

Extending Dialogue in a Design Competition?

*A Participatory Urban Design Competition on
Toronto's Waterfront*

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Abstract

Design competitions are often used to select design teams for high profile development projects, yet have received scant attention in the literature. Seeking to redress this imbalance, this paper presents a competition model that was employed on Toronto's waterfront in 2006 for a large public realm project and describes how it was structured around an iterative public consultation process. Although subject to a number of implementation delays, the competition sponsors built a constituency of support for the redevelopment project by engaging lay people in the decision-making process. The paper argues that the competition struck a balance between lay input and professional knowledge and contends that future research efforts should continue to explore means by which dialogue with the users of the built environment can be integrated into design competitions.

Key words

design competition, public participation, professional expertise, user input, waterfront redevelopment, Toronto

Introduction

Since the Renaissance, design competitions have been employed by public agencies and private sponsors to select the designers of important public buildings and new civic spaces (Lipstadt 2003). In some countries, notably France, public agencies are obliged to hold design competitions for projects requiring large amounts of public funding (Cabanieu 1994; Loew 1994). While in many other Western nations design competitions are actively encouraged as tools of 'design excellence' (Ollswang 1990; Pantel 1994; Punter 2005; Spreiregen 1979) and regulated by the various bodies that govern the design professions (e.g. AIA 2011; RIBA, 2013).

Despite this, the literature on urban design policy and practice has tended to ignore the role that design competitions play in shaping the built environment. The small body of research available is relatively limited and debates about the effectiveness of the competition method, both in architecture and urban design, remain inconclusive (Volker 2010). One recurring argument is that design competitions are a public-spirited method for delivering design excellence (Larson 1994; Spreiregen 1979; Van Wezemael 2011), yet there is also evidence that competition decision-making processes, where an expert jury chooses the winning entry, leave little room for public dialogue and lead to results that are often unsatisfactory to lay people (Nasar 1999).

Through a case study of a public realm competition convened on Toronto's waterfront in 2006 by the Toronto Waterfront Revitalization Corporation (TWRC)¹, this paper focuses on the relationship between lay people and design experts during a design competition. It explores the challenges of introducing more participatory means of decision-making before turning to Toronto's waterfront, where regeneration efforts since the 1970s have been characterised by political infighting, over-development and acute public dissatisfaction. The paper illustrates the competition decision-making model and describes how it was structured around an iterative community participation process that was engineered to ignite local interest in the TWRC's waterfront redevelopment programme. Although an expert jury chose the winning design, public exhibitions, a public forum and a stakeholder advisory committee, were convened so that local people could influence the competition process. The paper contends that the competition reconciled some of the challenges

¹ The TWRC was rebranded Waterfront Toronto in 2008. For the purposes of this paper the original abbreviation will be used throughout.

associated with jury-led design competitions and, while engagement efforts could have gone further, it helped establish a constituency of support for the project that forged a middle ground between professional expertise and lay input. At the same time, however, implementation efforts were negatively impacted by political instabilities and financial setbacks that resulted in protracted construction delays. The paper concludes with a critical examination of the competition decision-making model and offers a series of lessons that might be applied to future design competitions.

The research was conducted as a single qualitative case study and formed part of a wider investigation of urban design as public policy on Toronto's waterfront, conducted between 2009 and 2012. By calling upon a range of data sources, case studies allow for the judicious interpretation of real-life situations (Yin 2003) and, in this instance, provided a delineated framework to situate the personalities of the actors and institutions involved in the design competition process. Although case studies have long been stigmatised for their apparent failure to offer scientific generalisations (Stake 1995; Yin 2003), this research embraces the contrary perspective which contends that data-rich cases can maximise knowledge and emphasise particularisation thereby yielding rich transferable information (Flyvbjerg 2001; Stake 1995).

Three sources of triangulated qualitative data were collected during the research fieldwork. Fifty semi-structured interviews with representatives from the TWRC, the City of Toronto, designers and members of the local community provided the personal accounts of the Toronto waterfront story, while over 300 documents and archival data, ranging from planning reports and architectural drawings to meeting minutes and press reports, were used to piece together the design and planning processes; direct observations were also conducted. The verbal, textual and visual data was analysed using content analysis and the interview subjects were coded to protect their anonymity. A brief description of the codes employed in this paper can be found in the appendix.

Unpacking urban design competitions

As one of the preferred methods for choosing designers on projects of "exceptional prominence" (Lipstadt 2003, 396), competitions are widely recognised as laboratories for aesthetic and spatial design experimentation (Larson 1994; Lipstadt 1989;

Malmberg 2006). Competitions tend to attract numerous, and often innovative, proposals for complex design problems and, as a result, the decision to sponsor a design competition, typically made by a public agency or a wealthy private sponsor, is frequently motivated by publicity. Competitions regularly elicit the interest of international design teams and celebrity architects, provoking media attention and generating public curiosity (Sudjic 2006). This can cultivate a constituency of public support and political capital for a project and reduce the risk assumed by the sponsor (Malmberg 2006; Sagalyn 2006). For designers, competitions can also be irresistible. Although winning is rare, even shortlisted proposals can attract clients and lead to commissions (Banerjee and Loukaitou-Sideris 1990; Larson 1994).

Urban design competitions hold much in common with those for architecture and landscape architecture projects (Eley 1990). Typically, a brief will establish the vision and objectives of the competition, an independent jury of experts will be appointed to select the winning entry and, although every competition is slightly different, the competition sponsor will specify whether the competition is 'open' to all qualified designers, 'limited' by certain criteria (such as age or registered profession), or by 'invitation' only (Lehrer 2011; Alexander and Witzling 1990). The competition sponsor also decides whether the competition will conclude with a showcase of ideas, or eventually lead to a built project (Lehrer 2011; Lipstadt 2006; Spreiregen 1979).

Despite these similarities, some important distinctions can be drawn between architecture and urban design competitions. First is the subject matter. Although architecture competitions often incorporate public realm components, especially on large civic projects, the design juries inevitably focus their attention on the creativeness of the building envelope and its visual impact on the site (Alexander et al. 1987). In contrast, urban design competitions are, by their very nature, more spatially dispersed. Ranging from district wide masterplans to public realm proposals, they almost always include a combination of architectural and non-architectural elements that can be tackled at a variety of scales (Sagalyn 2006). This leads to a second difference: urban design competitions generally require the skills of a multidisciplinary consultancy team, rather than an individual designer or team of designers. Most urban design problems demand strategic spatial thinking that challenges the existing layout of the urban fabric at a neighbourhood or district wide scale (Lehrer 2011). In addition to architects and landscape architects, the participants in an urban design competition often include a diverse group of

professionals who can address issues such as historic conservation, morphology, transportation, urban infrastructure and real estate (Eley 1990; Sagalyn 2006).

Whatever the differences, the one consistent theme amongst all design competitions is their political sensitivity. Whether a competition is held for a building, a park, memorial or a neighbourhood master plan, design ideologies and passions collide; public and private interests interweave and the problem(s) identified are often as much about local or regional politics as they are about finding an innovative design solution for a building, space or neighbourhood. As Sagalyn argues, design competitions "...are commissioned for many reasons, almost none of which have to do with design and all of which have to do with political motivation" (2006, 29).

Participation and design competitions

By offering "a variety of proposals and innovative ideas to a jury" (Lehrer 2011, 305), competitions extend opportunities for design engagement beyond standard consultation exercises. The extra layer of evaluation provided by a jury has the potential to generate a more open decision-making environment (Lehrer 2011). It is common for design competitions to include some form of public engagement. Many competition sponsors organise public exhibitions and often a book, or review document, is published to record the results for posterity (e.g. Arnell and Bickford 1984; 1984a; De Haan and Haagsma 1988; Mansour 2003). A growing number of blogs and websites also promote competitions and offer commentary on the results (e.g. competition.org, ribacompetitions.com, thecompetitionsblog.com) and, in some instances, competition sponsors hold public consultation exercises before the competition brief is written to inform the jury's selection process (Cabanieu 1994). Nevertheless, much of the existing academic literature has tended to focus on historical analyses of past competitions for iconic architectural projects, memorials and civic spaces (e.g. Lipstadt 1989; 2003; Solomonson; 2001) as well as descriptive instructions – almost like 'practice guides' – of different competition models (e.g. Spreiregen 1979; Strong 1976). With a particular focus on Scandinavian practice, a further and informative area of research explores how the dialogue between sponsors, competitors and the jury might be enhanced if participants interact with each other and with the judges during the competition (Kreiner et al. 2011).

Despite these trends, substantive research on the engagement tools used during design competitions remains relatively limited. This is particularly alarming because

numerous competitions have been criticised for raising public expectations, failing to engage local people and leading to unfinished or poorly conceived projects (Nasar 1999; Sagalyn 2006). Banerjee and Loukaitou-Sideris share Lehrer's earlier stated view that design competitions can be relatively open and add that there is something "civic-minded, and public spirited" (1990, 116) about the format, casting the design competition method as an event that "catches the fancy of lay people" (ibid.). Similarly, Lipstadt argues that "Competitions encourage those who only observe, including the public, to applaud or admonish architects as if designers were contending in a public tournament" (1989, 9). Yet, while it might be true that public appreciation for design should be celebrated, the idea that competitions are events at which lay people merely marvel at the ingenuity of the designer sets a dangerous precedent.

In a study that offers one of the few detailed accounts of the participatory potential of design competitions, Nasar (1999) argues that a sizable gulf regarding the nature of 'good design' tends to exist between lay people and design experts, both during and after a competition. In his analysis of an architectural design competition for the Wexner Center, a public arts facility at Ohio State University, Nasar (1999) describes how the winning entry by Peter Eisenman divided opinion. Assessed by an influential jury and beating off stiff competition from three world-class architects, the design was simultaneously extolled by the creative elite and admonished by the general public, many of whom found aspects of the final design challenging. Reflecting on his findings, Nasar argues that competitions should be recast as 'democratic opportunities' in which jury deliberations are informed by lay opinion about the meaning of the project. Not only would this enhance transparency, he contends, it would also reduce the likelihood that the expert jury misjudge local sentiment.

Nasar's view is shared by Banerjee and Loukaitou-Sideris who contend that user participation, especially before the jury deliberates, can provide both the competitors and the jury members with important insights into the "social, political, or behavioural aspects of the design problem" (1990, 128). They admit, however, that involving lay people in the competition design process is more challenging and posit whether users could be invited to sit on the design jury to decrease the communication gap between experts and lay people.

Engineering a precipitous shift towards more participatory means of decision-making remains a challenging proposition because the professional bodies that regulate

competitions, such as the Royal Institute of British Architects (RIBA) and the American Institute of Architects (AIA), regard the primacy of the expert jury as a defining component of the design competition method (AIA 2011; RIBA 2013). With this in mind, it is crucial to continue exploring, not necessarily how to directly replace expert juries, but how to better integrate the views of lay people into the competition decision-making process. To examine this further, the paper now turns to the case of an urban design competition on Toronto's waterfront where political and financial pressures have attracted the attention of local people for many decades. Constructing a model of the competition process (see Figure 3), the case reveals how a gentle balance was struck between generating a dialogue with lay people throughout the competition while also retaining the professional input of an expert design jury.

The Toronto Waterfront Innovative Design Competition

Held in 2006, the Toronto Waterfront Innovative Design Competition was sponsored by the TWRC, a quasi-autonomous agency created in 1999 by three levels of government (local, provincial and federal) to redevelop Toronto's vast post-industrial waterfront (see Figure 1). The waterfront's redevelopment has been characterised by quixotic planning visions and piecemeal interventions since the 1970s. Political pressures have led to short-term solutions and, during the 1980s, much of the public land on the waterfront was sold to private developers. The quality of subsequent redevelopment efforts ranged significantly and, as a result, the waterfront became a fragmented place. In response, a redevelopment moratorium was issued in the late 1980s and a blue ribbon commission was established to rethink the waterfront's future (Laidley 2007). It released a wide-ranging report in 1992, although little effort was made to implement the proposals.

Since the creation of the TWRC in 1999, however, the climate for design-led planning has improved. The three levels of government, buoyed by a bid for the 2008 Olympic Games, guaranteed equal financial contributions of \$500 million and the TWRC was tasked with producing and implementing a 25-year design-led redevelopment vision. At the TWRC, a talented leadership team with experience delivering large-scale waterfront redevelopment projects has engaged meaningfully with a group of community representatives, who themselves had an articulate vision and rigorous understanding of the design and planning challenges facing the waterfront. Underpinned by a goal of 'design excellence' (TWRC 2002), this has

culminated in numerous urban design tools, including design competitions and public consultation, being employed throughout the wider redevelopment process.

Figure 1: Toronto's downtown waterfront. The designated area for the Central Waterfront Innovative Design Competition is highlighted in grey.



Toronto is famed for its vibrant inner city neighbourhoods and the competition was, in part, a response to the uncharacteristically poor quality of the waterfront public realm. Little more than 750 metres separate the dense skyscrapers of Toronto's financial district from Lake Ontario, but a wide railway corridor and an elevated highway tear them apart. Pedestrians and road users alike have to negotiate underpasses, busy intersections and a cacophony of highway noise before reaching the water's edge and, on arrival, the conditions only marginally improve (see Figure 2). The principal waterfront street, Queens Quay, is a wide and busy thoroughfare that incorporates a heavily engineered branch of the city's streetcar line. High-rise construction has also encroached on the water's edge and little attempt has been made to sustain a continuous waterfront promenade or celebrate the visual connections between the city and the water. When the competition was initiated this problem was particularly acute at the 'slip heads', former harbour moorings located at the termination of the city's major north-south streets, where only crash barriers and wire fences demarcated the historically important transition between the port and the city (see Figure 2).

Figure 2: The public realm on Toronto's waterfront.



Image 2a: The inhospitable street-level experience caused by the elevated Gardiner Expressway (with kind permission of Waterfront Toronto).



Image 2b: The treatment of the Spadina waterfront slip heads prior to the design competition (with kind permission of Waterfront Toronto).

The decision to launch a competition and address the problems associated with the waterfront public realm was spearheaded by the TWRC's newly-appointed vice-president of planning and design, who brought experience managing competitions from a previous role at the Lower Manhattan Development Corporation in New York. From the outset, the competition had a strong political motive. Since its creation in 2001, the corporation had struggled to implement many of its planning proposals because of financial disputes between the three levels of government, which, at one point during the summer of 2004, had brought it to the brink of bankruptcy (Eidelman

2011). The TWRC's financial difficulties were stabilised somewhat during late 2004 and it was therefore keen to move expeditiously towards implementation. As a senior executive remonstrated, the TWRC had to demonstrate to politicians and local people that the waterfront redevelopment programme was progressing, otherwise the corporation was doomed to failure (CORP 8). The TWRC board of directors announced its approval of the competition in November 2005 and stated that it would tackle the problem of connectivity between the city and the water, while creating a 'signature,' or brand, that would demonstrate the corporation's commitment to the waterfront's long-term future (TWRC 2006).

The Design Competition Process

The competition decision-making model is depicted in Figure 3 and illustrates the four major phases and eleven stages of the competition.

Phase 1: Competition Qualification

Stage one of the first phase of the competition began with the composition of a design brief by the TWRC's internal design team. This reinforced a long-standing aspiration of the City of Toronto, to "knit everything together as one cohesive urban fabric that would create something on a great civic scale" (CORP 3). The brief was also notable for its comprehensiveness. Instead of a theoretical abstract encouraging 'outside of the box' thinking, as is often issued on design competitions (Eley 1990), it set out, over some fifty pages, the corporation's planning strategy as well as a detailed urban design framework (TWRC 2006). The brief also incorporated a far-reaching site analysis that drew upon many earlier planning analyses of the waterfront (City of Toronto 2001; TWRC 2003).

The TWRC was keen to see innovative design responses that might "overcome...existing visual noise and create a sense of interconnectedness and identity" (TWRC 2006, 5). In particular, the brief challenged the functionality of Queens Quay by promoting new 'gateways' at the waterfront slip heads and anticipated the realisation of a continuous waterfront promenade (TWRC 2006). The thinking behind the competition design strategy was ultimately quite simple: although innovative conceptual ideas were sought, considerable planning work and supporting public consultation had already been conducted and there was little desire to 'reinvent the wheel'. As a result, this first stage of the competition did not include any

opportunities for public engagement. By providing a clear design context and well-defined parameters, explained one of the authors of the brief, the TWRC could expect the design teams to act more creatively to solve the problems that had already been identified while, at the same time, raising the public profile of the project (CORP 3).

Figure 3: The Central Waterfront Innovative Design Competition decision-making process.



In addition to setting out the competition design challenges, the brief also made clear that opportunities for public engagement would be created later in the decision-making process. More specifically it stated that a combination of stakeholder committee meetings and open public forums would directly inform the selection process, although an independent jury of experts would ultimately choose the winning team (TWRC 2006). Describing how this would work in practice, a senior urban designer at the TWRC explained that: “It was not a case of ‘pick the nicest design from an architect’, it was a case of ‘you, as design professionals and planning professionals [the jury], should be understanding of what it is the community wants and help them to select a plan that achieves their goals’ ” (CORP 3). The proposed decision-making model reaffirmed the TWRC’s desire to elicit public support for the project and, at the same time, put into practice a wider strategic commitment towards “effective two-way communications with members of the public...[that would]...Build constituency trust and support for the Corporation” (TWRC 2002a, 4).

Public consultation has played an important role in the Toronto planning process for many decades. It became a core component of the waterfront redevelopment process in 1990 when the blue ribbon commission was struck. Although the commission’s work was largely academic, it did pave the way for incorporating public participation in future planning endeavors (Lehrer and Laidley, 2008). The procedure of interweaving large open public forums with stakeholder advisory groups was a TWRC initiative that aimed to straddle the divide between experts and lay people and encourage conflict resolution, education and the sharing of professional and community knowledge. The iterative process emerged directly out of early discussions between the TWRC’s leadership team and local community leaders representing the West Don Lands Committee, a vibrant neighbourhood organisation with a long history of grassroots planning leadership on and around the waterfront (West Don Lands Committee 1999). Now the TWRC employs this process on all of its masterplanning and construction projects, including design competitions.

Using this formula, the TWRC planned for a series of six competition exhibitions to be held at locations across Toronto, as well as a large public forum (TWRC 2006b). The ‘Central Waterfront Stakeholder Committee’ was also convened with the specific objective of consolidating “the many different voices with an interest in the waterfront” (TWRC 2006, 30). Representatives from a cross-section of organisations were invited to take part. These included: the local community associations representing residents on the waterfront and in adjacent neighbourhoods, local businesses

operating within the competition area and advocacy groups such as the Waterfront Regeneration Trust. To support the design competition process on technical matters, a City of Toronto expert advisory team was also convened. Their task was to offer counsel to the jury on the regulatory challenges that might be encountered with respect to planning, engineering and transportation by each of the shortlisted proposals (TWRC 2006).

The brief made clear that the TWRC wanted the competition to lead to both conceptual ideas, as well as a detailed public realm masterplan. The competition thus took the basic form of a two-stage implementation competition condensed over six months. In February 2006, the second stage of the competition was initiated by the release of a detailed request for qualifications (RFQ) – an abridged version of the competition brief – and an open call for competitors (see Figure 3). In accordance with provincial regulations, the only stipulation was that each team include a Toronto ‘partner’ with the necessary registration to practice architecture or landscape architecture in Ontario (TWRC 2006a). The RFQ set out the competition goals and objectives and outlined the timetable and assessment criteria for the competition. Interested teams were asked to produce an initial design concept and highlight their previous experience with public space design, sustainability, transportation infrastructure and community engagement (*ibid.*). 38 multidisciplinary teams from fifteen different countries responded.

During March 2006 the competition moved to the third stage and each submission was assessed against the aforementioned criteria by an internal panel comprising four design experts from the TWRC and the City of Toronto (TWRC 2006a). Sitting on the panel were the corporation’s vice president of planning and design, the head of the TWRC Waterfront Design Review Panel and, from the City of Toronto, the manager of waterfront parks and the urban design director. Once again, the decision-making process remained firmly in the hands of design experts. Based on this internal assessment, five shortlisted teams spanning an international gamut were invited to proceed to the fourth stage of the competition:

- Foster and Partners (UK) and Atelier Deiseitl (Germany)
- Stan Allen Architects and Sarah Whiting and Ron Witte Architects (USA)
- Tod Williams Billie Tsien Architects (USA) and Martinez Lapena-Torres (Spain)
- West 8 (The Netherlands) and du Toit Allsopp Hillier (Canada)

- Snøhetta (Norway), Sasaki Associates, nARCHITECTS, Weisz + Yoes Architecture, H3, Balmori Associates, Halcrow Yolles HPA (USA)

Phase 2: Intensive Design (6 Weeks)

At the start of the second phase of the competition the shortlisted teams were issued with the competition brief, given an honourarium of \$30,000 to cover expenses related to the competition and invited to tour the waterfront before beginning work on their submissions (TWRC 2006). Although the primary aim of the brief was to seek proposals for a complete public realm masterplan, the initial implementation objective was less ambitious. The brief made clear that funding was only available for a series of design interventions at the eight slip heads that had originally been proposed in a document called the *Central Waterfront Public Space Framework* (TWRC 2003). Approximately \$20 million was reserved for this intervention and the corporation admitted that “Other components may or may not be pursued at the same time depending upon a variety of factors, including availability of funding, timing, or related development projects, and need for further design work” (TWRC 2006a, 16). Nevertheless, the design teams were still instructed to consider the entire project in their proposals. In some respects, this was a clever decision. If the winning entry was well-received, heightened public support might encourage further funding commitments from the three levels of government. Yet it was also a big risk because the corporation would inevitably find it hard to sustain interest in its wider redevelopment aims if funding was delayed or unforthcoming.

The five shortlisted design teams were given a short six-week window during April and May 2006 to produce their submissions. Halfway through, at stage five of the competition (see Figure 3), they presented their ideas to the local stakeholder committee, the City of Toronto advisory team and TWRC design staff at a mid-term review. During the subsequent sixth stage, the design teams were expected to react to the mid-term review and develop a final proposal.

Phase 3: Public Feedback (2 Weeks)

Following the competition deadline on May 11th 2006 (stage seven), the competition moved to its third phase and was opened to comment at a widely publicised public forum. This eighth stage of the competition was convened on May 15th 2006 in downtown Toronto (TWRC 2006) and each of the shortlisted teams were given 15

minutes to present their design proposals. The forum attendees then had an opportunity to view the submissions and speak to the designers. Over the following two weeks, the shortlisted proposals were presented at six public exhibitions. Together these events proved pivotal. Over 500 people attended the forum and more than 300 comment cards were left at the public exhibitions (TWRC 2006b). A detailed record of the individual attendees was not kept, but data available from similar proceedings held by the TWRC suggest that the corporation's public events attract a large number of active members of local community associations based close to the waterfront, members of the Toronto design community (professional architects and planners, etc.), representatives from local advocacy group and, invariably, local graduate students interested in urban issues (e.g. TWRC 2003a). Attendance from communities located further away from the waterfront is typically much lower (Leherer and Laidley, 2008). Responding to this problem, and with the aim of re-establishing the waterfront as a "city-wide asset" (TWRC 2006b, 1), the corporation purposefully organised the ninth stage of the competition at sites across Toronto so that people residing away from the waterfront could get involved. The exhibitions and the public forum were publicised through paid advertising, media coverage and the TWRC's newsletter. The results were written up in a public report to the jury (TWRC 2006b).

The public events provided local people who were not directly involved in the stakeholder consultation process an opportunity to play an active role in the competition. In addition, the TWRC used the events to showcase the steps being taking towards implementation, as well as their commitment to community engagement. From the perspective of the *Toronto Star's* architecture critic, Christopher Hume, the public forum was a great success. "Judging from the crowds that showed up daily at BCE Place, where architectural models were on exhibit as well as drawings, this competition has succeed in generating some genuine excitement," he wrote, "God knows this sense of engagement will take some getting used to" (2006, B04). To coincide with the public exhibition, the *Toronto Star* also conducted an online poll, which asked attendees to vote on their favourite of the five submissions. 4,840 readers took part and the results were included in the report given to the jury (TWRC 2006b).

Figure 4: Renderings from the shortlisted design competition entries.
**Permissions required for images proposed for Figure 4.*

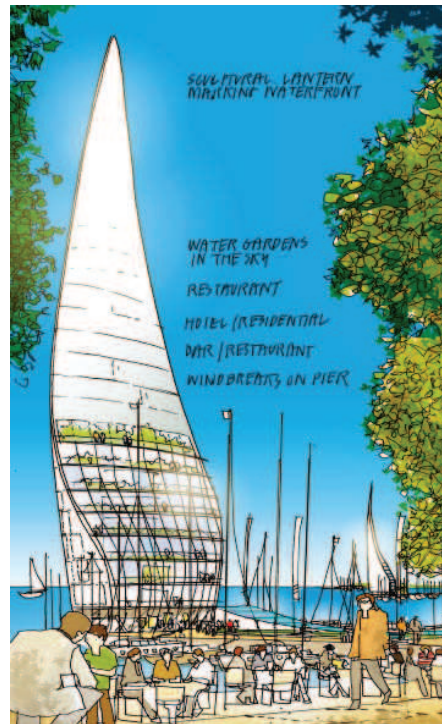


Image 4a: The tear-shaped pavilions proposed by the team led by Foster and Partners.

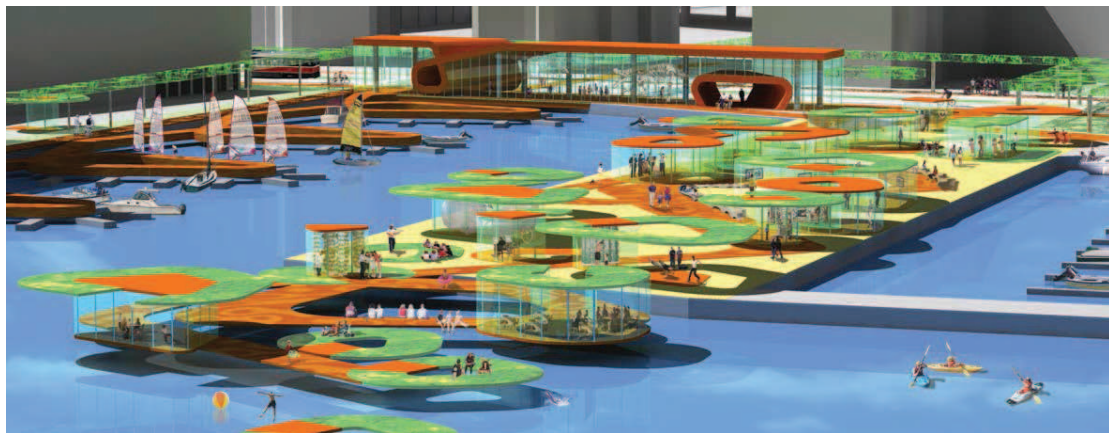


Image 4b: The 'cultural buoys' proposed by the team led by Stan Allen.



Image 4c: The series of new islands proposed by the team led by Tod Williams.

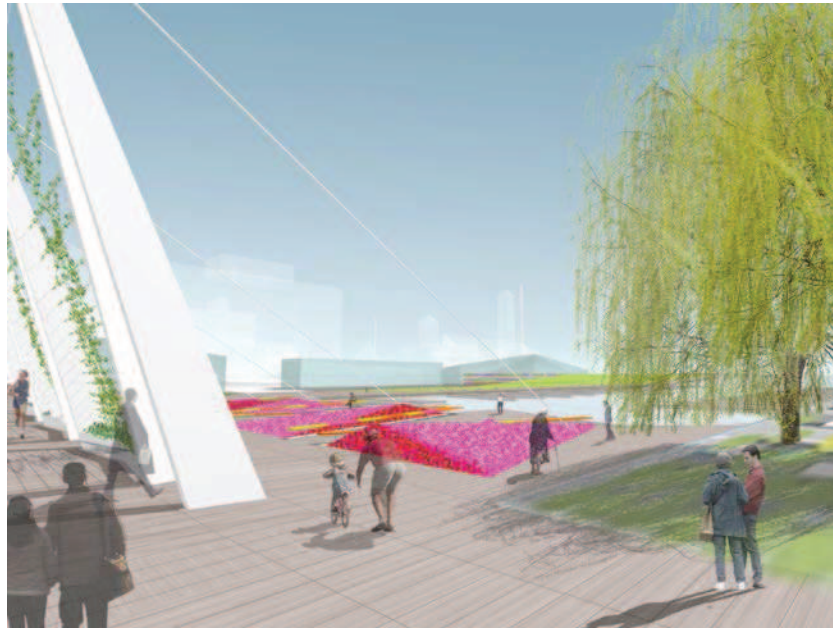


Image 4d: Elements of the public promenade proposed by PORT.



Image 4e: Elements of the public promenade and boardwalk proposed by the West 8 led team.

The five shortlisted submissions ranged in style and approach (see Figure 4). Norman Foster's team emphasised the eight slip heads with a series of piers and iconic teardrop-shaped pavilions (TWRC 2006c). Many of the attendees at the public

exhibitions liked these sculptural pavilions, while some were attracted to Foster's celebrity and believed he could be trusted to deliver a brilliant project (TWRC 2006b). Nevertheless, there was also concern that the design was too iconic. Christopher Hume (2006) noted, for example, that the proposal was dubbed 'Dubai lite' by some forum attendees. The entry by the first group of US architects, led by Stan Allen, also imagined a series of pavilions on the water's edge, in this instance constructed from glass and termed 'cultural buoys' (TWRC 2006c). One member of the public commented that the design was ' "startling" and "creative" and...would 'rival waterfronts around the world" ' (in TWRC 2006b, 3), while another worried that the design was "reminiscent of 60s-style urban planning disasters" (ibid.). The other American submission, by Tod Williams' team, received praise from exhibition attendees for the steps taken to integrate public transit with the natural environment, but was also widely criticised for proposing a series of new manmade islands in the Inner Harbour (TWRC 2006b). The two most celebrated entries were those by the European landscape architecture teams, the first led by the Norwegian firm Snøhetta and the second by the Dutch firm, West 8. Both were praised for their consideration of the existing environment and the emphasis they had placed on a continuous waterfront promenade. Albeit a rather crude sample, the West 8 scheme garnered the most votes in the *Toronto Star's* online poll with 30% support followed closely by Snøhetta who garnered 28% (TWRC 2006b).

Phase 4: Expert Assessment and Results

The fourth and final phase of the competition began at the end of May when the jury began its deliberations (see Figure 3). It was comprised of six design experts from diverse disciplines; the Toronto architect Brigitte Shim was appointed as the chair and was supported by landscape architect Claude Cormier, urban designer Ken Greenberg, New York architect Lise Anne Couture, film maker Atom Egoyan and Bruce Mau, a Toronto-based graphic artist and brand designer. A senior urban designer at the corporation reflects that the kaleidoscope of talent on the jury was intentional. It was selected by the TWRC's design team with leadership from the corporation's vice president of planning and design; the public did not play a selection role. The vice president and his team chose a group of experts that were likely to take city building principles into account, but by inviting a film maker and graphic artist to join the panel as well, they also reinforced the corporation's market-orientated desire to use art and design to brand the waterfront and, at the same time, demonstrate to the general public that the corporation was keen to channel a broad

range of ideas for the waterfront that did not focus solely on architectural and urban design expertise. As a senior urban designer at the TWRC explains, “I like to get more than just architects on these things because otherwise the architects just talk about architecture to each other” (CORP 8).

The jury were asked to assess the proposals using the design principles contained in the competition brief and the feedback compiled from the public events and the stakeholder advisory committee (TWRC 2006). Their report was released by the end of the month (TWRC 2006c). Complimenting all the teams for producing “a remarkable amount of exemplary work” (TWRC 2006c, 3), the report described how the jury had looked for a design solution that offered a bold vision, but could also be implemented quickly. With unanimity, and mirroring the sentiment of both local people and the stakeholder advisory group, the jury chose the entry by the team led by West 8. The runner-up position was awarded to the team led by Snøhetta. A member of one of the local neighbourhood associations involved in the Central Waterfront Stakeholder Committee remembers, “we chose the company...the one that won we liked. They had sort of a European sensibility. It introduced something completely new to Toronto” (CIVIL 4).

Although not explicitly described as such in the jury’s report, this ‘European sensibility’ likely stemmed from the team’s simple and consistent approach to the public realm and the emphasis it placed on civic scale over architectural frivolity. The West 8-led team had responded well to the TWRC’s competition brief and, in particular, the problem of fragmentation. To engineer the facelift of Queen Quay, the winning entry proposed a series of simple yet dramatic design moves: remove two lanes of traffic, transform the surface under the streetcar lines into a carpet of grass, continue the Martin Goodman Trail² along Queens Quay, widen the sidewalk and plant a dense glade of trees to demarcate pedestrian, cycle and vehicular space. At the eight spit heads, the team proposed a series of sculptural wooden decks, quickly coined the ‘wave decks’, to act as anchoring public spaces. Each was envisaged slightly differently, but remained part of a consistent fabric that connected the north-south termini streets at the slips with both Queens Quay and the water’s edge (see Figure 5).

² The Martin Goodman Trail is part of a longer Toronto lakefront bike trail. the Central Waterfront section is yet to be completed.

Figure 5: Renderings of the winning submission by the team led by West 8.



Image 5a: Illustration of the proposed transformation of Queens Quay into a multi-use boulevard (with kind permission of Waterfront Toronto).



Image 5b: Illustration of one of the proposed 'wave decks' (with kind permission of Waterfront Toronto).

Implementing the Central Waterfront Masterplan

In their report, the jury urged the TWRC to give the winning design team a much fuller implementation mandate than imagined in the brief, arguing that any initial efforts should be more broadly focused on a strip of Queens Quay and the waterfront promenade, rather than the slip heads alone. This would demonstrate how the entire

proposal might work and “ensure that the citizens of Toronto see immediate action” (TWRC 2006c, 9). Recognising the political capital that could be gained from this and hoping to reinforce the public dimension of the competition, the TWRC arranged a summer showcase event. For ten days in August 2006 the TWRC closed a stretch of Queens Quay and constructed a ‘mock up’ that included the installation of a one-kilometre lawn, a temporary extension of the Martin Goodman Trail and a lineal flowerbed. The response to the event was generally very positive (Hume 2006a).

Sustaining the Competition’s Momentum

During the remainder of 2006 and throughout 2007 and 2008, the West 8-led team were contracted to deliver a full masterplan for the Central Waterfront and a supporting environmental assessment (EA). Required under provincial law on all large infrastructure projects, the EA was conducted in partnership with the City of Toronto and was supported by a companion EA process. This was completed by the Toronto Transit Commission (TTC) and focused on the streetcar track upgrades that were necessary to alter the configuration of Queens Quay. Public engagement continued during the two-year process through an ongoing series of iterative stakeholder advisory meetings and public forums (Waterfront Toronto 2009). Neither of the final EAs recommended any major departure from the shared boulevard proposed by the winning team and the provincial government approved the assessment process in April 2010 allowing construction to proceed subject to funding (Waterfront Toronto 2012).

Due to their smaller size, the wave decks were not subject to the same strict regulatory assessment and were allowed to proceed almost immediately. The detailed designs for the new wave decks were periodically reviewed by the TWRC’s expert Waterfront Design Review Panel (WDRP) as well as by the stakeholder committee. One of the members of the winning design team notes that the stakeholders “really helped us understand what programmatic things they would like to see more of; the kinds of activities they imagined and the moods they imagined” (DESIGN 8). From the outset, the WDRP was also very supportive of the winning submission and praised its creativity and simplicity in connecting the city to the lake (TWRC 2006d). The panel’s critical commentary, albeit relatively minor, was reserved for the more technical aspects of the construction details (TWRC 2007). However, the panel’s greatest concern related to the implementation of the wider masterplan. While continuously stressing their enthusiastic support for the design

proposals, the panel made it be known that in their professional opinion the success of the *whole* project was crucial to the wider redevelopment vision and that delay would damage the corporation's public credibility (Waterfront Toronto 2008).

The TWRC's ability to secure funding from the three levels of government to move beyond the wave decks proved difficult, despite the combined efforts of the expert design jury, the WDRP and the enthusiasm of local community leaders. Even though regulatory approval had been granted, by mid 2012 only a very small percentage of the Central Waterfront competition vision had been realised. The TWRC constructed three of the eight wave decks during 2008 and 2009 utilising the funding that was available³ (see Figure 6). These have proven to be a major success and have won numerous awards as well as enthusiastic support from local residents (CIVIL 4). The only other aspect to have been completed is a small phase of the waterfront public promenade. It was enabled by funding commitments associated with adjacent building projects and opened in 2010.

Figure 6: Bathurst Wave Deck.



Overshadowing the implementation of these punctuated additions to the waterfront has been the slow progress made on Queens Quay and the remainder of the waterfront promenade. Speaking in 2011, a representative from a local community group lamented that the excitement surrounding the 2006 showcase event had

³ Each costing approximately \$5 million

become a distant memory (CIVIL 4). In July 2012, however, a full six years after the design competition and soon after the research for this paper was completed, initial financing for upgrading a small section of Queens Quay Boulevard was secured from the three governments. The money was tied to essential streetcar track repairs and construction work began in Autumn 2012 and is scheduled to continue until 2015 (Waterfront Toronto 2013).

Lessons from an Innovative Urban Design Competition

The motivation behind the Central Waterfront Innovative Design Competition was simple. The TWRC was desperate to build a constituency of support for its wider waterfront redevelopment programme as it weathered serious financial storms. In some respects it was successful in doing this. It engaged local people in an ordinarily closed decision-making process, enlivened interest in the waterfront and elements of the winning design received positive press coverage and design awards. Yet in spite of this, financial roadblocks persisted and the innovative decision-making environment was undermined by protracted construction delays and lacklustre support from the three levels of government. Nevertheless, the impact of these obstructions upon the intended design vision were relatively minor and those elements of the West 8-led proposal that have been constructed, or are scheduled for construction, remain consistent with the original proposal selected by the jury. Such an outcome is not always guaranteed during a design competition because new clients, and occasionally new design teams, can take over the implementation of a competition entry as time passes.

This final section of the paper casts the Central Waterfront Innovative Design Competition as an example of how competition sponsors might begin to reconcile some of the tensions between traditional jury-based design competitions and public decision-making processes. It begins by underscoring the three most successful elements of the competition decision-making model illustrated in Figure 3 before exploring a series of potential strategies for increasing the public's role in future design competitions.

Establishing a clear competition brief: Researchers have previously identified that the quality of a competition brief and the ability of a design jury to make an assessment that is actually based on that brief, rather than the whims of jury members, remains a challenge during many design competitions (Eley, 1990; Volker 2010). The outcomes on Toronto's waterfront were encouraging in this respect. The contextual analysis

provided a strong foundation for the urban design principles that followed and, because the brief was based on previous studies of the waterfront, the integrity of prior public consultation exercises was also upheld. This meant that the brief became an authoritative guide for the competition participants. It provided the jury with a clear mandate as well as a thoroughgoing sense of the competition's history and its subsequent goals. Moreover, the jury and the corporation 'stuck to the brief' when assessing both the qualification and shortlisted proposals. The scope and depth of the brief helped to legitimatise the competition and sustain the TWRC's commitment to the winning proposal throughout the many implementation hurdles that followed.

Appointing an appropriate jury: The chances for digression from the competition brief were further alleviated by the sponsor's purposeful selection of a broadly focused jury that was sympathetic to the redevelopment programme and, indeed, the rationale of an urban design competition (rather than a competition focused on a single building or object). Evidence of this was born out in the jury's final report, which, in its assessment of the shortlisted entries, strongly urged the TWRC to focus any initial implementation efforts on the urban design vision, in the round, rather than the slip head design elements alone. While financing woes meant this recommendation could not be realised in the short-term, the jury's intelligent advocacy for the project, *in toto*, helped the TWRC to lobby passionately and convincingly to the three levels of government about the need for the winning design proposal to be completed in its entirety and as imagined by the competition winners.

Integrating opportunities for public feedback: Supporting the brief and the expert jury was the public participation procedure adopted during the competition. As discussed at the beginning of the paper, many design competitions fail to generate a successful dialogue between the sponsor, competitors, jury members and the final users of the project. Moreover, design competitions rarely incorporate structured space for public participation (Banerjee and Loukaitou-Siders 1990; Nasar, 1999). On Toronto's waterfront the combination of stakeholder committee meetings and public exhibitions begins to offer a contrary perspective. Through enhanced dialogue, the sponsor and the design jury took into account the opinions of the general public who attended the exhibitions and public forum and, although this process was not entirely open – a jury still made the final decision – the public had a number of clear opportunities to assess and critique the competition entries. The TWRC's design review process, as well as further stakeholder meetings and public forums that occurred after the formal competition had concluded, reinforced this collaborative approach and helped to

sustain the competition's struggling momentum in the face of funding delays. In addition, the jury, whose professional judgment was still considered crucial to legitimise the competition, were obliged to take public feedback into account when making their decision. This reduced any likelihood that the competitors would only aim to please the individual jury members, as experienced on past design competitions (Banerjee and Loukaitou-Sideris 1990), and led to a strong sense of agreement between the jury and the general public about the winning entry. The process described is similar in scope to what Nasar (1999) has termed a Pre-Jury Evaluation (PJE). Although Nasar proposes a more quantitative analysis of user viewpoints than was adopted on Toronto's waterfront, the general concept is similar: the opinions of those who are going to inhabit a building or public space should be recorded prior to the jury's deliberations and directly inform the decision-making process.

Strategies to Deepening the Public's Role in Design Competitions

While the Central Waterfront Innovative Design Competition offers a fresh perspective on how the users of the built environment might begin to play a more substantive role during a design competition, the process was still imperfect and there remain further ways in which the barriers between lay people and experts might be reconciled in future design competitions.

Establishing a public dialogue at the beginning of a competition: Although public opinion was integrated throughout the assessment of the shortlisted entries, the TWRC did not make the same effort to establish a dialogue with local people during the preceding open stage of the competition. The decision to select the five shortlisted teams was instead made by an internal panel of experts. While the cost of hosting additional public forums might have been prohibitive, the PJE stage, to use Nasar's parlance, could have been extended by other means. In future competitions, for example, this could take the form of an interactive website onto which users might input initial ideas. Such a process would encourage interest in the competition while providing the jury with a deeper sense of local sentiment. In a similar vein, the TWRC could have convened the stakeholder advisory committee earlier in the decision-making process and used it, as it did successfully later on, as a platform to discuss the design proposals in more depth.

Inviting a lay representative to sit on the jury: To reinforce the significance of the

structured public engagement conducted by the TWRC during the competition, a representative from the stakeholder committee could have sat on the design jury. While in this instance the jury's decision did appear to reflect the majority opinion of those who participated in the public forums, exhibitions and the stakeholder advisory group, the jury's deliberations were nevertheless conducted *in camera*. As a result, the extent to which the jury based their decision on the judgment of the public participants versus their own expert knowledge cannot be reliably known. Appointing a lay representative on the design jury would provide additional monitoring and "decrease the communication gap often associated with competitions" (Banerjee and Loukaitou-Sideris 1990, 128). Furthermore, the TWRC could have also sought public input during the selection of jurors. Although steps were taken to create a jury with a diversity of design talent, the pool of candidates was still limited by the professional knowledge and ideologies of the experts making the jury selection on behalf of the corporation.

Developing opportunities for post-competition participation: In some respects the TWRC did conduct participation after the competition. Its peer review panel rigorously reviewed the winning proposals on numerous occasions, regular public forums were convened and the stakeholder advisory committee also remained active. Nevertheless, there remains scope for what Nasar (1999) calls post-occupancy evaluation (POE). During a POE the sponsor evaluates the performance of the finished project against the principles contained in the competition brief. In addition, the POE could also be used to assess the quality of the competition decision-making process. While Nasar's proposal emerges from a critical assessment of an architectural competition for a singular building, the role of a POE is just as relevant to competitions in urban design because "They can make the jury and architect more accountable for the project's performance and they can improve our understanding of the actual performance of these public projects" (Nasar 1999, 161). In many instances the biggest barrier to a POE will likely be cost. For the sponsor, conducting a reflective assessment of a completed project would be both expensive and time consuming, especially as many competitions are 'one off' events. On Toronto's waterfront, however, there is a strong rationale for employing a POE because the TWRC has continued to use its design competition model on emerging public realm projects and, as a result, it remains a high profile component of the corporation's wider public participation programme. In particular, the POE might help the corporation pinpoint a more successful means of seeing a project through to full implementation.

Conclusion

This paper has presented a design competition decision-making model and asserted that urban design competitions should incorporate more open and participatory decision-making. It has argued that design expertise can, and should, remain a distinct component of any design competition decision-making process, but posits that a positive balance must be struck between professional expertise and the diverse opinions of lay people during, before and after a design competition. The case of the Central Waterfront Innovative Design Competition highlighted the structured ways that participation was integrated into the decision-making process and, although lay people did not directly influence the jury in their deliberations, the conditions were established for local people to have effective influence over the competition process and the TWRC ensured that the jury took local opinion seriously. This outcome was reinforced by the high profile nature of the public forum held in downtown Toronto, the extensive press coverage given to the public exhibitions and the coupling of the competition to the TWRC's wider iterative public consultation process.

While public participation is often used in different ways during various design competitions the research available to understand these processes is limited. More knowledge is needed about the competition procedures that lead to some of the most high profile buildings, public spaces and neighbourhoods around the world. This paper offered a series of important lessons for practitioners in Toronto and beyond, but was also presented as a stepping-stone for further enquiry. Future scholarship on design competitions should aim to interrogate the decision-making models employed by both public and private institutions employing design competitions in different jurisdictions and establish deeper theoretical perspectives on the relationships that can be forged between lay people and experts during design competitions.

Appendix: List of Interviews and Explanation of Codes

The numbers assigned to the participants below denotes their categorisation in the full list of research participants for the wider project that led to this paper.

DESIGN 8: Senior landscape architect involved in the winning competition bid
(Interview conducted: 25th March 2011).

CIVIL 4: Representative of a local neighbourhood organisation based on the waterfront (Interview conducted: 28th March 2011).

CORP 3: Senior executive and urban designer at the TWRC (Interview conducted: 18th March 2011).

CORP 7: Senior executive at the TWRC (Interview conducted: 1st April 2011).

CORP 8: Former senior executive at the TWRC (Interview conducted: 1st April 2011).

Bibliography

Alexander, E. R. and L. P. Witzling. 1990. "Planning and Urban Design Competitions: Introduction and Overview." *Journal of Architectural and Planning Research* 7 (2): 91-104.

Alexander, E. R., L. P. Witzling and D.J. Casper. 1987. "Planning and Urban Design Competitions: Organization, Implementation and Impacts." *The Journal of Architectural and Planning Research* 4 (1): 31-46.

Arnell, P. and Bickford, T. (eds.). 1984. *Mississauga City Hall: a Canadian competition*. New York: Rizzoli.

Arnell, P. and Bickford, T. (eds.). 1984a. *Southwest Center: The Houston Competition*. New York: Rizzoli.

American Institute of Architects. 2011. *The Handbook of Architectural Design Competitions*. Washington, DC: American Institute of Architects.

Banerjee, T. and A. Loukaitou-Sideris. 1990. "Competitions as a Design Method: An Inquiry." *Journal of Architectural and Planning Research* 7 (2): 114-131.

Cabanieu, J. 1994. "Competitions and Architectural Excellence". *Places*, 9 (2): 40-41.

City of Toronto. 2001. *Making Waves: Central Waterfront Part II Plan*. Toronto: City of Toronto.

De Haan, H. and I. Haagsma. 1988. *Architects in Competition: International Architectural Competitions of the Last 200 Years*. London: Thames and Hudson.

Eidelman, G. 2011. "Who's in Charge? Jurisdictional Gridlock and the Genesis of Waterfront Toronto." In *Reshaping Toronto's Waterfront*, edited by G. Desfor and J. Laidley, 263-286. Toronto: University of Toronto Press.

Eley, J. 1990. "Urban Design Competitions: A British Perspective." *Journal of Architectural and Planning Research* 7 (2): 131-141.

- Flyvbjerg, B. (2001). *Making Social Science Matter: Why social enquiry fails and how it can succeed again*. Cambridge: University of Cambridge Press.
- Hume, C. 2006. "Finally, waterfront waves. We won't learn the winner till Friday. Meanwhile, people are starting to talk." *Toronto Star*, 27th May 2006.
- Hume, C. 2006a. "Hallelujah, we're capable of change." *Toronto Star*, 21st August 2006.
- Kreiner, K., Jacobsen, P. H. and Jensen, D.T. 2011. Dialogues and the problems of knowing: Reinventing the architectural competition. *Scandinavian Journal of Management*, 27 (1), pp. 160-166.
- Laidley, J. 2007. "The ecosystem approach and the global imperative on Toronto's Central Waterfront." *Cities* 24 (4): 259-272.
- Larson, M.S. 1994. "Architectural Competitions as discursive events". *Theory and Society*, 23 (4), 469-504.
- Lehrer, U. and Laidley, J. 2008. Old Mega-Projects Repackaged? Waterfront Redevelopment in Toronto. *International Journal of Urban and Regional Research*, 32 (4), pp. 786-803.
- Lehrer, U. 2011. "Urban design competitions." In *Companion to Urban Design*, edited by T. Banerjee and A. Loukaitou-Sideris, 304-316. Abingdon, Oxon: Routledge.
- Lipstadt, H. 1989. "The Experimental Tradition." In *The Experimental Tradition: Essays on Competitions in Architecture*, edited by H. Lipstadt, 9-19. New York: Princeton Architectural Press.
- Lipstadt, H. 2003. "Can 'art Professions' Be Bourdieuean Fields Of Cultural Production? The Case Of The Architecture Competition." *Cultural Studies* 17 (3-4): 390-419.
- Lipstadt, H. 2006. "The Competition in the Region's Past, the Region in the Competition's Future." In *The Politics of Design: Competitions for Public Projects*, edited by C. Malmberg, 7-28. Princeton, NJ: The Policy Research Institute for the Region, Princeton University.
- Loew, S. 1994. "Design Control in France". *Built Environment*, 20 (2), pp. 88-103.
- Malmberg, C. 2006. "Introduction." In *The Politics of Design: Competitions for Public Projects*, edited by C. Malmberg, 3-5. Princeton, NJ: The Policy Research Institute for the Region, Princeton University.
- Mansour, Y. (ed.) 2003. *The Grand Museum of Egypt: International Architecture Competition*. Cairo: The Egyptian Ministry of Culture.
- Nasar, J. 1999. *Design by Competition: Making Design Competition Work*. Cambridge: Cambridge University Press.

- Ollswang, J. E. 1990. "Successful Competitions: Planning for Quality, Equity and Useful Results." *Journal of Architectural and Planning Research* 7 (2): 105-113.
- Pantel, G. (1994). "Design Control in German Planning." *Built Environment*, 20 (2), pp. 104-112.
- Punter, J. 2005. "Urban design in central Sydney 1945-2002: Laissez-Faire and discretionary traditions in the accidental city." *Progress in Planning* 63: 11-160.
- Royal Institute of British Architects. 2013. *Design Competitions: Guidance for Clients*. Leeds: Royal Institute of British Architects.
- Sagalyn, L. B. 2006. "The Political Fabric of Design Competitions." In *Politics of Design: Competitions for Public Projects*, edited by C. Malmberg, 29-52. Princeton, NJ: The Policy Research Institute for the Region, Princeton University.
- Solomonson, K. 2001. *The Chicago Tribune Tower Competition: Skyscraper and Culture Change*. Chicago: University of Chicago Press.
- Spreiregen, P. D. 1979. *Design competitions*. New York: McGraw-Hill.
- Stake, R.E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage.
- Strong, J. 1976. *Participating in Architectural Competitions: A Guide for Competitors, Promoters and Assessors*. London: Architectural Press.
- Sudjic, D. 2006. "Competitions: The Pitfalls and the Potential." In *The Politics of Design: Competitions for Public Projects*, edited by C. Malmberg, 53-66. Princeton, NJ: The Policy Research Institute for the Region, Princeton University.
- TWRC. 2002. *Our Waterfront: Gateway to a New Canada, The Development Plan and Business Strategy for the Revitalization of the Toronto Waterfront*. Toronto: TWRC.
- TWRC. 2002a. *Toronto Waterfront Revitalization Corporation Public Consultation and Participation Strategy*. Toronto: TWRC.
- TWRC. 2003. *Central Waterfront: Public Space Framework*. Toronto: TWRC.
- TWRC. 2003a. *East Bayfront Precinct Planning: Summary of Public Forum #1*. Toronto: TWRC.
- TWRC. 2006. *Toronto Central Waterfront Innovative Design Competition: Competition Brief, Version 2*. Toronto: TWRC.
- TWRC. 2006a. *Innovative Design Competition for Toronto's Central Waterfront: Background Information Document, Request for Qualifications*. Toronto: TWRC.

- TWRC. 2006b. *City-at-Large Public Input Summary Report*. Toronto: TWRC.
- TWRC. 2006c. *Jury Report for Toronto Central Waterfront Design Competition*. Toronto: TWRC.
- TWRC. 2006d. *Waterfront Design Review Panel: Minutes of Meeting 8, Wednesday June 21st, 2006*. TWRC: Toronto.
- TWRC. 2007. *Waterfront Design Review Panel: Minutes of Meeting 16, Wednesday May 9th, 2007*. Toronto: TWRC.
- Van Wezemaal, J. 2011. "Research on architectural competitions: Towards a theory of jury-based decision-making." *Scandinavian Journal of Management* 27(1): 157-159.
- Volker, L. 2010. *Deciding about Design Quality*. Leiden, NL: Sidestone Press.
- Waterfront Toronto. 2009. *Queens Quay Revitalization Environmental Assessment: Municipal Class Environmental Study Report*. Toronto: Waterfront Toronto.
- Waterfront Toronto. 2008. *Waterfront Design Review Panel: Minutes of Meeting 24 Wednesday February 13th 2008*. Toronto: Waterfront Toronto.
- Waterfront Toronto. 2012. "Queens Quay Environmental Assessment." Accessed March 28th 2012. Waterfront Toronto http://www.waterfronttoronto.ca/queens_quay_bldv/queens_quay_ea.
- Waterfront Toronto. 2013. "Constructing Queens Quay." Accessed May 20th 2013. Waterfront Toronto http://www.waterfronttoronto.ca/explore_projects2/central_waterfront/queens_quay/constructing_the_community___queens_quay.
- West Don Lands Committee. 1999. *Obstacles and Opportunities: Realizing the Potential of the West Don Lands: Workshop Final Report*. Toronto: West Don Lands Committee.
- Yin, R.K. (2003). *Case Study Research: Design and Methods (3rd Edition)*. Newbury Park, CA: Sage.