

‘Ludoarchiteca’ (Playful Architecture)

A community workshop for
‘Scotland + Venice’
at the
2012 Venice Biennale

Research.

Can the ludic qualities of architecture be usefully applied during community engagement workshops?
Can a method using a simple modular toolkit transcend language barriers ?

Submitted by Kathy Li (of MSA & Stone Opera)
Output No. 1



OUTPUT

This research relates to an interactive architectural community workshop called ‘Ludoarchiteca’ designed and delivered in Venice by Stone Opera as part of the ‘Scotland + Venice’ contribution to the 2012 Venice Biennale. The project builds on Stone Opera’s UK experience in community led interactive workshops and tests whether the method of using ‘play’ to engage people in architecture can transcend language barriers.

Output of the workshop can be seen on film at: <http://stone-opera.com/index.php?page=scotland-in-venice>

Stone Opera is a UK based architectural practice set up in 2009 with the aims to raise awareness of the built environment across the wider community, and equip people with knowledge to become involved in how their places and spaces are designed and created. A focus of the practice is to facilitate architectural dialogues with people through the use of playful interactive toolkits. Workshops have been commissioned for a variety of purposes. Examples include informing an architectural brief for a new children’s hospital, for primary and secondary educational use, exhibitions, and more recently to contribute to an application for planning permission for a large scale housing development.

The ‘Ludoarchiteca’ project focussed this knowledge and experience to design a workshop

that engaged local children of the Cannaregio district in Venice. Working in an environment where English is not spoken required this project to be designed with minimal reliance on spoken or written language. Using a bespoke full size toolkit of simple modular cardboard shapes it enabled participants to discover the world of architecture simply through hands-on play, thus transcending the verbal language barrier. The results are delightful and thought provoking with children fully engaged for one whole day creating spaces and places which displayed some truly sophisticated architectural design thinking. The success of the workshop was evidenced by the children’s requests to extend the workshop to a second day of exploration.

The project was a publicly funded commission for the Scotland + Venice ‘Critical Dialogues’ week at the 2012 Venice Biennale. It was awarded the prestigious 2012 RSA Medal for Architecture for ‘outstanding work to encourage younger architects’. The output has been exhibited at the Lighthouse, Glasgow’s centre for architecture, and at the Royal Scottish Academy. A second Ludoarchiteca event has subsequently been held with local schoolchildren in Glasgow, with two more proposed for New York and Tromsø. The output contributes to the practice’s continuing research developing toolkits and methodologies for community engagement.

Title

Ludoarchiteca

Submission No.

01

Authors/Creators

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&
Hanneke Scott van Wel (Stone Opera)



Italian children were exploring architecture during the Ludoarchiteca workshop

CONTEXT

THE AIMS OF THE PRACTICE

Stone Opera's work in mainstream education, community groups and preplanning consultation is not necessarily for the purpose of creating a building at the end, but the aim is always to allow people to develop a voice and express desires and ideas of architecture through playful discovery. The aspiration is to promote an awareness of good design in the built environment and encourage people to see their environments in a different and open way. Two streams of investigation run through the work of the practice;

- How can we better engage the public in the design of our surroundings?
- How can we better equip the public with the knowledge and skills to express themselves in an architectural sense?

The practice believes the development of physical tools that encourage experimental playfulness can be a key to opening minds to more unfettered investigation and if applied correctly this could be a method of softening the perceived barriers between the 'professional' and laypeople during engagement sessions.

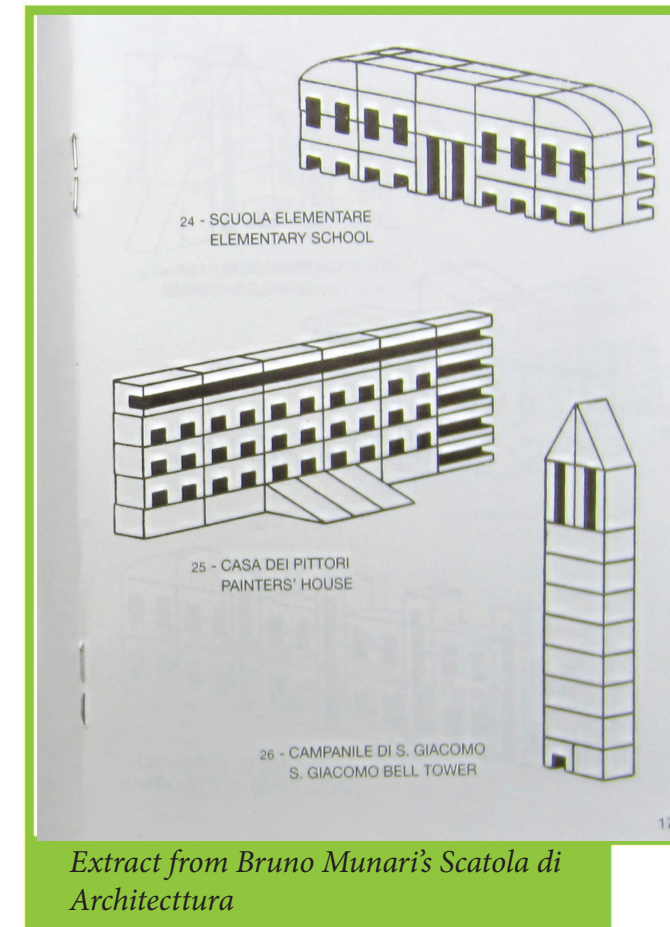
ARCHITECTS AND COMMUNITY ENGAGEMENT

In conventional practice the process of architectural design from concept to completed building will with normal discourse involve many engagements with

the general public. This may be with a private client, neighbours or communities affected by the development and the end user of the completed building. Indeed these engagement skills are increasingly important as pre-planning consultation is now mandatory. Many architectural practices already have a wealth of experience and knowledge of community engagement. In Scotland, Glasgow's Assist architects were pioneers of this approach of this in the 1980s, and today Collective Architecture and Anderson Bell Christie continue that vein of high quality work, now taken up by the likes of younger practices such as Pidgin Perfect. Internationally Jan Gehl has been a proponent and skillful practitioner of public consultation and engagement with a record of successful engagements and realised projects. However many practices find public engagement difficult, technical jargon and presentation can unintentionally be an exclusive barrier to successful dialogue. Stone-Opera seek to find solutions to these barriers by developing a useful library of playful architectural toolkits.

PRACTICAL APPLICATIONS OF THE LUDIC QUALITIES OF ARCHITECTURE

Investigative and exploratory play using simple formulated architecturally based toolkits is proven



CONTEXT

and well documented, from Frank Lloyd Wright's early years as a child exploring design with Froebel blocks, to wider use by the public of other similar toys such as Sticklebriks, Meccano and Lego. The works of Bruno Munari highly influence the practice's own work, particularly that of his 'Scatola di Architettura' kit of parts. The commonality is the use of modular forms which provide the ability to create and recreate forms that either imitate real objects or produce imagined ones. This is useful when applied in the architectural field to initiate discussion and allow lay people to express themselves. Interestingly David Sim of Jan Gehl Architects always carries Lego bricks in his pockets in case an opportunity to engage with people arises. If these toys have worldwide appeal might this suggest that architecture carries its own universal language which is innately learned and applied through hands on application? If this is so, can encouraging play be of value not only in the realm of the education and enjoyment of the child but also employed in the adult world too to activate serious discussion about our built environment?

Prior to the Venice commission Stone-Opera had already run ludic based workshops in the UK using readily available modular materials. In one instance school children were asked to learn about Labyrinths by making a huge structure

filling their school hall simply from hundreds of pieces of pushfit plumbing. On another occasion paper cups, rubber bands and tin foil were used to discover the sensory qualities of spaces. Stone Opera had already successfully tested the use of cardboard boxes as building blocks at their workshop 'An Architectural Icon' which asked school children to discover the architectural design qualities of the brick built Church of Good Counsel in Glasgow by architects Gillespie Kidd & Coia. These workshops demonstrated the ease that people can engage in depth with architecture without being intimidated, and that hands-on interactive approach using simple palettes of objects encourages exploration. A self-assessment of Stone-Opera's body of work, and thorough investigation into a variety of readily available materials on Venice eventually resulted in the decision to employ a modular cardboard toolkit for the Venice project. Would it be simple enough to use, to overcome language barriers, and provide enough flexibility and impact to fire imaginations in an architectural way?

SCALE AND MATERIAL

The use cardboard shapes in quantities to create large scale structures is not new or innovative, indeed artists such as Oliver Grossetete are known



Oliver Grossetete's Peoples Tower for Glasgow's 2012 Merchant City Festival.

CONTEXT

for such works, a case in point is his Peoples Tower project for the Glasgow's 2012 Merchant City Festival. However, whilst this is still extremely fun for participants, the design is fixed and preconceived by the artist, and therefore limits their input and output. Stone Opera aims are different and the methodologies the practice employs for events allow participants, the opportunity and flexibility to conceive, realize and experience their own architectural designs within a set of given parameters. Principles of freedom of expression applied to the Venice Ludoarchiteca but the challenge was to ensure the event was designed well enough for the workshop to more or less run itself on the day. We believe the architectural modularity of the cardboard boxes designed for Venice provided the inherent language for participants in place of spoken language. Indeed the simple instruction diagrams that were given to the children at the outset were readily discarded and they made discoveries without any further verbal guidance

ASSESSMENT OF THE OUTPUT

The Ludoarchiteca film is evidence of the success of the approach for participants to be given freedom of expression to discover architecture through play, indeed participants were fully engaged for

an entire day and at their request this was extended to the following day. Interestingly a quick analysis of their outputs shows real attitude to architectural design and we see investigations into form, structure, view, privacy, openness, celebration of entrance, shelter. The benefit of using full size lightweight building objects is the temporary and ephemeral quality it imbues to the structures, nothing is precious. Importantly at full size it allows participants a truly experiential investigation of their designs that scaled models or more traditional toys cannot. These issues are dealt with in a formal sense in many schools of architecture but here were occurring unprompted and as part of a natural discourse, proof that the ludic qualities of working with simple modular forms used in community engagement workshops transcend language barriers.



Stone Opera's Glasgow workshop 'An Architectural Icon'

METHODOLOGY

Stone Opera's Ludoarchiteca community workshop sits within the context of a weeklong event during the Venice Biennale under the theme of 'Critical Dialogues'. Four architectural practices, Stone Opera, GRAS, Pidgin Perfect and Do Architects, formed the Critical Dialogues delivery team and were selected by the funders because of their emerging profiles in developing architectural practice beyond the normal convention of the production of buildings. Critical Dialogues set out to investigate threads of each of the practices work based in the UK and transfer these to Venice.

Project Timescale

Commission: March 2012

Scouting Trip: April 2012

Workshop Delivery : September 2012

Budget: £10k

The entire project was developed designed and delivered for a budget of £10k with a 6 month lead in time. Costs were inclusive of all professional services, project development costs and accommodation and subsistence for the week event in Venice. As non Italian speakers and with no personal connections with Venice both Kathy Li and Hanneke Scott van Wel of Stone Opera sought the consultancy of a local architect to assist with investigations and preparations the Venice event. The only scouting trip prior to the official

events was used to select the section of community to work with and find a solution for the modular toolkit. Overcoming the language barrier was the major obstacle, securing workshop materials and transportation were also issues to be resolved

At the outset of the project Stone-Opera were determined at the Venice Biennale to work with a local community, one which would not normally engage with the architecture festival. The practice does not always work with young people, and in the case of Venice this was not the immediate group of choice, a preference being for local work groups such as dockers or hotel workers. However as many companies are small sized family based operations it was not possible to coordinate big enough groups to work with. The local Venice architect led us to the ludoteca (playgroup) in Cannaregio where 20 or so children would be available. The word ludoteca became the inspiration for the name of the workshop 'LudoArchiteca'. Cannaregio lies at the north west of the island of Venice and it does not form part of the main tourist routes and is very much populated by local Venetians. The children attending the ludoteca were of similar social back grounds to those Stone Opera work with in Scotland, a mix of children with parents of professional backgrounds and some from more difficult backgrounds. Neither the children or their parents had ever interacted



*top. The grounds of the Cannaregio Ludoteca
below. Scouting workshop materials*

METHODOLOGY

with the Venice Biennale nor had they experience any architectural workshops, this was an ideal position to start from, however it did generate doubt as to whether Stone-Opera's proposals could succeed.

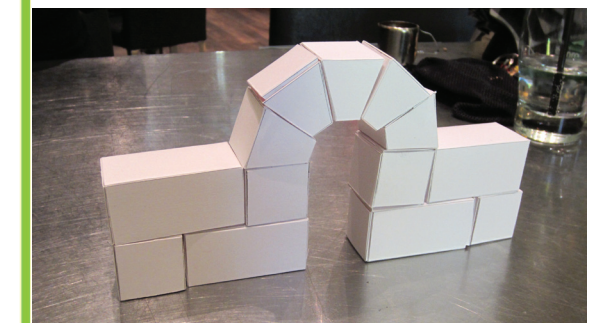
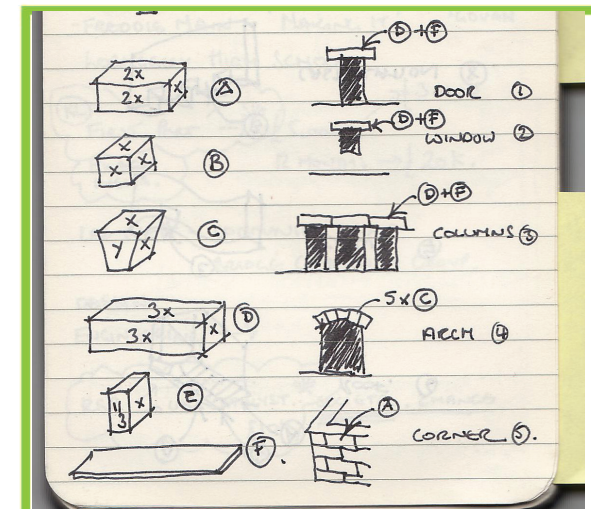
The search for a suitable modular toolkit to play with did not start with the idea of using cardboard boxes. The practice researched extensively for local modular products or packaging that already existed in Venice, this would save on transport and be more sustainable. However finding enough quantity of standardised beer crates or fruit boxes on the island to build large scale structures proved impossible. Cardboard boxes were eventually chosen based on two factors, the success of the Glasgow brick workshop and the supposed ease of availability. Interestingly the search for suitable off the shelf standard sized boxes that could be used in the modular playful way proposed also proved difficult and eventually the practice developed its own bespoke cardboard prototype toolkit in partnership with manufacturer Smurfiit Kappa.

The modular cardboard toolkit consists of only four different shapes based on a simple 300x300 cube, a double cube, a triple cube and a segment. These shapes would allow participants investigation of simple architectural features commonly found in Europe such as the column, window, doorway and arch. Over 500 boxes in total were manufactured for the workshop. Preparations also included design of simple diagrammatic instruction cards which asked participants to explore and

build 8 basic architectural elements, these would be employed to initiate the architectural dialogue than reliance on the written or spoken word.

For the day of the workshop, Stone Opera enlisted 4 Italian architectural students and a few Biennale volunteers to unpack and assemble the 500 boxes. For maximum impact half of the boxes were used to make a wall which filled the park grounds of the Ludoteca, the purpose of which was to give the children a wonderful surprise before the event started. Children were given in hi viz vests and hard hats to wear, a trick that Stone Opera had used in the UK to put them in the mindset of the 'builder'. The Italian students gave a brief verbal introduction about the workshop to the participants and handed out instruction cards, from thereon they were used to encourage to play and attended any pastoral issues, of which there were the usual number of quarrels, huffs and tears. Parents and ludoteca staff were on hand to assist but on the whole remained observers to the event, as were Stone Opera.

Children were very much left to their own devices to explore their own architecture. The play cards were quickly dispensed with, some groups not engaging with them at all preferring to move directly onto more sophisticated exploration of



*Development of the prototype modular toolkit
Only 4 shapes were eventually used*

METHODOLOGY

building structures and spaces. The segments creating the 7 block arch were the most successful and popular part of the toolkit and these were also used inventively for making decorative friezes and patterned walls. Every group explored making enclosed spaces, and most attempted a roof of some sort. Children also tested structural qualities or architecture with height and span being explored. Boxes were also used to make furniture for both inside and outside their structures. Some children went off piste to make robot heads but this direction of creativity was controlled but not discouraged.

Stone-Opera were in the unusual position to be passive observers of their own workshop. On the whole the workshop did run itself evidenced by the variety of structures the children created and explored. Input by adults using the spoken word was marginalized to encouraging interesting ideas and setting boundaries for behaviour. Watching these young people build mini civilisations from scratch is fascinating insight into architecture and human behaviour.



top. Instruction cards and scaled blocks
bottom. Introduction briefing

DISSEMINATION

FILM

Film of the workshop prepared by Stone- Opera
accessed on the company website at
<http://stone-opera.com/index.php?page=scotland-in-venice>

EXHIBITION

RSA Architecture Open exhibition at the Royal Scottish Academy
24th November – 16th December 2012
Critical Dialogues Exhibition at The Lighthouse, Glasgow 22nd
February- 10 April 2012

PUBLICATION

'Critical Dialogues' publication, author Jonathan
Charley. pp 52-61
August 2012. ISBN:978-0-9565200-4-3

LECTURES & FILM SCREENING

Mackintosh School of Architecture as part of the
Friday Lecture Series. October 2012
Students Association public lecture Strathclyde
University. November 2012.
Velvet and Silk Café, 20 September 2012

CITATIONS

A10: New European Architecture issue 50. March /
April 2013. Article 'Connecting Scotland'.
A10: new European Architecture issue 51. May/June
2013. Article 'Bearings Architecture in Action'

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Boxes developed with Smurfit Kappa, Glasgow and Gosport

