# Bridging the Gaps: A procedural Analysis on Design Competitions -the case study of Low2No competition in Finland

(A procedural Analysis on Design Competitions -the case study of Low2No competition in Finland.)

### Zheng Liang, Aalto University, Finland

### 1. Introduction

Design competitions have a long history. The first ever recorded design competition in literature dates back to 448 BC, organized by the ancient Greeks for constructing a war memorial on the Aropolis in Athens (Hurwit, 2000). Recently the importance of design competitions are now increasing as tools to ensure design quality in our built environment. This is connected to the changing regulations of public procurement on building and infrastructures in the course of European Union integration and world trade organization. As Sudjic (2005) argued that, throughout the European Union, an element of competition is now mandatory in the procurement of buildings and infrastructure, and competitions have had a new lease of life as a result. They have been considered as a standard method to discover new talents, stimulate public debate and publicity, encourage young architects and ensure design quality especially along with prominent large-scale projects. Young talent are offering better chance by relatively more fair competition of design proposals than their connections or origins. In 2005, the Princeton University made a study on how design competition shape the landscape across the region and world. And researches<sup>1</sup> are done with respect to the important role of design competition. However, there is a lack of procedural analysis due to the very complexity of design competition; there are various types of stakeholders and different forms of representation involved. As Catherine Malmberg (2005) highlighted, the information regarding design competition is anecdotal and people are eager to put together better scholarship on it; there is confusion over the role of the competition itself and how it translates into the built piece of work. In order to obtain a procedural knowledge, it is important to reveal what are the factors (objective and subjective) that affect the result of a competition project and what are the degrees of importance of them? What are important results through the analysis of design competition? What are the practical implications to promote urban development as a whole?

In this paper I will give a procedural analyse the design competition through a case study of low2No<sup>2</sup> design competition in Finland, representing an attempt to reveal how design competition are used to direct the city planning to sustainability <sup>3</sup> through a procedural innovation. The project is part of the "sustainable solutions Finland" project, organized by the Sitra-the Finnish Innovation Fund. The competition aims to nurture the concept for combing sustainable development with an integrated social, economic and architectural approach. The competition area is situated in the heart of Jätkäsaari, which is known as reclaimed land and the results of the competition, the jury report and related documents were made available on October 19th, 2011.Through the analysis, we are able to see how the design competition are different from the traditional example of design competition in Finland. My research method is based on content analysis, which allows me to analyse the very relations of stakeholders involved during the competition process by exacting the key words in highlight of the competition brief, rules, reports and relevant textual documents; we will be able to ask question above-mentioned.



This paper are structured into five parts, from the first part, I will introduce the research design and methodology. Secondly, I will give the overview of the context study-the design competition tradition in Finland. Then the in-depth analysis of the case study will be conducted. At the end, the preliminary findings and relevant implications will be given as a result.

### 2. Research methods

According to Sudjic (2005), even the most experienced of juries would prefer concrete representation such as images and diagrams other than words to help them make up their decisions, and it is also more understandable for the sponsor who may be layman without professional knowledge as well. Controversy arises over competition rules and briefs, which are both represented in words. However, as Kimmo Lapintie (1996) argued that the jury report of architectural competition could be refer to scientific theories and observation data despite their due nature. Content analysis (De Sola, 1959; Weber, 1990; Krippendorff, 1980) is used as the main research method. Textual materials are the major source of recording design competition nowadays; content analysis was employed as the research tool to determine the presence of certain words or concepts in the context of the project and thus classify textual material and transfer it to relevant and manageable data.

The textual documents related to design competition are analysed to reveal its conceptual content, design methodologies, physical features and their various degree of importance with competition requirements. The empirical material includes design competition brief, jury report and design proposals, which are important source of records of design competition evaluation process. Through analysing the key words highlighted in the documents, we are able to explicit the hidden facts during the competition process.

### 2.1 Gaps existed during competition

Generally, competition process includes a sponsor (also known as initiator or client) who initiate the design competition and supply costs and resources for proceeding the competition. The sponsor normally engages with professional adviser for professional consultations on phase of design competition specification. With the assistance of professional adviser, the sponsor defines the brief scheme and ultimate objectives of competitions under his/their political, economic and social agenda. The professional adviser plays a crucial role in developing and testing the competition process. In some cases, other parties such as technical adviser are also appointed by the sponsor due to the complexity of the project. The professional adviser will be responsible in assisting of selecting the Jury board and set up the procedural rules (competition conditions), which will be obeyed during the competition process. The Jury will evaluate the competitors and select winners and distinguish the gualities according to the selection criteria specified in the project program document: the competition brief with consensus among them. The roles of sponsor, professional adviser and other possible parties are intertwined during the competition specification phase and put a major impact on the decision of selection criteria on choosing the winning entry.

Since it is the jury who will finally decide the winning proposal, competitors may take the seemingly known or imagined preferences of the jurors into account during the design process. However, the results in all likelihood may not be what the client expected. As Pelli<sup>4</sup> argues that competition system distort the design process, the essential phase for a good design of building, which is the result of a special type of collaboration of architect with clients and users, cannot be fully realized in an open competition. The lack of direct communications between the competitor and client and user may largely reduce to the risk of what the designer built is out of the expectation of the client and user. Liang (2012) argued from a



recent research that there are gaps existed during the seemingly liner competition process as diagram 1 shows.



Diagram 1: the liner process of design competition as described by the author

It is important to adapt the competition format towards our contemporary built environment. There are some attempts to deal with the problems. As the Royal Institute of British Architects<sup>5</sup> suggested that, "often a hybrid competition is seen as the most advantageous solutions". In Denmark, the types of design competition<sup>6</sup> are much flexible, which consists by idea competitions, project competitions, combined project and fee-based competitions, competitions in stages and competitions not based on anonymity. In order to have better communication among stakeholders involved, types and forms of design competition should not be restricted but be adapted with various context of exact project.

Based on above-mentioned, we thus focused on the case study of Low2No competition due to their new form to promote the sustainable development strategies for Helsinki, Finland. Secondly, the reason why we chose the case study of Low2No competition is closely related to its specific relations with the Finnish design tradition. Till now, over 2000 architectural competitions have been held in Finland and most were frequently used in town planning and in the design of public projects, such as schools, churches, cultural halls and town halls. The long history of Finnish architectural competition defined the standard for being a good architecture and has a significant influence in shaping the Finnish built environment (Huotelin and Kaipiainen, 2006; Solla, 1992). Kazemian, Reza and Rönn, Magnus (2009) stated that the Finnish experience contains innovative solutions in the realm of urban revitalization, poverty elimination, environmental pollution, cultural and socio-spatial renewals, and democratization of design and planning process. The development of design competition in Finland is heavily rooted from the foundation of SAFA and influenced by the Swedish rules (Huotelin and Kaipiainen, 2006; Solla, 1992; Matti Rautiola, 2005). According to Kazemian, Reza and Rönn, Magnus (2009), architectural competition in Finland is administered by the SAFA and accepted as a common method to evolve innovative and qualitative proposals. However, the Low2No competition aims<sup>7</sup> to: "rethink the Finnish competition approach in order to meaningfully address their strategic goals." The organiser intends to have their own sets of rules and procedures rather than following standard SAFA protocols, according to Prof Martin Bechthold : "Despite support for a new and more open approach to competitions SAFA's board never formally approved Sitra's competition process."

We started from careful scrutinizing of the common rules, objectives and themes of the context of case study. How the general themes, objectives and rules were specified were analysed as context study. At the detailed project level, how jury decide the winning entries



will be illustrated. By analysing the meaning and relationships of concepts, we attempted to identify inherent correlations and compare with other during the competition evaluations process. Most importantly, what are crucial factors with respect to the final competition result? What are relations in between them? On the basis of systematically examining interaction of different roles, networks and their relations with evaluation criteria, we will answer the following questions:

- 1. What are the factors (objective and subjective) that affect the result of a competition project and what are the degrees of importance of them?
- 2. What are important results through the analysis of design competition?
- 3. What are the practical implications to promote urban development as a whole?

## 3.0 Context study

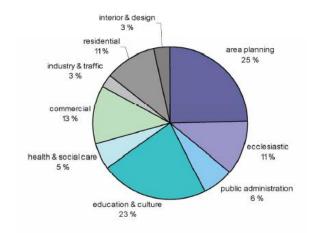
Design competitions are lenses from which we can reflect the design cultures. In America, Deyan Sudjic (2005) concluded that the mark of insufficient opportunities for younger architects is partly due to the lack of open competitions; which in part lead to most notable new buildings are designed by European or Asian architects. In Europe, design competitions are widely used along with large-scale project as a consequence of the compulsory rule in the procurement of buildings and infrastructure of European Union integration. Especially in Finland, design competition system is nationally accepted as traditions to select qualify design solution and promote young talents. Richard Rogers<sup>8</sup> has criticized the rigidity of Italian competition system by following the relevant legislation other than the spirit of design competition, from which the jury cannot select their favourite. In Finland, the involvement of the SAFA in the competition process to some extent give the sponsor and competitor confidence in terms of professional guarantee.

Over the past 133 years, there are over 2000 design competitions held in this country. From 1876 on, many well-known projects, such as the bank of Finland, arose from design competitions. In Finland, design competitions act as the platform for the purpose of making national identity and image, to communicate social values between citizens and public will, to find innovative solutions for difficult design tasks, to assure the project quality, to implement the relevant policy programs, to gain positive publicity, to continue design discipline education, practice, exchange and promote proficiency (Matti Rautiola, 2005).



Figure 1: the architectural competitions in Finland from 1972-2009 Source: the official site of the SAFA





#### Architectural competitions 1876-2005

Figure 2: the use percentage of architecture design competition in Finland from 1876-2005 Source: From Matti Rautiola

Over the past decades, the guidelines for planning and design competitions in the construction sector have been revised based on the integration of EU directives on public procurement by SAFA, while the Finnish Competition authority (FCA) is responsible for competition regulation in Finland. The FCA investigates competition restrictions both on European competition laws and on the basis of complaints received. Recently, problem has been resulted in conflicts between the rigidity of the architectural competition condition applied by SAFA<sup>9</sup> and supervision of FCA. The conflicts have been resulted between the Competition conditions of SAFA and supervising of FCA(*The Finnish Competition Authority*) on the restriction of "prevent its members from entering other architectural competitions than ones consulted by or approved by SAFA "applied by SAFA which distorts competition in the design service markets. As shown in figure 1, design competitions have been vastly used in the area of education, culture and area planning and mostly administered by the SAFA. Almost all open competitions in Finland are well documented: results of invited competitions are published on the SAFA website, the museum of Finnish architecture and in the appendix to ark-the Finnish architectural review that periodically published by SAFA' (Huotelin and Kaipiainen, 2006). Compared with the traditional competition organized by SAFA, the Low2No competition is a new kind of competition to encourage the reconceptualise medium and long-term sustainability design strategies in Finland.

### 4.0 Case study: sustainable development design competition

The competition site located on 100 hectares reclaimed land areas of Jatkasaari., which is one of the six large redeveloped area along with the relocation of Helsinki's port facilities to the eastern edge of the city in 2008. The aim of the competition is to "to design a large building complex on an approximately 3/4 hectare site on the reclaimed goods harbor at the western edge of Helsinki' s central business district"<sup>10</sup>. Four themes (energy efficiency, low to no carbon emissions, high architectural, spatial and social value, sustainable materials, methods and operations at the scale of a city block) are highlighted as central objectives for design approaches. Due to the lack of national sustainability strategy, it is necessary to acquire sustainable design principles.



Liang, Zheng **A procedural Analysis on Design Competitions** 48<sup>th</sup> ISOCARP Congress 2012



Jätkäsaari goods harbour, courtesy of Suomen Ilmakuva Oy

Figure 3: the use percentage of architecture design competition in Finland from 1876-2005 Source: From Matti Rautiola

According to Prof Martin Bechthold<sup>11</sup>, it was the recognized pursuit of systematic change which leads to the acclaim of new design operational model; they hoped to employ the international design competition to generate replicable solutions for radically sustainable design, leveraging its reputation and institutional knowledge of private industry and government and eventually triggering systematic change in Finland.

### 4.1 The broaden defined design issue

According to Justin Cook<sup>12</sup>, who is the author of competition Brief, the wide scope of the competition will help to aligh with all of the activities and goals of Sitra. Thus the low carbon design objectives are defined in order to better connect to strategic goals in post-2012.



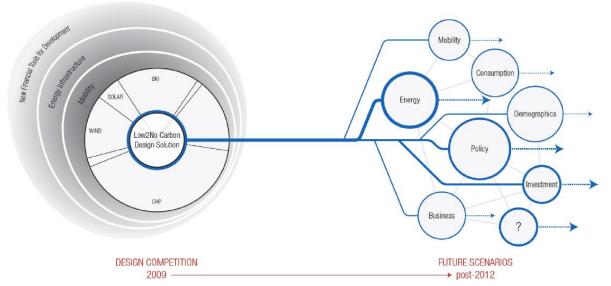


Figure 4: The Low2No competition define design issues

Source: Low2No brief.

As described as the name of the competition, the goal is to achieve a low carbon building complex and urban district that will transition to a no carbon complex as the energy context improves. In detail, a durable indicator of sustainability composed of a technical measure and the strategies for how that measure is to be achieved over the lifecycle of the proposal and design vision of rendering and drawings are required from the design proposal.

### 4.2 The hybrid jury composition

According to the competition brief, the composition of jury is somehow hybrid in order to involve stakeholders with diverse backgrounds, nationalities, culture and knowledge, which are distinctive from normal competition administered by SAFA. The hybrid composition doubtlessly promotes the communication among the stakeholders.



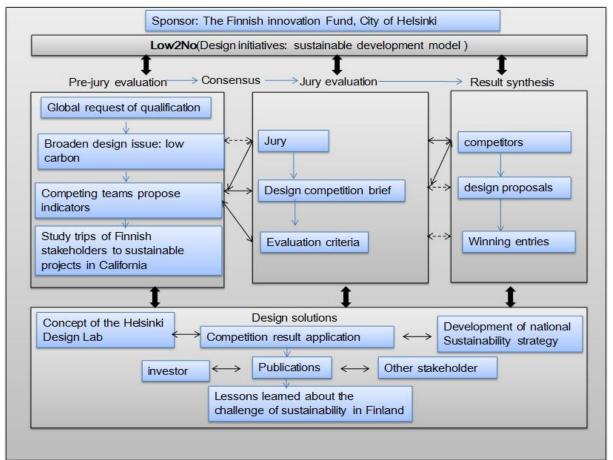


Diagram 2: the procedural analysis of Low2No competition as described by the author

# 4.3 The hint of design competition brief

In the competition brief, some paragraph indeed drop a hint of an adaptation of the master plan will be preferred from the perspective of Sitra's goals of systemic change. According to Prof Martin Bechthold, the competition brief author were hoping for a "Trojan horse effect of Sitra's development." on the master plan<sup>13</sup>; this to certain extent lead to all three teams had questioned and changed the master plan plan—which in Schuler's view is a key element for achieving Sitra's goals of systemic change. The winning entry-C\_life focused on the human behavior and community development in the terms of reducing carbon footprint.





Figure 5: The winning entry C\_life Source: Low2No case study.

### 5.0 preliminary findings

As Anthony Shorris stated, we envision the future of our cities and towns through the lenses of design competition. Especially to urban project, they are often used to find a variety of design solutions, call for public opinions and promote communications among stakeholders with respect to posed urban problems. We thus propose to set up different models of design competition on respective projects. It is very important to integrate additional process such as the interview process along the competition to improve the communication among the stakeholders. The Low2No competition is considered as platforms to introduce the outside design intelligence and foster the national systematic change on sustainable development. There was also criticism of Low2No competition by those who did not believe that the exclude of Finnish practices would help to foster systematic change, with some believing that it would actually help Finnish professionals thinking out of the box and provide the opportunity for learning. Jenni Lautso<sup>14</sup> criticized: "they were surprised because Sitra is funding the building of Finnish knowhow, and they were curious how this competition would promote Finnish knowhow when there are hardly any Finnish experts involved. But, of course, Sitra wanted to have the best available and the local actors don't have the references these five had." However, as diagram 3 shows, the low2No design competition supply procedural innovations as effective integrations which promote the communications among the stake holders involved.



Development partnership(Feb,2009) ntegrative design approach other	Competition integration	
han traditional Broaden the design issues Global request for qualification-5 inalist teams(March,2009) -The quality of the team -The experience of team members - Evidence of systemic thinking	Design strategy Design indicators Design vision Hybrid Jury composition Technical expert evaluation A process involving workshops and other resources to help the teams deliver strategic visions.(June,2009)	A "next steps" workshop: A "next steps" workshop is proposed for after the competition concludes in September to seek other opportunities to leverage the content and expertise generated by the competition for other projects in Helsinki and beyond. Contractual links with SRV,VVO AND SITRA to guarantee implementation

Diagram 3: the procedural innovation analysis of Low2No competition as described by the author

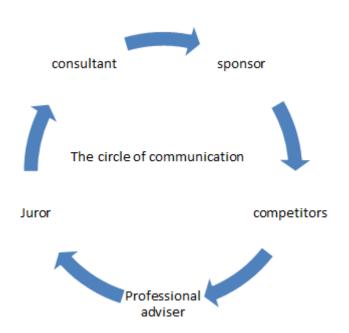


Diagram 4: the aim of innovated competition as author described

However, the lack of competitive interview process is admitted as a pity; as Steinberg<sup>15</sup> agrees: "I think it would have been nice to have the teams engage in a discussion with the jury. Ultimately we were trying to weigh their intellectual capacity and experience." It is obvious the communications among stakeholders would be essential during the competition process. Further research will be developed to promote communications.



Endnote:

<sup>1</sup> Such as Prof. Andrea Kahn's research of "constructing urbanisms: case studies of urban design competitions" examining the synergies or impact of design issues, methods and representational strategies involved in design competition on the field of urban design to explore the premise that specific insights about contemporary attitudes toward urban design. The trend of architecture and urbanism can be gleaned from examining how competitions with urban aspirations set forth challenges, delineate sites, and articulate goals.

<sup>2</sup> Which represent the transition from a low carbon situation to carbon neutrality.

<sup>3</sup>As quoted from the corporate publication of "world-class sustainable solutions from Finland" from SITRA, TEKES and VIT of Finland. <u>www.tekes.fi/u/sustainable\_solutions.pdf</u>, available on 10, July, 2012

<sup>4</sup> As quoted by Nasar(1999), the interview from the book design by competition.

<sup>5</sup> Which had played an important role as a competition organizer in England, as quoted from Deyan Sudjic, Page 62. URL<u>http://www.vanalen.org/gateway/why\_politicsofdesign.php</u>, accessed on 2012-07-14.

<sup>6</sup>According to the Nordic competition rules, the most common types of design competition in Denmark include Idea competitions, Project competitions, combined project and fee-based competitions, Competitions in stages and Competitions not based on anonymity.

<sup>7</sup> According to the low2No case study from the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012

<sup>8</sup> As quoted from Deyan Sudjic,. URL<u>http://www.vanalen.org/gateway/why\_politicsofdesign.php</u>, accessed on 2012-07-14.

Page 62

<sup>9</sup> Retrieved from following link (Available at <u>http://www.kilpailuvirasto.fi/cgi-bin/english.cgi?luku=news-archive&sivu=safa\_eng.html#\_ftnref11</u>, accessible at 2012-7-13)

<sup>10</sup> As quoted from the design competition brief of Low2No competition. From the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012

<sup>11</sup> According to the low2No case study from the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012

<sup>12</sup> As quote from low2No case study, page 8, from the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012

<sup>13</sup> As quote from low2No case study, page 8, from the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012. Page 22

"The master plan has been in development for 10 or 12 years. There is so much political and financial investment, and even though people realize that there are serious misgivings about the master plan there isn't the political will to undo those. It's a freight train." says Steinberg, and adds "Hopefully, if we are lucky, phase three (Ed.: of the master plan) will incorporate some of the principles we are working with."

<sup>14</sup> According to the interview of prof. with Jenni Lautso, 20 Nov, 2009 in the low2No case study. From the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012

<sup>15</sup> According to the interview of prof. with Jenni Lautso, 20 Nov, 2009 in the low2No case study. From the link of <u>http://www.low2no.org/pages/resources</u>, available on 14-7-2012



**References:** ("Harvard style" of references) Book publication:

Adamczyk, G. (2004). Architecural competitions and new reflexive practices. Paper presented at the Conference Name|. Retrieved Access Date|. from URL <a href="http://www.leap.umontreal.ca/docs/Adamczyk-dublin2004.PDF">http://www.leap.umontreal.ca/docs/Adamczyk-dublin2004.PDF</a>, accessed on 2012-07-14

Alexander, E. R., & Witzling, L. P. (1990). Planning and urban architectural competitions: Introduction and overview. Journal of Architectural and Planing Research, 7(2), 91-103.

Anthony Shorris, The Politics of Design: Competitions for Public Projects, Paper presented at the Conference Name|. Retrieved Access Date|. from URL <a href="http://www.vanalen.org/gateway/why\_politicsofdesign.php">http://www.vanalen.org/gateway/why\_politicsofdesign.php</a>, accessed on 2012-07-14

De Sola Pool (1959). Trends in Content Analysis. Urbana, University of Illinois Press.

Huotelin, P. and Kaipiainen, M. (eds) (2006) 130 Years of Finnish Architectural Competitions, Finnish Association of Architects, Helsinki.

Hurwit, J (2000). "The Athenian Acropolis", Cambridge University Press.

Kazemian, Reza and Rönn, Magnus (2009) Finnish architectural competitions: structure, criteria and judgement process', Building Research & Information, 37:2,176 -186

Krippendorff, K. (1980). Content Analysis: An Introduction to Its Methodology. Newbury Park, CA: Sage.

Lipstadt, H. (2005). The Competition in the Region's Past, the Region in the Cmopetition's Future. Paper presented at the Conference Name|. Retrieved Access Date|. from URL <a href="http://www.vanalen.org/gateway/why\_politicsofdesign.php">http://www.vanalen.org/gateway/why\_politicsofdesign.php</a>, accessed on 2012-07-14

Lapintie Kimmo (1996): The justification of planning solutions in ecological housing - a case study of Viikki in Helsinki, Scandinavian Housing and Planning Research, 13:4, 183-199

Magali Sarfatti Larson (1994) Architectural competitions as discursive events, Theory and Society 23:469-504,1994. Kluwer Academic Publishers.

Malmberg, C. (2005). Introduction. Paper presented at the Conference Name|. Retrieved Access Date|. from URL<u>http://www.vanalen.org/gateway/why\_politicsofdesign.php</u>, accessible on 27/01/2010

Nazar, J. L. (1999). Design by competition. Making architectural competitions work. New York: Cambridge University Press.

Sagalyn, L. B. (2005). The Political Fabric of Architectural competitions. Paper presented at the Conference Name|. Retrieved Access Date|. from URL<u>http://www.vanalen.org/gateway/why\_politicsofdesign.php</u>, accessed on 2012-07-14.

Sudjic, D. (2005). Competitions: The Pitfalls and the Potential. Paper presented at the Conference Name|. Retrieved Access Date|. from URLhttp://www.vanalen.org/gateway/why\_politicsofdesign.php, accessed on 2012-07-14.

Speiregen, P. (1979). Design Comppetitions. New York: McGraw Hill.



Liang, Zheng **A procedural Analysis on Design Competitions** 48<sup>th</sup> ISOCARP Congress 2012

Ware, W. R. 1899. Competitions. American Architect and Building News 66(1253), 16 December:107–12.

Strong, J (1996) Winning by design e architectural competitions, Butterworth Architecture, Oxford

SAFA (2008) ARK, Competition Rules (available at: http://www.safa.fi/archive/170\_Competition\_rules\_2008\_ENG.pdf), accessed on 2012-07-14.

Solla, P. (1992) The architectural competitions in Finland, in The Work of Architects, The Finnish Building Centre, Helsinki, pp. 268–281.

Viljo, E.M. (1992) The architectural profession in Finland in the latter half of the century, in The Work of Architects, The Finnish Building Centre, Helsinki, pp. 26–51.

Volker, L et al., Deciding about design quality: design perception during a European tendering procedure, Design Studies (2008), doi:10.1016/j.destud.2008.03.004

Weber, R. P (1990) . Basic Content Analysis. Sage University Paper

Web references:

http://www.low2no.org/pages/resources, accessed on 2012-07-14

