

54 LEARNING FROM THE BRIDGE PROJECT

JACK BREEN

In February 1999 the exhibition *The Bridge (De Brug)* was held at the faculty of Architecture in Delft.^a A presentation consisting of some three hundred models of student designs for a pedestrian bridge. A vast and varied collection of objects, many of them arranged along a monumental ‘canal’ axis spanning a large part of the faculty’s main hall. This extensive collection of work was the result of an exercise offered by the staff of the Form Studies department, as part of a second year educational block entitled ‘Imaging and Materialisation’. The exhibition was the third of its kind, two previous activities being ‘The Table’, 1993 and ‘The Bench’, 1996.^b

The theme of the original Form Studies exercise was ‘The Footbridge’. Students were asked to develop a pedestrian bridge for a given – imaginary - site: a relatively modest canal with a width of just five metres and identical walled embankments on either side. The students had to ‘realise’ their ideas in the form of a presentation model scale 1 : 20, plus a design portfolio. Ten selected designs were eventually worked out scale 1 : 5, forming the visual ‘centrepiece’ of the exhibit.

The ambition of the exercise was to confront students with design themes like functionality, form and proportion, but also with specific qualities and possible combinations of materials, logical and expressive detailing and the consequences of ‘making’. The idea was that students should continue refining their designs in the ‘realisation’ phase (in this case model making). For many students, this was an experience approaching ‘realising’ a first project (although reduced in scope and scale).

Despite constraints (or perhaps precisely because of them) a considerable number of students managed to come up with interesting propositions, often realistic, carefully detailed pieces of work, whilst a small group of students proved to be able to tackle the design task with such ambition and inventiveness that their designs can be said arguably to throw new light on the familiar phenomenon of the (foot)bridge

The exhibition generated a wealth of responses and interpretations. Some faculty members even regarded the initiative as a kind of prototype for new forms of *study by design*. Why



- a The exhibition – designed and organised by Jeroen van de Laar - was documented in the Faculty of Architecture’s yearbook: Breen, J.L.H. (2000) *The Bridge*.
- b For an article on the exhibition ‘The Bench’: see Form Studies Staff (1998) *The Bench*.

543 The Bridge exhibition (some photo-graphs of the exhibit at the Architecture faculty)



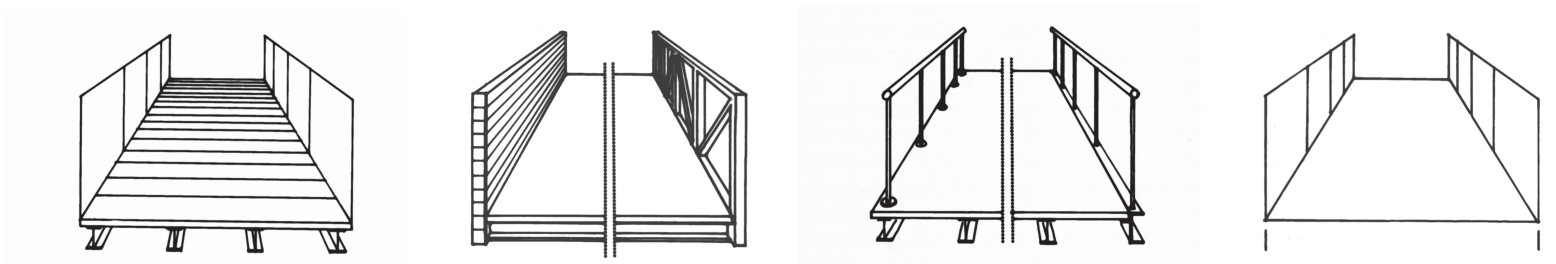


was this? What might be learned from the project? In which ways may design activities like this one lead to – or even be considered forms *of* study?

Firstly, it became apparent that a presentation like this tends to activate to ‘private study’ amongst visitors; may be because there was a clearly recognisable ‘format’ that allowed – and indeed stimulated – comparison. At the same time, the *diversity* of the solutions proved to be a source of fascination. There was a tendency amongst *all* kinds of visitors (from professor to window cleaner) to identify *favourites* and to communicate one’s opinions concerning the *qualities* (in a positive *and* negative sense) of specific designs. Such qualities might vary from the *originality* of the solution, the expression of *form* and the *technical* translation of the concept (even on a model level), to name but a few aspects.

Possibly researchers who recognised a ‘study by design’ potential in the exhibition discovered something for themselves. It might be they were to some extent able to ‘re-construct’ the process of designerly enquiry underlying different design solutions, fuelled by a spontaneous, personal process of comparison and selection. Naturally, this response generated by the exhibition ought not to be considered a merit on *research* level, but it might be possible to learn something from the project’s approach...

544 A comparison of characteristic design aspects



Apparently, the simultaneous confrontation with of a diverse, but thematically consistent collection of objects stimulates focused scrutiny and consequently selection and identification of qualities. Clearly, the *binding* theme - with an underlying set of design constraints - meant that the results could in principle be compared and analysed, initially in an intuitive way but potentially also in a relatively systematic way. The individual selection processes mentioned may also have been stimulated by the organisation - the *design* - of the exhibition: a clear overall spatial concept with a (seemingly) random placement of the artefacts. The emphasis on variety rather than on thematic or typological clustering may have offered a 'puzzle' to the viewers, who were thereby stimulated to seek out some measure of *order*, to recognise *themes* and to identify objects for which one felt a particular kind of *appreciation*, possibly even affection.

Secondly, the exhibition was not the only product of the Footbridge exercise. As with the previous projects, The Table and The Bench, a publication was prepared to co-incide with the manifestation.^a Besides offering a generous overview of results, the articles in the book attempted to probe the bridge as a *phenomenon* and to reflect on the project as a whole. In this case the theme of the educational exercise was taken as a *starting point* for research activity.

Drawing from a wide range of sources and precedents, issues like the bridge as symbol, development of structural systems and impact of bridges in (sub)urban landscapes were addressed. In addition, an attempt was made to identify recurring design themes (see illustration). Such themes can be considered as - fundamental - design options, contributing to determining the manifest form of the bridge *as a whole*, as well as creating occasion for individual designerly *variation* of material and structural detailing.

In the book a selection of the students' work was presented in seven thematic clusters.^b Rather than suggesting thematic order by choosing a potentially rigid organisation in *types*, a group of compositional categories was developed, intended to stimulate visual interpretation by the reader. In addition, a selection of ten 'laureates' was discussed in-depth, focusing on individual design themes and specific aspects of 'concretisation' of the designs. In this way the 'catalogue' to the exhibition was used as an intellectual exercise, exploring both formal characteristics and cultural connotations.

In retrospect, The Bridge experience might to be appreciated on different, inter-related, levels:

- As a design *laboratory* with the primary aim that students should acquire new insights, by designing and 'doing'.
- As a quest of *discovery* for students as well as teachers, allowing interpretation and comparison on a design studio level, as well as overall.
- As a collective, *thematic* form of enquiry, whereby the energy and open-mindedness of students were made instrumental for developing and identifying relevant design options that could be evaluated more or less systematically afterwards by a wider audience.
- As *design driven* research, firmly embedded in an *educational* context.

a Breen, J.L.H. and B. Olsthoorn (1999) *De Brug / The Bridge*.

b The themes were: The bridge as a piece of sculpture; The bridge as a play of lines; The bridge as a spatial object; Proportion and rhythm; Curved and folded; The dynamic form; The bridge as a device.

