

# WATERFRONT DEVELOPMENT WITH WEB MEDIATION

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The term ‘unreal estate’ is coined to refer to online mediations of projected and planned urban developments, especially luxury domestic residency. A related website is studied as a mediation of co-ordinated artifacts and assembled persuasion. The site is also examined as a mediating artifact through which multiple representations are co-articulated. Taking the form of a visual essay, we argue that attention is needed to mediation in design research.

## INTRODUCTION

### ARTICULATING DIGITAL DESIGNS

Project based work and the management of large urban development projects increasingly requires co-ordination of multiple actors responsible for specified parts of a wider design process. This co-ordination also extends to the modes of representation involved in and across projects and their intersections in presentations and portfolios. In this paper we focus on the articulation of such activities as they appear on the World Wide Web in the mediation of a new waterfront development project in Oslo, Norway.

The core website, *Tjuvholmen*, is designed principally for potential purchasers of exclusive domestic properties at the waterfront in central Oslo. As online branding, the site employs a variety of visual and verbal representations to persuade visitors of its appeal



Figure 1. Digital model of *Tjuvholmen* development, Oslo Norway, showing main buildings, layout and current building in progress, no 2. Image from [www.tjuvholmen.com](http://www.tjuvholmen.com)

and trustworthiness. In the site we also see the inscription of digital tools in mediational moves designed to engage users in the location of their future homes. Further, the site offers the wider public a carefully marketed view of part of the wider development of the central city shoreline called *Fjordbyen – the Fjordcity*.

We concentrate on design mediation. We develop a bi-directional term, *co-ordinating artifacts*, to refer to the professional design representations and their relations via web based mediation. It is the co-articulation of these representations that users meet online and access as part of a multidisciplinary construction. This construction is designed to involve users in processing a diversity of views in order to build up a coherent image of a wider context of dwelling.

## A SOCIO-CULTURAL PERSPECTIVE ON DESIGN

In our critical, interdisciplinary textual analysis we draw on core concepts from applied discourse studies and social semiotics and from contemporary debates and examples in urbanism and collaborative work in architecture. We adopt a socio-cultural perspective on design that sees design as an activity that is situated in contexts of expertise and development. It is linked to the application of tools and the realisation of cultural signs and significations to which we contribute, reflexively, as designers, users, educators and researchers, and consumers.

Where design reaches for solutions to known problems and needs as well as generating new concepts, in digital design domains the notion of mediation is central in these processes. It is through artifacts - digitally created, stored, circulated, used and critiqued, and their mixes with the non-digital - that meaning making is realised and effected. This occurs in the historical and contemporary contexts within which an artifact is framed and shaped. Digital representations of design artifacts, both as products and activities, may now be seen as intermediaries in the translation between actual physical worlds and imagined, projected ones, as well as the dynamics between them (e.g. Dave 2005).

We also refer to the alignment of actors and the translation of interests as framed by Actor Network Theory. By way of visual illustrations and close reference to websites we show how such discourses are co-present and are woven together to create an overall persuasive projection of unbuilt property. We demonstrate how a range of mediational forms, digital tools and related professional work practices are inscribed within representations. As digital media design, their re/semblances are used to create, concatenate and circulate projected residences online. In addition to the analysis of representational and rhetorical techniques used to persuade, especially visual ones (Kostelnick & Hasset 2003), we discuss ways in which potential purchasers and users are given some room to participate. We close the paper by referring to an example from Copenhagen and its development of waterfront domestic properties.

From a Communication Design view, we argue that there is a need for attention to the design of digital mediation in unpacking how realisations of planned and proposed properties move between discourse and text types in urban planning, architecture, online branding and public access and participation.

## PLANS FOR IMAGINED RESIDENCY

### FROM HOME TO HOMEPAGE

Housing prices have soared in many urban areas in the developed world in recent years. Along with this market capitalisation, the mediation of domestic property for both buyers and sellers is now also created with digital tools and communicated via the Web. Bids too are now taken on mobile phones and processed via SMS. Real estate is no longer presented only through print media or via visits to site offices. It is also constructed, presented, traded and exchanged online. Location now also refers to the representations of properties online via a range of digital media, especially property portals and project development sites (see Figure 2). Few analyses, and fewer critical ones, look at how web design is being floated as a 'natural' means of the circulation and exchange of domestic dwelling.



Figure 2. Two screenshots from the Norwegian property portal [www.finn.no](http://www.finn.no), showing (left) a cutaway floor plan with textured flooring and (right) a 3D visualisation of a projected apartment with clipart designer furniture and sunny interior overlooking the city.

### UNREAL ESTATE

In order to address the ways in which digital mediation is used to construct and market such properties we have coined the term *unreal estate*. We use unreal estate to refer to the mediation of planned, proposed or projected properties that are realised via digital representations that include a variety of design processes, tools and co-ordination. Unlike earlier cultural studies writing on simulation, or other architecturally framed ones on designing cyberspace as space (e.g. Kalay & Marx 2006), however, unreal estate refers not to the erasure of the real but to the digital realisation of a future, built environment located in a specific social, economic and public cultural setting. We see this in Figure 1 where a former waterfront and warehouse peninsula area is shown as digitally 'built' in a 3D model as part of the online mediation of the development called *Tjuvholmen*. Architectural design processes have been influenced by changing digital technologies, such as connections to

pervasive computing (McCullough 2004); digital tools have been central to conceptual projects into imagining potential urban re-design (Gullart 2004, Zardini 2005). Concerning media, Bolter and Grusin (1999) argue that representations that are clearly digital constructions may be understood in terms of hypermediacy.

## ISSUES & APPROACHES

### WEB ADVERTISING

Despite the growth of the web as a medium and the expansion of commerce online, and the body of studies of advertising (e.g. Williamson 1994), there have been relatively few detailed textual analyses of the communication design and social semiotics of websites. Countless manuals now exist on designing websites. Further, seldom do we see examinations of digital and multimodal mediation of advertising on the web. However, many project-based websites and the sites of larger advertisers are built around a communication design that aims to co-ordinate and integrate a variety of representations. These are representations that are designed to function informationally and persuasively. They are instances of digital communication spaces that are scalar yet cultural (e.g. Couldry & McCarthy 2004).

Websites are seldom analysed as artifacts for meaning making. Mediational aspects in websites are not adequately discussed in contrast to a focus either on information design and usability or graphic design and style (e.g. Helfand 2001). Engholm (2002) argued for categorisation and analysis of websites in relation to graphical style. Engholm and Salamon (2005) motivated for a connection between a stylistic and an anthropological approach to users' preferences concerning different representations. In a Communication Design perspective to web design, style, information structures, visualisations, text types and navigation devices are seen as elements of mediation (Morrison 2007 forthcoming). The properties and affordances of digital materials need to be understood and related to their practices (Dearden 2005). It is through their relations and co-articulation that an overall mediation is achieved (Morrison & Skjulstad 2006). This is apparent in online persuasive discourse of which advertising is a major part. Web-based adverts encompass a range of conventions: references to other digital media that they use to give texture and allure to items or processes being marketed and exchanged. Media rich articulations are now a characteristic of the activity of persuasion in online

adverts. Such adverts may now also take the form of complex websites with multiple mediations therein and not simply 'pages'. As we will show, this also extends to the promotion of domestic properties for public perusal and purchase in which a diversity of mediations, especially visual ones, are assembled and connected. With respect to shared work practices in architecture,

Schmidt and Wagner (2004) have shown that a variety of professional and specialist illustrations and texts are co-ordinated in complex chains of collaboration (see also Kalay 2006). Multiple views over time need to be co-ordinated. Batara et al. (2004) describe how complex, linked work in CAD architectural design is constrained by unidirectional mappings. They designed a tool that enables designers to move flexibly between different design representations. In the context of large web portfolio and project sites, it is in the mediations online that the connection between parts of different design professional representations are shaped. It is this level that concerns us: the co-ordination of different digital representations within a project site. However, users may need to engage with these representations imaginatively when they refer to objects and contexts that are yet to be constructed as part of the built environment.

### OUR APPROACH

At a macro level, we study co-ordinating artifacts by connecting concepts and approaches from Actor Network Theory (ANT) and from a broad view on Activity Theory. These ontologically different approaches are beginning to be cross-filtered. They cannot alone account for the medley of activities and assemblages that are apparent in mediations of unreal estate.

In ANT, where actants include the human and the machinic, what is important is that a meaning is generated through processes of translation as different actants pass through different boundary zones (Starr 1989, Shiga 2006)). Latour has encouraged us to 'follow the actors' so that we can trace the negotiations between participants and the co-ordination of their discourses (e.g. Latour 2005a). He develops the concept of assemblies to account for the gathering of actors and alignment to point to their affinities and political weightings (Latour 2005b). Concerning web design this is very much to do with the articulation via different media. In understanding technologies, Latour (2005b:240) extends his earlier notion of following between human and machinic actants to include mediators who speak thus:

We are beings out there that gather and assemble the collective just as extensively as what you have called so far the social, limiting yourself to only one standardized version of the assemblages: if you want to follow the actors themselves, you have to follow us as well.

ANT has been applied in Science Technology Studies but there has been little in the way of closer analysis of design processes involving digital technologies and mediations (Stuedahl et al. 2004, Stuedahl & Smørdal 2007 forthcoming). ANT offers a means of examining the co-ordination of artifacts but does not address the level of digital mediation much.

We see a need to move closer to the ways in which mediation is enacted. Mediation is central in studies in social semiotics and theories of situated meaning making (Wertsch 1991) and cultural historical activity. Mediation is often studied in the form of language-based meaning making. Bakhtin (e.g. 1986) proposed 'speech genres' or social and discursive conventions as part of mediated meaning making. His notion of polyvocality (various speaking positions, modes of address in texts) is useful in conceptualising websites as multiply articulated in multiple media. Websites can be seen as artifacts of co-ordination. In web communication, though, we encounter different modes of mediation and their metaphoric and metonymic significations in their design as artifacts and in their use as activity. Websites also refer to projected designs, ones that are imagined and imaginary. Wartofsky (1979) saw the embedded artifacts of such imaginaries as inflected with historical contexts. He referred to the tertiary artifact as offering a means to go beyond the material present. As we show, the mediation of unreal estate plays on projection of the new and the desirous.

## METHODS

In addition to applying textual analysis as a method, shown through the format of a visual essay, over several years we have followed the online mediation of unbuilt properties. First, we have attended project presentations and traced projects as they have evolved from promotions to fully formed advertisements. Second, we have examined property, architecture and urbanism websites as part of our research into interaction and communication design about the built and the marketed. Third, we have experienced these sites as consumers, as potential buyers and as users. In the past year, one of us has gone through the process of finding and buying an apartment and currently one of us is involved in finding a new one.

## TJUVHOLMEN

The building is an assembly of assemblages, pluralistically constituted, genuinely additive, marked by manyness. The building is a 'multiverse'. (Yaneva 2005:535)

## CHANGING URBAN DESIGNS

As part of the changing social and economic character of the capital city of Norway, the waterfront area of Oslo has undergone many changes. Similar to urban regeneration projects in many harbour cities especially in the 1980s, such as Genoa, in Oslo an earlier warehouse and dock area called *Aker Brygge* was extensively redeveloped to create a mixed area of luxury apartments, offices, services and public spaces. This development has been successful; it has brought considerable focus to the waterfront as a vibrant public and aesthetic feature of the metropolitan core. It has also contributed to a larger plan for the regeneration and development of the coastline of much of the city, one that now includes for example a new opera complex that is already well underway.

In contrast to this development of a coastal 'belt' of apartments, businesses, public spaces and services, in 2007 *Tjuvholmen* is a small peninsula that extends southwards into the fiord from the existing *Aker Brygge* complex. Construction is already underway: an earlier warehouse and container facility, including the site of the National School of Dance and Opera, has been demolished to make way for a staged building process. This process includes the extension of the landmass as well as its reshaping (as will be shown below). It is this unreal estate, a projection of a future luxury area but with public access, that the *Tjuvholmen* website embodies.

*Tjuvholmen* has had a varied history as a section of the website summarises: it's name originates in it being a small island used by thieves (*tjuv*) in the 1700s to being an object of desire for a royal harbour in the first half of the 19th century. In 1914 it was acquired by the municipality of Oslo and developed, including landfill extensions that extended it by 300%. The area was procured by a shipping company in 1959 and then in 1982 taken over by a mechanical industrial company.

The current development takes place under the aegis of a joint company *Tjuvholmen*, an amalgamation of the Selvaag and the Aspelin Ramm Groups. The development is a clear example of urban gentrification that is constructed through commercial partnerships through which the original island of thieves becomes a locale for luxury residence and selected commerce.



Figure 3: Start screen for *Tjuvholmen* with multiple points of entry and perspectives. Main categories: (top bar) Municipality and area, Apartments, Activities and shopping, Building process. The main image points to 'Find your home'. The three thumbnails point to: Great shopping, Have an apartment again, & A new town by the sea. The right hand column marks links by Service and activities, Follow the building process, and Recent news.

#### STARTSCREEN AS CULTURAL CONSTRUCTION

The startscreen for *Tjuvholmen* (Figure 3) paraphrases those of many larger web portals and multi-level concerns. It opens with a marked visual identity based around a context of dwelling that values outdoor life and leisure as much as a central urban setting. The main image space rotates between three photographs: a luxury interior, the image of the fiord from a power boat and a man and woman, possibly a retired couple. The image seen here also shows a Norwegian flag, typically flown at summerhouses and on boats and not necessarily associated with right wing nationalism. Here the boat and flag resonate the outdoor life so treasured and protected as part of the Nordic societies.

The presentation takes identification a step further in the three subsidiary images with accompanying texts. From the left these refer to opportunities for shopping and eating in the waterfront, the central image points to selecting an apartment, while the one to the right provides more contextual information about the development and surrounds. Moving further to the right and in the highlighted area there is an additional section and image that offers access to the building process as well as a 3D movie rendition that can be seen from three different points of view, including an aerial one. This is accompanied below with a section on latest

news. Clearly the project site borrows conventions from online news as well as from other genres of web mediation especially the portal and project sites with layers of information and main categories. As the site refers to a planned project and stages of its realisation it is the wider context of habitation and a sense of potential lifestyle that is projected.

On searching for an apartment - an activity that now requires online savvy as much as it once meant a relationship with a motivated and sympathetic estate agent – and clicking on the related link, a birds eye view of the development appears. Illustratively, this differs somewhat in style, weighting and labelling from the startscreen. It thereby reveals the co-ordination of different parties to the overall development and design of the project.

The mediation of urban and real estate developers' views can be seen perhaps most fully in sites that market planned properties being built as part of a new waterfront development in the heart of Oslo. Connected to an earlier development, *Aker Brygge*, a mix of commercial and residential properties in old warehouses and 1980s aesthetics, the new development is on a small peninsula that stretches right into the heart of the fiord and its commercial and recreational traffic.

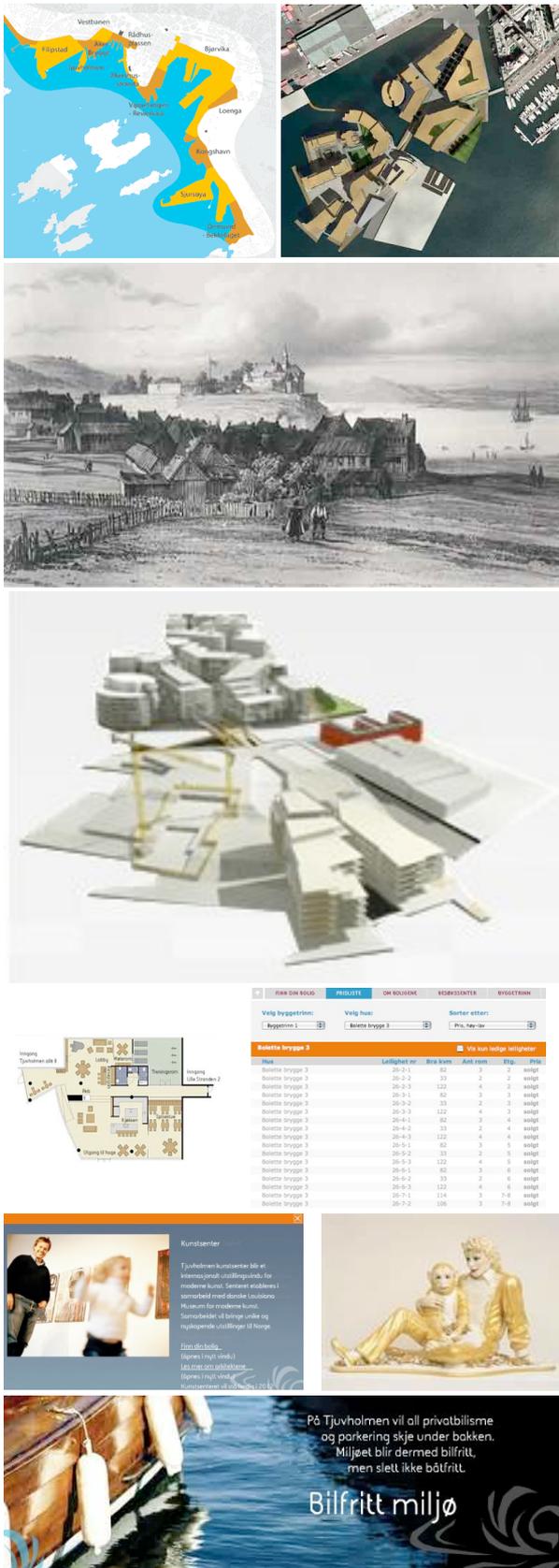


Figure 4. Multiple representations from *Tjuvholmen* website and online prospects. Top left: 1) Digital map of waterfront development *Fiordbyen*. 2) 3D aerial animation. 3) Greyscale illustration of early city with castle in background. 4) Animation of building process. 5) Floor plan of selected apartment. 6) List of apartments in a building with areas, prices and availability. 7) Section on amenities showing art links. 8) Image of artwork from gallery in city centre. 9) Image of section in website, with boat, graphic overlay, and label 'Car free environment'.

CO-ORDINATION OF ARTIFACTS

The startscreen for the site suggests that there is a hand behind an overall integrated design. The professional graphic presentation, such as overlay of type on the main image, the pixellated border on the main image and the uses of three main sections, visualised and with links, points to the co-ordinating role of a web design company. A wider Communication Design strategy has been developed that provides an aesthetic and an information design that interrelate the inscription of a variety of representations that are realised in a range of media types. These diverse representations need to be given a guiding coherence structurally and presentationally and this is done by the usual conventions of layers and links. However, in this site it is possible to see that the web designers and project developers as a whole have needed to create what Latour (2005a) calls an assemblage of assemblages in order to provide users with a coherent sense of the context and processes of construction and their own selection of a property. Where we may agree with Latour that we follow the actors, including mediators, web users encounter a diversity of representations drawn from different participants in the development of the waterfront. Not all of these representations are seamlessly linked; for example notes on images of planned buildings are not connected to the numbered charts of different buildings.

In Figure 4 we have assembled some of the modes of mediating the professional and contextual representations of the project. First a digitally rendered map of the overall waterfront development of Oslo is given from the related project website *Fjordbyen* belonging to the city council. A screen narrating the history of *Tjuvholmen* contains an etching of the castle and early settlement. In contrast below it we see a still from a 3D animation showing the main stages of construction rendered by a 3D designer. An architect's floorplan with colour is shown beside a chart in which users can set the parameters of price, location and availability. Below this, again in contrast, we see an extract from a pop-up window on art galleries in the vicinity and an image of joyful visitors. A related screen contains a photo of a popart sculpture by Jeff Koons. Finally, a main image from the site reminds us of the water itself and a sense of calm - the label is of a car free environment with underground parking, but 'not free of boats'. Here we see the appearance of a graphic pattern that is used in the PDF print prospects that may be downloaded. In sum, we see that representations from planners, developers, architects, city council and web designers - are co-ordinated and resemioticised in the site (Iedema 2003).

## ARTIFACTS OF COORDINATION

In addition to the co-ordination of multiple design illustrations and related professional practices, 'unreal estate' is achieved in the depictions of both exteriors and interiors. Here we see a mix of techniques used to project realism onto the unbuilt site via its web mediation.

The site contains a variety of such representations that span web images and those in three downloadable prospects. These images may be seen as supporting the formation of textual coherence across the site. In Figure 5 we see realist photographs from one of the prospects shows yachts as well as a couple arm in arm, thereby suggesting the various lifestyle options afforded in this prime property and its exclusivity. These contextual images help to augment those of exteriors that are explicitly digitally rendered. Potential buyers are invited to make the leap between the simulated and the sensed. Following Wartofsky (1979), we may say that the imagined is embedded in the representation. However, the imagined construction of unreal estate is further realised by way of the user's meaning making across and between these digitally mediated representations.

Hyperrealism is extended to the interiors of the proposed properties. Here we see extreme simulations of contemporary interior design. CAD (Computer Aided Design) tools are enhanced by the inclusion of clipart from furniture libraries on the screens of 3D designers. Such visualisations also include the insertion of photographic material as backgrounds, such as in the panorama view of the living room. We also see that designers make careful use of textures, simulating the materiality not yet realised but available in shops, swatches and catalogues. In the final image we see the application of an exclusive wood finish, perhaps unvarnished, that marks the property as differing from others and their use of more commonly affordable types of parquet flooring.

The scenes are of an ambient quality. They offer images of domestic order and an aesthetics that mimics that of glossy interior magazines and online furniture catalogues. Allusion to Scandinavian design is understated but present - the images offer an achievable domestic reality, but clearly a monied one. In these two images we see that these apartments overlook the sea so that it is part of the visual interior and its sensoriness.



Figure 5. (From top left): 1) Two scenes of lifestyle options. 2) Digitally drawn image of one of the apartment complexes, view from the fiord. 3) Two images from the site showing hyperrealistically rendered interiors.

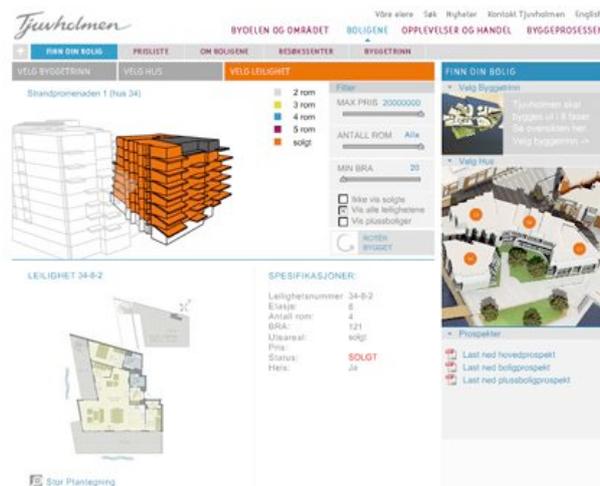
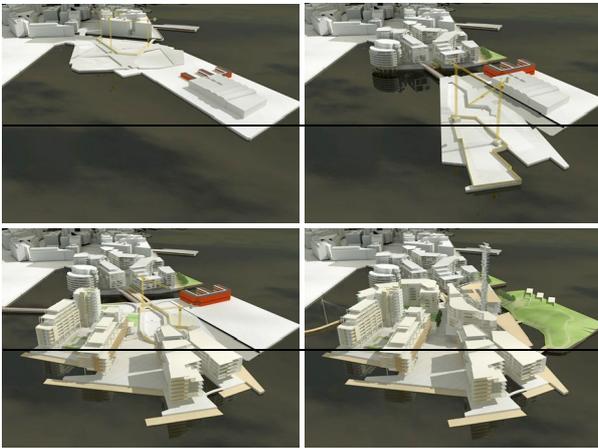


Figure 6. (From top left). 1) Four small images from animated sequence of building process, shown from the fiord. 2) Four screengrabs from one of three possible animations of development, shown from the south. 3) Chart showing main development and specific numbered blocks. 4) Selected block reveals animation of layers, sizes, and availability of apartments with corresponding floor plan.

The professionalism projected through this contemporary styling is also apparent in the mediation of the building process. In Figure 6 we see four small screengrabs from a sequence showing the site as it was prior to the start of construction with one large warehouse and an existing apartment complex at *Aker Brygge*, one of the most expensive locations in Oslo.

The sequence then shows the development process, including cranes, a temporary site building and the resulting new structures. These are views that are shown from the water. This is not the only animation in the site though. The *Tjuvholmen* startscreen contains a link to a calendar of the building process and 3D films of the major stages that also provide buyers with a sense of the longer activity construction. Here the development is mediated through three artifacts of the same media type but showing different perspectives: an overview of the whole area, a view from the north, and birds eye view. These kinetic projections visualise presumably the shaping of new landfill and constructing an entirely new complex of structures and amenities. The animations also offer the wider public some insight into the trajectory of development as well as a sense of its scale.

Several features of digital tools are deployed to engage users further in looking at the development as a process and as visualisations drawn from other professional practices such as architectural drawings. In the large overview chart seen in Figure 6, second from the bottom, users see two images juxtaposed. On the left is the entire area as projected with numbered buildings. To the right, at the top is a link to the animations, and below a larger pullout of the area already being built. Selecting a building leads to a screen such as that shown on the final image. This section is realised dynamically illustrating that artifacts are processes and events (Owen 2006).

In the image shown, a top floor apartment has been chosen, marked in grey with remaining ones in orange (keeping visual coherence to the colour palette used in this section). The adjacent building is shown by opaque grey line with no fill. This selected block and apartment may be rotated. Like the animations mentioned above, the user may imagine different points of view in the built as well as relations to other structures. The floor plan for this apartment is also given as a still image but this also leads to a large and detailed drawing from the architects. Here we also find a series of sliding scales shown to the right of the highlighted apartment block. These sliders refer to price, number of rooms and size. As one moves the slider, a corresponding animation appears in the

highlighted block showing apartments fitting the selections in this matrix. Here aspects of the software tools are imported into the presentation and communication design (Manovich 2001). They give the user a sense of dimension and variation, yet they are simulations of the deeper processes that lie behind the architectural and urban design processes involving digital tools and representations.

## FINDINGS AND DIRECTIONS

### WEB MEDIATION

Through a visual essay we have shown that complex but coherent mediations of 'unreal estate' on the Web are achieved through both the co-ordination of artifactual representations by a range of design professionals as well as via the inscription of some of their modes of articulation via digital tools. As Yaneva refers to buildings, so to may websites on unreal estate be seen as multiverses. While we have drawn on approaches from ANT as well as activity-based ones, we see that these together enrich our understanding of Communication Design as more than the study of mediated interaction based on buttons, links or pop-up windows. We have shown that a socio-cultural approach to digital design - with its focus on context, communication and articulation – provides some means of accessing the ways in which digital tools and a variety of mediations may be studied.

Websites such as the one we have studied need to be approached as economic and political constructs. They need to be considered as powerful embodiments of discourses of the unbuilt environment that are in effect investments in real estate development. Websites such as *Tjuvholmen* give the public some means of seeing the complex of the co-ordination of artifacts in 'the politics of the artificial' (Margolin 2002) in which mediated representations are drawn from a multiverse of professional articulations. Beyond the focus on one small peninsula in one city, the shaping of unreal estate is already a part of the highly mediated sector of property advertising and marketing. Digital tools, representations and their co-ordination are important in wider urban planning processes. Their presentation as persuasive devices marketed to buyers and the public is realised as an overlay of other professional representations and design work practices. Instances of unreal estate, whether through the individual advert for an apartment in a sales portal or the assembly of visualisations in a project development site, provide publics with 'concrete', but mediated, examples of

parts of their urban futures that will be built. However, mediational design is often bypassed by developments in graphics or information systems design, yet it needs to be considered alongside them and in relation to users and use too. However, without attention to the mediated only part of what users and consumers do and consider and how they do so may be understood. As Friedman (2003) has argued, design practice and design research need theory. Through this site we have tried to show how digital media are being used to inform but also to persuade, not simply to assemble or to demonstrate a variety of competencies.

### FUTURE SUNSHINE?

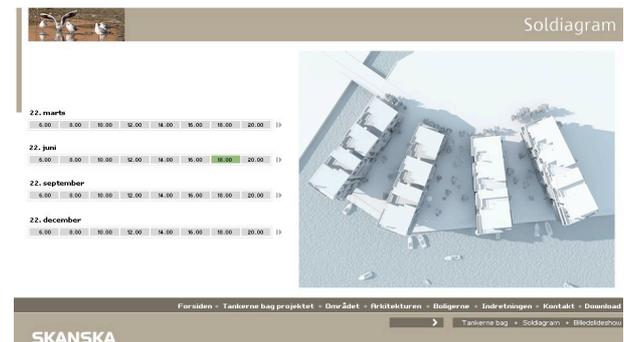


Figure 7: Animated sequence showing path of sun and shadows over 4 days in four seasons, Copenhagen, 22 June selected, 18h30. ([www.skanska-havneholmen.dk](http://www.skanska-havneholmen.dk))

The mediational aspects of unreal estate presented and discussed above do not only appear in Oslo but may perhaps be seen as an emerging feature in the changing face of the online marketing of property. As part of our inquiry we have also trawled property websites in Copenhagen where urban developments with new waterside residencies are also to be found. In these mediations of unreal estate we see many similar features to those presented and discussed above. We also encounter dynamic diagrams that are used to augment earlier modes of representing property portfolios now digitally designed and mediated online.

We mention one feature from a related site as a way of drawing together core issues covered in the paper. In Figure 7 we may select one of four months and then times of day. A corresponding animation shows the path of the sun. This feature, labelled a representation only, gives potential buyers a sense of the quality and extent of daylight in their future home, a feature hard to pin down with sellers during short on-site visits.

Features such as this show how the digital design of online mediations can 'travel'. A range of media types – still and moving images as well as text, tables - and linking strategies suggest that a web of mediated

discourse is created in the representation of unreal estate online. Following Diáz-Kommonen (2003) on expressivity in digital design in mediating cultural heritage and Wagner (2000) on architecture and persuasive artifacts, we see that co-ordinating artifacts relate to artifacts of co-ordination and the reverse. While we may make meaning from mediated representations and their assembled articulations on the Web, it is from the built and our critical and lived experiences of it that we continue to imagine unreal estate in the light of day.

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