘living history’ as a serious leisure pursuit. *Leisure Studies* 23(4):387–403.
- Jensen, Jörgen 1999. *The Dream Society. How the Coming Shift from Information to Imagination Will Transform Your Business*. New York, McGraw-Hill Education.

- Jones, Gordon L. (2010) 'Little families': The social fabric of Civil War reenacting. In: J. Schlehe, M Uike-Bormann, C. Oesterle and W. Hochbruck (eds.), *Staging the Past. Themed Environments in Transcultural Perspectives*: 219–234. Bielefeld, Transcript.
- Kalshoven, Petra T. 2012. *Crafting the Indian. Knowledge, Desire and Play in Indianist Reenactment*. New York and Oxford, Berghahn.
- Kansteiner, Wulf 2005. Alternate worlds and invented communities. History and historical consciousness in the age of interactive media. In K. Jenkins, S. Morgan and A. Munslow (eds.), *Manifestos for History*: 131–148. London and New York, Routledge.
- Kobiałka, Dawid 2013. Time travels in archaeology. Between Hollywood films and historical re-enactment? *AP: Online Journal in Public Archaeology* 3:110–130. Available at <http://www.arqueologiapublica.es/descargas/1382781444.pdf> (accessed 5 July 2016).
- Kristiansen, Kristian 2001. Resor i tiden. In ETOUR (ed.) *På resande fot*: 144–153. Stockholm, Sellin.
- Kruse, Tove and Warring, Anette (eds.) 2015. *Fortider tur/retur. Reenactment og historiebrug*. Frederiksberg, Samfundslitteratur.
- Lombard, Matthew and Ditton, Theresa 1997. At the heart of it all. The concept of presence. *Journal of Computer-Mediated Communication* 3(2). Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.1997.tb00072.x/full> (accessed 5 July 2016).
- Lombard, Matthew, Biocca, Frank, Freeman, Jonathan, IJsselsteijn, Wijnand and Schaevitz, Rachel J. (eds.) 2015. *Immersed in Media: Telepresence Theory, Measurement & Technology*. Heidelberg, Springer.
- Lowenthal, David 2015 [1985]. *The Past is a Foreign Country - Revisited*. Revised 2nd edition. Cambridge, Cambridge University Press.
- Lukas, Scott A. 2013. *The Immersive Worlds Handbook. Designing Theme Parks and Consumer Spaces*. New York and London, Focal.
- Mattsson, Jan and Praesto, Anja 2005. The creation of a Swedish heritage Destination: An insider's view of entrepreneurial marketing. *Scandinavian Journal of Hospitality and Tourism* 5(2):152–166.
- McCalman, Iain and Pickering, Paul A. 2010. From realism to the affective turn: An agenda. In I. McCalman and P. A. Pickering (eds.) *Historical Reenactment from Realism to the Affective Turn*. Basingstoke and New York, Palgrave Macmillan.
- McDevitt, Jack. 2001. *Deepsix. A Breathtaking Chronicle of Disaster and Discovery*. New York, Harper Voyager.
- Petersson, Bodil 2003. *Föreställningar om det förflutna. Arkeologi och rekonstruktion*. Lund, Nordic Academic Press.

- Pihlainen, Kalle 2012. What if the past were acceptable after all? *Rethinking History* 16(3):323–339.
- Pine, B. Joseph, II and Gilmore, James H. 2011. *The Experience Economy*. Updated edition. Boston, Harvard Business Review Press.
- Rambuscheck, Ulrike 2016. Lebendige Archäologie – stereotype Geschlechterbilder? Archäologisches Reenactment und Living History aus der Geschlechterperspektive. *Archäologische Informationen* 39, 193–194. Available at <http://dx.doi.org/10.11588/ai.2016.1.33550> (accessed 6 Jan 2017)
- Rentzhog, Sten (2007). *Open Air Museums: The History and Future of a Visionary Idea*. Stockholm, Carlsson.
- Samida, Stefanie 2013. Aneignung von Vergangenheit durch körperliches Erleben. *Literatur in Wissenschaft und Unterricht* 46:105–121.
- Samuel, Raphael 1994. *Theatres of Memory. Past and Present in Contemporary Culture*. London, Verso.
- Sanders, Karin 2009. *Bodies in the Bog and the Archaeological Imagination*. Chicago and London, University of Chicago Press.
- Schiffman, Zachary Sayre 2011. *The Birth of the Past*. Baltimore, Johns Hopkins University Press.
- Schulze, Gerhard 1992. *Die Erlebnis-Gesellschaft. Kultursoziologie der Gegenwart*. Frankfurt and New York, Campus.
- Sénécheau, Miriam and Samida, Stefanie 2015. *Living History als Gegenstand Historischen Lernens. Begriffe – Problemfelder – Materialien*. Stuttgart: Kohlhammer.
- Thompson, Jenny 2004. *War Games. Inside the World of 20th Century War Reenactors*. Washington, DC, Smithsonian.