

Futures West: A Design Research Initiative Promoting Sustainable Futures for Western Sydney, by Jonathon Allen, Abby Mellick Lopes & Tara Andrews

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Futures West: A Design Research Initiative Promoting Sustainable Futures for Western Sydney

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Abstract

How will life in Western Sydney change over the coming decades? What will be driving the changes? What kinds of responses to these changes will be appropriate, desirable and sustainable? These are questions that a new design research initiative at the University of Western Sydney titled *Futures West*, seeks to respond to. *Futures West* aims to exercise the creative and practical capabilities of design to generate alternative visions of the future of Western Sydney, and to develop the means to bring these visions into being through targeted, community-relevant projects. This paper will outline the initiative, discuss the outcomes of the first *Futures West* event held in June this year, and present ways forward that raise promising questions about the role of the university in preparing for a climate-changed future.

Keywords: *Design futures sustainability*

All of us, everywhere in Australia and in the rest of the world confront serious environmental changes which will challenge our everyday lives and aspirations for the future. The formation of communities that can recognise and apply themselves to the task of preparing for change is perhaps one of the most radical challenges we face. *Futures West* seeks to bring design to the challenge of community formation in response to the problems and opportunities presented by a climate-changed future in Greater Western Sydney (GWS).

This paper provides background to the *Futures West* initiative, the role of design in the community-generating project and tells the story of the first event, *Futures West 2031*, and its outcomes. In this event the creative and practical capabilities of design were exercised to generate alternative visions of the future of Western Sydney, which were then showcased at a community forum. The intention of the *Futures West* project is however to move beyond design's capacity to inspire imaginations and evoke desire through images – the objective is to develop targeted, community sponsored projects to bring these visions into being.

We don't expect this to be an easy process, but we have much to learn about how change can be made real and sustained in our particular context. We take on board Manzini's and Jégou's (2003) understanding of the transition to more sustainable ways of living as a “complex, social learning process” in which chances have to be taken and failures documented and learnt from. The role of design in supporting ‘social innovation’ is critically important to our approach and informs how we understand the connection between design and sustainability. Thus we turn for inspiration locally to Chris Ryan's Victorian Eco-Innovation Lab (VEIL) project (Ryan, 2008, 2008b, 2009; VEIL 2009) and internationally to projects such as John Thackara's City Eco Lab project on display in St Etienne in 2008 (Caines, 2008). We also seek to embrace the emerging theory of redirective practice (Fry, 2009), in which the design-practitioner is able to reflectively interrogate what already exists in order to effectively and strategically mobilise change processes for the future.

1. *Futures West 2031* background and context

Futures West is focused on Western Sydney primarily because that is where we are. Every region has its particular issues and future pressures that will characterize how global changes will emerge locally. Western Sydney is unique in several important respects that are meaningful in light of a climate-changed future.

It is geographically and demographically dispersed, and has a strong agricultural history that has been rapidly encroached upon by suburban and industrial development in recent years (Gilbert, 2007). The manufacturing base of Greater Western Sydney is, however, now eroding due to local and global

economic pressures and consequently there has been a significant loss of jobs in this sector. In addition, a third of its inhabitants have to leave Western Sydney for work (O'Neill et al., 2008). These factors have drawn attention to the extremely car-centric nature of the development of transport infrastructure in the region to date (O'Neill et al., 2008). The Urban Research Centre's recent comprehensive study of Employment in Western Sydney highlights both manufacturing and transport (including commuting and freight) as key areas which would face major adjustments in a climate-changed future (O'Neill et al., 2008).

The University of Western Sydney is not immune from these issues with six campuses spread across six Western Sydney suburbs. The vast majority of students are drawn from Greater Western Sydney and most travel to, from, between and within campus via car. A recent study addressing the accessibility of open public space in Penrith, which included university students, found that the dominance of car transport has a significant impact on the experience of place and is a natural inhibitor of community (Sofoulis, et al., 2008).

These regional characteristics highlight the importance of exploring change opportunities both within and outside the university and the critical significance of community engagement and development.

In light of these base-line issues we identified four areas of focus for the *Futures West* initiative: 1) mobility and industry in Western Sydney, 2) energy, water and food security, 3) the regeneration of public life, & 4) the future role of the university. In terms of the projected date, 2031, we took our cue from the Urban Research Centre report, which proved invaluable in identifying significant trends and implications for the Western Sydney area.

2. The potential of Design

One of the underlying agendas of *Futures West 2031* was to shift community perceptions of design: what it is, what it can do, what it has done, who does it. This is a complex and difficult task not least because there exists a popular perception of design as a style driven activity perhaps more in the business of providing finishing touches than generating new projects in response to complex problems. So we had to both strategically work with and attempt to transform this perception. Our strategy was one of seduction – first to generate visually and conceptually compelling alternative future scenarios for Western Sydney based on our four areas of focus, and then to follow this up with an invitation to collaboratively develop projects with specific community partners in order to bring the changes represented by these visions into being.

Our approach is based on the correlation of design and planning activity (Fry, 1999) and the need to learn to think and act forward (Slaughter, 1999) in relation to the futures that design has already put in place (Fry, 1999) and ‘what is coming to shape the future’ (Fry, 2009). We have for some time worked with a hybrid model of scenario planning for sustainable futures in our industrial design program, drawing on a range of theoretical sources from Futures Studies and Strategic Foresight (Marsh, McAllum & Purcell, 2002; Fry, 1999; Slaughter, 1999); Fry’s (1999) theory of defuturing and design-oriented scenario planning (Manzini & Jégou, 2003) which is elaborated elsewhere (Lopes, Clune & Andrews, 2007).

3. The *Futures West 2031* workshop and forum

The *Futures West 2031* initiative emerged after we were invited to participate in Tony Fry’s Design Futures workshops held over a weekend at Griffith University in Brisbane. This involvement underscored the significance of transforming “the practice the designer inhabits as much as the application of this practice” (Fry, 2009) as well as the considerable challenge of learning to ‘think together’ in collaborative teams. It is clear that sustainable futures will depend upon collaboration between many divergent disciplines toward common goals.

We invited Dr. Tony Fry to lead the first *Futures West* workshop, and invited participants from varied disciplines within academia, industry, government and the non-government sector all with a stake in the future of Western Sydney. A critical recognition in the planning of the workshop was the importance of designing some way to facilitate participants’ ability to design together. Rather than working with a traditional brief, participants were presented with two prefabricated and relatively coherent future scenarios for the Western Sydney of 2031, developed by Tony Fry. Both scenarios addressed the local impacts of global climate change and engaged all areas of focus that emerged from the base-line research. They also represented significant capacity for ongoing biophysical, economic and socio-cultural sustainment. With a view to the region’s history, the first scenario envisaged Western Sydney as the ‘new’ Sydney ‘food bowl’, both generating and supplying sustenance within the region and utilising existing rail infrastructure to transport food to Sydney and compost out, with a proposal for extending farmers’ markets along the rail line.

The second scenario was based on the idea of the ‘unsettlement’ of human populations as a key consequence of climate change (Fry, 2009). This scenario envisaged a significant influx of environmental refugees into Western Sydney in the future, generating the need for rapidly constructed sustainable cities and the means for creating homes and starting new lives in unfamiliar places.

The group was briefed on the scenarios and then put into teams, each with a designer-visualiser whose role was to synthesise the idea-generation process into visual concepts and storyboards. Teams were invited to pull these scenarios apart, reinvent them or throw them out and start again, as long as another was put in its place. The key design task was: how could these scenarios be made better, more realisable and more workable? A series of questions were posed to assist the process: What are the existing 'enablers' and 'disablers' of change? What is flowing out and what is coming in to the region? Where is there excess capacity and where are the hotspots of limited resources? These orienting questions recognize that design is energetic – it has creative and destructive potential. Design concepts therefore needed to be presented in a way that shows this; design not as object, but as a structuring process that responds to anticipated problems which may not yet have arrived in the public imagination. This represented a significant creative challenge.

More reflectively, we were challenged to optimize the creative capacity of the moment. What means could be designed by these teams working together in this intensive way, within the limitations of a weekend workshop? And would we be prepared to take responsibility for what we designed; to bring it into being? While many good ideas emerged as a result of the team work, it was felt that one weekend was not enough to capitalize on the richness and substance of the internal team dynamics. The experience was exhausting but really highlighted the exhilaration, pain, difficulty and necessity of learning to work together.

A strong lesson of the weekend was that there are various initiatives spread out across Western Sydney, and even within the University, that could be and should be learning from one another and building upon each others' capacity to enable change. Research projects developing new knowledge in much needed areas, farming communities changing their practices to be far less resource intensive, food initiatives employing and experimenting with alternatives to the industrial system of supply and demand, manufacturers retooling for more sustainable outcomes and even manufacturers wanting to initiate product-service system solutions, but without the means to explore how this might be effectively done. In this regard design could work as an enabler to build connections between these dispersed projects.

Elaborating on the scenarios with design ideas was straightforward and a task that the designers present embraced. To take responsibility for our designing and to create immediate starting points for the scenarios was far more challenging and led us frequently to the recognition of the unique position of the University and its capacity to identify, leverage and support the region's innovation.

4. Project result dissemination

The outcomes of the workshop were presented at the *Futures West 2031* forum to which a range of guests from industry were invited. The most promising workshop proposal offered a strategic vision of a reinvented university that could enable the region to learn to change in response to the coming conditions of the future. This vision was elaborated in four key roles that our particular university could play.

5. The Applied Research and Knowledge Hub (ARKH)

5.1 Snapshot of regional expertise and resources

In order to respond to the need to have a better and more accessible picture of the existing resources of the region, we thought the university could play an important role in creating coherent pictures of regional expertise. This was conceived as an auditing exercise, which could be performed as part of research training curricula.

5.2 University as Knowledge Hub

The interdisciplinary expertise of the university could be mobilized in direct response to problems that are being experienced by people in a scattered and fragmentary way. In this sense, it can act as a place of the reception of problems that can be developed into briefs and actioned in curricula, in on-site demonstration and research projects or regional research partnerships. In applying ourselves to real community problems, we learn how to deal with them and as a region take leadership in adapting to changes. This idea has been explored by Penin and Vezzoli (2004) in a European context, in which the ‘peculiar community’ of the campus functions as preparatory ground for the dissemination of change strategies. Our proposal views the university as more of a conduit for community relationships, as a hub and repository of shared knowledge.

5.3 University as Risk Absorber

There could be change initiatives that members of the regional community would like to explore, but they may be perceived as too risky or time intensive. The university could be the ideal place to do this exploration, to roll out community pilot projects and trial those ideas – such as the product-service system design for the local manufacturer mentioned above – as part of our core business of knowledge generation. In this capacity the hypothetical status of the university is more properly embraced.

5.4 Information Visualiser

Finally, the university could have a role in creating regional snap shots of how we are travelling as a community. These could be in the form of visual attractors, such as the Finnish ‘Green Cloud’ project which projected the energy consumption of an entire town on the smoke stack of the town’s power station, and changed over time according to this quantified consumption (Evans & Hansen, 2009).

This was a proposal that we were certainly willing to take responsibility for – to develop a ‘roll out’ strategy with community partners. In this respect the university could become a lead agent in the formation of a change community, but not without the participation and input of community partners.

The aim of the Forum was to invite participants into a process whereby design-led *Futures West* projects that are proactive, foresightful and immediately useful could be collaboratively developed. This invitation is to a round table ‘brief development’ workshop participants prepare for by addressing three questions:

- (i) What are your aspirations for the future of your sector?
- (ii) Are you currently planning any changes in response to future pressures such as that presented by climate change?
- (iii) Do you have any ideas for change in your sector that you would like to explore, but perhaps do not have the time or means to do so?

The ARKH proposal gives these projects an initial place to go – to be fed into research and curricula. As a starting point for the *Futures West* project, the ARKH provides a platform to explore our other areas of focus including: 1) the future of education, 2) mobility and industry in Western Sydney, 3) energy, water and food security, and 4) the regeneration of public life. These are themes we intend to develop in future events.

6. Sustainable Design Education

A further consequence of the ARKH proposal is the potential impact on design education at our university. A curriculum reflects a proposal for what sorts of graduates are needed. The future context raises questions about what should be taught and how it is taught under the rubric of ‘design’. The *Futures West 2031* initiative fundamentally challenges the traditional role of designer as client service-provider by embracing redirective practice. The ‘redirective practitioner’ is one who becomes practiced in recognizing the consequences of design’s energetic potential, and who is able to mobilize

this potential for sustainability: “Redirective practitioners become key team leaders, potentially designing and directing programs of change” (Fry, 2009, p.172).

The ARKH could therefore be the testing ground for the graduate sustainable designer in a region where manufacturing, a traditional destination for the design graduate, is in decline. The development of a reinvented design discipline via curricula would also respond to calls for the university sector to deliver sustainability literacy. Such calls have been international, such as the Talloires Declaration (USLF, 1990), and more locally the green skill shortages have been highlighted in a study by the Dusseldorp Skills Forum and CSIRO Sustainable Ecosystems (Hatfield-Dodds et al., 2008). The nature of the ARKH proposal provides a platform where meaningful links can be developed between research, curriculum, and community and industry engagement.

What the first of the *Futures West* events has highlighted is the unique opportunity in Western Sydney for design futures to be deployed to enhance the relationship between the region and its university in order to advance sustainability as a social learning process. Whilst envisioning sustainable futures is crucial to projecting desirable alternatives, the real creative challenge is to action the scenarios and deliver the means to their realisation. This was the most significant of Tony Fry’s challenges to the event participants and one that as design educators in the region we can pursue via community and industry engagement, research and education.

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