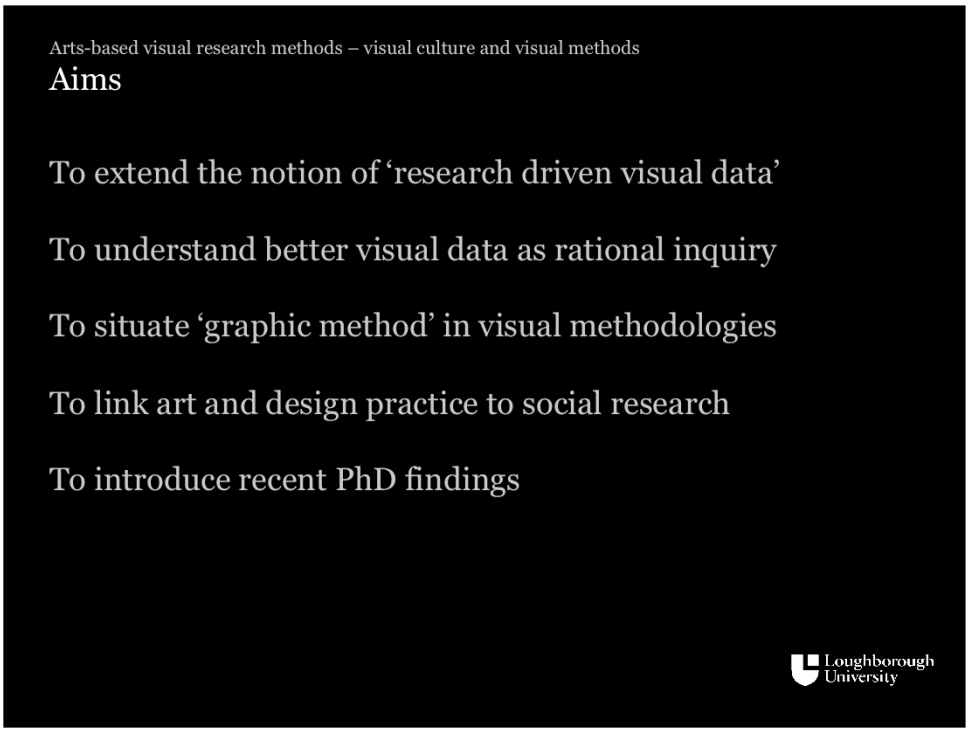
First I must apologies for the lack of suitable title in my abstract. I'll suggest now that this talk will focus on 'Graphic method as Visual method' and hope this doesn't disappoint.

In the abstract for this paper I noted the claim by Bruce Brown that 'art, design and media embody some of the most innovative and effective teaching and learning practices in the sector that are still in the process of articulation'.

The intention here is to explore this claim by focusing on the how some of the methods associated with art and design—specifically graphic design—offer some useful approaches to visual research and visual methods.

Some clarification is needed in the use of terminology in that my own background is more familiar with the phrase 'Art and Design, rather than the separate academic disciplines of 'art' or 'design' that some institutions prefer.

Some loose aims for this presentation are:



Read from screen …

Arts-based visual research methods – visual culture and visual methods

Some background

Practitioner ➔Educator ➔Researcher

1986	BA(Hons) Information Graphics Trent Polytechnic, Nottingham
1986–2000	Graphic Design practice London
2000–now	University lecturer Derby, Nottingham, Loughborough
2011	PhD Architecture (Social Sciences) The University of Nottingham

Loughborough University

Read from screen …

Arts-based visual research methods – visual culture and visual methods

PhD Architecture (Social Sciences)

The University of Nottingham

School of Architecture and the Built Environment

Thesis title:

Graphic design as urban design:
towards a theory for analysing graphic objects
in urban environments.

Research question:

What are the visual communication requirements of a built environment?

Key visual methods:

Photo-documentation, 'graph theory'

Subject:

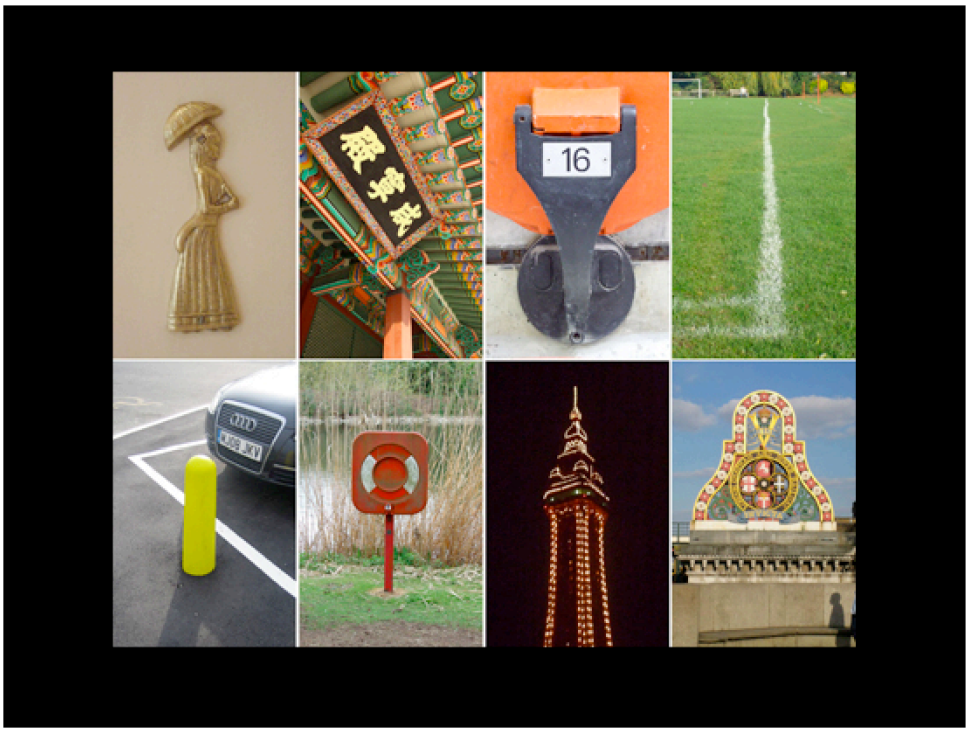
Symbolism of the graphic object in the urban object

Loughborough University

Read from screen ...

Exploring the idea of the what a graphic object might be … using Buchanan's suggestion that the first order of design consists of the symbolism that central to graphic design.

A cobble, iconic building, red carpet, hand writing – each of these are made objects, or what Kant might have called an 'empirically external object' …



... these are not media specific and play a central role in influencing human behaviour.

The purpose of the photo-documentation has adopted many specific themes, from place specific studies such as New York's Times Square, to concerns about a particular material culture such as the use of cobbles in the centre of Lisbon (and the colonial link to the same patterns in Sao Paulo), to a focus on a single defining graphic property such as the simple use of a line.

Some graphic objects in New York's Times Square ...

Top: Lisbon
Bottom: Sao Paulo

Photographic studies of the phenomenon of a line in urban design

Photographic studies of the phenomenon of a line in urban design

Arts-based visual research methods – visual culture and visual methods

Micro-meso-macrographic ways to think and act on the urban environment

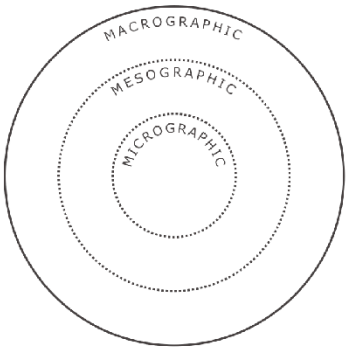


Diagram: HARLAND, R. G. 2011. Graphic design as urban design: towards a theory for analysing graphic objects in urban environments. Unpublished PhD thesis.

Loughborough University

The findings of the research are summarised as micro-meso-macrographic ways to think and act on the urban environment.

This emerged from the scalar approaches that a reflexive photo-documentation process revealed, as seen in some of the previous images.

Journey specific studies contributed to this realisation, as can be seen in this study of visiting a sporting venue in Montreal.

In this sequence of images we engage with micro-meso-macrographic objects to help orientate ourselves.

Furthermore, the micro-meso-macrographic thinking seems to facilitate the manifestation of urban objects. For example, a mundane traffic roundabout.

Arts-based visual research methods – visual culture and visual methods

Micro-meso-macrographic analysis (*towards invisibility*)

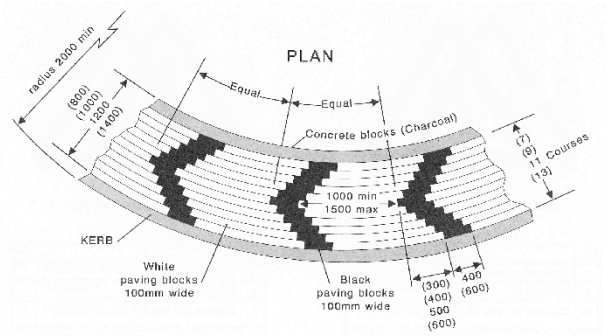


Diagram: ANON 1994. The traffic signs regulations and general directions. London: The Stationery Office Limited.

Inherent in this process is a way of thinking that renders the object visible and invisible, crossing over with notions of the legibility city.

It also happens in discipline specific ways that enable us to understand design relationships, such as those present between type, typographic, graphic and urban design.

Arts-based visual research methods – visual culture and visual methods

[in]visibility

Here we can experience the move from macro to micro and how graphic objects come in and out of visibility.

Arts-based visual research methods – visual culture and visual methods

Defining properties and configurational patterns

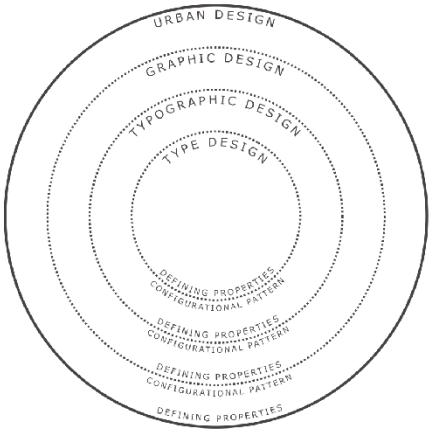
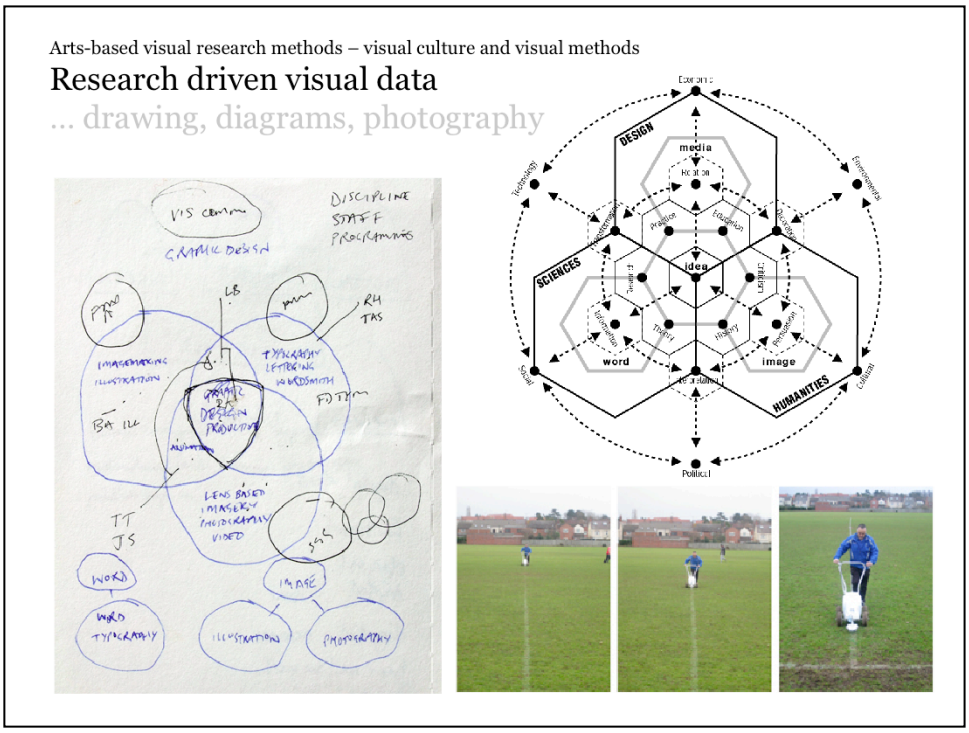


Diagram: HARLAND, R. G. 2011. Graphic design as urban design: towards a theory for analysing graphic objects in urban environments. Unpublished PhD thesis.

Loughborough University

Benefitting from work in cognitive science about how the mind connects to the world (Pylyshyn), I have represented this in a model that represents how the defining properties from one field of design provides a pattern configured in another design field, moving from the micro-to-macro, as shown here.

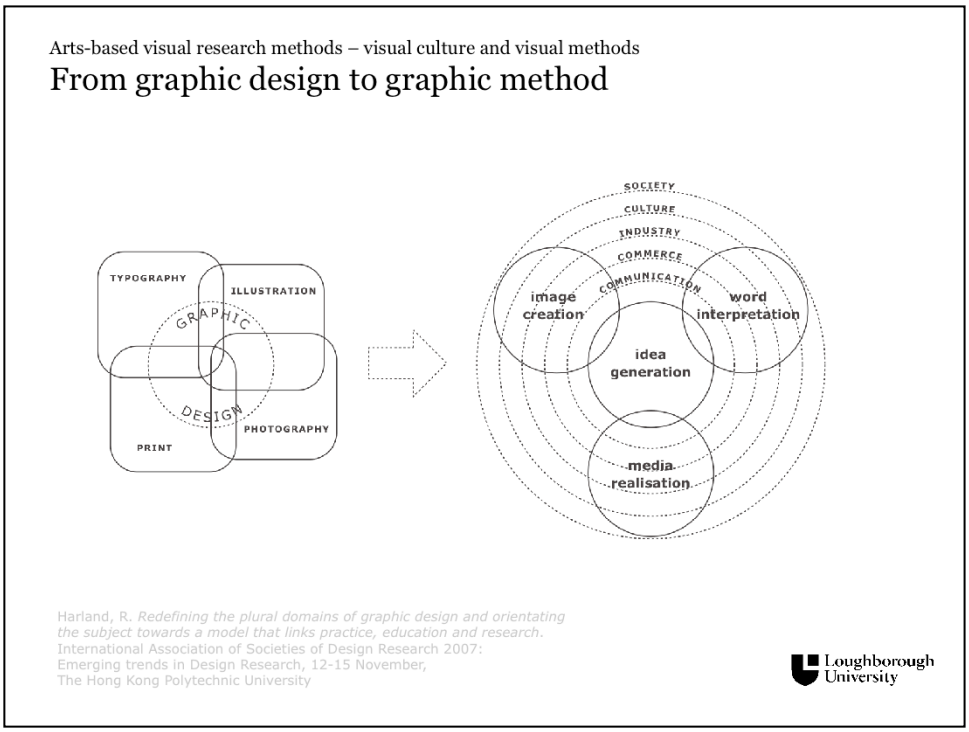


These examples are outcomes of the PhD study, and throughout the research training process I have adopted research tools that were previously used in my design practice. This has resulted in much research driven visual data that has been integral to rational inquiry.

Here are some examples of how drawing, diagrams and photography have been used, benefitting from modelling ideas imported in geography, specifically central place theory.

This emersion in visual data has also resulted in reflection of my former practice, and questions about how language and context can be used to link practice with theory and research.

For example ...



These basic models represent the an historical and contemporary view of graphic design, with the intention of contextualising the activity for the purpose of visual data generation in a research context.

One thing worth noting here is that neither model priviledges one property over another, unlike, say the overwhelming popularity of photography in social science research for research driven imagemaking.

But this has close relationships to established methods in Science and social science.

For example …

Arts-based visual research methods – visual culture and visual methods

Linking Design to Science and Humanities

Graph theory. A branch of mathematics that treats networks on their simplest topological level as a system of *nodes* and *links* (Goodall, 1987: 197)

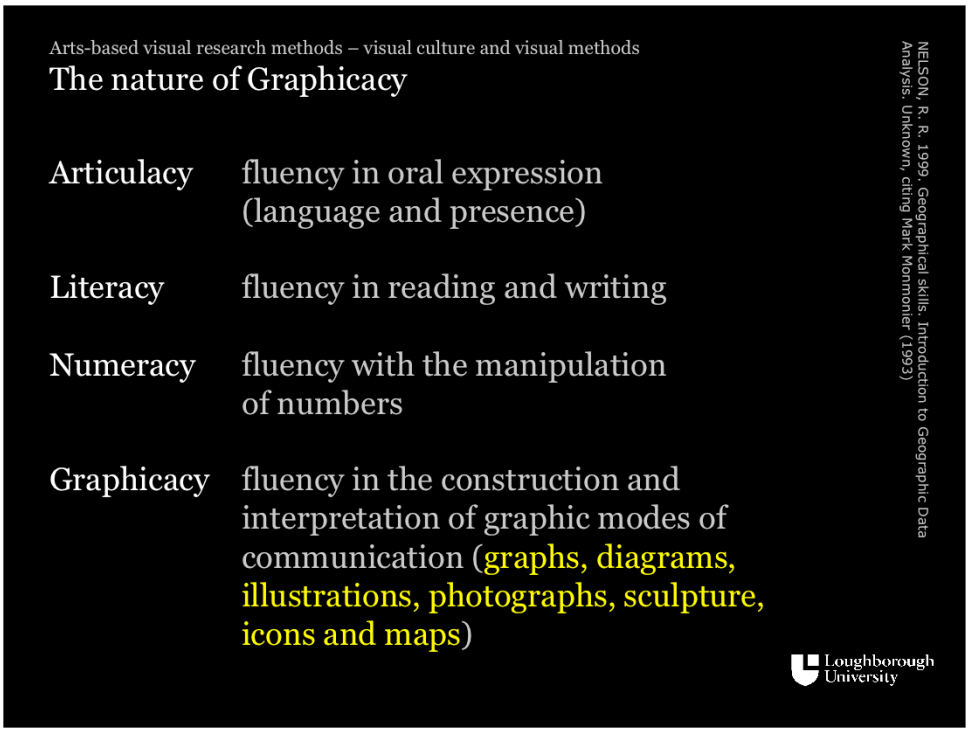
Graphicacy. The communication through the medium of maps and diagrams of spatial relationships that cannot be successfully communicated by words or mathematical notations. It is the basic province of the geographer and ranks alongside the other basic skills of literacy and numeracy. Graphicacy may also be used to represent time relationships (e.g. rates of change) as well as conceptual abstractions.
(Small & Witherick, 1986: 95)

Loughborough University

GOODALL 1987. Dictionary of Geography. London: Penguin Books.
SMALL, J. & WITHERICK, M. 1986. A modern dictionary of geography, London, Edward Arnold (Publishers) Ltd.

Graph theory is explained as an abstract mathematical concept being concerned with simplified systematised networks of nodes and links. It is also utilised in social science disciplines such as geography, where it has also been shown to have limitations in terms of its communicative capacity.

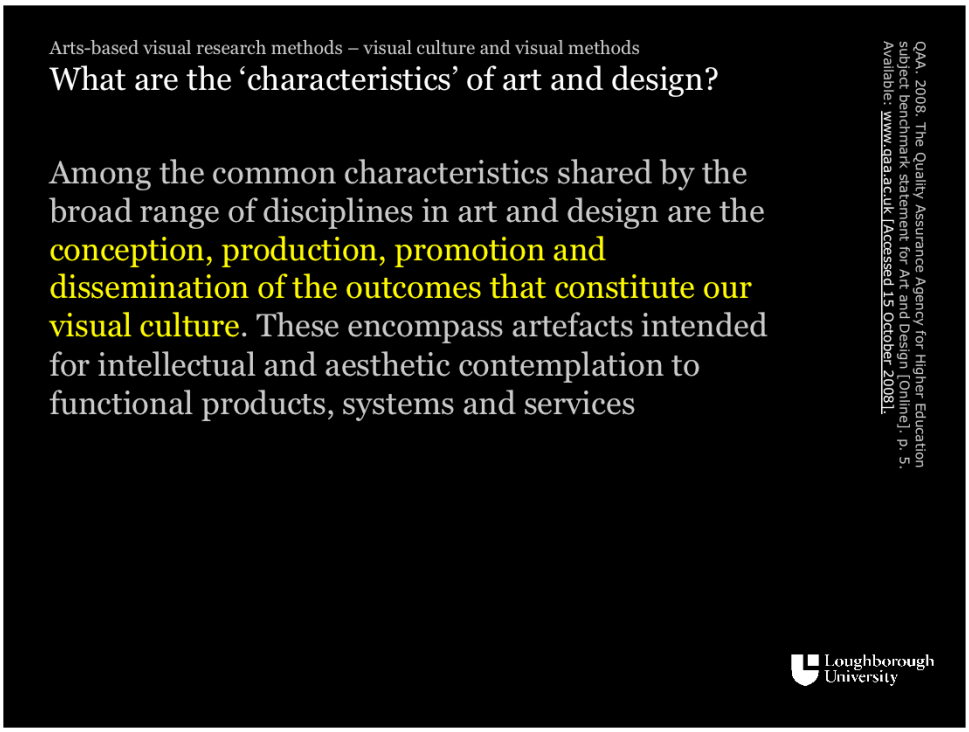
In geography, this appears to have been overcome by the recognition of graphicacy as an idea that complements basic skills in literacy and numeracy. Primarily, graphicacy has been explained as encompassing the medium of maps and diagrams to explain spatial relationships, something where words or notation are inadequate. But this explanation by Small and Witherwick does not identify the properties of graphicacy.



The nature of graphicacy is explained here as one of four core geographic skills and communication competencies that educated people should learn.

But the nature of such fluency is unclear in terms of what might be required in the construction process, and more recent attempts to define graphicacy as a key method in geography do not escape the general principles associated with cartography except to say that graphicacy, according to Chris Perkins (2003: 344) 'is the skills of reading and constructing graphic modes of communication, such as maps, diagrams and pictures'.

This is where some knowledge of the characteristics of art and design education might help with closer definition.



What are the characteristics of art and design?

The Quality Assurance Agency for Higher Education in the UK explains these as the conception, production, promotion and dissemination of the outcomes that constitute our visual culture. It is therefore easy to see the direct link between art and design and visual methods, emphasised by the central place that the artefact has in the output of art and design. As stated these may satisfy a need for 'intellectual and aesthetic contemplation' or 'functional products, systems and services.

Within this appears to be a subjective-objective duality that determines both the authorship and readership for artefacts produced in the name of art and design. These are matters of context for the practice and dissemination of art and design artefacts

It is clear from this that artists and designers make things, and four key processes of conception, production, promotion and dissemination capture the basic cycle of the process, but not what happens through the cycle.

Arts-based visual research methods – visual culture and visual methods

What are the 'characteristics' of art and design?

The processes from conception to dissemination employ a range of predominantly visual languages to articulate concepts and ideas in two and three dimensions, while in some disciplines the time dimension, narrative, sound and interactivity are of equal importance. These are combined with the exercise of creative skills, imagination, vision and innovation.

Drawing ability is regarded as a prerequisite skill for observation, recording, analysis, speculation, development, visualisation, evaluation and communication.

QAA. 2008. The Quality Assurance Agency for Higher Education subject benchmark statement for Art and Design [Online]. p. 5. Available: www.qaa.ac.uk [Accessed 15 October 2008].

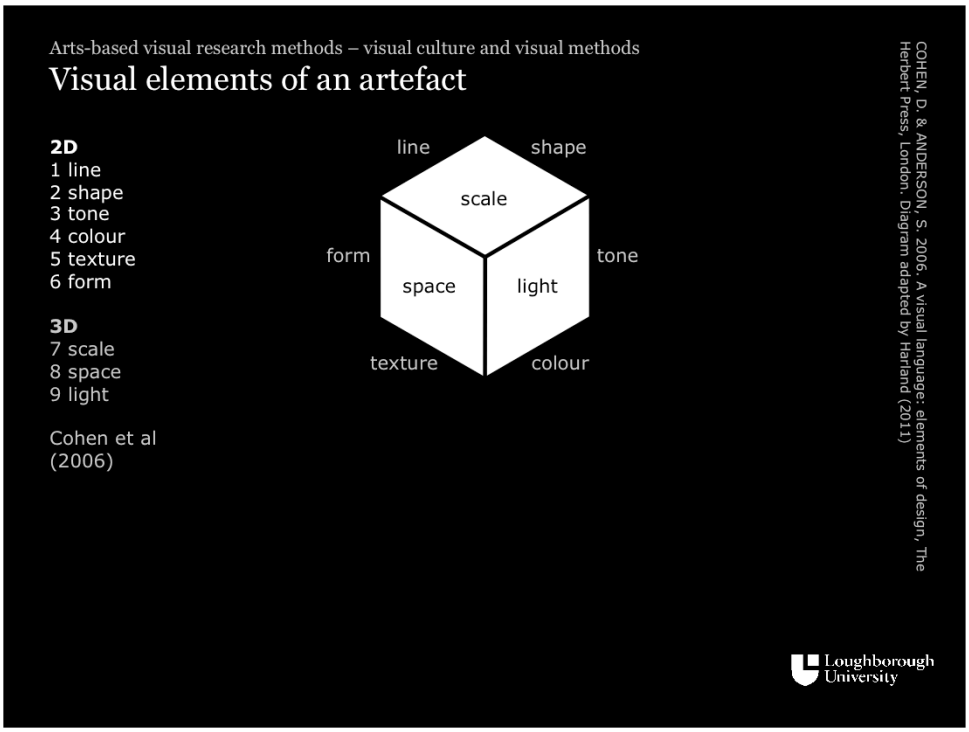
Loughborough University

Some keywords emerge from the benchmark statements that help expand this point. Concepts | Ideas | Visual language | Two and three dimensions | Time | Narrative | Sound | Interactivity | Creative skills | Imagination | Vision | Innovation. Clearly art and design places high value of these characteristics, but these are arguably present in non-art and design subjects.

It seems that a distinction can be drawn when special emphasis is given to the development of 'visual literacy' and 'drawing'. 'Drawing ability is regarded as a prerequisite skill for observation, recording, analysis, speculation, development, visualisation, evaluation and communication.'

Yet the act of drawing is not typically discussed in contemporary texts on visual methods, such as Gillian Rose, Sarah Pink, or Alan Bryman, in the wider context of Social Research Methods. The emphasis appears to be more on the photographic image as the defining 'visual method' and this most likely reflects the view taken from within their respective disciplinary perspectives that cover geography, ethnography and social research, with emphasis more on research than the kind of vocational training traditionally associated with art and design.

Research driven visual data from the art and design perspective will include some basic properties associated with making in art and design. I will return to this, but first a brief word on how the role of images in social research are categorised.



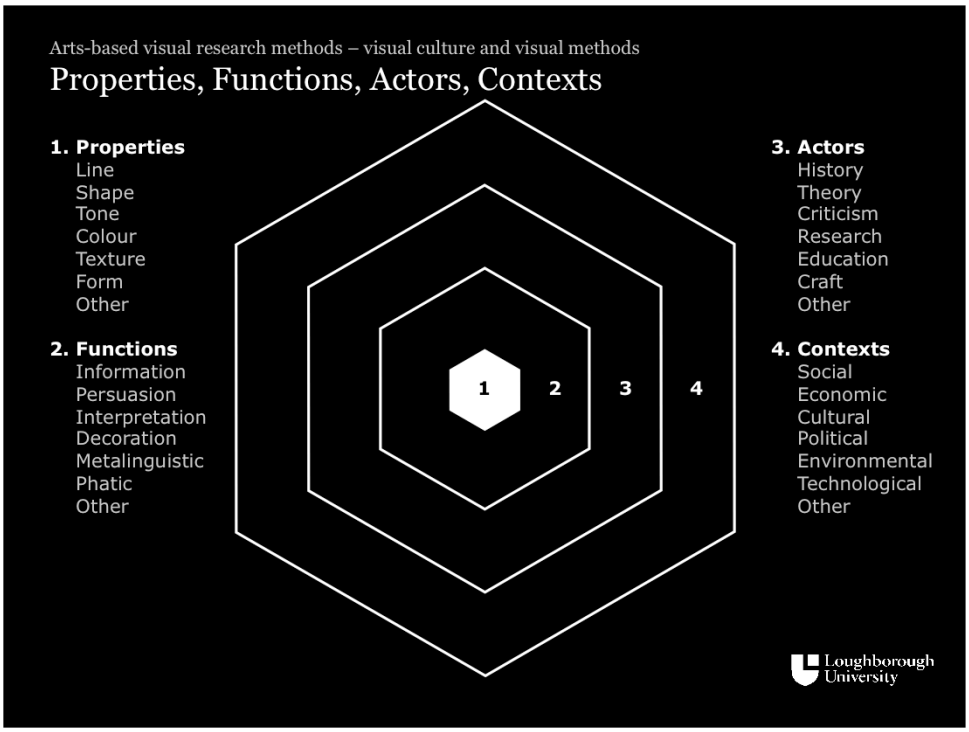
Here, I represent the artefact as a cube that possesses 2D & 3D qualities (I will concentrate on the analogue rather than digital, for the purpose of this discussion.

Already mentioned have been the characteristics of Concepts | Ideas | Visual language | Two and three dimensions | Time | Narrative | Sound | Interactivity | Creative skills | Imagination | Vision |Innovation. Theese are a mix of tangible and intangible things.

From within art and design, Cohen and Anderson (2006), identify nine visual elements that the maker of art and design will be concerned with: 1. Line | 2. Shape | 3. Tone | 4. Colour | 5. Texture | 6. Form | 7. Scale | 8. Space | 9. Light. He groups these within an hexagon, for no apparent reason. Yet the first six of these are primarily to do with the nature of the object, whereas the last three are predominantly environmental, or spatial.

Having developed the use of hexagons and cubes elsewhere in my research, I suggest here the first make up what might be called the defining properties of the graphic object represented here as a cube, each of the first six reflecting a different facet of the object.

Should we wish to incorporate a wider understanding of the 'graphic' in visual method, I suggest the following framework to help understand the many spheres of influence that will contribute to shaping reflexive research driven visual data. This extends work I have previously published in the design research literature.



There are four basic components that will help understand the use of artefacts as central components in the research process: Properties, Functions, Actors and Contexts.

These can be further discussed in the context of the relationship between Design Science, Social Science and the Humanities, but time will not allow this here.

This will refer to important work in design studies by Nigel Cross and Bruce Archer over the last 40 years or so.

Arts-based visual research methods – visual culture and visual methods

Linking Design to Science and Humanities

	The **phenomenon** of study in each culture is
Science	the natural world
Humanities	human experience
Design	the artificial world
	The **appropriate methods** in each culture are
Science	controlled experiment, classification, analysis;
Humanities	analogy, metaphor, evaluation;
Design	modelling, pattern-formation, synthesis
	The **values** of each culture are
Science	objectivity, rationality, neutrality, and a concern for 'truth'
Humanities	subjectivity, imagination, commitment, and a concern for 'justice'
Design	practicality, ingenuity, empathy, and a concern for appropriateness

(Cross, 2006, p. 2)

CROSS, N. 2006. Designerly ways of knowing, London, Springer-Verlag.

Loughborough University

Refer to screen …

… The phenomenon of study

… The appropriate methods

… The values

Arts-based visual research methods – visual culture and visual methods

Education in Science, Humanities and Design

Design, in its most general educational sense, where it is equated with Science and the Humanities, is defined as the area of human experience, skill and understanding that reflects man's concern with the appreciation and adaptation of his surroundings in the light of his material and spiritual needs. In particular, though not exclusively, it relates with configuration, composition, meaning, value and purpose in man-made phenomena.

ARCHER, B. 1976. The Three Rs. In: ARCHER, B., BAYNES, K. & ROBERTS, P. (eds.) A framework for Design and Design Education: A reader containing key papers from the 1970s and 1980s. Wellesbourne: The Design and Technology Association. p. 1

Loughborough University

Here we will find a concern for appreciation and adaptation as much as materiality and spirituality.

Arts-based visual research methods – visual culture and visual methods

Adaptation …

… adaptive theory focuses on the ties between agency and structure in social life and the connections between macro and micro levels of analysis.

[…]

It also acknowledges the need for an epistemological basis which reflects the interweaving of objective and subjective elements of social life.

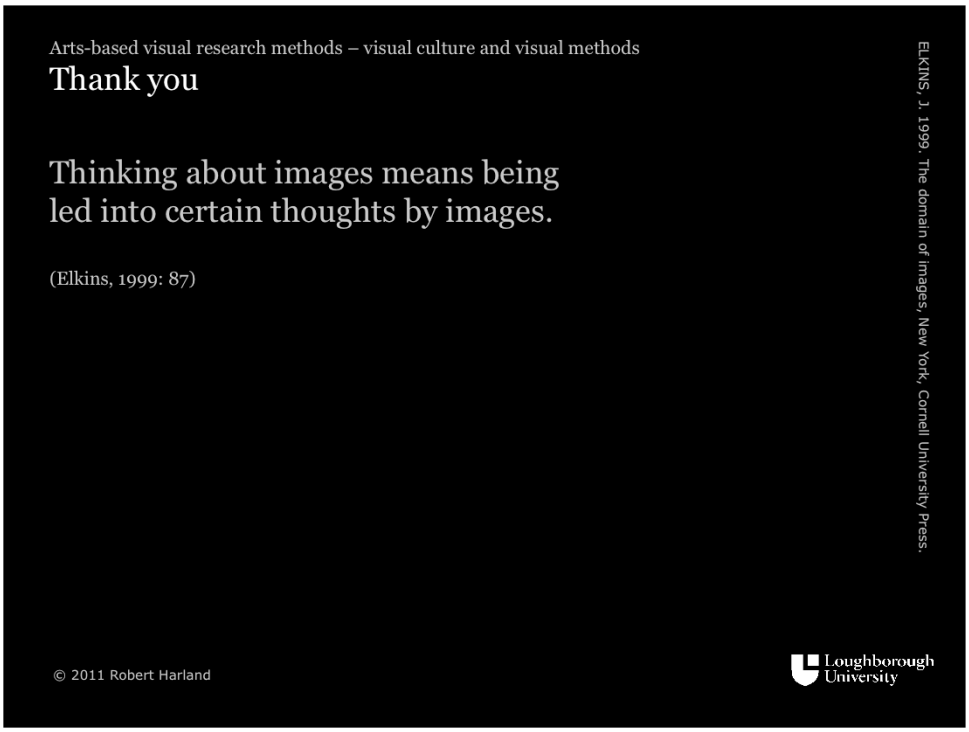
(Layder, p. 27)

LAYDER, D. 1998. Sociological practice : linking theory and social research, London, SAGE Publications Ltd.

Loughborough University

I will close with a small reference to the work of Derek Layder, someone whose theories seemd to articulate the dilemmas in art and design practice as much as they do sociological practice.

Perhaps an obvious reference to my recent PhD work is a concern for macro-micro levels of analysis, as well as the duality of objective and subjective elements that are present in the artefacts of art and design.



I will close with this short quote from Layder …

Thank you