Title:

Views, use and reception of visualisations of development proposals impacting cultural heritage

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Visualisations of land-use projects have become an important part of the planning process. Using a survey of heritage professionals' attitudes towards visualisations as a starting point, this article addresses tensions between the expressed usefulness of visualisations and critical attitudes towards the lack of 'objectivity' of visual representation and the risk of manipulation for strategic purposes. Moving from the survey, the article discusses how visual representations of development proposals became part of a Norwegian public dispute over the expansion of a shopping centre in a historic town. Furthermore, our aim is to introduce a social semiotic approach for analysing visualisations at historic sites. Finally, we discuss some theoretical implications of negotiating visualisations, with emphasis on the recent debate about representational and non-representational theories in heritage studies.

Keywords: Visualisations; heritage; land-use planning; social semiotics; objectivity; non-representational theory

Introduction

There is a long tradition for using visualisations in land-use planning and impact assessments in both urban and rural areas. Indeed, images are strong policy instruments and often central in the process leading to decision-making in land-use planning. Thus, the use of visualisations deserves critical attention. Yet, visualisations are more often dealt with in relation to creativity and design, rather than heritage.[1] This article addresses the gap by firmly situating visualisation within the field of heritage studies.

Starting from a survey on heritage professionals' use of and attitudes towards visualisation, we examine why and how visualisations can be a significant part of heritage disputes. Inspired by 'social semiotics', we explore possible ways to 'read' visualisations and discuss how they and their materialisations have been read and received by heritage professionals and in newspaper debates.

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[1] For some exceptions, see e.g. Watson and Waterton (2010), Waterton and Watson (2014).

The article starts by situating the practice of visualisation before theorising visualisation, drawing on social semiotics and non-representational theory. This is followed by a brief description of the methods and sources used before the data is presented. Prior to discussing the results of the survey and the case study of Brotorvet, we briefly introduce the planning framework of Norway, drawing attention to how visualisations may be used as part of the planning process. Finally, the article is concluded by a discussion on the theoretical framing of visualisation.

Introducing visualisation

There has been an increased interest in cultural heritage and landscape in the last two decades in many European countries (e.g. Fairclough and Grau Møller 2008). This involves a shift in both policies and practices from protecting single monuments and sites to also considering their environmental setting (Council of Europe 2000, 2005, Australia ICOMOS Burra Charter 2013). As a result, we have witnessed an increased emphasis on visual assessments of historic sites and environments. Large-scale developments at or close to World Heritage Sites have, for example, led to discussions on how these developments may impact the integrity of the site, monument or cityscape. The visual impact of tall buildings on the skyline at the World Heritage Sites along the River Thames in London, the River Mersey in Liverpool, the River Elbe in Dresden and areas surrounding Cologne Cathedral, are but a few which have caused heated international debates (e.g. Prendergast and Rybaczuk 2004, Zacharias 2006, Tavernor 2007, Albert and Gaillard 2012, Rodwell 2014, Gaillard and Rodwell 2015). Similar concerns have been raised in rural, coastal and protected areas where developments such as open-cut mining, resorts and wind farms bring forth discussions on how to assess not only the environmental but also visual impact on heritage and landscape (e.g. Shang and Bishop 2000, Wood 2000, Bishop 2002, Thórhallsdóttir 2007, Torres Sibille et al. 2009, Rodrigues, Montañés, and Fueyo 2010, Jerpåsen and Larsen 2011).

With the increased development pressures in urban and rural areas alike, visualisation becomes an ever-important means of presenting the potential impact of development projects and informing decision-making. While assessing visual impact has been common practice within disciplines such as architecture, landscape planning and landscape architecture, it has yet to be fully scrutinised within the field of heritage studies (Masser 2006, McClean 2007, Jones 2010). Combining recent theoretical developments and debates on social semiotics and non- representational theory, our aim is to extend the discussion of visualisation by broadening the focus from the direct impact on historic sites and monuments, such as specific damage and obliteration, to examining how visualisations contribute to debates on how the sites and their surroundings are experienced.

Theorising visualisation

Put briefly, 'social semiotics' is dedicated to examining the repertoire of meaning potentials available to communicators. As not everything that can be realised by means of language can also be realised by means of images, images are useful for communicating messages hard to express in language (Kress and van Leeuwen 2006). When using images as empirical material, one therefore has to address whether the given images or visualisations duplicate the written description – for example, planning documents, zoning plans, and so forth – or whether visualisations have distinct meanings themselves. When the latter is the case, it is commonly referred to as 'multimodal' representations (Kress 2011), where a mode is considered a socially-shaped and culturally-given resource for meaning-making. A mode may therefore be images, writing, gestures, music, and so on. For the purpose of this paper, we primarily confine ourselves to images used for visualising plans for regenerating urban areas involving tangible cultural heritage. Furthermore, when text and images interchange, they can take on different roles (Machin 2007). For example, a text is probably not the best way for communicating that one works in a glamorous modernistic office building, but an image can

be used to impart this impression (Machin and Mayr 2012). However, as Kress (2010) notes, the unnoticed, nearly invisible, social and ideological effects of images are often unremarkable and banal. Thus, images and particularly visualisations of the yet-to-be-materialised are far from neutral or 'objective' representations. This can be further explored by discussing images' sites of meaning-making.

Images and sites of meaning making

Following Rose (2012) and Hansen and Machin (2013), we may distinguish between 'three sites at which the meanings of an image are made' (Rose 2012, 19) : (1) production, (2) image/content[2] and (3) audiences. At the (1) site of production, the technologies used are central. However, while some of the formal components in an image will be caused by the technologies used, others will depend on the social practice involved. At the (2) site of content, we draw on Machin (2013) and address the semiotic resources deployed in the process of abstraction such as deletion, addition, foregrounding, substitution and evaluation. As a visualisation cannot represent all the aspects of a case, it is important to ask what/who has been deleted – buildings, people, actions, settings, backgrounds, context, and so forth. Visualisations may correspondingly involve the addition of elements or strategic foregrounding where the creators of visualisations choose to communicate some aspects of a case at the expense of others. Moreover, visualisations always involve evaluations of the social practice that they concern. Visualisations are made according to goals, values and priorities, which is probably why they are received so ambivalently within heritage management. At the (3) site of the audience, a visual image is (re)negotiated; it may be accepted, reinterpreted, opposed or rejected.

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[2] Rose describes this as the site of the image itself, whereas Hansen and Machin describe it as the site of content. In the following, we use site of content.

The visual approach described above may be used to analyse how we 'read' semiotic representations – in this article understood as visualisations. However, as the case study will demonstrate, visualisations of development proposals allude to a less prominent feature of communication: its affective and emotional aspects. Thus, there is a need to address the relationship between semiotics, affect and emotion.

Semiotics, affect and emotion

The popularity of viewing heritage as a semiotic/discursive practice, may have paved the way for a countermovement, namely the incorporation of the recent developments in 'non-representational theories' (NRT) in heritage studies, affiliated with Thrift's (2008) work. This means a turn away from analyses of disembodied sign systems, towards more embodied meaning-making (Wetherell 2012, Tolia-Kelly , Waterton, and Watson 2017). Within Heritage Studies, this move has most commonly been examined in relation to museums and heritage sites, often exploring tourists' and visitors' responses to exhibitions and monuments of remembrance (e.g. Smith 2017, Golańska 2015, Ashley 2016, Savenije and de Bruijn 2017, Waterton and Watson 2014). Furthermore, as Yarker (2017, 238) notes, much of this literature has focused on the spectacular and traumatic (see also Smith and Campbell 2016, 449 for a similar observation). However, as several of the contributors in the recently-published *Heritage, affect and emotion* point out, affect may also be a lens to explore both the everyday and mundane – whether through practices or places (e.g. Mains 2017, Yarker 2017, Emerick 2017)). Visualisations, and more precisely visualisations of development projects in historic landscapes, follow this expansion, shedding light on the practices of creating visualisations and on responses to the visualised and materialised transformations of everyday places such as small towns. As such, visualisations and their responses can showcase how the semiotic and the emotive work in tandem, thereby providing a space to move away from the tendency to strictly divide representational and non-representational theories and perspectives on

heritage. Thus, visualisation serves as case to further explore how human affect is inextricably linked with meaning-making and with the semiotic/discursive, and that it is 'futile to try to pull them apart' Wetherell (2012, 20). Following this line of argument, we believe that the phrase 'more-than-representational' is preferable, as it does not reject the importance of semiotics, in spite of investigating *more* than the semiotic aspects of heritage. This opens up for the possibility to investigate the semiotic dimension of heritage, parallel to including embodied experience. We need a social context, not only a subjective one, in the same way as we cannot focus solely upon the material side of heritage (Waterton and Watson 2013). Hence, whilst we use the model of sites of meaning-making, we also draw attention to the affective side of visualisations when discussing our survey and the case studies.

Data and methods

The issue of visualisation has been approached using two primary sources: The first is a survey aimed at identifying heritage professionals' attitudes towards using visualisation in developing plans. The findings from the survey served as an inspiration to explore the reception and debates of visualisation as witnessed in an in-depth case: The expansion of Brotorvet shopping centre in the historic centre of Stathelle, Norway. Thus, in the second part of the article, the primary sources are the very images visualising the impact of planned development projects and their reception by heritage professionals and local interest groups as witnessed through the planning processes' main site of audience; the hearing process, followed by media coverage of the materialised visualisation. .

Survey

The survey was designed to gather information about heritage professionals' attitudes to visualisation and 3D analysis. The survey tool https://www.smartsurvey.co.uk/ was used to gather data and the survey was distributed via email in 2014. Consisting of closed questions,

free boxes followed each question in order for the respondents to expand and elaborate on their views. The survey was sent out to 308 heritage professionals in Norway working in the national (Directorate for Cultural Heritage/Sami Parliament), regional (county) and local (municipal) administrations. 135 respondents replied, representing a 43% response rate. The majority of the respondents (68%) were working in the regional administration and the vast majority had an archaeological background (see table 1). Over 80% of the respondents had more than six years of experience working in heritage management and over 80% held the equivalent of a master degree. Thus, vast majority of the respondents were experienced heritage professionals.

Table 1 near here.

Case study

Using an urban case, the second part illustrates the significance visualisations of development projects may have on heritage-listed cityscapes. The case study included on-site observations and document studies, in addition to the analysis of visualisations. Interviewing stakeholders could of course have brought additional insight into the case; however, rather than to look for the intentions behind a visualisation, we have – in this case – considered possible ways to 'read' visualisations as an important source of knowledge in its own right. Furthermore, the case study focuses on the site of audiences and thus reception of the development projects and their visualisations. However, before presenting the survey results and the case study, it is necessary to briefly describe the Norwegian planning legislation and process.

Visualisation, planning practices and heritage professionals' attitudes towards visualisations in Norway

There are two central acts which regulate heritage management in Norway: the Cultural Heritage Act (Ministry of Environment 1978) and the Planning and Building Act (Ministry of

Local Government and Modernisation 2008). The two acts include statutory provisions where

visualisation becomes a particularly relevant tool for decision-making: The Cultural Heritage

Act (§3) prohibits the disturbance (including visual) of protected monuments and sites.

Broader in scope, the Planning and Building Act complements the Cultural Heritage Act

through the municipalities' establishment of municipal masterplans. The municipal master

plan includes a 'land-use element' – essentially 'a map with written provisions for the use,

protection and design of areas and physical surroundings in the whole municipality' (Ministry

of Local Government and Modernisation 2017). One of the elements indicated on the maps

are so-called 'zones requiring special consideration' (§11, section 8). The protection of the

natural or cultural environment (through e.g. the Cultural Heritage Act) falls under this zoning

category (§11, section 8c). Development projects within or close to a zone requiring special

consideration entails the proposal, public hearing, and then passing of a zoning plan by the

elected municipal council before major construction projects can go ahead. Visualisations

serve as integral parts of these zoning plans, whether produced by the private party

(developer) or the municipality, enabling both the public and political decision-makers to gain

a sense of how a proposal may alter an area.

The close relationship between visualisations and the two acts is indeed reflected in

the survey: the statutory provisions that most often trigger the use of visualisations are the

Planning and Building Act's §11-8, §12-6, §12-7 (85%) and the Cultural Heritage Act's §3

(65%, Tables 2 and 3).

Tables 2 and 3 near here.

The survey also uncovered that a majority (66%) use visualisations as part of their job more

than 10 times a year. As the use of visual analysis is an important management tool among

heritage professionals in Norway, the survey was also designed to gather information about

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professionals' attitudes towards using visualisation. As table 4 indicates, there is an unambiguous and positive attitude towards the significance of visualisation both as a central method to promote well-grounded points of view and for disseminating such points of view to decision-makers and the public.

<mark>Table 4 near here.</mark>

However, while the majority of the respondents have a positive attitude towards using visualisations, the fact that visual background material used for the analysis come from different sources – partly provided or ordered from the developer and partly produced by heritage professionals – provides a source of concern. Thus, the sites of production and content and their impact on the site of audience are negotiated through practice: While the fact that developers can produce and provide visualisations is fully in line with the Planning and Building Act, half of the respondents noted that they produce visualisations themselves.[3] When asked about the reasons for doing it themselves, 71% of the respondents argued that they do so in order to ensure the best informational basis for carrying out scientifically-sound assessments, whereas others argued they did so in order to have control over the visualisation process (24.5%). This may indicate that the respondents consider neutrality important to escape emotional and biased visualisations. The uneasiness with the accuracy of visualisations was further reflected in the free comment boxes, where one of the respondents argued that it is 'easy to manipulate visualisations in order to sell the project' and that 'visualisations can never be good enough'. The respondents therefore allude to the inherent ambiguity of visualisations and the challenges they bring to the site of audience: As an audience, heritage professionals are themselves critical towards visualisations produced by or for developers. Furthermore, visualisations are seen as crucial when presenting proposals to the decision-

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[3] The fact that most of the respondents are provided with visualisations or order them for the developer, is partly a reflection of the legal framework, but is also a reflection of a bias in the data set as most respondents work in the county administration rather than municipalities.

makers (in Norway this is first and foremost municipal politicians) and when decisions are presented to the public (table 3). Yet, as different stakeholders with different agendas produce the visualisations, visualisations may not always work in the service of heritage protection. This tension and the affective impact of the visualisations are further explored in the case study.

Attitudes towards accuracy and objectivity were also explored in relation to 3D modelling, where over 40% responded negatively to the statement '3D visualisations provide more objective visualisations than other forms of visualisations'. Several of the respondents elaborated on this in the free comments: One wrote that 'a representation cannot be objective'. Another argued that 'the concept "objectivity" is problematical'. A third claimed that visualisations are about the opposite of objectivity and that they are easy to manipulate in one direction or another. As we can see, the respondents are rather ambivalent towards the use of visualisations and their 'objectivity'. This may be a reflection of the fact that the notion of 'objectivity' lacks a clear and concise meaning. However, we may distinguish between (at least) two interpretations of 'objectivity': (1) objectivity as value-neutral or value-free investigations; and (2) objectivity in the search for 'true' knowledge (Sayer 2000). In the social sciences and the humanities, we are often told that we need to confine ourselves to facts and avoid values, because they may introduce a damaging bias into our enquiries (Toulmin 2001). This criticism may be relevant; however, in many cases it is provoked by the conflation or confusion of the two objectivities mentioned above. People representing contrasting political values, for example, can still agree on the factual outcome of an election, regardless of whether they are happy about it or not (Sayer 2000). Thus, maximizing objectivity is not the same as maximizing neutrality, as conventional understandings have often assumed (Harding 1995, 332-334). Therefore, we should not aspire to create value-free visualisations of heritage. Rather, we should ask how visualisations could work to inculcate

certain views at the expense of others. This is what we will now explore through the case study.

Case presentation of Stathelle and its development proposals

Our examples concern the visualisation of two development proposals in a listed historic town centre, which first and foremost impacts the view of the town centre, Stathelle, as experienced from a distance. Stathelle is located in southeast Norway in Telemark County (figure 1). With a population of about 8000 citizens, it is a rather small town, even in a Norwegian context; however, it was an important place for trade and industry in the 1800s thanks to Stathelle's status as a seaport. A townscape with narrow streets and small wooden houses ascending the hillside behind the harbour is preserved. Consequently, the Directorate for Cultural Heritage lists Stathelle as an early nineteenth-century example of a cultural historic environment of national significance. However, the status was jeopardized with the proposal to alter the zoning plan and extending the nearly 30-year-old Brotorvet shopping centre from 15 000 to 35 000 square metres, dramatically altering the picturesque seaward view of Stathelle (Figure 2).

Figure 1 near here

Figure 2 near here.

Following the first discussion on the revision of the zoning plan for Stathelle at the municipal council's technical committee in June 2009, the zoning plan was sent to public hearing (Bamble Municipality 2010). Serving as a site of audience, the hearing process represented a means to comment on the sites of production and content: Prior to the hearing process, the architect's office produced a visualisation of the old and the new extended façades (Figure 3), designed with five different brick types and two glass walls in an attempt to soften the contrast with the historical city (Joelson 2013). Following the hearing process, from mid-July

and mid-September 2009, 19 interested parties made submissions about the plan; five from public offices, one from another municipal council committee and the remaining from private persons. From the heritage sector, it was only Telemark County Administration (TCA) that submitted a statement. TCA noted there was a need to take the listed buildings into account, but highlighted that such a grand construction would not easily blend in with the existing townscape. Thus, TCA commended the choice of contrasting modern materials of brick and glass and argued it would be more appealing than the current shopping centre (Bamble Municipality 2010). As such, the response is measured, neutral and non-emotional in tone, highlighting how the proposal complies with principles for reading the different historical layers of the city. This is in accordance with the view that buildings should be built in the architectural style of their time, in order to be readable, and contrasts between the old and the new are therefore accepted (Christensen 2011, 229).

The main concern put forward by TCA, along with the municipal council committee for business and the environment, and several private persons, was the height of the centre and the fact that it would dominate the landscape (Bamble Municipality 2010). Thus, the site of content, the very visualisation of the development proposal, provoked opposition and negative responses from a varied audience, even if there was no clear rejection through a formal objection. Within the city, there were, however, more visibly, emotive, yet also semiotic, signs of opposition as illustrated by the banner in figure 4 declaring: Save our heritage!

Figure 4 near here.

However, the municipal administration met the height concern with a flat rejection as the building heights complied with the previous zoning plan from 1982, and Bamble municipal

council adopted the zoning plan for Brotorvet on 4 February 2010 (Bamble Municipality 2010).

While the visualisations of the transformations had raised concerns during the hearing process, only minor concerns had been raised by the TCA, and the national office, the Directorate for Cultural Heritage, had not responded to the hearing at all. Rather, its reaction came once the shopping centre was completed, exposing an unusually colourful affective response to its materialisation: The Director-General of the Directorate for Cultural Heritage, Jørn Holme, threatened to remove Stathelle from the list of significant historical cities and towns and termed Brotorvet 'a gigantic Berlin Wall that impounds the historical city' (Øvrebø and Ekeli 2012). Holme further contended that politicians must learn from this mistake in order to prevent similar buildings in the future. Morten Ragnøy Ednes, project manager at the Foundation for Design and Architecture in Norway, agreed with Holme that the project had failed; however, he argued that it was political will, not mistakes, that were responsible for the project (Ednes 2013). In fact, Ednes claimed that he and his colleagues at the Foundation for Design and Architecture thought the photo of the completed Brotorvet shopping centre extension had been manipulated when they saw it the first time. They 'could not imagine that it was possible to build like this in the real world' (Ednes 2013, 4). This is a significant statement, which would normally imply that the visualisation process prior to the construction of the shopping centre differed from the final result; however, this is not the case with Brotorvet. The main aesthetic dispute actually took place *after* the shopping centre was completed, in spite of the fact that the visualisation resembled the final result.

Since its completion, further development plans for the area around Brotorvet have been put forward. The architectural firm Gjestland has visualised an apartment block – Stathelle Panorama – planned to be built right in front of the shopping centre (figure 5).

This new project is said to mitigate the contrast between Brotorvet and the historical city, as it has nostalgic saddle roofs like the listed buildings below. The proposal has been well received locally (Eidbo-Hansen 2017). At present the development is purely conceptual, however, as the required alterations to the existing zoning plans have yet to be put forward, and no formal response from the heritage sector has been given. However, based on the argument put forward in the case of Brotorvet, one might expect some debate as the visualisation runs contrary to preference towards a readily readable contrast between old and new (Christensen 2011, 229-233).

Concluding discussion

Returning to Rose's (2012) site of production, the visualisations used at Stathelle are of rather ordinary 2D quality, without that undermining their meaning and possible effect. At the site of content, the first visualisation foregrounds the principles of separating old and new. Where the old façade had a whitish colour, blending discreetly with the historical city below, the new façade has the effect of contrasting with the slope of the white wooden houses. Made from quite a distance, the inclusion of the fjord creates a sense of detachment from the city centre. In the foreground of the photo there are two twigs connoting nature rather than urbanity. The picture is taken in daytime on a cloudy day, something that reduces contrasts. The producer could have chosen to present a night-time view or chosen to take the picture on a sunny day, but did not. The latter could potentially have visualised if (and how) the shopping centre would have thrown shadows on the historical environment. Furthermore, the city centre is shown about at the same level as us, something that may invoke a metaphorical association of balance (Machin 2007).

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On the other hand, the new Brotorvet shopping centre visualised after its materialisation showcases the very opposite: How the shopping centre has rather substituted the historical city centre both metaphorically and literally. Compared to the developer's visualisation, the picture taken by the Directorate for Cultural Heritage (figure 2) effectively communicates the shopping centre as an eyesore in the historic centre triggering strong emotive responses by heritage professionals. This is achieved by both the close-up low angle perspective, and by the fact that it is of a higher quality according to naturalistic standards. The sense of balance in the visualisation is replaced with a view that shows the shopping centre's size against the small wooden houses below. This is a more dramatic view than the original visualisation carried out with other semiotic resources. We can also see two houses that have actually been 'embraced' by the façade. In the visualisation, it looks as if they are detached and placed in front of the shopping centre. As such, both the visualisation and the photo after the extension allude to the issues of objectivities raised in the survey. The choices producers make at the site of the content actively create a context for disputes negotiated at the site of the audience.

Rose (2012) makes the crucial point that the *social* is perhaps the most important modality for understanding the audiencing of images, since this is a 'question of the different social practices that structure the viewing of particular images in particular places' (Rose 2012, 31). The site of audience therefore highlights the contentious nature of visualisations. In the case of Brotorvet, heritage professionals were rather elusive, if measured, during the formal site of audience of the planning process commending the clear separation between new and old, only raising concerns over the heights. However, other audiences took the debate further during the planning process: One debater even made his own 3D-model to visualise how he arguably would lose four-and-a-half hours of evening sun (Eidbo-Hansen 2009). Once completed, however, the materialised visualisation catered for strong emotive responses from

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the general public: One local politician is cited in the media as saying that 'the vandalism taking place at Brotorvet is shocking [and that] the historic ignorance is a death sentence' as far as cultural heritage is concerned (Miland 2011, 56). An architect claimed that Brotorvet is an 'assault' on the surroundings of wooden houses worthy of preservation (Dale 2011). A citizen complained that the night-view of Brotorvet – with its two large, illuminated windows, which were not visualised – is 'environmental pollution of the worst kind' (Ekornrød 2012, 16). We may also claim that the picture taken by the Directorate for Cultural Heritage (figure 2) is a negative evaluation by showing how the visual influence of the shopping centre 'really' is. Thus, the case adds to Mains' (2017) and Emerick's (2017) observations that development proposals and their materialisations in wider historic settings and landscapes open affective spaces. Furthermore, the case of Brotorvet indicates this space is not restricted to residents, visitors or politicians. Rather, it becomes a space where the measured, rational and legally-sound voice of the professional can temporarily be replaced by the passionate heritage professional using bold and colourful metaphors to convey their messages.

However, in the case of Brotorvet, the opposition came at the wrong site of audience, as it were, to have an impact and was not sufficient to prevent Brotorvet from being expanded. Thus, visualisations served their producers well in the sense that the project was realised. If the public, and indeed a wider group of heritage professionals, had been involved at an earlier stage and during the main site of audience for planning proposals, the hearing, one might perhaps have been able to reduce the negative impacts on the perceptions of those who use the historical urban space (Tweed and Sutherland 2007). However, the municipal council, backed by the municipal administration, succeeded in persuading that the scale would not exceed an already endorsed zoning plan.

As mentioned, a new apartment block in front of Brotorvet has been put forward as a means to mitigate the contrast between the façade and the historical city below. The visualisation looks like a pencil sketch containing no colours, which reduces contrast and directs attention to *form* – particularly the saddle roofs. The background behind Brotorvet is replaced with a white colour. This semiotic choice directs our attention to the formal elements, rather than texture and depth. A lack of background generally serves to decontextualize visualisations, and make them more symbolic than documentary. The visualisation has low modality; it is 'less than real' according to the naturalistic standards. Low modality is often used to connote timelessness, something ancient etc. (Machin 2007, 159). As such, the visualisation is able to re-create a sense of historical continuity that the extension of Brotorvet shopping centre disrupted. The drawing is nostalgic, harmless and has a somewhat naïve quality attached to itself – maybe what was needed not to provoke emotional harm and restore a sense of an earlier everyday affective atmosphere in Stathelle.

The case of Brotorvet also highlights how semiotic and emotive resources are at work at the same time. As such, Waterton and Watson (2014) move towards more-than-representational theories might be fruitful as the developments are *integrated* into the semiotic/discursive practices, which are part of constructing heritage as an object of study (see Smith and Campbell 2016). When dealing with visualisations of development projects, they are to be understood as semiotic representations of plans not yet materialised. Consequently, semiotics is a significant part of development projects as visualisations may turn into 'new material realities' (Fairclough 2006, 30). Semiotics are often part of disputes before a project reaches 'the point of no return', that is, the phase where changes can only be made at extra cost, and the project achieves a kind of 'resistant materiality' (Iedema 2000). During the process towards completion, we may say that Brotorvet shopping centre was 're-semiotisised' from a visual representation to a materialised object (Iedema 2003). The

expansion started as a semiotic visualisation; however, it did not provoke enough affect, emotion or negative feelings, to prevent its realisation. The situation altered significantly after the project was finalised, illustrated by negative evaluations like 'death sentence', 'assault', 'severely damaged' etc. – but the phenomenological and psychological involvement came too late to be able to stop the enterprise. When we walked around and observed the visual impact in Stathelle viewed from below – the same angle as the photograph taken by the Directorate for Cultural Heritage (Figure 2) – we definitely *felt* the overwhelming scale on our bodies. Such a feeling is not provoked by looking at the visual representation from a distance (Figure 3). Semiotics, then, may contribute to concealing certain elements of development plans and should thus be taken seriously. Therefore, proponents of non- representational theories (NRT) should not dismiss the relevance of semiotics; rather, we should ask how phenomena can be read *simultaneously* as somatic, subjective, social, historical etc. Thus, moving Heritage Studies further, it may be useful to treat affect and emotions as complex, relational, semiotic and pre-discursive. Emotions are not an object inside the self. We need less individualistic accounts including relation to others, responses to a situation and to the world (Wetherell 2012, 21) – in Stathelle and elsewhere.

Acknowledgements

Figures

Figure 1. Map showing the geographical position of the case study areas. Illustration: Magnar Mojaren Gran, NTNU University Museum

Figure 2. The historical city centre in Stathelle with Brotorvet shopping centre on the top of the slope. Photo: Kristin Bakken, The Directorate for Cultural Heritage.

Figure 3. Photo of Brotorvet shopping centre before the expansion (top) and a visualisation of the planned new façade (bottom). Photo: Arkitektkontoret Kjetil Jensen AS.

Figure 4. Photo of banner declaring "Save our heritage". Photo: Gro Jerpåsen.

Figure 5. Visualisation of planned development project in front of Brotorvet shopping centre. Photo: Gjestland Arkitektkontor.

Tables

Table 1. Statuary provisions that trigger the use of visual studies. N=135.

Table 2. The degree to which visual studies are used on different types of plan. N=135.

Table 3. Degrees to which respondents agree to statements about visual analysis. N=135.

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