



# MIND MAPS

We consider “Urbanism” a multidisciplinary area of research and practice, gathering urban design, spatial planning, data analysis and modelling, urban studies and sustainable technology, among others. Each area of knowledge asks different (but complementary) questions anchored on different ontology and epistemology. Different questions demand different methods to answer them. Sometimes, the same question can be answered from different perspectives. The Methodology Sheets give an overview of methods used in Urbanism.

## WHAT DOES THIS METHOD ‘DO’?

A mind map is a visual brainstorm. It is also a communicative tool, and a way to study, in which participants map ideas in the form of keywords sprouting from a central concept or idea, generally (but not necessarily) in the form of the branches of a tree. This is why many mindmaps look like a “tree” of ideas, but we will come back to this later. A mind map is structured hierarchically, that is, the main concepts give birth to subsidiary concepts and so on. Ideas “branch out” in logical relationships.

The advantage of this method is that participants are not only encouraged to “unpack” their ideas, but they can also “see” the results of the discussion and keep a record of it. Even if some mind maps may seem quite chaotic, it is possible to retrace the thought process by following the “branches” of the discussion. Mind maps are often created around a single concept drawn at the centre of a blank page, to which one adds the initial main concepts sprouting from the centre. Because mind maps are essen-

tially a visual tool, participants are encouraged to use single keywords that summarise a concept and to add drawings, symbols, icons, pictograms, and other imagery that illustrates the idea they wish to convey. The use of diagrams that visually “map” information using branching and radial maps has a very long history. These pictorial methods record knowledge and help model systems, and have been used in learning, brainstorming, memory, visual thinking, and problem solving.

## WHY DO WE NEED THIS METHOD?

Abstract thinking is, well... hard! When listening to a lecture or a discussion, we may have the impression to have grasped the concepts being used, but as soon as we need to EXPLAIN those concepts and ideas, we often get stuck. This is because our capacity as human beings to absorb complex ideas is rather limited when we are in “passive” mode (just listening, and possibly also fidgeting with our Smart phones). Taking notes is the first step to understanding complex ideas. When we take notes, we are forced to summarise and/or explain ideas with our own words. This increases understanding significantly. A next step would be “concept mapping” or, as we like to call it, a CONCEPTUAL DIAGRAM or the CONCEPTUAL FRAMEWORK (both are addressed in another Methods & Tools Sheet). In the conceptual diagram, or concept map, we are forced to understand (and explain) the various concepts we might be using in a research or design project, and how they relate to each other and with the object of study. Mind mapping is a similar exercise, but in mind maps we are more free to experiment and to come up with crazy ideas or associations. After all, the mind map is just there to help us “connect the dots” collectively. This is very important. Of course it is possible and quite pleasant to make mind maps for yourself (we suggest using MIRO) as a form of studying, but mind mapping is an excellent tool for group thinking and discussion. At the end of the mind mapping session, the shared understanding of that group of people is significantly improved.

IT'S A COMMUNICATION TOOL

## LIMITATIONS

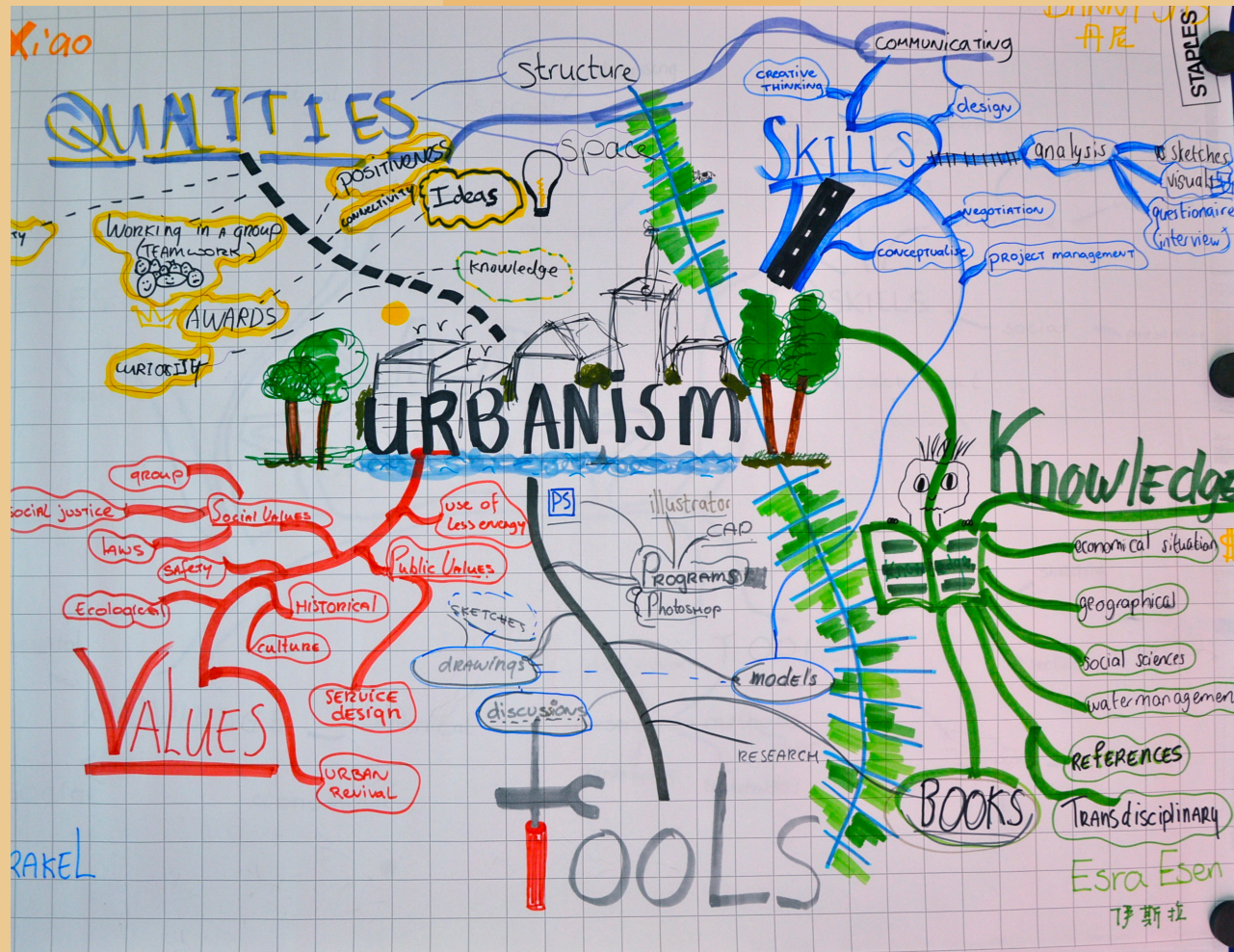
Many students of design are not satisfied with making a messy, full mind map, and try to make a “draft” or follow a certain “design principle”. The result are beautiful, conceptual mind maps, that lack “depth” (the concepts are not sufficiently unpacked), either because there was no time, or because people focused on making the drawing “tidy”. Don’t get me wrong: a beautiful mind map will take you far in terms of communicating your ideas, but it would be better to just let your mind flow and get a bit messy on paper, just this once, as long as you can unpack the concepts to a sufficient level of detail and complexity. The best mind maps are those where the design “emerges”, and is not too planned in advance. An expressive, messy, colourful mind map full of icons and pictograms, and where concepts have been sufficiently unpacked, is a joy to see. Another limitation of mind maps is when they are thought exclusively in terms of a tree. Remember the title of that book, the “City is not a tree” by Christopher Alexander (2015)? Well, our conceptual thinking is also not a tree. Although we can easily think in terms of categories and hierarchies, our thoughts are also networked. They branch out but reconnect down the line, much like a network. Remember a network also has structure, hierarchy and order, but one thing that the network is not is linear! The mind map should reflect that by allowing participants to draw lines connecting overlapping thoughts or concepts, in a kind of spider web.

GET MESSY!

# HOW DO YOU DO IT?



This Mind Map was produced by Yazhi Xiao, Sarah Brakel, Esra Esen and Danny for the course Methodology for Urbanism.



# FURTHER READING



**Alexander, C. (2015).** The City is not a Tree, Portland, Sustain Press.

**Bennett, E. (2017).** How to make the Perfect Mind Map and Study Effectively, YouTube. <https://www.youtube.com/watch?v=Y1HJMuqAPY>

**MooMoo Math and Science. (2017).** Step by Step directions for creating a mind map, YouTube. <https://www.youtube.com/watch?v=oY4sUQzXJ1g>

**Sicinski, A. (no date).** The complete guide on how to mind maps for beginners, <https://blog.iqmatrix.com/how-to-mind-map>

**Tanguay, M. (no date).** How to Mind Map to Visualize Ideas, Lifehack. <https://www.lifehack.org/articles/work/how-to-mind-map-in-three-small-steps.html>