Image Analysis of Urban Design Representation Towards Alternatives

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Abstract: This paper is a critical exploration of visual representation of urban places. This paper examines extracts from one Australian case study, the document An Urban Design Framework: A Vision for Perth 2050 (UDF), and makes comparisons between prior analysis of urban plans and the visual language of the UDF. Three alternative representations are then briefly discussed to explore some ways in which urban places are understood and communicated outside of urban design and planning frameworks. This paper is the start of a project rather than the culmination and sketches future directions of enquiry and possibilities for practice. The overall focus of this analysis is to reveal the way in which attitudes to place, roles and process are revealed through visual sections of city vision documents. The paper concludes that the visual representations in the UDF are not neutral and that these representations correspond to discursive traits seen in urban plans. These traits conceptualise place history as unproblematic and without authors, construct authority within technical process, and limit the role of place occupants as opposed to designer or planner. Parallel to moves to challenge the language of urban plans this paper illustrates that it is also important to challenge the visual language of urban design.

1. Visualising urban design for Australian cities

Urban design plans and frameworks are part of the tools and outputs of city making in Australia. The way that these documents are constructed tells us about the built environment profession’s understanding of urban places and the perceived role of various players in this context. Recently there has been much interest in the structure of city plans, however as yet there is little equivalent work on urban design policy documents. This paper is a modest contribution in this direction and takes a visual approach to a single case study. The visual approach is taken here to complement textual analysis of planning discourse. This can perhaps be seen as part of a larger move towards engagement with visual artefacts of planning (Healey 2004, Duhr 2003), and in critical engagement with digital visual materials of collaborative planning (Bamberg 2010, Wagner 2012). In order to understand policy and (extra-policy) documents as part of the process of making urban places it is useful to understand the way in which images communicate about the people, places and process of planning. The overall focus of this paper is to reveal the way in which attitudes to place, roles, and process are revealed through visuals included in city vision documents. This exploration is significant because changes to visual approaches to representing urban places, like changes to textual modes or styles of city plans (MacCallum & Hopkins 2011, p. 287), are also changes to the practice of urban design and planning of which these documents are a part. The case study discussed in the second part of this paper sits within the context of urban planning in Western Australia.

MacCallum and Hopkins (2011) analyse 50 years of urban plans for Perth, Western Australia. Their focus was to highlight the relationship between local planning practice and trends in international planning theory. They undertake this through a critical discourse analysis focusing on four textual features of the plans: construal of substance, construction of agency, generic structure and presentation. This analysis was less focused on what was proposed in the plans as the way in which the proposal was communicated, in particular comparing the representation of the “nature of the plan,” “institutional roles,” “public,” “treatment of space,” and “legitimacy claims,” (MacCallum and Hopkins 2011, p. 504). Their analysis suggests that the approach of the Western Australian plans echoes concurrent trends in international planning theory which, they argue, highlights the significance of urban plans as materials to reveal changes within historical approaches to urban planning.

MacCallum and Hopkins give some consideration to use of “maps, illustrations, cover design and general layout/formatting” (2011, p. 505). They highlight the way in which attractive layout is used in more recent plans to “sell” the plan to a general audience. However, in comparison to the detailed analysis of the textual content of the plans the visual analysis is slim. A deeper analysis of the visual content of plans and associated documents is possible. Visual representations also form part of discourse, and with the
bias in academic communication towards print based mediums, it is important to also focus on critically engaging with the visual methods of practice. Particularly in the context of urban design, the visual aspects of documents can stand as a summary in processes of further design response and interpretation. Further, the visual context of development in urban centres is no longer limited to design plans and supporting documents. City of Perth, like many aspiring global cities, uses a broad range of media to promote a particular vision of the city. These media range from bus-stop and cinema advertising to documents such as *An Urban Design Framework: A Vision for Perth 2050* (City of Perth 2010) which this paper takes as a case study. Urban plans are not the only documents to contain images and text about urban futures and a new methodological engagement is needed to understand contemporary planning and urban design practice in this context. Lees (2003) highlights the value of anthropological approaches to urban studies, and this seems particularly pertinent when we see city visions spread through everyday contexts in addition to the professional sphere. In particular the nexus between design, planning and visual anthropology practices may prove a fruitful methodological starting point.

This paper identifies parallels with three general continuing traits MacCallum and Hopkins highlight within the West Australian urban plans: the conceptualisation of place history as unproblematic and without authors, the construction of authority within technical process, and the limited role of place occupant as opposed to designer or planner (2011, p. 505). MacCallum and Hopkins’ analysis of Perth’s urban plans echoes Tett and Wolf’s (1991) horizontal study of North American urban plans in highlighting various means in which the authors of the plans’ views are validated while the community is silenced. Finnegans’s (1998) earlier narrative study of the development discourse of Milton Keynes, in the UK, also identifies some similar traits. In particular parallels can be seen in the centralising of the planner/developer as “unquestionably the story's glorious hero” while “the people” or “the citizens” “lurk behind the scenes” in a secondary role (Finnegan 1998, p. 34). Likewise history is represented as unproblematic and without authors, “its relevance extending no further than its capacity to explain current conditions” (MacCallum and Hopkins 2011, p. 505). Finnegans provides context to this trait through narrative theory. The history of the development site is not relevant to the ‘story’ of the development plan or design framework which starts with the current planning process (1998, p. 33). There are also differences: while the discourse of Perth’s urban plans draws on the authority of the planning bodies constructed through reference to technical process, the narratives of the Milton Keynes Development Authority draw from images of the organic development of cities.

This first section of the paper (1) has provided some context to the enquiry. The second section of this paper (2) is the case study. Three images are discussed and connections to MacCallum and Hopkins analysis are made. The third section of this paper (3) describes three works which offer alternatives to the mode of representation found in the case study and urban plans more generally. The fourth section of this paper (4) outlines advantages to incorporating alternative visual approaches within urban design frameworks or other similar extra-policy documents, particularly within the Australian context.

2. Visual representations from City of Perth’s Urban Design Framework

The three image extracts below are taken from *An Urban Design Framework: A Vision for Perth 2050 (UDF)* (City of Perth 2010). This document makes a useful case study: It sits between the city planning framework and operational policies, and embeds other relevant documents including consultation documents, corporate plans, development plans, independent studies into Perth’s urban design, and local government planning studies. The UDF is a highly illustrated document and the text is written for a broad, rather than technical, audience. The purpose of the document is described as to help “ensure that the built environment we create reflects the community’s vision and the Council’s strategies” and to underpin “an integrated approach to better physical environments” (City of Perth 2010, p. 10). Although hardcopies of the draft were produced, it is now accessed by download from the City of Perth website.

The UDF functions on several levels for different audiences. The primary audiences of the document are both internal and external. Internally the UDF works as a reference point for City of Perth planning officers, to clarify a vision for the city, when exercising discretion—for example in the interpretation of the town planning scheme. The primary external audience of this document are developers. We can see the
UDF as a persuasive document aimed to attract investment from developers who share the vision of the City, and more generally to seek to guide development attracted to Perth. A possible key external audience in this context is the Metropolitan Redevelopment Authority (MRA) which, as a developer and planning authority, operates under its own State Government act with the power to set their own planning schemes in place. The MRA currently has authority over the major development sites in Perth, and as such has responsibility for much of the urban design outcomes within City of Perth. The role of the UDF in this context is to persuade the MRA of a shared vision with City of Perth.

The secondary audiences of the UDF are the general public and the local built environment professions. The UDF is written as if to a general audience, and in this context seeks to persuade the reader of the validity of the process and vision proposed. However, unlike the primary audiences of the document, there is no role outlined for the lay reader in working towards the vision outlined in the UDF, unless this is to give a token endorsement. In addressing design professionals in Perth the authors of the UDF have a similar intent. The document seeks to persuade built environment design practitioners of a valid and shared vision through which designers working in the City can read the technical and policy documents. These professionals are located as part of the mechanism which will deliver the vision of the authors of the UDF.

Banks (2001, p. 7) proposes three questions to guide analysis of visual material. Firstly “What is the image of? What is its content?”; secondly, “Who took it or made it, when and why?” and thirdly, “How do other people come to have it, how do they read it, what do they do with it?” In line with other contemporary descriptions of visual analysis methods he places emphasis on the context of the image rather than considering the image in isolation. This paper adopts Banks’ framework. For each of the images below the content and then the intent of the image will be considered. The document description in the previous paragraphs provides some response to Banks’ third question about the context in which the images are read.

Unproblematic, authorless history
The image titled “Sense of Place” (figure 1) is a series of five plan diagrams of the City of Perth. The mapped area is identical in each: from Kings Park in the west to East Perth and Heirisson Island in the east, from the Swan River in the south to Newcastle Street and the Graham Farmer Freeway at the north. The mapping of the river extends beyond these boundaries to the north, with the result that the shape of the river as shown is reminiscent of the silhouette of a swan. The five diagrams are titled “River,” “Topography,” “City Streets,” “Landscaping” and “Views.” The River diagram highlights the silhouette of the river. The Topography diagram highlights the scarp of Kings Park that faces the river, and the hills in East Perth.

The City Streets diagram presents four colour codes for streets. Three purple streets run parallel to the river: Riverside Drive, St Georges Terrace and Wellington Street. Several streets coded blue run perpendicular to the river and continue down across the boundary of the shore, notably either side of the site of the new Elizabeth Quay development, and curiously seeming to extend Mill Street directly through the Perth Convention and Exhibition Centre. The two freeways are shown in green. The remaining city streets are indicated in a less dominant grey.

The Landscaping diagram highlights several areas in green. Kings Park is the largest single area highlighted. The northern edge of the river is highlighted as ‘landscaping’ with the exception of the three sites proposed for development Elizabeth Quay (formerly The Esplanade), the area south of the Concert Hall currently occupied by a carpark, and the area between the Causeway and Trinity College, just to the north of Heirisson Island. This diagram highlights six landscape areas beyond the extents of the other diagrams, and while Matagarup, a registered Aboriginal cultural site for camping, gathering, fishing and birthing (AHIS ID. 3589) at Heirisson Island is categorised as landscaping, the East Perth Cemetery is not. The Views diagram identifies three outlook points, and five directional views to the river. The three outlook points are from the top of Mt Eliza in Kings Park, from Langley Park on the river, and east from the top of the hill in East Perth. The directional views are located looking down the street grid to the river.
Together these diagrams present a definition of Perth’s ‘sense of place’ through physical characteristics. This image frames the discussion of what makes Perth distinctively Perth. At first glance it may seem that in the terms of this image ‘sense of place’ is described by natural landscape features. However, on reflection it is the built environment that dominates in this image. In these diagrams the landscape changes since colonial-settlement are equated with geological land formations, and presented as an unproblematic outcome of a muted history. The river edges highlighted are the rationalised curves and straight lines of modernist land ‘reclamation’. Places designated as landscaping are the pockets of land between the city grid that were too hard to build on immediately: the swampy river edge, Aboriginal cultural places and steep hillsides. The views that are highlighted are views out rather than across or in. One the one hand this image argues that Perth’s distinctive ‘sense of place’ has been made through the development of a long grid adjacent and separated from the river edge, but on the other it conflates this built outcome with features enduring on geological time—the river and topographical formations.

Figure 1: Sense of Place diagram (City of Perth 2010, 30).

**Authority in technicality**
This consolidation collage (figure 2) is a composite of the covers of four documents and a page from a fifth, and is located in the background section of the UDF. In this composite image *Capital City Perth: A 10 Year Strategy for Perth the Perth City Area* (2004), a document authored by City of Perth and the Department of Planning and Infrastructure, overlays the corners of two documents authored by urban consultant Jan Gehl *Public Spaces and Public Life in Perth* (1992) and *Perth 2009: Public Spaces and Public Life* (2009). To the bottom left of the image, rearmost and in black and white, is the *Perth Central...*
The author's expertise in synthesising the accumulated results of studies, as expressed in the UDF, seems to span across these time periods, tying in on the expertise of Jan Gehl, public consultation and policy refinement. It is the UDF that consolidates the City's vision for the future of Perth, and it reflects the changes and developments that have occurred previously.

The UDF is also an evolution of the ideas and development patterns that have been previously identified in planning studies, such as the 1993 'Perth Central Area Policies Review' and the 2004 'Capital City Perth' document. The UDF is a compilation of a number of other Australian plans and initiatives, including the MacCallum and Hopkins (2011) plan. The UDF is presented as an agenda for change and a guide to the future of Perth.

Figure 2: A consolidation collage [untitled image] (City of Perth 2010, 15).
Lead role for planner
The Masterplan drawing (figure 3) is a close cropped plan proposal for Heirisson Island—reimagined as a sculpture park. In this drawing the island is bisected by the Causeway bridge which connects two white landmasses to the north and south of the blue river. The image of the island is colourful, playful and complex evoking museum-landscapes such as Room 4.3.1’s Garden of Australian Dreams (National Museum, Canberra) or Taylor Cullity Lethlean’s Australian Garden (Royal Botanic Gardens, Cranbourne) but also playground designs and theme-park maps. In this design proposal the rationalised outline of Heirisson Island (dating from a 1930s land reclamation project) is eroded, suggesting the reinstatement of some swamp areas particularly on the south of the island. A numbered legend is used to allocate new land uses to the entire area.

Within the context of the UDF this plan is included within the ‘Implementation: Major Projects and Interventions’ section. The masterplan drawing was made by Urbis for City of Perth, (the masterplan has since been revised: see City of Perth 2013). Heirisson Island Sculpture Park Incorporated is a group of individuals formed to lobby for the creation of sculpture park on the island, gaining support from the City of Perth in 2008 (Sculpture on the Swan, no date). In 2010 the time of the publication of the document Heirisson Island was protected at state level, nationally and internationally as a place of cultural significance. Local Aboriginal language group the Nyoongar people traditionally used this place for gathering, camping and fishing among other uses. At the time of the UDF’s publication the Nyoongar Tent Embassy, which has been located on the island since 2012, was not yet established however the site had been used as a base for Aboriginal justice movements over many years. The continuing cultural use of this place has not resulted in buildings, and it is perhaps this in combination with the modernist land reclamation project that it has made it possible for Heirisson Island Sculpture Park Incorporated, City of Perth and the masterplan designers and to see this as a ‘cleared site’ (Burns 1991, p. 152): that is to see a significant cultural site as blank page on which a landscape of leisure can be overwritten. Considering this image in its contemporary context we see the primacy of the designer and planner and the limited role that place occupants (past, present or future) are granted within the UDF document.

![Figure 3: Masterplan (City of Perth 2010, 87).](image)

3. Visual representations from beyond urban design documents

To give further substance to the suggestion that urban design images are not neutral and indeed, as a visual language, are part of the shape of the way we understand and design in the urban realm I will introduce three alternative images of urban places. These will also be approached through Banks’ analysis.
**Shifting place**

Locke’s work *Blue Suit Pier* (see online folio [http://www.rebeccalocke.com/brooklynbognor#4](http://www.rebeccalocke.com/brooklynbognor#4)) from the *Brooklyn/Bognor Pt.1* series explores the potential for an individual to reframe a place. Recognising the social permissions for personal change granted by being in a new place, Locke inverts this with her series of photographs. To make this series Locke returns to her home town Bognor, a seaside town in the UK, after having lived in Brooklyn, New York, for some time. She photographs herself in Bognor in the clothing and attitude of her new home Brooklyn—looking to reframe Bognor through her recent experiences. In these images Locke is a small but not insignificant figure in the built landscape. She does not dominate the image, but neither do the streets and buildings. In these photographs the buildings and her body find an even balance, neither dominating the other. In the context of this paper, and representations for urban design more generally, Locke’s works explicitly challenge the dominance of built form in generating sense of place: instead pointing out the individual dependencies of place experience, such as travel and migration which overturn the naturalisation of a static population in an unchanging place [Clifford (1997, 22–23)].

**Destabilised authority**

McLaughlin’s use of postcards (figure 4) within consultation destabilises claims to authority through “technical” processes. McLaughlin carried out three visioning workshops as consultation towards a feasibility study for aged care homes for the London Borough of Camden. Photos taken by participants in the first workshop were made into postcards by the architect and then distributed to the second workshop groups inviting comment. This structure draws on photo-voice and photo elicitation techniques. The intention of this process was to facilitate communication across the subject-expert divide. Rather than present complete schemes for comment or elicit a list of briefing requirements from workshop participants the co-construction of postcards offers a different approach to roles, perhaps showing one direction of response to Tett and Wolfe’s call for planning voices to “empower others discursively” (1991, p. 195). In this example the future user of the place is creatively involved and the ‘technical expert’ is de-authorised as a producer of postcards, and as someone who can be informally addressed through a hand written note.

[Image: Figure 4: Consultation postcards (McLaughlin, 2012).]

**Lead role for place occupant**

The film *Moving Dublin* (Cleary and Connolly 2009) is a collection of stories about moving around Dublin in the present and recent past (figure 5). Audio of these stories is overlaid on the corresponding video of travelling the routes described, interspersed with long-shots of the video interviews, themselves conducted on the move. The audio and visual layering creates a reading of place that is changing, connected and yet very particular in its narrative of space and inhabitation. [Lees (2003, p. 110) argues...](#)
for the validity of ethnographic methods in urban geography, which are equally valid in urban planning and design research:

“The attractions of an ethnographic approach...are numerous. It addresses the richness and complexity of human life and gets us closer to understanding the ways people interpret and experience the world. It is well able to deal with complex concepts like culture. It believes in the socially constructed nature of phenomena and the importance of language, and it reminds us that the researcher only ever gains partial insight.”

In contrast to the visual representations within the UDF, and the language of urban plans generally, Cleary and Connolly’s work focuses on the role of occupants inhabiting and creating places through their actions. In this film designers and planners are silenced—passive witnesses of how places are inhabited and traversed.

In Australia, technology is also aiding in the broad dispersal of visual communication in planning through online community consultation particularly as might be found through online community GIS data collection, discussion or surveys. The websites of development authorities (such as the MRA) are particularly dense sites of communication about the urban plans, designs and processes that are making Australian cities. These are not only rich sites for multi-modal analysis but, freed from the

4. Discussion

The practice of urban planning and design has textual, performative and visual dimensions. Documents, such as the UDF, considered as a case study in this paper, have many audiences, including government bodies, current and potential investors, their design consultants, and business and individual residents. In this context the visual aspects become significant communicators of meaning. There is growing recognition of the importance of multi-modal analysis in planning, engaging with not only the written but also visual or other performative aspects of planning communications. Bamberg highlights that the practice of planning is not just language and emphasises the need to include “in the analysis different modes and media of communication and the materiality of meaning-making processes” (Bamberg, 2010, p. 897).

The increased accessibility of desktop publishing, digital illustration, and digital distribution is reducing the barriers to detailed, full colour visual communications about planning and urban design, both for authors and readers. In Australia, technology is also aiding in the broad dispersal of visual communication in planning through online community consultation particularly as might be found through online community GIS data collection, discussion or surveys. The websites of development authorities (such as the MRA) are particularly dense sites of communication about the urban plans, designs and processes that are making Australian cities. These are not only rich sites for multi-modal analysis but, freed from the
constraints of print media, such platforms are potentially sites for exploring alternative visual modes of urban planning and design.

In this rapidly expanding field for visual communication of urban development it is useful to know how images such as those within the UDF reinforce or contradict our current understandings of the dominant traits presented in urban plans. Perhaps unsurprisingly, this paper finds key similarities in the messages of urban plans in the last 50 years in Perth (MacCallum and Hopkins, 2011) and those in three selected images from the UDF. These traits have been criticised for excluding voices and engagement of the public, while at the same time claiming to represent and facilitate people’s access to the planning process (Tett and Wolfe 1991). Picking up the argument that to change the language used in a process is to change the process itself, this paper selects three contrasting examples of urban representations drawn from the works of practitioners at the nexus of ethnography, architecture and art. The three examples selected draw on visual anthropology methods, specifically photography, photo voice, photo elicitation, and video mediums.

What do these three alternatives to visual representation of urban places contribute to a conversation about urban design representation? Specifically these works present challenges to the continuing traits of urban planning in Perth, and beyond. Locke’s photography problematizes history. Her work highlights the mobility of any given population (Clifford 1997, p. 22–23) and draws attention the corresponding shift in meaning of places for these people. The postcards used in McLaughlin’s consultation practice depend on the creative contribution of workshop participants and take a form that de-authorises the expert team. While Cleary and Connolly’s video focuses on the lived space of a city, foregrounding the stories of people who move through these spaces. These three works are engaged with the lived experience of the urban places they represent. Lees, in arguing for a move away from textual analyses in urban studies, identifies the strengths of ethnographic approaches as, in summary, addressing the complexity of human life, culture, experience, language, and researcher’s limitations (2003, p. 110).

Although located in the context of discourse analysis of urban plans, and artefacts of planning processes more broadly, this paper draws on only a very small sample of the available materials, focusing on just three images from one document. Likewise the three alternative images are only a very small sample from a growing pool of practitioners working across disciplines responding to and helping shape our urban places. This preliminary study is restrained to propose directions for more extensive enquiry into the visual communication choices in Australian urban planning. Looking at the images selected for this paper highlights that the images from the UDF are purposefully composed, as are the three works drawing from beyond planning practice. These images are, when approached through Bank’s visual analysis, anything but neutral. This paper seeks to support the possibility of incorporating alternative visual representations of urban places within urban design frameworks, and similar extra-policy documents—where they may contribute to both the authors and audiences engagement with the process, contexts and experiences of urban settings.

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References


