

Modelscapes of Nationalism

Collective Memories and Future Visions

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Table of Contents

Preface	11
Introduction: Narratives into Objects, Objects into Narratives	13
What are Models?	15
Modelscapes	17
Case Studies	19
1 The Qualities of Modelscapes	27
Models and Modern Modes of Perception	28
Visual Perception as a Product of Social Relations	29
Visual Objects as Makers of Culture	30
Historicizing Visual Culture	31
Contemporary Modes of Vision	32
Collection and Classification	34
The Model as Representation	37
The Copy	38
Model, Image and Text	41
Experience, Performance and Play	43
Models and Architecture	48
The Perception of Architecture	49
On Scale and the Body	50
Interior and Exterior Modelscapes	54
2 Models and Modern Perceptions of Nationalism	57
The Perception of Time and Modern Nationalism	58
A Verbal Model: Utopia	60
Models and the Construction of Collective Identity in Modernity	61
Theories of the Emergence of Modern National Identity	62
Modelscapes as Representations of National Space	65
Modelscapes as Signifiers of National Identity	67
Time and Enclosure	72
3 The Second Temple Model	75
Designing the Second Temple Model	77
The Model of Imperial Rome	81
A Serious Plaything	84
Authenticity	88

The Second Temple Model as a Representation of Archaeology	98
The Second Temple Model and the Protestant Perspective	101
Representing the Past	103
A Vision of the Future	106
Relocating the Model	108
Who Visits the Second Temple Model?	111
Updating the Model	114
4 Mini Israel	121
Mini Israel as a Theme Park	123
The Politics of the Miniature	125
The Politics of the Site	128
The Politics of Utopia: Planning the Site	130
The Politics of the Sign: Choosing the Models	134
The Political Economy of Mini Israel	145
The Politics of the Exhibition: Mini Israel at the Israel Museum	148
The Politics of the Model: A Partial Inventory	154
5 The Valley of the Communities	161
Collective Memory and its Sites	163
Official Holocaust Memory in Israel	167
The Valley of the Communities in the Context of Minimalist Memorials	170
Yad Vashem and the Mount of Remembrance	175
The Valley of the Communities	179
Designing and Building the Site	185
Remembering and Forgetting	189
The Memorial Ritual at the Valley of the Communities	191
Performance and Ritual within Memorial Monuments	193
Pilgrimages to Holocaust Memorials	195
The Linking Path March	196
Conclusions	207
Representational Modes	208
Bibliography	219
Index	231

1 The Qualities of Modelscapes

In this chapter some basic characteristics of models will be explored. My focus is on public spatial models which I have defined as *modelscapes*, referring to meaningful constellations of individual architectural models that are exhibited to the public. I will examine in what respects modelscapes are unique modes of representation, which differ from other forms such as texts and two dimensional objects.

My aim is to identify the features that characterise modelscapes and make them unique. I begin by examining modelscapes as objects that occupy a physical space, which stands in some relationship to an actually existing space beyond the modelscape. What is the relationship between a modelscape and the external objects to which it refers? The models I am interested in are representations of the built environment, representing mostly architecture. However, they differ considerably from their source objects. I analyse this difference in order to determine how models, as objects or artefacts, relate to architecture.

Another important feature of modelscapes which differentiates them from other modes of representation is the use of scale. Many modelscapes are miniatures, and thus position their visitors in a powerful position, quite different from the experience the visitor would have at the exterior site which the modelscape represents. The question of alterations in scale is also relevant for examining modelscapes which are not miniaturized, for example, real-size replicas of buildings in World Expositions, which nevertheless participate in a miniature representation of the world itself.⁵

Modelscapes are one of the manners of representation which are both an outcome and a reflection of modern modes of perception. I base this argument on an examination of the historical emergence of modern modes of vision and concepts of time and space. Modernity is characterized by a

5 Another type of life-size modelscapes which will not be discussed in this book is reconstructions of entire built areas for the purpose of military training in urban warfare. Such 'ghost' environments emphasise the built structures as models of threat and representations of death itself (Leshem, quoted in Larry Abramson, 2006b, 90) rather than as shelters for human life. The life-size buildings nevertheless require the training soldiers to participate in simulation and to 'play', in order to empower them over the simulated built environment. Rather than using the framework of play as a retreat from reality, a controlled environment of pleasure and entertainment with its escapist and utopian connotations of creating better alternatives to reality (see below the section about experience, performance and play in relation to modelscapes), the training game is played in order to prepare for action in combat, which is invariably a destructive action (Berger, 2008, 40).

cognitive separation between viewers and viewed. One of the reasons for this was the development of both optical instruments and the perspective system. These placed the subject in a central and powerful position, while the world became a visual experience determined by the viewer. I aim to explore how models and modelscapes are perceived within this visual and cultural framework.

Modelscapes are organized clusters of individual models, and therefore it is important to examine the physical presence of the individual spatial model as well as the effects of grouping models together to create a context, a model environment. Just as the built environment within which we pass our everyday lives has cultural dimensions that deal with collective issues such as belonging, common roots and cultural heritage, so does an imagined miniature environment made of architectural models. The interesting question is, how does a model built environment represent ideas, standpoints and aspirations about identity and nationality? Which issues are represented, and why were they chosen?

Individual models invite people to pick them up, turn them around, touch them and feel their tactile qualities. This is not always possible in exhibitions and in modelscapes, where touching is sometimes forbidden. However, visitors can still walk around, in between, and sometimes inside models, and experience them through the movement of their body. I examine the walking routes planned for visitors within and around modelscapes, in order to find out how the individual objects are revealed in sequence and framed in carefully constructed ways. Movement within a modelscape is hence inseparable from its perception and interpretation.

The process of interpretation is invoked by the objects on display, but in order to understand their meaning it is necessary to be familiar with the social context of their experience. In this chapter I explore the functional features of modelscapes: what makes them distinct modes of representation, how they present themselves to reading, how they are used, and which habits and conventions enable the makers of models to address their audiences.

Models and Modern Modes of Perception

There is a vast academic literature about modern modes of perception.⁶ In addition to perception through the moving body, an important property of all types of models is their visual aspect. Some models are not accessible to

6 For an overview, see for example Dikovitskaya, 2006.

the body, but are exposed to the eyes. This is true especially of miniature models, in which 'all senses must be reduced to the visual, a sense which in its transcendence remains ironically and tragically remote.' (Stewart, 67). Although miniatures offer more than a merely visual experience, this section will focus on the visual qualities of models and relate to their qualities as types of visual media.

Visual Perception as a Product of Social Relations

In order to understand modes of visual perception and its relevance to the study of models, it is necessary to explore how visual information is interpreted by the viewer. This interpretation is conditioned by the social and cultural context in which it is made, rather than by inherent qualities of visual (and other) media. A useful explanation of how interpretations are made and how they change is offered by Bourdieu in his theory of the habitus. Bourdieu defines habitus as the individual's position within the social world. He argues that perception and appreciation of all experiences is structured by the habitus. The habitus thus constructs individual and collective practices. It is a product of history, that 'ensures the active presence of past experiences, which, deposited in each organism in the forms of schemes of perception, thought and action, tend to guarantee the "correctness" of practices and their constancy over time.' (Bourdieu, 54)

Thus Bourdieu argues that a 'correct' perception of visual culture is determined by the habitus of the viewer. Baxendall proposed the term 'cognitive style' for the process of interpreting visual information. Cognitive style is a product of specific historical periods (Baxendall, 30). It reflects the 'mental equipment' that defines the visual experience, based on social and cultural circumstances. This 'mental equipment' includes the ability to categorize visual stimulations, the knowledge required to complete the visual information, and the viewers' approach towards the visual material (Baxendall, 40). The style of the visual information has to correlate with the cognitive style of the period in order for the viewers to be able to 'see' the visual media (Baxendall, 86-91).

Bryson criticizes Baxendall's approach by warning against the assumption that there is a unity of culture. He points out that different social groups, as well as different members of these groups, perceive the same works of art differently, based on their ability to access different codes for viewing (Bryson, 18-42). In order to study modes of perception it is therefore necessary to take these differences into account. This is underlined by Bourdieu in his theory of the habitus using the concept of the field. Bourdieu

argues that the field of culture (like other fields) is a configuration of positions which impose certain determinations upon their occupants by their situation in the structure of the distribution of power. Hence those that can shape the rules of the field and access its relevant capital (in this case, the 'mental equipment' that will enable them to comprehend the visual media 'correctly') can participate in the field from a position of power (Bourdieu and Wacquant, 97-98).

I argue that the perception of models, like other cultural objects, is therefore shaped by the 'cognitive style' which is reflected in the conventions of representation of a given culture, as well as by the 'mental equipment' which an individual is able to access within its social structures.

Visual Objects as Makers of Culture

Material artefacts have a major role in expressing and defining the field of culture. This field consists of '[t]he shared practices of a group, community, or society, through which meaning is made out of the visual, aural and textual world of representations.' (Sturken and Cartwright, 3). Since there is a variety of different possible meanings and interpretations, culture is a process rather than a fixed set of practices and interpretations. Meaning results from negotiations within a given culture, not only between individuals but also between people and artefacts, images and texts. Hence Sturken and Cartwright suggest that interpretations are as important as the visual artefacts (Sturken and Cartwright, 4-5). Visual artefacts are therefore inseparable from the production of meaning in a given society.

Cultural critics tend to concentrate on the visual aspect of artefacts, and have ignored the genre of models altogether. For example, Mitchell (1995, 11) has created the term 'pictorial turn' to emphasize the importance of visual perception in postmodern culture, while Mirzoeff argues that visual culture involves an interface with 'visual technology' which includes any form of apparatus designed either to be looked at or to enhance natural vision (Mirzoeff, 1999, 3).

Meaning resides not solely within visual images, but is produced in various ways by the interrelation between objects and viewers in the process of their consumption and circulation (Sturken and Cartwright, 7). Furthermore, as argued by Azoulay, the language that describes the work of art and the space that exhibits it affix the object under a certain shape, concealing other possibilities of its visualization (Azoulay 1999, 25). Hence the object and subject partake in constructing each other, and this mutual construction takes place in certain public sites. Azoulay refers to

the museum as such a site, a space where the object is exposed, gathered, rephrased, exhibited and represented. The museum demands interpretation and self-reflection in front of the object, which in turn posits the viewer as a free, rational and impartial subject (Azoulay, 76).

Individual models as well as modelscapes are often exhibited in museums and can therefore be analysed as cultural objects organised and managed by the museum. However, modelscapes contain elements that characterise the museum, and therefore they are not merely visual objects on display but also public sites containing and exhibiting visual objects. Hence they are part of a field of cultural production as defined by Bourdieu, where the viewer participates in patterns of preservation, representation and visualisation.

Historicizing Visual Culture

As argued earlier, models are products of modern modes of vision, which determine contemporary perception of the self and the world. Mirzoeff suggests that modern visual perception begins with the formal logic of what he calls the *ancien regime* image (1650-1820), that included for example the perspective system and the camera obscura (Mirzoeff, 1999, 8). Harries suggests that the awareness of the perspective system (first systematized by Alberti in 1435) and its implication in painting was in fact a key to the shape of modernity (Harries, 19).

The perspective system was identified with the very essence of vision. Hence it seemed to reveal not only the exterior visible world but the very nature of the spectator's cognition (Mitchell 1986, 39). Vesely suggests that perspective representation offered a way to reduce the larger context of human existence to a fixed point of view or 'mind' versus a 'picture'. This was a departure from the medieval concept of the relationship of human existence to the world, in which man (microcosm) was perceived as an abbreviation of the world (macrocosm). Vesely calls this change 'the perspectivization of reality', a process which established a dualism of man and world, subject and object. This dualism is the basis of current modes of interpretation of modern history and culture, which he defines as 'divided representation' (Vesely, 177-184).

The desire to appropriate reality has led to the establishment in the 16th century of different collections. Works of art, stones and minerals, curiosities and exotic plants were housed in specially designed cabinets, rooms, private galleries and botanical gardens. Vesely notes that such representations, which were kept in enclosed spaces, are closely linked with the imaginary room of perspective construction. These collections

were introverted representations which created an illusion that they were the world itself, presented to the individual spectator whose judgment determined the visual experience (Vesely, 184).

Contemporary Modes of Vision

The modern, Western cultural paradigm is thus based on a differentiation between viewers and viewed, on both cognitive as well as analytical levels. This differentiation coincided with some optical developments such as the technology of the lens, the telescope and the microscope. The epoch of modernity has thus been described as the 'opening of vision', whereby visual relationships dominate human experience (Jencks, 6). Modern modes of vision are based on the dichotomy of 'the vision' and 'the ultimately visual'. The 'self' becomes 'the receptacle' and the 'other' becomes 'the spectacle', (Jencks, 3). Thus the 'spectacle of the world', was developed in the eighteenth century, producing both the seeing subject, as well as the subject-in-sight (de Bolla, 68).

Jencks further points out that the modern Western 'plain view' of reality is both based on and projects a consensus 'world view'. This leads to a loss of the viewer's interpretive power, since alternative 'visions' or 'perspectives' become unintelligible, classified as deviance and distortion (Jencks, 7). This idea corresponds with Baxendal's suggestion that works of art must fit the 'cognitive style' in order to be 'seen', as well as with the argument by Bordieu that the 'correctness' of perception depends on the viewer's habitus.

Modernity is similarly defined by Heidegger as the 'age of the world picture'. He suggests that 'beings' are only interpreted in terms of their 'presentedness', or the human representations of them (quoted in Reisinger and Steiner, 75). This is a departure from previous perceptions of the world, since there were no, and could not have been, medieval or ancient 'world pictures' (Heidegger, 218). This is because only in modernity do 'beings' owe their existence to their placement before human perception. Thus perception of the world as a picture distinguishes the essence of modernity (Heidegger, 219). Heidegger further argues that the modern human has become a subject, '[t]he referential centre of beings as such' (Heidegger, 217).

Other scholars have argued that the presentation of the modern 'world picture' to the subject-viewer is inseparable from modern conditions of production and consumption of images.

The whole life of those societies in which modern conditions of production prevail presents itself as an immense accumulation of *spectacles*. All that was once directly lived has become a representation. (Debord, 12)

The essence of modern society is what Debord calls a 'reciprocal alienation' between reality and the spectacle, whereby 'reality erupts within the spectacle, and the spectacle is real.' (Debord, 14). Debord argues that the spectacle is the visual reflection of the ruling economic order and thus, '[t]he real world becomes real images, [and] mere images are transformed into real things' (Debord, 17). Analysing the spectacle requires a critical approach that would reveal the ideology it has materialized (Debord, 139).

Barthes suggests that a semiotic process of breaking down the 'visual text' must take into account that images contain several levels of messages. These include coded iconic messages (requiring 'external' cultural knowledge) and non-coded iconic messages (requiring the knowledge that is bound up with our perception), which are received simultaneously by the viewer. The confusion which arises conceals and neutralizes cultural messages and hence corresponds to the function of the mass image (Barthes, 2002, 70-73).

The mass image exemplifies the modern period (1820-1975) of visual culture, in which the logic of perspective was transformed to the dialectical logic of the image characterized by film and photography (Mirzoeff, 1999, 8). These new types of image created a relationship between the viewer in the present and the past moment of space and time that is represented as 'reality' by the camera. Furthermore, McQuire argues that technologies such as camera, cinema, television, internet and virtual reality provide us with 'indirect' perception. The uncanny equivalence between 'direct' and 'indirect' perceptions presents a radical challenge to traditional formations of identity and subjectivity. Modernity entailed a crisis of perception as technology replaced the presence of the subject with the formation of representations in the subject's absence. This crisis has caused a profound change in contemporary experiences of time, space and memory (McQuire, 1-2).

The crisis of visual perception is not merely relevant for representations, but also for the experience of space. Thus, for example, Jameson describes the Westin Bonaventure Hotel by John Portman in Los Angeles, which he terms 'hyperspace':

My implication is that we ourselves, the human subjects who happen into this new space, have not kept pace with that evolution; there has been a mutation in the object unaccompanied as yet by any equivalent mutation in the subject. We do not yet possess the perceptual equipment to match this new hyperspace. (Jameson, 242)

The only solution to this bewilderment would be 'to grow new organs, to expand our sensorium and our body to some new, yet unimaginable, perhaps ultimately impossible, dimensions' (Jameson, 242).

Another modern mode of vision is the tourist gaze, which participates in shaping the meaning of visited sites. Since the end of the eighteenth century, sight became a central factor in the ordering of the discourse of tourism and travel. The tourist visually captures the visited sites, and constructs meaning, expectations, experiences and memories through visual images (Crawshaw and Urry, 178-179). Within these sites, tourists produce and re-produce space by their performance, which in turn exposes them to the disciplinary gaze of other tourists. Hence tourist sites are oriented towards visual consumption, and the tourist gaze shapes these sites by constructing the meaning of places according to individual and group identities (Edensor, 71-72).

Individual models as well as modelscapes are perceived within this visual and cultural framework. The modern concept of separation between viewer and viewed is fundamental for understanding the modelscape as a means to appropriate reality, by creating an introverted representation of an exterior world. This situation is particularly clear in miniature modelscapes, which are an extreme case of detachment of visitor from model. The external reality represented to the visitor corresponds with the idea of a 'world picture' presented to a viewing subject. Such models provide the viewer with panoramic vision, which Barthes suggests requires a power of intellection in which the world is read and not only perceived. The combination of knowledge and perception results in a new 'architecture of vision' which presents intelligible objects that have material existence (Barthes, 1997, 175-176). I argue that modelscapes possess this quality of the 'architecture of vision', because they are what Barthes calls 'concrete abstractions'.

Collection and Classification

Modelscapes are related to artefacts and collections, in particular public collections (as for example in museums). However, individual models on display within a modelscape are different from collectibles. This is because collections usually contain artefacts that are collected as primary sources with values of their own, while modelscapes often contain individual models whose value derives solely from the entire constellation. Nevertheless, the modelscape displays some important aspects of the logic of a collection, by using the concept of a spatial arrangement of the individual artefacts. Modelscapes thus contain relations of interiority and exteriority,

classification and display, physical boundaries and scale, as well as their own interior logic and rules. Similar to other collections, in modelscapes narratives are transformed into objects, and objects back into narratives.

Collections are characterized by the relationships between the objects within them, namely their interior temporality. I argue that modelscapes similarly display an ability to represent shifts in time. The experience of this aspect of modelscapes is a result of the modern perception of time, past experience and future expectations. Furthermore, I argue that both individual models as well as modelscapes of future buildings and environments are attempts to bridge the conceptual gap between past and future by giving the future a material tangible shape in the present.

The emergence of public collections since the sixteenth century, designed to represent reality, was a process for defining both self as well as shared identities. As argued by Clifford, the collection is a method for possessing the world and creating an orderly, meaningful display, and these are crucial processes of Western identity formation. He points to the 17th century 'ideal self' as the owner of possessions, and argues that the same ideal can be applied to collectives defining their shared cultural 'selves' (Clifford, 96).

Contemporary identity formation through collections is defined by Baudrillard in his analysis of the capitalist 'system of objects', which is a structured environment that replaces the 'real time' of historical and productive processes with its own temporality. Baudrillard notes the importance of object collections:

The environment of private objects and their possession (collection being the most extreme instance) is a dimension of our life which, though imaginary, is absolutely essential. Just as essential as dreams. (Baudrillard, 1996, 95-96)

The collection represents a transformation of narrative and history into space, or property (Stewart, xii-xiii). Clifford concludes that collecting is a Western subjectivity as well as a changing system of powerful institutional practices (Clifford, 98). The collection seeks to represent experience 'within a mode of control and confinement' (Stewart, 161):

Thus there are two movements to the collection's gesture of standing for the world: first, the metonymic displacement of part for whole, item for context; and second, the invention of a classification scheme which will define space and time in such a way that the world is accounted for by the elements of the collection. (Stewart, 162)

An important feature of the collection is therefore the presentation of objects detached from their context and inserted into an alternative framework. Another feature is the replacement of the circumstances of the concrete production of the objects with the interior rules organizing the collection. Hence the interior time and order of the collection mask the historical and social relations of the collected items and their appropriation (Clifford, 97). Stewart argues that the collection functions as a means to bring the environment into the personal, and hence the 'self' – the collector's own identity – becomes part of the collection (Stewart, 162). In Baudrillard's articulation, '[w]hat you really collect is always yourself.' (1996, 91); therefore the collection serves to define the collector, as well as to establish the subject (collector) as an object in the collection.

Like artefacts, models within modelscapes gain their meaning from their individual presence as well as from their placement within the context of the collection. An interesting example of how interior temporality and meaning are created by the context is found at Bekonscot Model Village in England (fig. 5).

This model village was founded in 1929, and is the oldest member of the International Association of Miniature Parks (IAMP), which includes

Figure 5 Bekonscot Model Village, general view



Photograph by Y. Padan

more than 40 public miniature parks open to the public across the world. The model's brochure describes Bekonscot as, '[a] little piece of history that is forever England'. This refers to the interior logic of the collection, in which the temporal aspects of the past ('piece of history') and the present are fused into an imagined 'forever'. This is also a reference to a 1914 poem by Rupert Brooke, an English poet known for his idealistic sonnets written during the First World War:

If I should die, think only this of me:
 That there's some corner of a foreign field
 That is for ever England. There shall be
 In that rich earth a richer dust concealed;
 A dust whom England bore, shaped, made aware
 Gave, once, her flowers to love, her ways to roam,
 A body of England's, breathing English air,
 Washed by the rivers, blest by suns of home. (Brooke, 15)

Sherry argues that in the 1920s, there was a tendency to view the pre-war era as a time of innocence and wonder. Brooke 'extends the imaginative claim of Georgian nationalism to its revealing extreme, a verge and a limit at which its establishing outlook is at once exaggerated and typified' (Sherry, 153). The Bekonscot Model Village, which represents 'forever England', supplies concrete images to such national sentiments.

Bekonscot is a collection of miniature models, some of them replicas of existing buildings and others typical English buildings such as pubs, railway stations, churches and manor houses. The sites are detached from their original geographic context, and the system of their classification or spatial arrangement creates a new symbolic geography, complete with its own nature and countryside, representing an ideal nostalgic England.

The Model as Representation

A central theoretical question concerning modelscapes is in what respects they are unique types of representation that differ from all other representational tools such as texts and two dimensional objects. I argue that rather than being merely a copy of a source object, a model is a creative and interpretive type of image that works by invoking comparison with its external referent. The act of comparison involves verbal interpretation of both model and its source, including reference to abstract ideas.

Another important quality that makes modelscapes unique representations is their nature as objects which involve the human body. A third central aspect of modelscapes is the alteration of scale. Many modelscapes are miniatures, and their scale relations with their source objects as well as with their visitors are central to their experience. Although some modelscapes are not miniaturized, they often exhibit complex scale relations with the represented objects as well as visitors.

The Copy

The relationship or the distance between object and its representation is a fundamental issue in Western culture, and has been widely discussed in the literature of art and philosophy. This question is relevant for understanding how modelscapes stand in relation to the places that they model.

In his book *Likeness and Presence*, Belting analyses the pre-modern interpretation of the image and its source as bound by resemblance. Thus in icons of saints, for example, 'the likeness is not honoured in the name of the image but in the name of the person represented, the image being only a means to an end' (Belting, 153). Hence icons could be venerated, since 'by adopting the essence of the archetype, the image borrowed the supernatural power that justified its worship' (Belting, 153). Belting further argues that this interpretation of the image was based on the Platonic concept that every image originates in a prototype from a pre-existing and everlasting world of ideas. Hence the image was a universally significant cosmic agent in the development of the physical world (Belting, 154).

In medieval thought this concept was used to explain the nature of the image as generated by its source model:

The image was not the mere invention of a painter but was more or less the property – indeed the product – of its model. Without the model, the image could not have come into being. (Belting, 153)

However, as argued by Auerbach, such resemblance to the source does not necessarily imply an exact reproduction. He refers to the representation of reality using the term 'mimesis', arguing that representational art which is a copy of 'reality' is in fact a re-interpretation, a creative repetition that differs from the original. Representation is thus 'an active dramatic presentation of how each author actually realizes, brings characters to life, and clarifies his or her own world' (Saïd, xx). Auerbach defines the conception and representation of pre-modern reality as 'figural'. This term indicates 'the

intellectual and spiritual energy that does the actual connecting between past and present, history and Christian truth, which is so essential to interpretation' (Saïd, xxi-xxii).

Modernity is characterized by a shift from this pre-modern perception and interpretation of the image. Belting suggests that a 'crisis of the image' took place during the Renaissance, when the image began to be interpreted as the artist's invention or idea. This type of image no longer functioned as a visible manifestation of its source model. Rather, it was perceived as a product of optics and of the general laws of nature. It represented both the principles of perception and an original idea of the artist (Belting, 471-472). The concept of the image thus changed from a literal representation generated by its source object into an invitation to look for the artistic idea behind the work. This change has laid the basis for the modern interpretation of representations as works of art resulting from aesthetic concepts (Belting, 471-472).

Furthermore, Auerbach argues that with the rise of secularism, the image shifts towards historicism, and represents through its source reality the social and cultural conventions of the time (Auerbach, 443-444). The 'realism' which is represented in literature and other arts requires separation, since as argued by Eagleton, 'if a representation were to be wholly at one with what it depicts, it would cease to be a representation' (Eagleton, 23 October 2003). Eagleton suggests that 'pure' representational art is impossible, because 'nobody can tell it like it is without editing and angling as they go along. Otherwise the book or painting would simply merge into the world' (Eagleton, 23 October 2003). The image in this view is thus always interpretative.

The issue of the distance between an original and its representation is also discussed by Benjamin, who analyses the modern mass-produced copy and its effect upon works of art. He stresses the fact that the concept of authenticity requires the presence of an original. Benjamin argues that the copy differs from an original, not necessarily because it is interpretational or creative, but because its circumstances of production and circulation are different (Benjamin, 220). Benjamin goes on to argue that the 'aura' of the original is destroyed in the process of its mass reproduction. It no longer has a unique existence, and thus mass reproduction causes 'the liquidation of the traditional value of the cultural heritage' (Benjamin, 220).

Models and modelscapes differ from Benjamin's objects of analysis, but they nevertheless have several points in common. They do not imply a mass reproduction, but rather they often claim to be unique representations of their source object. Models refer to objects, such as buildings, and not to

other representations of objects. Moreover, the separation from the original is inherent in its representation in a model. This separation is evident by the change of scale and of materials, by the de-contextualizing of the object, and by its abstraction.

When individual models are grouped into a modelscape, this is further emphasized in their creative re-contextualizing, which provides a tangible but interpretive image of a 'reality' that they construct based on abstract ideas and values. However, models and particularly miniature models also correspond with Benjamin's description of the modern aspiration to grasp reality through its reproduction.

The desire of contemporary masses to bring things 'closer' spatially and humanly [...] is just as ardent as their bent toward overcoming the uniqueness of every reality by accepting its reproduction. Every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction. (Benjamin, 223)

Furthermore, Benjamin suggests that mechanical reproduction has created forms of art, such as photography, which are designed to be reproduced. The questions of authenticity and of the original are no longer relevant for this type of art. Instead, he proposes that art is now based on politics (Benjamin, 223-224). There is an 'absolute emphasis on its exhibition value' to the point that its artistic value and function may be recognized as incidental. Modelscales similarly are removed from their original and focus on their own 'exhibition value', that is, their immediate presence before their audience.

Baudrillard takes this point further in his essay 'Simulacra and Simulations'. Baudrillard explores the relationship between original and image in the contemporary 'age of simulation', and identifies four successive phases of the image:

1. It is the reflection of a basic reality.
2. It masks and perverts a basic reality.
3. It masks the absence of a basic reality.
4. It bears no relation to any reality whatever: it is its own pure simulacrum. (Baudrillard, 2001, 173)

In the order of simulations, Baudrillard claims that the 'real', or the original, has disappeared. Instead, 'nostalgia assumes its full meaning. There is a proliferation of myths of origin and signs of reality; of second-hand truths, objectivity and authenticity' (Baudrillard, 2001, 174). He therefore defines

simulation as 'a generation of models of a real without origin or reality: a hyperreal' (Baudrillard, 2001, 169). In this view, it is the simulation that precedes and generates the 'real'. Furthermore, this type of 'reality' can then be reproduced indefinitely, and this is what makes it into a 'hyperreality'. In this process, all referentials are destroyed by being incorporated into systems of signs, 'substituting signs of the real for the real itself; that is, an operation to deter every real process by its operational double' (Baudrillard, 2001, 170).

Baudrillard uses the example of Disneyland to explain the orders of simulation. He argues that the fantasy in Disneyland, itself a play of illusions, is in fact intended to conceal the absence of reality outside it, and thus to save the 'reality principle'.

Disneyland is presented as imaginary in order to make us believe that the rest is real, when in fact all of Los Angeles and the America surrounding it are no longer real, but of the order of the hyperreal and of simulation. (Baudrillard, 2001, 175)

In the following chapters, modelscapes are discussed in terms of their capacity to represent both a reality which no longer exists, as well as one which is proposed to exist in the future. In this sense, they are capable of representing an original which is unreal. Furthermore, by representing a non-existent reality, models and modelscapes participate in generating and constructing it. They are used in certain cases to provide tangible simulations, but these simulations aim to reveal a certain reality rather than conceal its absence. They are part of an ideological discourse and hence they don't correspond to Baudrillard's contention that 'it is always a false problem to want to restore the truth beneath the simulacrum' (Baudrillard, 2001, 185).

Model, Image and Text

The question of original and image discussed above is relevant to all forms of representation. Within this framework, what characterizes the model specifically? The differences between representational media have been analysed in depth by philosophers and cultural critics, but none focused on the model.

As discussed earlier, the modern view of the image departed from the monotheistic concept of showing something greater, the sacred reality, embodied and resembled in a lesser form, the image. The role of representation in modernity is the focus of Goodman's work about aesthetics. He views the

arts as contributing to the understanding as well as the construction of the realities we live in. Art is thus not sharply divided, in goals and means, from science and ordinary experience. Goodman defines the modern concept of representation as 'a symbolic relationship that is relative and variable' (Goodman, 43). Unlike the pre-modern idea of the image, in modernity it indicates an object which refers to other objects and this reference Goodman calls denotation, which is independent of resemblance (Goodman, 5). Hence he calls representation a 'description under denotation' (Goodman, 43).

Goodman includes under this definition both images that denote, as well as verbal and textual denotations. The distinction between verbal denotations and images is the subject of Mitchell's book *Iconology: Image, Text, Ideology*. Mitchell examines the question of 'image versus text' as the two fundamental types of representation. He focuses on the differences and similarities between words and images, or verbal and pictorial signs. Mitchell refers to the term *image* as 'likeness, resemblance, similitude', apparent in different kinds of images: graphic, optical, perceptual, mental and verbal. Each of these is central to a different intellectual discourse (Mitchell, 1986, 10). However, a verbal image or a text are expressions of language. Forty suggests that a text is a system of differences, which is capable of distinguishing between different kinds of experiences (Forty, 15). Mitchell points out that in this process, the text is expressed in words but creates an image in the mind, a verbal image. Hence images are closely connected with texts: both are to do with communication, by means such as reference, representation, denotation and meaning (Mitchell, 1986, 47). Both are symbolic marks which make use of different functional features (Mitchell, 1986, 69).

Forty argues that unlike images in the mind, a basic feature of concrete images is the fact that the observer is external to the object. Thus for example in architectural drawings:

Subject and object are conveniently separated by the surface of the paper. The drawing itself becomes a simulacrum of perception, and its exteriority to us requires us to suppose that perception, as well as the thing perceived lies outside the mind. Language places no such demands upon us: the words themselves carry no illusions, but act directly upon the mind; language allows perception to happen where it belongs, within the mind. (Forty, 41)

However, it is important to note that verbal images, like concrete ones, are not transparent reflections that offer direct access to external objects. Thus

Richard Rorty argues that language is not a means of representation, since it is not a verbal illustration of external non-verbal ‘meanings’ or ‘facts’. Rather, language is a tool, a contingent product of time and coincidence. It merely signifies the usefulness of employing a specific vocabulary in order to handle a given situation effectively (Rorty, 3-23). In other words, verbal images which are imprinted upon the mind are artificial, conventional signs, like the letters and words that describe them, and their meaning is socially and culturally constructed (Mitchell, 1986, 26).

I suggest that models are three-dimensional, nonverbal symbols, which are imprinted in the mind as images. They gain their meaning from the viewers’ capability to interpret their experiences into words. Models refer to external objects and hence they are images that denote. They resemble their reference object but differ from them in features such as scale, materials, and details. The model requires a wider reading that takes into account its propositional nature. Hence the third quality of models that I would like to put forward is that their historical and ideological components are inseparable from their formal materiality.

Experience, Performance and Play

Models invite the visitors to explore their aspects in motion. Unlike the frontal position assumed when observing images such as paintings, photographs, films or computer screens, models are observed through the movement of the body around them. While this is true for individual models, it is also an important aspect of the observation of collections of models, such as modelscapes. These are designed to make the public perform certain routes within or around them. Hence I consider these kinds of models theoretically to be settings for ‘public performances’.⁷

Another important point is the association of models with playful objects, especially miniature models which are reminiscent of doll houses and other toys. I argue that the frame of play enables models to refer to political and social problems in a mediated way, which does not deter the visitors. Berger suggests that toys are situated within a creative ‘interpretive space’, which differs from the strictness of exact duplication. Although toys, like models,

7 The idea of performance is used here in the sense defined by sociologist Erving Goffman, as ‘all the activity of an individual which occurs during a period marked by his continuous presence before a particular set of observers and which has some influence on the observers’ (1990, 32). This type of performance is not necessarily conscious, such as the performance of an actor in front of an audience. Rather, an individual may possibly be involved in performance without being aware of it (Carlson, 35).

refer to source objects, they nevertheless have an independent existence which opens them to new interpretations and uses (Berger, 2008, 19).

Models gain access to an 'interpretive space' by virtue of their tactility. Ferguson describes the model as one step closer to reality than a drawing, because it gives tactile clues that help the observer to make sense of the object (Ferguson, 107). The model therefore offers a full experience which is not limited to the visual. It provides 'nonverbal, sensual, qualitative information – visual, tactile, muscular, and aural' (Ferguson, 107). Similarly, Healy suggests that models offer a hybrid phenomenological realm which focuses on their materiality and functionality as objects (Healy, 15).

Similarly, Pallasmaa has argued that model-making is a tactile experience, both for the maker as well as for the visitor. Even when it is not physically approachable, the model is experienced by the body:

In our imagination, the object is simultaneously held in the hand and inside the head, and the imagined and projected physical image is modelled by our bodies. We are inside and outside the object at the same time. (Pallasmaa, 12)

Movement enables the viewer to imagine the realized building that a model represents (Patteeuw, 126). Movement around and within modelscapes allows the visitors to imagine complex environments. The model's layout is the decisive element of this movement. In contrary to the individual model which permits freedom of movement around it, movement within the modelscape is planned in advance and organized by the spatial logic of the site and possibly by guides which lead tours. Thus it is a structured rather than arbitrary experience, designed to instruct the visitor how to make sense of the modelscape. This didactic purpose coincides with the narratives that accompany the exhibits.

A good example of a structured experience in a model can be found at the Panorama of the City of New York (fig. 6). This is a model of the city that was built for the New York World's Fair of 1964-65 and housed at the Queens Museum of Art. At 1:1200, the model of the metropolis occupies more than 860 square meters. The Panorama was built originally with moving rail-cars around it which offered the visitors a nine-minute ride and a recorded narration (Momchedjikova, 268). This extremely controlled experience (that simulated a helicopter ride) was replaced by an ascending ramp, which today offers the visitors an opportunity to explore the model on their own aided by labels and brochures or else by a guided tour (Momchedjikova, 268).

Figure 6 New York Panorama, general view

Source: Queens Museum, New York City

The Panorama, like other modelscapes, is experienced by the moving body. And like other miniature models, it offers the visitors an experience of empowerment over New York's skyscrapers, which outside the museum dominate the pedestrians in the city. Momchedjikova notes that the visitor's elevated position along the ascending ramp inverts the spatial relationship between people and buildings: while the city surrounds the pedestrians, in the model space it is the viewers that surround the city. Moreover, temporal relations are inverted as well, because the model has a special lighting system that simulates dawn-to-dusk, thus capturing the visitors within the accelerated model time.

In that reversal of scale, time decreases as well, encapsulating the city even more – caught in observation and reverie, we experience one hour at the scale model as 10 minutes. (Momchedjikova, 269)

Movement also serves to validate the information the visitors gather from the model, by comparing it with the exterior reality it represents. The interaction between visitors and model is essential in order to affirm its authenticity, which 'resides in the "bringing to life" and performing of that

same scale model by those that it, in itself, lacks – the moving bodies of the guide and the visitors' (Momchedjikova, 269).

The experience offered by the Panorama reduces distances and flattens the visual field. The difference between near and far are erased: in several seconds the visitor walks distances which are impossible to cover outside in an entire day (Momchedjikova, 275). Walking around the model connects 'here' and 'there', enabling the visitors 'to belong to all places at the same time' (Momchedjikova, 279). Furthermore, for residents of the city and others who are familiar with New York, movement around and above the miniature familiar places 'activates' these places with memories and with comparisons that the visitors make with the city they know outside. For those visitors,

Public becomes private – the public places on the scale model become the private spaces of personal memories and so the scale model functions as anybody's memory palace, at any given time. As a result, two cities come to co-exist at the scale model: the visual, miniaturized architectural one in the museum and the tactile, lived one in our minds and memories. (Momchedjikova, 279)

As will be discussed in Chapter 4, this feeling of the co-existence of the model and its source objects is not limited to residents who are familiar with the city. Rather, this impression is shared by tourists who experience the model by comparing it with famous landmarks in the city. Culler points out that tourists have images of the attractions they would like to see prior to their actual visit. These images are produced by markers, including different types of representations (Culler, 1988, 160). In the model, miniature representations serve as markers of both the entire city as a tourist attraction and of particular sites within it, which are recognized by the visitors. Culler suggests that such a process of recognition is essential in order for the tourist to make sense of the touristic experience. Representations mark the 'real' attractions as places worth visiting. Even after visiting a 'real' sight, its markers retain their importance, since features of the 'real' sight are discovered with reference to and in comparison with the markers (Culler, 1988, 160).

Another aspect of experience through the moving body which models offer is analysed by Handelman (1990, 27), who refers to modelling in public events: 'Models abstract reality in coherent ways, by selecting out, simplifying, and condensing various of its aspects and relationships. Models also provide directions for the reformulation of these abstractions into action'

(Handelman, 24). The focus of Handelman's analysis are rituals which are public events that have a pronounced purpose of making a direct and profound change to the participants, a change that will eventually affect reality. In this sense, Handelman regards events-that-model as events that mold. Such a model-event is 'something of a microcosm of the lived-in world, a simplified but specialized, closed system' (Handelman, 27), which operates independently according to its own internal rules.

My point in comparing spatial models with model-events is that they both frame and recreate a portion of reality. The modelscape acts as a closed site where reality is simulated according to internal rules. This reality is shaped by the model and projected back to the world, and hence the model acts upon the world. This idea corresponds with the model's capacity to suggest a different reality, by representing alternative, fantastic, or utopian possibilities (Manchanda, 2006, 45).

Some modelscapes reinforce images of existing reality rather than offer alternatives, and may better correspond with a different kind of public event, which presents (rather than models) the lived-in world. In the modern bureaucratic state public events are used to 'enunciate and index lineaments of statehood, nationhood, and civic collectivity' (Handelman, 1990, 42). These types of events are defined by Handelman as mirrors. They do not have transformative qualities, but rather they highlight and affirm certain aspects of social order. They display social order 'quite as their creators understand this – as determinate images that mirror collective or elite perceptions of what the mind-sets and the feeling states of participants ought to be' (Handelman, 1990, 79). Likewise, I suggest that modelscapes have the capacity to sustain as well as to challenge existing reality, and hence they can either 'model' or 'mirror' it.

The modelscape is cut off from the surrounding world by what Goffman calls 'the organization of experience' (1997, 155), which informs the participants of a given situation about the frame of the activity, that is the understanding of what is going on and which actions fit with this understanding (Goffman, 158-159). Larry Abramson suggests that the experience of the model has an 'enchanted dimension that is both entertaining and magical. The model is at once an innocent toy and a powerful fetish, a voodoo doll with control over the reality it images' (2006b, 154-155). Hence part of the experience of the model is framed within a seemingly innocent context of play. Bateson notes that the framing of play blurs the borderlines between reality and fantasy (Bateson, 185). In the case of a modelscape, the framing of play enables the visitors to understand the internal rules of the model and to interpret its meaning as an autonomous space:

Either, as in the case of the play frame, the frame is involved in the evaluation of the messages which it contains, or the frame merely assists the mind in understanding the contained messages by reminding the thinker that these messages are mutually relevant and the messages outside the frame may be ignored. (Bateson, 188)

The modelscape is a special case since its internal logic and messages refer to an external reality, which cannot be ignored. However, it has the capacity to represent political space which refers to the reality outside the frame of play, in a way that bypasses the difficulties of controversial or unresolved collective issues. Hence modelscapes correspond with what Handelman defines as 'play media', which touch upon problematic issues of political and social significance:

The messages that can be transmitted through the play medium to weighty social realities are diminished in their impact, since they are received as frivolous, and as inconsequential to those realities [...]. Yet, in another dimension, such messages that emerge from play media nevertheless are sent back to serious realities, albeit as unstressed, or through ambiguous genres of allegory, irony and so forth. (Handelman 1990, 70)

Models and Architecture

Models are basic tools for architects. In the process of planning, models serve architects and planners to consider their work and provide a better understanding of the implications of two-dimensional drawings and sketches. The model also serves the architect to facilitate the explanation of these documents to others. I use several analytic principles of architecture in order to examine the relationship between architecture and modelscapes. The first principle is the perception of architecture as a background setting for everyday activities, versus that of the model. The second is a study of models as abstractions of the built environment. A third principle is the concept of scale and its relationship to the human body, a principle used to evaluate both architecture and models. The fourth is the spatial relation between interiority and exteriority, an architectural category that suggests a basic difference between buildings and their model representations.

The Perception of Architecture

The objects of architectural work are buildings, whereas representations such as sketches, plans and models are merely part of the creative process. Patteeuw argues that there is a basic ambiguity between the physical presence of the building and its representation which is part of the intellectual process of architecture (Patteeuw, 123).

Although models are experienced by the moving body of the visitors, they lack basic spatial qualities that buildings possess. Scale models cannot represent space as we experience it inside and between buildings, and therefore they are merely objects or artefacts. In the literature it is widely argued that the experience of architecture encompasses all the human senses, in a way that is hardly possible in models.⁸

The model thus offers a different experience to that of the architecture which it represents, in that it requires an effort of the imagination in order to make the suggested comparison and generate the relationship of the object to its architectural referent. Vervoort defines the model as a 'thinking object' which hovers between the cognitive and the material. It is 'less a physical phenomenon than a constructed phantasm, inevitably held in place by our own imagination' (Vervoort, 80).

Architecture is part of everyday experience. Benjamin observes that 'architecture has always represented the prototype of a work of art the reception of which is consummated by a collectivity in a state of distraction' (Benjamin, 241). In this sense, architecture is merely a background, noticed incidentally, where 'habit determines to a large extent even optical reception' (Benjamin, 242). Benjamin points out that 'the public is an examiner, but an absent-minded one' (Benjamin, 242-243).

Distraction on a collective level creates the kind of vision that Pallasmaa calls 'peripheral vision', which enfolds the human body in space: 'Unconscious peripheral perception transforms retinal gestalt into spatial and bodily experiences. Peripheral vision integrates us with space, while focused vision pushes us out of the space, making us mere spectators' (Pallasmaa, 13). In contrast to buildings, models, and especially miniature models, tend to be more on the side of focused vision as objects on display which the visitors look at deliberately rather than habitually. Hence the visitors, although in motion, remain essentially spectators, and their sense of involvement in the model space is primarily an imaginary one.

8 See for example Pallasmaa (2005); Rasmussen (1964); Bloomer and Moore (1977); Bachelard (1971).

Models, as artefacts, are effectively abstractions of architecture. The nature of abstraction is discussed by Chris Jencks who suggests that it is an extracting of essences from one original plane into another, creating a representation that allows for the manipulation and control of images. While images which are abstracted and detached from their context become flexible and open to manipulation, they nevertheless retain significations within that original context (Jencks, 9). The representation of a building in model, and especially in miniature model, necessarily entails a certain abstraction by the omission of some information such as details. However, the materiality of models prevents them from becoming nonfigurative and retains them as 'concrete abstractions' (Barthes, 1997, 176).

The abstraction of the model results from its double role. It is both 'a virtual space which makes the viewer aware of his own presence by analogy', as well as a 'material presence, the physical space occupied by minimalism' (Vervoort, 77). The model is often devoid not only of the details of the complete architectural work but also of the unruly shabbiness of real buildings and cities. The Panorama model of New York is a good example:

Here, one can marvel at the precision of craftsmanship as well as the precision of the city because the Panorama is, conveniently, not only a model of the city but also a model city: clean, clear-cut, connected, and quiet. (Momchedjikova, 268-269)

The cognitive similarity between model and building is used by architects as a tool for understanding an exterior reality, and therefore architectural models are taken to be an ideologically neutral media. This is because 'the totality, three-dimensionality, manoeuvrability and/or physicality of architectural models encourages the assumption that the model "is" the building' (Starkey, 235). Furthermore, this is due to an architectural culture which is trained to 'look through' or 'overlook' the physical existence of the model (Starkey, 236). Therefore, models are not only perceived as unthreatening playful objects, but also as professional tools referring to the building industry rather than to contested and unresolved cultural or political issues.

On Scale and the Body

As discussed earlier, an important feature which distinguishes models and modelscapes from other representational modes is the issue of scale. The idea of alterations in scale and of miniaturisation has changed from the

mythical pre-scientific perception of microcosmic representation of an ideal order (Weston, 41), to the modern concept of scale as objective measure, a technical professional tool.

As mentioned earlier, 'cabinets of curiosities' were private collections assembled by scholars and princely collectors, common in the sixteenth and seventeenth centuries in European cities. Weston points out that these typically included specimens from nature (such as stones, minerals, exotic plants), thematically connected with man-made objects (including works of art, jewels, coins, antiquities) and scientific instruments (like globes, telescopes, clocks), as well as exotic rarities (such as ostrich eggs, fossils, mammoth bones). These were displayed together thematically to represent the world in a single room, defying modern dichotomies such as art and science, nature and culture, past and present (Weston, 38). The cabinets of curiosities, conceived as microcosms of the mystery of the universe, typically contained also minute objects such as tiny natural elements, as well as miniature works of art which were regarded as magical, metaphysical and symbolic surrogates, whose manipulation could influence their source objects (Weston, 42-44).

These enclosed representations of the world were used for contemplating the whole of knowledge, metaphorically evoking the entire universal order through analogy, which tied together contrasting classifications. Disparate fragments were juxtaposed together, retaining the memory of their old context and creating new meaning by their assemblage (Weston, 41-42). Maps were also common objects in cabinets of curiosities, presented as curious or luxurious objects more than as representations of landscape (della Dora, 339).

The collector could obtain a picture of the world as well as a metaphoric control over it:

Indeed, the cabinets strove symbolically to reveal the oneness of the world as one great unbroken chain, in which elements echo each other. They are microcosmic images of the greater cosmic order, still understood pre-scientifically, symbolically as 'world in miniature'. (Weston, 41)

By the early eighteenth century the logic of the cabinet of curiosities was gradually rejected, and they were replaced by rationally ordered collections which became the basis for the modern museum. This marks the shift from the microcosmic as analogic representation of the macrocosmic, to the logic of the miniature scale representation:

Micro is comparatively small, but within the same measure of the macro in the sense that microscopes allow us to see the tiny inhabitants with whom

we share our world. Nature encompasses both the great and the small, but is always 'full-scale'. Mini, on the other hand, is both proportionally small and in a reduced measure from its full-size sibling. (Emmons and Sullivan, 103)

The miniature is therefore a cultural product, which is comprehended in relation to the human body (Emmons, 232). Stewart suggests that the body is perceived as contained and container at once, measured by its boundaries and limits. From outside we perceive its limits as object, while from inside we perceive the limits of our body's physical extension into space (Stewart, 104). By miniaturizing the environment, the viewer's body is transformed to gigantic dimensions (Stewart, 71).

Claude Levi-Strauss has observed that miniaturization makes the object easy to comprehend and to control, and by extension this is applied to the external referent which the miniature represents:

Being smaller, the object as a whole seems less formidable. By being quantitatively diminished, it seems to us qualitatively simplified. More exactly, the quantitative transposition extends and diversifies our power over a homologue of the thing, and by means of it the latter can be grasped, assessed and apprehended at a glance. (Levi-Strauss, 23)

Levi-Strauss further argues that miniature works of art are distinguished by presenting the viewer with a totality. This totality refers not only to the work of art itself, but also to the perception of what it represents. Hence it is a mediating object between the subject and the sensible world, which enables the world to be 'mastered' (Wiseman, 36):

In the case of miniatures, in contrast to what happens when we try to understand an object or living creature of real dimensions, knowledge of the whole precedes knowledge of the parts. And even if this is an illusion, the point of the procedure is to create or sustain the illusion, which gratifies the intelligence and gives rise to a sense of pleasure which can already be called aesthetic on these grounds alone. (Levi-Strauss, 24)

Larry Abramson suggests that such a sense of pleasure from the power relations of visitor and model is the result of the model's tendency to encourage identification with the miniature and its source objects:

Like the general deploying his forces on a sand table, the viewer's relative magnitude produces a sense of power vis-à-vis the minute and fragile

model. Yet [...] the model induces empathy in its participants, not just with the model itself but, by extension, with the reality represented by it. (L. Abramson 2006b, 154)

Furthermore, Emmons and Sullivan suggest that the shift from the perception of scale 'as magical possession' (as for example in the cabinet of curiosities) to scale as a technical and practical tool ignores the role of myth as a 'foundational structuring of the human world'. They argue that the mythic aspect of the miniature nevertheless continues into the present. Thus a miniature model representation of the city 'creates an amulet of the city that continues to operate as a fetish, an exotic object' (Emmons and Sullivan, 103).

Experiencing models of architecture is clearly different from experiencing the 'real' built environment, which we grasp bit by bit from our point of view between or within buildings. In the act of perceiving the entire model, the 'big idea' can dictate the viewer's judgment of the project (Morris, 13). The relationship of the 'big idea' to the model is established through a projection of narrative which originates outside the given field of perception (Stewart, 54). The miniature aims to close the gap that separates narrative from its objects, or signifier from signified (Stewart, ix). Fascination with 'miniaturism' is problematic since the 'big idea' is always partial and simplistic compared with the complex exterior reality to which the model refers.

In contrast with the individual miniature model, some modelscapes are designed so that visitors can enter them with their bodies. This is the case of the Bekonscot Model Village, where visitors can walk between models, although walking is confined to the paths which structure the visit and separate visitors from models. In such models the 'big idea' is retained, since the visitor is often still able to grasp the entire model at a glance. To assist this, special viewing platforms feature in many modelscapes (including Bekonscot) for visitors to gain an overall view of the model in its totality.

The shift in scale introduces a shift in time as well. On one hand there is a recollection of the visitor's personal past, as the toy-like qualities of miniature models produce a sensation of childhood play and fascination with objects that can become magical through the imagination (Valli and Dessanay, 8-9). On the other hand, time is condensed alongside space. Miniature time is not an extension of everyday time, but a parallel time that never intersects with the time of lived reality (Stewart, 57).

While the model lacks the spatial qualities of architecture, and cannot be experienced in the same way, it derives its meaning from its full-scale referent, and this relationship is established by an act of imagination. As argued

by Stewart in relation to the dollhouse, it 'cannot be known sensually; it is inaccessible to the languages of the body and thus is the most abstract of all miniature forms. Yet cognitively the dollhouse is gigantic' (Stewart, 63). By comparison, the miniaturisation of the model does not prevent but rather encourages its perception as a large-scale building.

The cognitive ability to perceive a miniature as gigantic is precisely the feature that enables the model to be taken as a professional tool. The discourse of models is based on the assumption that they differ from toys despite some connotations of play and childhood. Experiencing models requires that everyone participate in a common act of imagination, as noted by Morris:

Architects must take this illogical view when fashioning models, otherwise the practice would appear foolish; and clients, not to mention students of architecture, must be coaxed into this way of 'miniature thinking' without naming it as such. (Morris, 11)

The model is a visible object which points to an invisible, absent external referent. Thus the presence of a miniature model is enough to trigger an imaginary view of its complex and detailed referent, although this view is limited and incomplete.

Interior and Exterior Modelscapes

Models representing interior spaces display particular scale relations. For example, dollhouses are analysed by Stewart as miniatures focused on interiority and its furnishings. She suggests that they are usually simplified and affordable signifiers of expensive objects, and thus represent property relations in the exterior world. Hence she argues that the two dominant motifs of the interiority of the dollhouse are wealth and nostalgia. The dollhouse rejects contamination and crudeness by an absolute manipulation and control of the boundaries of time and space (Stewart, 61-63). The interiority of the dollhouse is experienced as a sanctuary (a place of fantasy) but also, she suggests, as a prison, because of the inaccessibility of what cannot be lived experience (Stewart, 65).

Models of exteriority may similarly serve as nostalgic objects. Stewart points out that nostalgic objects, such as collectors' items, serve to both distance and appropriate the past. Their importance lies in their ability to overcome the fact that the nostalgic past never existed except as narrative, by instead creating an imagined tangible past (Stewart, 142-143).

In contrast with 'domestic' models, such as dollhouses or collections that are displayed indoors, models that are placed within a landscape function as elements of exteriority. Brennan refers to the way in which objects placed in the landscape are perceived, maintaining that this placement determines not only the relationship between people and objects, but also the self-perception of the moving body. She argues that in the seventeenth and eighteenth centuries landscaping brought about a 'visual turn' from active to passive seeing. Public parks were places where objects and other people were observed, hence passive seeing meant that one could be aware of oneself seeing and being seen. This awareness acted as a guarantor of one's existence and of one's 'objective standpoint' as a viewer (Brennan, 226). The 'objective standpoint' meant that the viewing eye was understood to be a passive receiver of the virtual truth, rather than an active participant in constructing this truth. The passive viewing subject was nevertheless perceived as located at the centre of the world, and therefore could retain control over the object of which he passively received information (Brennan, 224).

As noted above, this approach which corresponded with the development of the perspective system underlined the modern mental model of the dualism between the viewing eye and its object. Modelscapes which are located in landscape surroundings are part of this modern perceptual system.

A specific form of landscape park is the theme park, which imports existing or typical spaces and buildings chosen to represent a given subject, and rearranges them in a new context according to a structured logic. In the theme park a new space is created that is inspired by external places but gives them a different meaning. Often, these places are represented in miniature. Jones and Wills identify in the theme park elements of entertainment, utopia and orderliness. Some theme parks include representations of different countries, which inevitably distort them: 'People, history and events are reduced in size and complexity – national identity plasticized and simplified in a similar way to how theme parks treat the natural world' (Jones and Wills, 120). The presence of rides which create an element of excitement and fear in some theme parks reveals that they also simulate the desire for adventure and risk found in everyday life outside the park (Jones and Wills, 116).

Stewart suggests that amusement parks provide an understanding of how miniature relates to narrative: some of them attempt to bring history to life, but while doing so the powerful presence of the miniature erases the history of the historical events illustrated. Therefore, she locates miniatures in theme parks within the realms of the nostalgic rather than the historic,

like miniatures of interior and dollhouses (Stewart, 60). I suggest that this argument further enhances the notion that modelscapes feature some aspects which range between the landscape park and the theme park: they construct new spaces out of fragments of existing spaces, and in this process they give material shape to narrative. Furthermore, narratives of the past are transformed within the modelscape and can be located between the representation of heritage and nostalgic memory.

2 Models and Modern Perceptions of Nationalism

Modelscapes are representational modes which are both an outcome and a reflection of modern modes of perception. This chapter will further explore two interrelated issues within this perceptual context. The first issue is the use of modelscapes in order to represent built environments which do not exist in the present. The ability of modelscapes to represent collective pasts, as well as visions of the future, will be examined and related to the perception of time in secular modernity.

As secularism developed, time was no longer understood as nearing an apocalyptic end, and therefore the perception of time in modernity was separated from religion. The secular view towards the end of the eighteenth century perceived time as a human task, and in this context, the future could be designed by human thought. The idea of living in modernity made it possible to look back on the past, as well as to propose a better, model future, which could improve society through human action. This led to the emergence, towards the end of the eighteenth century, of the term 'progress', which characterises modernity.

Modelscapes are thus products of the modern perception of the future as a scope for human action, which encouraged the planning and making of representations of future spaces. The notions of the future as a time of progress and improvement also characterised utopian designs of ideal cities, which were represented as model plans, opposed to and critical of the existing urban situation.

Modern ideas of time and progress are related to the perception of communities and collectives as moving through history, and thus to the development of modern nationalism. Therefore, the second issue explored in this chapter is the role of modelscapes in representing national identity. How do they give tangible form to a community's collective past and shared heritage, and how are they used to represent national territories, within which nationality is imagined? Like the map, they signify the nationalization of a territory, but unlike the map they are places in their own right. In this chapter several examples will be explored, some showing that model representations of national territories may replace a visit to the actual sites represented. Others, such as the World Expositions, show how themes of heritage and national identity represented in modelscapes are used to promote cultural tourism in a globalized economy.

The modelscape's internal logic and narrative are based on two inter-related concepts. On one hand, it is detached from external time and space, and constructs its own internal order and sense within an enclosed and bounded area. On the other hand, it is related with external referents, which tie the modelscape to source objects that exist elsewhere. This chapter questions how the modelscape functions as a taxonomic system, which arranges and classifies time and space to create a stable and constant presence, situated within an eternal duration of an unspecified 'panoramic' time.

The Perception of Time and Modern Nationalism

Pre-modern conception of time was characterized by the idea that cosmology and history were indistinguishable, and hence 'the origins of the world and of men [were] essentially identical' (Anderson, 37). Koselleck argues that between 1500 and 1800 a shift occurred in the perception of time. This shift is rooted in the development of secularism together with scientific thinking and the growth of humanism, which led to the Enlightenment. Until the sixteenth century, the monotheistic notion of expectation and anticipation of the 'End of the World' had constituted the dominant temporal horizon. Koselleck defines this perception as the 'compression' of time, which was taken to be nearing its end. Compressed time was a sign of God's will to bring the near 'End of the World'. In contrary, the secular view towards the end of the eighteenth century was characterized by the acceleration of time. Time had been detached from an anticipated ending and its acceleration was viewed as a human rather than divine task (Koselleck, 2004, 12-13).

Perception of time in modernity was separated from religion, causing the separation of national politics from the 'End of the World'. Anderson suggests that the perception of time as accelerating is one of the factors which enabled modern nationalism to develop:

The idea of a sociological organism moving calendrically through homogeneous, empty time is a precise analogue of the idea of the nation, which also is conceived as a solid community moving steadily down (or up) history. (Anderson, 26)

Koselleck argues that perception of time and of the nation during the Enlightenment was aided by the fact that in different calculations, the end of the world was 'postponed', as astrological predictions pushed this event into the far future. As a result, politics became concerned with the

temporal rather than the eternal. In this perception of time 'Human history, considered as such, had no goal [...] but rather was a domain of probability and human prudence' (Koselleck, 2004, 15). It was in the interest of the absolute state to overcome both religious and political forecasts of time to come. The state therefore suppressed apocalyptic and astrological readings of the future, ensuring for itself a monopoly on its control (Koselleck, 2004, 16). Simultaneously, humanists criticized prophecy and visions as the properties of oracles and superstitions. This development made it possible to look back on the past as 'medieval':

The triad of Antiquity, Middle Ages and Modernity had been available since the advent of Humanism. But these concepts became established for the entirety of historical time in a gradual manner from the second half of the seventeenth century. Since then, one has lived in Modernity and been conscious of so doing. Naturally, this varies according to nation and *Stand*, but it was a knowledge that could be conceived as the crisis of European thought. (Koselleck, 2004, 17)

Hence the future became a matter of political calculation, rather than a religious certainty of the Last Judgment. The notion of perfection, previously taken to be possible only in the Hereafter, was replaced by the concept of improvement or 'progress', a term which emerged towards the end of the eighteenth century. Not only was the future open to human action, it was also bound to improve society (Koselleck, 2004, 265-270).

I argue that in this context it was possible to propose a model future, a future designed by human thought which will be better than the present. This line of thought characterized Utopian thinkers and produced designs for ideal cities (Choay, 34). The ideal cities suggested positive models of the future, opposed to and critical of the existing urban situation (Choay, 246).

The notion of human action towards planning the future lies at the base of the making of physical spatial models. Models of planned and proposed environments are designed to materialize anticipated circumstances, often representing them as an improvement to an existing context. Modelscapes are products of such thinking, and represent modern concepts of the future: man-made, improved, and exemplary.

Furthermore, modelscapes provide an 'experience', both in the sense of the lived encounter, and in the sense of the accumulation of past occurrences. Based on past and present knowledge, models of proposed environments attempt to depict future sites, thereby overcoming the problem of prediction and of projecting the past and present into the future. Koselleck

argues that modernity entails a separation between the 'space of experience' and the 'horizon of expectation' (Koselleck, 2004, 272). I argue that the spatial model is an attempt to bridge this gap by providing a concrete representation of the future in the present. In this sense, the model is a unique product, since its spatial presence embodies human action that is capable of connecting experience (of the past) with expectation (of the future).

A Verbal Model: Utopia

The model acts as a generator of images, even when it is limited to text. The textual model describes and denotes an external reality, and creates an image in the mind, without having a material physical presence at all. Choay analyses Sir Thomas More's *Utopia*, in which a model (in the sense of exemplar) city is described in such detail as to create a comprehensive image in the reader's mind (More, 2003). Choay argues that language as such allows for freedom, and thus More's abstract ideas as expressed in the text may be open to different interpretations. However, when More goes into detailed descriptions and constructs his verbal model, distinct verbal images are created which pin down his ideas and give them decisive form. These images deter the reader from reflecting upon other possible interpretations (Choay, 152-154).

Utopia was published in 1516, a period corresponding to the beginning of modernity and modern nationalism.⁹ The book contains a description of a voyage to an imaginary ideal country. It criticizes and satirizes contemporary European society and particularly England and its king by contrasting it with the perfect country of Utopia, where human life is organized in the best possible way (Turner, xv). The term *utopia* which literally means 'nowhere' or 'no-place', gave its name to a literary genre featuring a critical approach to a present reality and the modelling in space of a future one (Choay, 8).

The interesting feature which I find in this critical literary genre, is that in order to be clear it requires the construction of an alternative spatial image, whether positive or negative: spatial images can express utopia, in which an imaginary place must be an expression of desire, or dystopia, in which case the imaginary place is an expression of fear (Carey, xi). The relevance of utopian (and dystopian) projects to the study of models lies in the fact that in order to convincingly depict his ideal society More (as well

9 See Chapter 1: Models and Modern Modes of Perception.

as other writers in this literary category) was obliged to verbally describe this no-place in terms of place. In order to do so he used a device for the a-priori conception of built space: a model (Choay, 8).

Model space in More's *Utopia* verbally represents both a social and a spatial construction. Furthermore, the printing of *Utopia* made this model and its subversive message accessible to the public. Choay argues that More's attempt to suggest a radical transformation of society was constrained and limited by its use of the device of a verbal representation of a model. She points out that the book *Utopia* opened up and revealed potentially innumerable alternative social and political possibilities to its readers. By criticizing an existing reality through a journey to an imaginary one, the reader is offered a literary experience of oneself as other (Choay, 152-154).

However, Choay points out that the device of a spatial model prevents the reader from reflecting upon different possible societies. More chose a single social model and affixed it to an image of a specific built environment that has visual coherence and identity. By doing so, all other social possibilities were ruled out, presenting the reader with definitive rather than open-ended answers to the critique of familiar society (Choay, 152-154). As argued by Scott, the narrowing of possible views serves the interests of hegemonic power:

Certain forms of knowledge and control require a narrowing of vision. The great advantage of such tunnel vision is that it brings into sharp focus certain limited aspects of an otherwise far more complex and unwieldy reality. This very simplification, in turn, makes the phenomenon at the centre of the field of vision more legible [...]. An overall, aggregate, synoptic view of a selective reality is achieved, making possible a high degree of schematic knowledge, control and manipulation. (Scott, 11)

The experience of More's detailed verbal image of the built environment is comparable with a visit to a tangible modelscape. However, I argue that the verbal model is nevertheless more open to interpretations than its physical counterpart. The spatial presence of a built model is more definitive and its authoritative qualities more extreme than those of a verbal model.

Models and the Construction of Collective Identity in Modernity

Modelscapes often participate in the cultural context that defines and consolidates modern national identity. I follow the argument that 'spatial

representations [...] can help construct, and legitimate, nation building' (Watts, 117). Models of national territories or spaces of national importance which were made during the eighteenth and nineteenth centuries have played a part in the concretization of the abstract concept of imagined communities. I argue that contemporary modelscapes continue to have a similar role: they are visited by both locals and tourists, and serve as means of representing the nation to them in a condensed spatial and temporal form. By signifying national identity, these models provide an 'experience of signs' (Culler, 1981, 138), which is loaded with political meaning.

Theories of the Emergence of Modern National Identity

A vast academic literature is devoted to modern nationalism and its emergence.¹⁰ Rather than discuss theories of the construction of the concepts of nations and nationalism, I aim to understand the role of the modelscape in the cultural representation of the nation.

Some scholars view the emergence of contemporary nations as a modern phenomenon, dating since the eighteenth century in Europe and expanding to be a global phenomenon in the course of over two hundred years. The 'modernist paradigm' was formulated among others by Gellner who links nations and nationalism with the needs of modernization and industrial development. Focusing on the effects of processes of uneven global modernization, Gellner argues that nations and nationalism are sociologically necessary in modern industrial societies (quoted in Anthony Smith, 1998, 27-30).

Other scholars have moved beyond some of the assumptions of the 'modernist paradigm'. Anderson conceives nations as imagined communities whose members hold a mental image of their communion. These communities are limited, because they are contrasted with other nations which exist beyond their boundaries (Anderson, 6-7). Anderson suggests that imagined communities are modern constructs which emerged as a consequence of modern capitalism and particularly the development of print technology. These have 'created the possibility of a new form of imagined community, which in its basic morphology set the stage for the modern nation' (Anderson, 48).

Hobsbawm analyses the nation as a modern construct and cultural artefact of elites, resulting from modern social, political, cultural and economic conditions (Hobsbawm, 2012, 1-14). He suggests that nations are

10 For overviews see for example Hobsbawm (1992); Anthony Smith (1998).

products of a specific conceptual perspective, and views national identity as a distinctive mode of consciousness, stressing its radical novelty. In this view, nationalism emerged in the context of broader processes of modernity including among others the development of capitalist economies, industrial technologies, the printing press, bureaucratic institutions, imperialism and colonialism (Cubitt, 2). Furthermore, Hobsbawm suggests that modernity necessitated the construction or invention of traditions, including nationality, in order to cope with the rapid transformations of society (Hobsbawm, 2012, 1-14).¹¹ Invented traditions often rely on 'old' ones, but earlier identities have been radically modified in the process of their cultural transformation into contemporary nations (Cubitt, 2).

Modern national identity is described by Anderson as 'modular', as it was transplanted gradually to a great variety of social, political and ideological constellations (Anderson, 4). Particularistic nationalism in most of Europe, which reflected geo-political and/or ethnic characteristics, did not emerge until the eighteenth century (Greenfeld, 14). As noted by Malesevic, pre-modern populations identified with a family, clan, religious group or village, rather than with a nation (Malesevic, 2006, 308). In France, for example, 'the peasantry refused to exchange local for national memory until almost the First World War, and then only when they had been effectively colonized by the state' (Gillis, 8-9). However, the urban middle and working classes became interested in national memory following the French and American revolutions of the late eighteenth century (Gillis, 7).

Other scholars are 'Primordialists', and derive nations from a 'primordial' sense of collective belonging, based on notions of ethnicity, kinship, and territory as well as on their manifestation in language and religion (Anthony Smith, 1998, 223). Still others place an emphasis on the relationship between national and ethnic identity, arguing that pre-modern societies were also capable of creating self-conscious political communities. Anthony Smith defines a nation as 'a named community of history and culture, possessing a unified territory, economy, mass educational system and common legal rights' (1996, 106). He suggests that nations are not mere constructs of privileged elites, but also concrete historical formations, based on earlier ethnic myths, values and memories, symbols, customs and traditions, bonds of allegiance and belonging (Anthony Smith, 1998, 6). He criticizes Anderson by stressing that the nation 'is not only known and imagined: it is also deeply felt and acted out' (Anthony Smith, 1998, 137). In this view, modern nations are rooted in pre-modern cultures, but make use of those

11 See also Anthony Smith, (1996, 109); Anthony Smith (1998, Chapter 6).

ethnic and cultural traditions which best suit the 'people' which they seek to mobilize (Anthony Smith, 1998, 226).

Basing modern nations on pre-modern ethnicity is criticized by Malesevic (2011, 71) for assuming that ethnicity is 'a homogeneous, overly structured entity with clearly defined boundaries'. Far from being so, he defines ethnicity as a continuous 'internal and external processes of social categorization, institutionalization, self-definition and identification that shape social (and hence ethnic and national) reality' (Malesevic, 2011, 71). Therefore, ethnicity is the result of 'universal and often trans-historic and trans-spatial practices through which social actors invoke cultural difference to mobilize collective action by creating credible narratives of common descent' (Malesevic, 2011, 77). Moreover, ethnicity and nation do not always overlap, and some nation-states include more than one ethnic group.

The modern nation developed following creative political and cultural action which involved considerable structural transformations, including the development of modern bureaucracy, as well as of mass public education. These resulted in growing literacy and secularization (Malesevic, 2006, 308). Furthermore, Malesevic argues that although nationalism has become the dominant ideology of modernity, the implementation of nationalist ideology depends on its translation into 'operative ideology'. This involves the use of images, metaphors of kinship and group solidarity. Thus, operative ideology appeals to emotions and aims to tie the central values of modern ideologies (such as socialism, conservatism and liberalism), to the nation (Malesevic, 2006, 317-318).

Cubitt emphasizes the cultural fields which sustain and develop the sense of national identity. Cultural symbolic constituents are used within frameworks of narrative which convey the nation as a continuous existence in time and space. This includes representations of the past as common history and memory through the formation of a geography of remains and sites of heritage and commemoration, stressing the intimate connection between landscape and national character (Cubitt, 8-11). The centrality of cultural imagery is also stressed by Brubaker, who argues that 'groupness' is expressed by representations, which frame the group and its external boundaries. Such representations are characterized by different degrees of accessibility or 'ease of activation', as well by the ways in which they correspond with other key cultural representations (Brubaker, 80). Following this line of thought I suggest that modelsapes are one of the representational mechanisms used in order to materialize abstract notions of collective and national identity, giving them tangible spatial form and presence.

Modelscapes as Representations of National Space

As mentioned above, Anderson suggests that imagined communities are limited, 'because even the largest of them [...] has finite, if elastic, boundaries, beyond which lie other nations' (Anderson, 7). Nationality is imagined within borders, even when in reality the community is scattered or exiled. The abstract concept of nationalism is thus placed within a physical frame. I argue that in this context many modelscapes are used as tools to envisage the national territories and provide a tangible representation of the collective space and its boundaries.

An early example of this is the collection of models made for King Louis XIV (1638-1715) in France. This was a collection of models showing the military fortifications of border towns of the kingdom. It was begun in 1668 by Francois-Michel le Telier who was the Marquis de Louvois and minister of war to the French king. The models were needed since the 16th century when the invention of solid shot weaponry required mapping of the frontiers in order to plan military strategies. As cartography was still basic and did not provide the necessary amount of three-dimensional information, it was decided to provide the king with *plans en relief* (fig. 7).

The first model was made in by the king's military engineer, Sébastien Le Prestre de Vauban, who planned and constructed the fortifications of Dunkirk simultaneously with the miniature model that represented them. He went on to construct models of one hundred more fortified sites which he had planned. The collection allowed the king and his staff in Paris to view and comprehend the strategic facilities at the frontiers of the kingdom and their military situation within the surrounding topography (Dethier, 89).¹²

The collection was housed in the Palais des Tuileries, and was regularly updated with the new defensive constructions which resulted from military conquests, annexations and treaties. The collection presented the king with an overview of both existing as well as planned fortifications, and followed the advancement of the work at different sites. Dethier argues that the models also served as 'psychological weapons' since in spite of its confidential nature the collection was known to the rulers of other European countries. He suggests that the models were 'at the same time strategic and secret, symbolic and prestigious' (Dethier, 91).

The models were moved in 1710 to the Galerie du Bord-de-l'Eau at the Palais du Louvre, reflecting their significance. The collection continued to be enlarged and updated representing the changing French borders during

12 See also <http://www.museedesplansreliefs.culture.fr/>, accessed 13 December 2011.

Figure 7 Model of Mont Saint Michel, at the Musée des Plans-Reliefs, Paris



Photograph by Y. Padan

the first half of the eighteenth century, until 1759. Later it was neglected and many models were damaged when the collection was moved out of the Louvre in 1777 and placed at the Hotel des Invalides where it remains today. It was not until after the Revolution of 1789, and especially the Napoleonic period during the nineteenth century, that new models were built, representing Napoleon's maritime arsenals and newly-conquered areas. The production of this type of models ended in 1870 when the French abandoned the construction of fortified bastions. In addition, mapping had become more accurate and legible and models were no longer needed for decision making and strategic planning. Between 1668 and 1870, 260 models were constructed, representing 150 fortified sites. Built at a scale of 1:600 and including the countryside around the fortification in minute details, some of them are over 70 meters square (Dethier, 89-92).

The importance of the French military models for this study of models-capes lies in the fact that they represented the country's territorial identity in a tangible way. The collection was highly symbolic of the centralized power

of the French state (Dethier, 92). It represented the changing geographical frontiers and thus provided both a material illustration of the borders of French nationality as well as its defence relations with the neighbouring countries.

Furthermore, the forts were designed like ideal cities, characterized by calculated diagrammatic plans, mostly in perfect centralized geometric shapes. They are examples of built sites which are models in their own right, as seen in their strictly planned layouts. Hence the fortified sites seem to represent their models as much as the models provide representations of the forts.

Modelscapes as Signifiers of National Identity

Modelscapes have some common features with maps, which represent the imaginative 'nationalization' of territory, habitat and resources (Cubitt, 10). Maps are 'at least as much an image of the social order as they are measurements of the phenomenal world of objects' (Harley, 7). The national map represents the nation, by giving it a recognizable shape and size: 'To imagine a nation is to envision its geography. Borders, scenery, route ways, regions, a capital city, provincial towns, historic landmarks [...] help define a sovereign territory' (Daniels, 112).

Modelscapes are means to 'zoom in' on parts of the national map, and to examine in detail three dimensional features such as the shape of the topography, its relation to buildings, their heights and volumes, their facades and the spaces between them. All these features cannot be conveyed by the map, even when the actual information is charted, since the conventional signs are limited to the flat paper surface and lack the spatial dimension of the model. Hence contemporary modelscapes, like maps, are meaningful in the sense that they represent an argument about the physical objects to which they refer. Making a model, like making a map, involves different steps: 'selection, omission, simplification, classification, the creation of hierarchies, and symbolization – are all inherently rhetorical. In their intentions as much as in their application they signify human purpose' (Harley, 11).

Modelscapes are located where they can be visited by the local public as well as by tourists. The tourist experience of modelscapes is important because for the tourist these are miniature representations of an unknown country. Like the map, they signify the nationalization of a territory, but unlike the map they are places in their own right, often replacing a visit

to the actual sites represented. The tourist gaze 'is constructed through signs, and tourism involves the collection of signs' (Rojek and Urry, 3). Hence modelscapes provide an experience which involves 'a production of or participation in a sign relation between marker and site' (Culler 1981, 133). The search for signs of a foreign identity is a basic feature of tourism:

The tourist is interested in everything as a sign of itself [...]. All over the world the unsung armies of semioticians, the tourists, are fanning out in search of the signs of Frenchness, typical Italian behaviour, exemplary Oriental scenes, typical American thruways, traditional English pubs [...] Tourists persist in regarding these objects and practices as cultural signs. (Culler, 1981, 127-128)

An important example of the use of modelscapes as markers that signify both national as well as international identities are the International Expositions (Expos). These are locations for multiple national displays of economic and industrial achievements as well as national, socio-political and cultural trends. The Expos, also called World Fairs, are effectively temporary representations of the world as much as they represent individual distinct nationalities within it. The Expos last several months before they are dismantled, leaving behind isolated symbolic monuments such as the Crystal Palace in London, the Eiffel Tower in Paris, or the New York Panorama mentioned above. New and updated representations of participating nations and their mapping of the world are then rebuilt some years later in a different location.

The first in this tradition was the Great Exhibition in London which opened in 1851. It was followed by a series of universal expositions which took place in the Western world up to 1939, and displayed the world order as mapped by Western powers. The exhibitions were idealized platforms where cultures were represented visually, primarily through architecture (Celik, 11). The participating countries displayed models and replicas of existing buildings as well as new pavilions whose main function was not only to house exhibits but rather to act as signs and markers of nationality. Hence the models and buildings at the Expos created a microcosm that offered the visitors an imaginary touristic journey around the world (Celik, 1-3; Newton, 353-354). Instead of travelling around the world in order to experience and gaze upon different signs, tourists could see them all in one location (Urry, 136).

As argued by Greenhalgh, the exhibitions provided a tangible expression of governments' preoccupation in generating pride and naturalizing

politically determined geographical boundaries in order to consolidate different social and racial groups into single national units. National identity was achieved by convincing a population that nations were not abstract concepts, but things to be admired, loved and died for. The exhibitions gave a physical form to nationalist ideas in ways that could be interpreted by a wide cross-section of the population (Greenhalgh, 112-114).

The Paris Exposition in 1887 introduced the 'Rue des Nations' – a series of national pavilions, which initiated the use of architecture to represent cultures and nations as a standard feature of the expo genre (Winter, 2013b, 139). The pavilions epitomized the dissonance between nationalism and universalism, which depicted 'a family of nations' participating in a shared, modern civilization, by way of free international exchange (Ang, 104-105). The spatial layout of the world at the Expos concealed power relations and illustrated the ways that Europeans related to other cultures. As noted by Crinson, those inscribed differences were necessary for a sense of national and imperial identity. He defines the exposition as a 'symbolic machine' relating centre and periphery, nation and colony (Crinson, 233).

Celik argues that the layout of the exhibition grounds reflected the power relations among the exhibiting countries, with the host nation occupying the central site surrounded by other industrial powers, and colonies as well as non-Western countries in the periphery (Celik, 51). The pavilions in the periphery represented European paradigms and the colonial discourse embedded in the culture of the colonizing nations on one hand, and the debates regarding the redefinitions of local cultures of the colonized on the other (Celik, 11). For example, Hinsley points out that in the Chicago Exposition in 1893 'the central problem of the exposition as a psychological construction of white Americans was to determine distance and relative placement between peoples, physically and ideologically' (Hinsley, 397). The Paris Exposition of 1889 displayed some ethnographic villages, including their human inhabitants.

The presentation of people and goods from the colonies also played a role in legitimising the trade relations of empire, displaying producers and consumers as parts of a collective market of liberal international free trade (Winter, 2013a, 28). The nineteenth century Expos were instrumental in normalising the cultural economic relations of core-periphery within a capitalist world system. The display of distant 'exotic' foreign cultures also promoted the development of an international tourist industry and leisure culture based on mass mobility (Winter, 2013a, 31).

Within this visual context, a model of Jerusalem and the Holy Land was displayed at the 1904 St. Louis World's Fair. It combined the notion of

the religious pilgrim visiting the Holy Land, with the modern idea of the tourist going to the World Expo. Thus it represented an attempt to preserve religious sentiments and symbolism within a celebration of modernity and consumerism (Shamir, 95). In addition, it was to lend a 'respectable' air to the fair, which could balance the 'distasteful' or 'vulgar' types of entertainment offered in some of its other parts (Long, 47).

The 'Jerusalem Exhibit', as it was called, was an enormous life-size model of the Old City of Jerusalem, which included about three hundred buildings. Its central location and massive presence within the St. Louis World's Fair provided a reassuring experience of religious meaning and values within 'the bewilderingly varied and alarmingly fragmented humanity exhibited in St. Louis' (Shamir, 103). The 'Jerusalem Exhibit' could thus tie the new modern experience of the fair with the Protestant American worldview.

The notion of authenticity was central to the 'Jerusalem Exhibit'. In addition to building exact replicas of the original buildings, hundreds of Jerusalem 'native' residents were hired and brought to populate the model city. They stayed at the fair for the months of its duration as living exhibits, much like natives of the colonies which were exhibited in many early Expos. At the St. Louis World's Fair itself there were other 'live' exhibits, such as a 'Filipino village' and an 'Apache village', including their residents. The Jerusalem shown at the fair was an 'authentic' replica of the most important holy sites in which visitors could not only walk around, but also watch staged Gospel events and dramatizations of biblical stories. Moreover, it was also a model city, cleansed of clutter and suited for its American public (Long, 52).

As in the St. Louis World's Fair, the main theme which characterises Expos from the same period was the idea of progress, evident in the display of scientific and technological developments (Winter, 2013a, 35). Colonialist capitalism displayed the inferiority of pre-industrialised cultures versus the supremacy and modernity of the empire. Within the framework of progress, expo themes shifted from the nineteenth and early twentieth-century focus on colonial and imperial representation towards an emphasis on fine arts, modern life, and the future. Following the Second World War, emphasis shifted again to issues of humanity and the environment (Winter, 2013a, 33). The expos of the 1950s and 1960s focused on themes such as human scale and harmony with nature. By the 1990s the emphasis shifted towards issues of environmental sustainability, reflecting ambivalence and doubt about the legitimacy of the modernist project (Ang, 109).

Contemporary exhibitions still function as 'a technology of nationhood, providing narrative possibilities for the imagining of national cultures in indeed the national "brand"' (Urry, 2002, 136). However, Smits and Jansen

argue that contemporary exhibitions focus on representing national identity as a personal, individualized and emotional experience of identifying with the nation. The visitor is transformed into 'a temporarily constructed national subject, by the way of generalized common human emotional experience' (Smits and Jansen, 174). This approach is influenced by corporate and commercial advertising techniques used by designers and promoters that create the national pavilions (Smits and Jansen, 175).

The Shanghai Expo of 2010 is an example of a spatial organization of contemporary power relations and corporate influence: rather than the old imperial powers, it is China that is attaining a superpower status (Ang, 102-104). As noted by Ang, this expo was an opportunity for Chinese people to locate their country as a central player on the contemporary world stage, especially in economic terms. This was reflected in the centrality and notable presence of the Chinese pavilion, promoting and merging national image and economic interests (Ang, 104-105).

Following the current trend of sustainability, the Shanghai Exposition was themed 'Better City, Better Life', and aimed to raise awareness of the challenges faced by the increasing number of people around the globe which live in growing urban concentrations. Part of the expo was dedicated to an Urban Best Practice Area, which displayed cities rather than nations. However, Ang notes that this area was spatially marginalized by its location at a peripheral part of the expo site, away from the national pavilions, and thus received far less visitors. Furthermore, many city pavilions were centred around branding and promotion of tourism, rather than on sustainable urbanization or environmental innovation (Ang, 109).

Similarly, some national pavilions (among others India, Cambodia and Thailand) at the Shanghai Expo were also focused on branding and on the economic potential of tourism, thus choosing to retain their 'exotic' and 'traditional' – but also reductive and culturally determinist – framing in the context of colonialism. Themes of sustainability and heritage were therefore used in these pavilions to market national cultural industries within the global capitalist system (Winter, 2013b, 151-153).

Expos are related with modelscapes in several ways. They are representations of the world, emphasizing national identity and promoting cultural tourism in a globalized economy. They display ideological values for visual consumption by their visitors, using architecture as well as architectural replicas and models. They relate to Anderson's reading of imagined communities as modern constructs which emerged as a consequence of modern capitalism (Anderson, 48). The tradition of world expositions has enhanced the global diffusion of nationality and national markets as well as of

modelscape as tools for displaying national identity and global hierarchy using material objects.

Time and Enclosure

The modelscape's internal logic and narrative are based on its enclosure and detachment from external time and space. However, its relation with source referents ties the modelscape to objects that have an existence of their own in an exterior reality. This section explores how the modelscape functions as a taxonomic system, which arranges and classifies meaningful objects within a framework of time and space.

As in museums and collections, the question of taxonomy is related to the act of delimiting and isolating certain objects for the purpose of exhibition within a confined space. The creation of boundaries produces order and sense based on discontinuity and distance from the exterior world (Fabian, 52). Time as a significant dimension is eliminated and an underlying logical necessity is revealed: 'the Now and Then is absorbed by the Always of the rules of the game' (Fabian, 98-99).

The museum is a means of condensing time and enclosing it in a defined and limited space. Museums display an 'impulse toward simultaneity' by exhibiting objects from different periods together (Stewart, 162). Similarly, the modelscape has a time of its own, different from 'lived time', and coordinated with its inner logic.

The flexibility of time is clear at Bekonscot Model Village, discussed in the previous chapter. Different structures and buildings were added to Bekonscot throughout the years. However, at a certain moment it was decided to reverse the model time. A photo exhibition on site reveals that during the 1980s it was decided to 'return Bekonscot to its original 1930s styling, with later concrete edifices removed!' One photo shows the model of Luton Town Hall with its clock tower. The caption reads: 'This concrete monstrosity was demolished to make way for more aesthetically pleasing buildings!' Similarly, another caption explains that 'Diesels were virtually banished from the Bekonscot Model Railway in 1992'. This erasure and reversal of time makes it possible at Bekonscot Model Village to merge history into a 'forever England'.

The shrinking of scale shifts not only space but also the time relations of lived reality. Stewart argues that the time of the miniature works against external changes, instability and variability. She suggests that the miniature's 'use value' is transformed into the 'infinite time of reverie' (Stewart,

65). Regarding the collection, Baudrillard observes that its organization replaces time, because the collector's task is to resolve real time into a systematic dimension. This enables the collector to face the irreversibility of time. Birth and death are 'recycled' into a system of objects that allows to transcend reality by offering a controlled, cyclical mode of existence (Baudrillard, 1996, 95-96). Similarly, in the case of the modelscape, the visitor is absorbed into the interior model time which is disconnected from lived time. Furthermore, Barthes argues that when faced with the panoramic view, 'it is duration itself which becomes panoramic' (Barthes, 1997, 176). The modelscape is likewise detached from the present, and may represent the past or future as well as an unspecified 'panoramic' duration ('forever').

However, modelscapes as well as world expositions, raise the question to what extent the visitors, which have their own perspectival constructs, participate or challenge the world-picture presented to them. It is important to note Appadurai's extension of Anderson's concept from 'imagined communities' to 'imagined worlds' (Appadurai, 33), which mould and reshape concepts of centre-periphery in order to negotiate the complexities and ruptures between economic, cultural and political interests.

An important fact of the world we live in today is that many persons on the globe live in such imagined 'worlds' and not just in imagined communities, and thus are able to contest and sometimes even subvert the 'imagined world' of the official mind and of the entrepreneurial mentality that surround them. (Appadurai, 33)

As argued earlier, the definite and persuasive physicality of modelscapes tends to convince their viewers to participate in the model reality. Model representations of nations, world expositions, and other representational means such as different kinds of international spectacles, serve to domesticate differences (Appadurai, 39). Appadurai's concept of 'global cultural flow' therefore challenges the aim of states to monopolize ideas about nationhood (Appadurai, 39).