

# MEMORY STUDIES

## *Building memory: Architecture, networks and users*

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### **Abstract**

Why are buildings such disputed objects with regard to time and memory, and what makes them peculiar? With the help of actor-network theory and the theory of functional differentiation, I show how objects in general relate to time and how objects can stabilize memories. I demonstrate the different ways in which networks place objects in time and how they are isolated and multiplied to relate to functional systems. I then argue that buildings cannot be controlled by functional systems because they cannot be isolated. This is so because they are singulars, occupy a stable location and are used by multiple users at the same time. For this reason I call them mutable immobiles. As mutable immobiles, buildings develop very complex relationships to times. They are changed and even converted to other building types, which cuts them off from their networks even though they still occupy the same location.

### **Key words**

actor-network theory; buildings; memory; time

## **INTRODUCTION**

It is a commonplace assumption in the humanities and social sciences that modernity goes along with processes of dematerialization, temporalization and historization (Asendorf, 1989). Modernity is a process that tends to turn anything into an object with a history and a biography (Kopytoff, 1986). Thus, temporalization is accompanied by a boom in monument protection and an increase in conflicts about the fate of buildings. The global expansion of the preservation movement and its formalization through international treaties, such as the Venice charter on the conservation and restoration of monuments and sites, are only examples of this trend (International Council on Monuments and Sites (ICOMOS), 1971). This leaves the question of what makes buildings prone to such conflicts. A common answer to these questions is that the increasing speed of modernization creates an urge to remember and to keep the

old, a kind of romanticism that now threatens to protect every object (Lowenthal, 1996; Lübke, 1982). I do not want to dispute this view of history, but I would like to focus on the other part of the problem, namely the question of materiality. Even in contexts that focus on the relationship between buildings and time, it is usually simply taken for granted that buildings do represent time and that they are prime objects for such debates (Heynen, 1999). I would thus like to ask a question that is seldom asked: what makes *buildings* so specific with respect to these processes? I want to show that buildings under the condition of modernity have a very complex relationship to time and memory, because they cannot be controlled by functional systems since they cannot be isolated from their context. The argument and the organization of the article proceed as follows: First, with the help of actor-network theory (ANT), I introduce a general argument about how objects are made to represent the past. Then I explain the difference between objects that stabilize memory and those that stabilize objects in science and art. I maintain that science and art have developed two ways to link time to objects, either by isolation or by multiplication. In contrast to these two ways of stabilization, I show that buildings cannot be stabilized by functional systems because they are mutable immobiles. They are mutable immobiles because they are singulars, they occupy a stable location and they are used. Next, I show that the status as mutable immobiles also leads to changes in buildings and adds another layer of time. Finally, I introduce the specific problem of building conversion, another result of the status of mutable immobiles, and one that adds yet another layer.

## MEMORY AND THE TIME OF OBJECTS

The title of this special issue relates time and memory to materials, indicating a complex, but not clearly defined relationship. I would thus like to start by exploring the relationship between memory and objects in a more general way and then to explain why buildings as a specific class of objects have a very complex relationship to time and memory. I try to understand the specific relationship of objects and time/memory from the view of sociological theory and what has been called a turn to ontology in science studies.<sup>1</sup> The goal is not to write an essay in ontology, but to use the tools of ANT and the theory of functional differentiation to understand seemingly ontological features of buildings with respect to time and to give sociological answers to what seem to be ontological features. The underlying idea is to describe what appears as ontology as the outcome of historical socio-material processes. My aim is to show that in modern society, buildings occupy a position that cannot be controlled by any functional system and that cannot be controlled by any professional group, and therefore buildings are prone to public discussion.<sup>2</sup>

Let me begin by exploring the relationship between memory and objects. Memory is a specific way in which persons relate to time. It is the capacity of persons to remember and recreate past events. Thus memory is the capacity that differentiates between objects that simply exist in time and objects – mostly persons – that recreate or re-enact former states. This is conceived of as a process referring to an individual. The

social sciences have extended this concept to collectives of persons, and invented the terms 'collective' and 'cultural' memory (Assmann, 2000; Halbwachs, 1950). But both of these terms, individual memory and collective or cultural memory, just highlight the difference between memory understood as a psychological versus a social or cultural fact. Both of these terms do not link the reproduction of past events to things or objects that are outside of the remembering persons or collectives.

But as the title of this special issue indicates, objects outside the remembering persons or collectives may act as catalysts for the production and interpersonal adjustment of memories. Things, so to say, mediate memories, they operate as links to the past (Middleton and Brown, 2005: see also Kontopodis, this issue). It seems to be easier to remember and to have memories if things help to remember. For Pierre Nora, who is one of the better-known proponents of a Halbwachsian theory of memory, this increasing dependence on things, or what he calls 'lieux de mémoire', is a sign of losing 'real', non-object-dependent memory: 'If we were able to live within memory, we would not have needed to consecrate lieux de mémoire in its name' (Nora, 1989: 8).

The goal of the following paragraphs is not to deplore this dependence on objects or to separate real from less real memory, but to explore the very possibilities of how objects are linked to time and how these links are organized in a functionally differentiated society. The question then is obviously: how do things form this link? How is it possible that a building does not only mean, represent and indicate its current use and meaning as we see, but also equally or even exclusively the meanings and uses it had some 20 or 200 years ago? And how is it possible that it indicates both the meanings and uses now *and* the meanings and uses 200 years ago and that disputes between architects, historians of architecture, investors and inhabitants erupt about which of these meanings and uses it should have?

## THE THINGS AND TIMES OF ACTOR-NETWORK THEORY

To explain this link between objects and time, I would like to invoke some basic ideas of ANT. Bruno Latour, Michel Callon, Madeleine Akrich, and others developed ANT originally as a method to explain science.<sup>3</sup> Different from most other theories of science, they depicted science as fully dependent on its material setup, its laboratories and objects. The resulting theory understood science as the production of very elaborate networks of actants that stabilize specific facts and thus render them true. An actant is a 'list of answers to trials – a list which, once stabilized, is hooked to a name of a thing and a substance' (Latour, 1991a: 122). Scientists 'enrol' a plethora of such semiotic-material actants into networks to achieve their goals. The stabilization of a network by enrolment is called black-boxing, a process whereby actants are stabilized in their use and meaning. At the same time, enrolment and black boxing change the actants that are enrolled. What is called truth in science for ANT is nothing other than the stabilization of networks.

If we translate this idea to the field of memory, we could say that non-material remembering consists of a very short and thus very unstable network. When the

hero of Proust's *A la recherche du temps perdu* (*Remembrance of Things Past*, 1968) remembers his childhood in Combray, he could do so by forming a network that would just be him and the memory. But the famous madeleines (cakes) are actants that enlarge and stabilize the network. The madeleines help perform memories because their smell is the smell of his childhood. By doing remembering, by operating the network, the madeleines cease to be the madeleines that Proust's protagonist is eating this very moment and become the madeleines of his childhood. Object-based memory, then, is a process that exchanges the meaning and uses of *present* actants with *past* meanings and uses, but it uses these actants otherwise just as other actor-networks use these objects. So what makes memories so often problematic? And what is the difference between history and memory?

Personal memory consists of a network between only one person and one or several objects. Such memories are 'subjective' in the sense that the network between the person, the object, and the memories is only relevant and only enrolled by this person and is arbitrary for the environment, because the object is easily stabilized to have exactly one meaning, but only for one person. What makes personal memories so elaborate is the fact that the network between the object and the memory is often faint, distanced and difficult to explain to outsiders. Unless Proust's protagonist explained it, an outsider could never make sense of why eating madeleines gives him such pleasure. The actual situation of eating the madeleine does not convey any link to the past situation that involved the madeleine. Likewise, it is impossible to test or to question personal memories. One cannot question the author's memory related to the madeleine, since this network is not supposed to hold for anybody else, except Proust's protagonist.

Objects become enrolled in such memory networks, because under certain circumstances they are more stable and easier to reproduce than memories without such objects.<sup>4</sup> But memories, or more generally speaking, the times of objects, are not always personal, and this is where the times of objects become more complicated and contested. In collective memory, memory is created by communication and this necessitates coordination and negotiation. But in pre-literate societies, as Nora notes in the quote above, such processes seem relatively unproblematic. Note that from the view of ANT, the difference is not between objects and writing, as it is made with the usual distinction between memory and history. Writing, as other objects, is only an actant in a network that helps stabilize memory. Also, even a text can constitute personal memory, because it may be meaningful for one person only. In modern societies, however, the workings of functional differentiation create specific difficulties. Two processes are important here: first, the role of functional systems and, second, the accessibility and usability of objects. These two processes are interwoven in many ways.

## FUNCTIONAL SYSTEMS AND THE TIME OF OBJECTS

If objects are publicly accessible or if they are made to be public, or if multiple persons use objects for different kinds of memories, the role of objects in time-networks

may become contested and controversial. Functional systems coordinate such controversies. Functional systems as the result of the differentiation of society coordinate discourses by operating on a binary code.<sup>5</sup> Modern society, then, is defined through the pervasiveness and autopoietic reproduction of these coded communications. The functional systems of art, for example, communicate along the code of interesting/not interesting (or beautiful/ugly), the functional system of science along the code of true/false and the functional system of law along the code legal/not legal.

How does the differentiation of society relate to objects?<sup>6</sup> Niklas Luhmann claimed that the process of functional differentiation results in a decreasing importance of objects for society because society depends primarily on writing (Luhmann, 1997a: 585 ff.).<sup>7</sup> However, I would like to argue that functional systems have very specific relationships to objects. Notably, science and art as functional systems have produced meta-theories to describe the relationship between time and objects, and technologies to stabilize them. To explain this, I invoke the language of ANT again: in the process of functional differentiation, both art and science produce ever longer and ever more stable networks.<sup>8</sup> Not only are these networks more stable, but it is also part of the very logic of functional differentiation that these networks are claimed to hold in ever more situations. Thus the scientific disciplines of paleoanthropology, palaeontology, history and art history create networks to establish the truth about former states of objects. And they not only establish such networks as truths to be valid in the confines of some academic conferences, but it is the very nature of science that truth claims are supposed to hold universally.

## SCIENCE AND THE STABILIZATION OF TIME-NETWORKS

For the case of science, Latour highlighted this performative aspect of time explicitly in an article where he describes a conference on paleontology, convened to find out what dinosaurs 'really are' (Latour, 1991b). For ideal-typical cases, Latour distinguishes the Realosaurus, the true dinosaur, the Scientosaurus, the dinosaur as displayed at any given time by palaeontology, and Popsaurus, the dinosaur as displayed in popular culture. The thrust of the article is that the Realosaurus appears to be the shadow of Scientosaurus. Whenever Scientosaurus changes its form, when it starts to walk on two legs instead of four, Realosaurus follows suit. That is, the network that the scientists use to describe the dinosaurs, their theories of dinosaurs, their fossils and methods to read the fossils are linked to the network of the historical dinosaurs, the form of their bodies, their feeding and mating habits, and the ecology in which they live. A change in the first network, for example a new-found fossil, leads to a change in the second network, a changing food habit. In such a network, the time of the Scientosaurus (the present) and the time of the Realosaurus (the one living a long time ago) are conflated into one. Such a conflation of the times of two networks is what is usually called truth in science. Other than in the case of personal memory (the madeleines), no switching between the past and the present network takes places. For Proust's protagonist, there is still a difference between the madeleines he is eating at the moment of remembering

and the historical situation of having eaten the madeleines in Combray. In the case of historical sciences such as palaeontology, this difference disappears.

Even though this is not the subject of Latour's theory, it is important to note that once these networks of science have been put in place and truth is established, all other claims that are produced by other networks are automatically degraded as being not true. That is, the time of the dinosaurs is monopolized by science and all other networks are relegated as myth or pop-science. Popsaurus is degraded not because its network does not hold – it surely does for those kids who play with plastic dinosaurs – but because science can radically set a break between those networks that are accepted inside the functional system and those that are relegated to the popular domain.

## THE ACTOR-NETWORKS OF ART

If we look at artworks with the same lens we can find a similar pattern, except that the production of truth is replaced by the production of the artwork. The artwork in this sense is the outcome of the artist's network at the time of the production, conflated with the network of interpretation by spectators at the time of analysis. The network of production may consist of the artist and their materials – paint, cameras, their body and pencils. The network of interpretation consists of the spectators, listeners, or readers and their knowledge of art history, the museum or other space of display, and the accompanying activities such as lectures and guided tours. As with the truth of the scientific object, the truth of the artwork is at the same time the truth of the artwork when it was created and the truth of the artwork at the time of interpretation. And with this act of realigning the past and the present network, other previous alignments of networks become 'historical' and thus wrong. They now give merely a history of what other people in other times thought the picture meant.<sup>9</sup>

## HOW FUNCTIONAL SYSTEMS CONTROL THE TIME OF OBJECTS: ISOLATION AND MULTIPLICATION

The conflation of the different times of the network is possible because the respective functional system – science or art – has control over the object. There are different ways of controlling the objects: either by isolating, or by multiplying and standardizing. In the case of isolation, single exemplars that are usually thought to be valuable are physically and organizationally isolated from public access and therefore from being involved in other networks. Artworks are brought into museums, houses are declared to be monuments and then access and change is restricted, and scientific specimens are brought into laboratories or declared research sites. The isolation of these objects results doubly in a stabilization of networks. First, isolation restricts access and thus restricts the amount of possible networks. Only scientists can access objects in a laboratory or in scientific collections. Art in museums is untouchable and unchangeable, its experience is defined through the setup of display, and only select

groups of visitors with the respective cultural capital, who know how to behave, can view it (DiMaggio, 1996). Second, the isolation allows physical and interpretative stabilization of objects. Museums and laboratories keep objects in stable environments, climate-controlled rooms, and low lighting. Thus isolation stabilizes physical features, slows deterioration and most notably excludes unwanted forming of new networks. It becomes impossible to paint a bone and turn it into a ritual object once it is in a museum or a laboratory. The critique of museums has highlighted this isolation and understood it as 'death of objects' (Baudrillard, 1983; Pazzini, 1990). However, this is far from true: isolation is a powerful tool of functional systems to create and control new networks and cut unwanted ones, and to create truth. Furthermore, the isolation of the objects stabilizes possible interpretations by users: specimens have written descriptions that offer authoritative interpretations about the provenance of objects and their meanings.

The other method of stabilization takes place when objects are not singulars but exist as multiples. In functional systems, organizations stabilize the objects by standardizing and controlling the process of multiplication. Latour calls objects that result from this process of stabilization through multiplication 'immutable mobiles' (Latour, 1987: 226–7). These objects all have the same history, and this history is accessible for any user dealing with such an object. A typical example is genetic technology that stabilizes specific genes and controls the multiplication of organisms containing those genes (Amann, 1994). Another example is the mass production of cultural objects such as printing books or records. Other than with isolation, control of the individual object is not necessary, since the deviation of individual copies from the prototype is unproblematic and the true history of the object is not the individual copy's history but the history of the prototype.

Both of these kinds of stabilization help to separate functional systems from 'mere' personal or collective memory. Isolation restricts the forming of memory by restricting access and thus hindering the forming of networks other than those under the control of functional systems. Multiplication lets every person form their own networks, but the multiplication devalues these individual networks while at the same time allowing the formation of massive networks of the functional systems themselves.

## MUTABLE IMMOBILES: THE NETWORKS OF BUILDINGS

This detour into the times of objects in science and art was necessary to understand the specificity of the time of buildings. The time of buildings is different, not for ontological reasons, but for how they relate to functional systems. Indeed, functionally coded communication sometimes refers to and depends on buildings. Architectural history usually deals with buildings very much as artworks. Buildings can also be scientific objects, for example in materials research. Little difference exists between the practices of a restoration scientist and a palaeontologist. But the position of buildings in society – in a literal and metaphorical sense – renders singular attachment to functional systems almost impossible. It is very difficult to stabilize the networks of buildings by isolation

or multiplication. Since buildings, other than artworks and scientific objects, *occupy a stable location*, they are *singular* and they are *used*, and therefore I call them *mutable immobiles*.

*First*, occupying a stable location, buildings tend to be linked to their environment in a much stronger way than other objects. Their network is tied in very complex ways to their environment. They remain part of the same environment, but this environment changes. It is difficult to understand and appreciate (and impossible to use) buildings without considering their location in the town. Buildings are thus almost impossible to turn into immutable mobiles. They cannot be sent to other places for inspection and they cannot be put into a controlled environment. The recent attempts at increasing security and surveillance only highlight how difficult it is to control buildings (Berking, 2006; Sorkin, 2008). The environment thus defines buildings in a way that no other objects are defined. Also, the longevity of buildings often means that after some time, buildings find themselves in completely different neighbourhoods from the time at which they were built. Even the cultural and monetary value of buildings is dependent on their environment. A building can be unchanged, but a changing environment, as in the case of gentrification for example, can completely alter the meaning and price of it (Zukin, 1982).

The local stability is closely connected to the *second* aspect, namely that the buildings are not interchangeable and cannot be multiplied because of their singularity. Each building has its own life and its own history. For sure, there is a long history of standardizing and replicating buildings. But even these buildings are singulars in the sense that once they are built they are all discernible, with their own stable address and their distinct history.<sup>10</sup> Buildings cannot be exchanged or replaced. Each building has its biography that is a result of its specific location in the city and its specific pattern of use.

Use, then, is the *third* element that creates the specific temporality of buildings. Buildings are used differently from other objects. Artworks are used too, and so are scientific objects. What makes buildings different is that different people use them *at the same time for different purposes*. Because buildings are not controlled by specific functional systems, they relate to different functional systems in an ad hoc way. Whereas an artwork is the product of the system of art, and without the functional system of art the artwork would often not even exist, this cannot be said of buildings. They are first of all buildings and can be made into objects of art or science, but never exclusively.<sup>11</sup> Even those buildings that are monofunctional building types and are commonly associated with specific functional systems, such as churches, banks or courts, are not controlled by these functional systems. Rather, the buildings themselves, or parts of these buildings, serve as technologies to stabilize the functional systems, by localizing specific communications and interactions, but this never prevents other communications and interactions from taking place (Guggenheim, in press).

To use a building always means to use it partially, to use it in the presence of others and to interact with others in, through and with the building. The multiplication of uses creates networks that are outside of anyone's control, and specifically outside the control of any functional system. For example, while a tourist might stand in front of

the Villa Savoye and look at it as an artwork, the inhabitant may be inside just preparing breakfast, while the plumber fixes the heating system and a restorer analyses the composition of the walls. All these uses may exist alongside each other, but they may even interact in all kinds of unexpected ways. The multiplicity of uses is an outcome of the internal complexity of the building, but also of its singularity and stable location. Simultaneous use happens just because it is impossible to move a building or deal with a copy of the building. Furthermore, this simultaneity of uses enhances the singularity of the building, since each use adds another layer of meanings and structural changes to the house. Whereas the first two elements, locational stability and singularity, were always part of western ideas of buildings, use only appeared in the 1960s (Forty, 2000: 312–15). The very features that produce the specific temporality of buildings are thus of relatively recent origin.

## THE TIMES OF MUTABLE MOBILES

The locational stability, the singularity and the use produce a specific temporality of buildings, a temporality that is much more complex than that of artworks or scientific objects. While the latter, as described above, result from a conflation of the time of production and time of interpretation, this is hardly the case for buildings. Rather, the three features of buildings create a distributed time. Buildings produce distributed times and distributed memories for different constituencies and these distributed times co-exist at the same location. The use of a building, unlike the interpretative operation of scientists or art interpreters, always primarily creates a present. The inhabitant of the Villa Savoye prepares his breakfast 'now' and he uses the building to do so. Preparing breakfast is done by creating a network comprised of social practices, kitchen appliances, and the building in the present. There is no past network that is realigned by the act of preparing breakfast. The art historian, who is standing in front of the building and taking a picture, creates a network that situates the building in art. She does realign the present network with a past network – Corbusier's ideas and the influence of modernistic ideas on architecture etc. –, by creating a truth about the Villa Savoye. But this network has no relationship with the network of the person preparing breakfast. It is neither affected by the fact of breakfast creation nor is it affecting breakfast creation. But both these network creations are dependent on the building. The singularity and the fixed location of the building tie the different users together, and the fact that they are users with different interests, different routines and operating in different functional systems produces the distributed times.

There is no functional system of architecture (Baecker, 1990). Since no functional system exists that would calibrate or stabilize these multiple times, they exist alongside each other. The distributed times of buildings not only refer to the same building, they are further complicated through the fact of *changing* buildings. Precisely because buildings are stable and singulars and because they are expensive to build and tear down, buildings are changed during their lifetime (Brand, 1995). Changing buildings is a process that starts with minor repairs and can go to full-scale conversions where

a building is hardly recognizable afterwards. Such changes of buildings are again different from changes in artworks or scientific objects.

Changes in artworks or scientific objects, to be sure, occur only rarely. The reason for this is again, that even if artworks are singulars, they are isolated and thus controlled by the organizations of art. Artworks remain stable once they are completed and they are only restored when deemed to fall apart (Hummelen and Sillé, 2005). But restoration in art, even if it constitutes an intervention, attempts to keep the artwork the same, by not changing it.<sup>12</sup> Similarly, scientific objects are isolated too. As scientific objects, their value for generating truth (or standards) is derived from their temporal stability. Any intervention into the scientific object is usually an intervention to keep it stable.

Changes in buildings, however, are not controlled by any specific social system. Changes can occur for a number of reasons – conservation of historical character (art history as functional system of orientation), repairs (maintaining usability), technical improvements such as adding a heating system or conversions (changing a building into a different building type) – and by different kinds of users, such as professional maintenance workers, restoration specialists or inhabitants. It is not uncommon that such changes occur concurrently. Even if buildings are considered to be art objects and are listed, changes may still occur.<sup>13</sup> Art historians and proponents of monument protection view changes to buildings with suspicion and try to isolate buildings.<sup>14</sup> But since the preservation of buildings cannot be made without affecting uses and since buildings are always used, protection inevitably has to deal with complex use-patterns. In short, preservation, even if it dreams of isolating buildings, always operates in an environment where change is paramount.

Changes add another layer of distributed times for different users to buildings. For example, the exchange of old windows with new insulated windows constitutes for the inhabitant maintenance, an act that simply keeps the network of the building stable. It replaces one not so perfect technology of letting light in and keeping the cold out with a better one. For the art historian the same change is a devaluation of the building that disrupts its historical unity and adds a new, present and thus non-matching time-object to the building. Whereas before, the building was one coherent network that anchored the present building in one coherent past, it has now become disrupted, because it assembles two different time points in one network.

## TIME AND THE CHANGE OF USE OF BUILDINGS

Buildings have an even more complex relationship with time than objects because they can change their building type. Change of use only exists for buildings and is related to the fact that we classify buildings as building types such as banks, hotels or hospitals. Building types are classifications that conflate the uses of a building with its form.<sup>15</sup> They add a *second level of classification* to objects that can be changed without affecting the first level. Such a second level of classification does not exist for other objects.<sup>16</sup> A church that has been turned into a restaurant is still a building. The primary

classification as building is not affected by the conversion. Conversion is a process that requires, if at all, little money, work and materials, since it is foremost an act of classification.

For example, the network of a church consists of an altar and stained-glass windows and benches. When turned into a restaurant, these elements are still there, but now the benches are used for seating the customers and the stained-glass windows relate in a wholly new way to the interactions that take place in the building. Other than in the case of renovations, the material elements of the network stay in place, but the network has changed dramatically, leading to a re-classification of the whole network. What was a church has become a restaurant. The fact of conversion adds thus another layer of complexity for the very reason that buildings are reclassified. For art history and the preservation of monuments, conversion poses thus a further problem, because it changes buildings by exchanging the network on the level of use and changing the meaning of the building. From the viewpoint of art history, converted buildings thus cease to function as material stabilizations of past times, since they only serve as stabilizations of the contemporary meaning and use (see for example Frankl, 1999[1914]: 143–6). Change of use creates the specific problem that the material basis of a network remains, while all other actants are exchanged, which leads even to a new classification of the object.

## CONCLUSION: MULTIPLICATING TIMES AND CONFLICTS

My goal in this article was to elaborate how buildings relate to time. I started with the assumption that buildings are among the most disputed objects with relation to time and memory. I developed a general theory of how objects can serve to stabilize memories and time, and then I compared buildings with other objects and thereby highlighted the specificities of buildings. I showed that buildings have a very specific relationship to time and memory in modern society because they cannot be controlled by functional systems. Buildings are specific kinds of objects, because they occupy a stable location, they are singulars and they are used. For this reason they are unlikely to be either isolated or multiplied. They keep multiple relations to different functional systems by being used by different constituents at the same time. Each of these constituents draws on a different network, containing elements from the same building and other elements. These networks intersect in the building and may construct distributed and sometimes conflictive times. Specifically, different times become conflictive when a change of use leads to a different classification of a building regarding its use. Buildings are used by a multiplicity of users and thus have multiple times that cannot be controlled by any constituency. Since buildings cannot be controlled, every attempt to find the true history of a building and every attempt to excavate real memories only enhance the likelihood of more conflicts about its real history.

## Notes

- 1 See the recent symposium 'A Turn to Ontology?' at Saïd Business School, Oxford, 25 June 2008 (Saïd Business School, 2008).
- 2 For other attempts at such theories, though with a focus on meaning and less on society, see Whyte (2006) and Goodman (1985). For a general overview of the relationship between buildings and time see Lynch (1972).
- 3 For a basic introduction into the terminology and concepts outlined here, see Latour (1987, 1991a, 1992, 2005).
- 4 This is not to say that objects are in general more stable, because examples for the opposite abound. Rituals replace the instability of interactions by repeating them in given rhythms. Like this, they are often more stable over time than the objects they involve. For example, baking cookies or cakes at Christmas is a very stable event, even though the objects involved are not stable at all. Similarly, the Ise-shrine in Japan is a building that is rebuilt every other year and thus less stable than the ritual.
- 5 For an introduction to the idea of functional differentiation see Luhmann (1997a: Chapter 4.8).
- 6 This is a task that Bruno Latour seems to be embarking on now, too, though explicitly without basing his theory on any reference to Luhmann (Latour, 2005: 241, 336).
- 7 Note that Luhmann sees precisely an opposite historical shift from Nora. While Nora believes that it is a sign of modern society that their memory depends on *lieux de mémoire* instead of real, enacted memory, Luhmann claims that modern society has given up on objects for the sake of mass media.
- 8 This is, at least with respect to science and technology, the basic claim of Bruno Latour's *We Have Never Been Modern* (1993).
- 9 On ANT and art, see Hennion (2002; 1993), Hennion and Latour (1993) and Albertsen and Diken (2004). For the time-binding features of artworks in the context of a theory of functional systems see Luhmann (1997b: 80).
- 10 For a wonderful account of how identical buildings become singulars see Boudon (1969).
- 11 Magali Sarfatti Larson convincingly shows that, unlike art, architecture is a heteronomous profession that cannot – and should not – control the terms of production of buildings (Larson, 1993).
- 12 If an 'artwork' is radically changed, this is usually a sign that it has fallen out of the system of art altogether. The few counter-examples such as Arnulf Rainer's *Übermalungen*, painted on other paintings, only prove the norm.
- 13 For an example of how protection and changes intersects in practice, see the guidelines in Kalman (1980). For an argument that preservation itself demands change, see Otero-Pailos (2005). Levine has argued that since buildings are changed, the true representation of history are not the buildings themselves, but the plans of the buildings (Levine, 2008).
- 14 Consulting any handbook of preservation proves the point, see for example Kiesow (2000: 162 ff.).
- 15 For an introduction to the problem of building types and their relation to society, see the edited volumes of King (1980) and Franck and Schneekloth (1994). For an extended discussion of how building types relate to social systems see Guggenheim (2008b).

- 16 Another example for such changing secondary classifications is transsexuality, see Guggenheim (forthcoming).

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