CREATIVE RESEARCH

Required Reading Range
Module Reader

THE THEORY AND PRACTICE OF RESEARCH FOR THE CREATIVE INDUSTRIES

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PART ONE: DEFINING THE RESEARCH PROBLEM

Having outlined what research is and the context within which research is set in the creative industries, this section moves on to outline the issues and processes involved in defining a research project. This is the stage at which research projects are conceived; the focus is on identifying a problem to investigate and finding a research framework that is workable for your needs. It involves generating ideas and refining them.

4 What makes a good research topic?

If you are doing a research project as part of your studies, one of the most important factors to consider is whether or not your idea will meet the requirements of the examining body. Consequently, you need to choose your subject with care and you must carefully check the details of the project you are planning against the assessment criteria.

Interest

It seems an obvious point, but your project should be something that you are genuinely capable of doing and it must be based on a subject that really interests you. You may be working on the project for up to six months or longer, so you need to be really enthusiastic about it – otherwise, it may very quickly become a chore rather than a pleasure. You need to link your research project to the relevant parts of your course and demonstrate how they inform your topic.

Focus

One of the attributes of a good research project is a clearly defined set of research questions and objectives. You therefore need to ask yourself whether or not your research questions will provide you with enough depth to give you a substantial project. If you have been given a research idea, perhaps by an organisation with which you are working on an internship, you will need to ensure that your questions and objectives relate to that idea.

Available knowledge

Interest and focus, combined with a good knowledge of the available literature, will enable you to understand how you can gain new insight into the topic. Try to consider whether or not there is sufficient published knowledge in the field that you are considering working in. It is important that the issues you are considering researching are linked to a relevant theory. You also need to use the available literature to put your topic into context.

Data availability

Some topics may be too large for you to complete in time, while others may not provide you with the focus or depth to meet the assessment requirements. You may have chosen a topic that is sensitive, such as the issue of housing for the homeless. Collecting the relevant primary data for such topics may prove difficult, so you need to reflect on how this might be resolved. You may also require additional finance for travel, or other resources to undertake your primary research and you will need to make sure that this is available before you begin.

Career goals

It is important to consider your own career goals. You can use your research project as an opportunity to pursue a particular subject or to focus on a particular industry. Your research project can be used to introduce yourself to potential employers and will demonstrate up-to-date knowledge of research and findings that are pertinent to your expertise.

THINK BOX

Should I do this?

Use this set of questions to ask yourself if you should proceed with your chosen topic:

- Is it feasible?
- Are you really interested in the topic?
- Do you have the research skills necessary to undertake the project you have defined?
- Can you do the research within the given time frame?
- Will the subject be up to date when the project is finished?
- Do you require additional finance to undertake the project and do you have access to it?
- Can you gain access to the data you need?
- Is it worth doing this project?
- Does the topic fit the specifications set by the examining body?
- Does the research topic contain issues that have a clear link to theory?
- Are your research questions and objectives stated clearly?
- Will your proposed research provide new insights into the topic?
- Will your findings be pertinent whatever the outcome?
- Is the research topic in line with your career goals?

4 Generating and refining research ideas

Before you can refine your research into a research question or proposition, you need to generate some ideas. Have you ever wondered how creative artists, designers and inventors come up with their remarkable ideas? Even though idea generation may seem a mysterious and random process, there is a practical, simple method we can all apply to help us to increase our chances of having great ideas: by using connections. Any idea, no matter how small, is an association between previous, established ideas. These connections happen in our minds all the time – often spontaneously and when we are barely conscious of them.

The conscious generation of ideas is often the starting point for an innovation journey. There are many techniques to support idea generation; the most widely used one is brainstorming. Most companies do not see the generation of new ideas as a problem. The question tends to be how to generate quality ideas, and how to select which of these ideas are to be taken forward.

—Bettina von Stamm

Finding connections

An interesting characteristic of these connections is their unpredictability. Many times, ideas are formed by associating two completely unrelated concepts, in unexpected or unusual ways. To create movable type, Johannes Gutenberg connected the idea of the wine press and the coin stamp. To create the concept of a mass-circulation newspaper, Joseph Pulitzer combined large-scale advertising with high-speed printing. Great ideas may even seem to be random at times – but that doesn't mean that there's nothing you can do to develop them. As part of his address to the Design Council's InterSections 07 conference held in Gateshead, UK, in 2007 (which brought together 34 design thinkers to consider how design is transforming as it adapts to a world in transition), Frans Johansson explained this process and the importance of it.

To demonstrate, he used the example of Mick Pierce, an architect working in Zimbabwe, who was asked to design the largest building in Harare – without air conditioning. For inspiration, he turned to the termites of the African savannah. Despite temperatures dropping to as low as six degrees at night and soaring as high as 40 degrees Celsius (104 degrees Fahrenheit) during the day, termites are able to keep temperatures in their mounds at a constant 31 degrees Celsius (87 degrees Fahrenheit). By opening and closing a series of vents around the mound, the termites redirect air breezes and maintain a constant temperature. Pierce thus used exactly the same principles in his design for the building. Omitting the need for air conditioning units immediately saved the build the sum of four million dollars, and the building now uses about 90 per cent less energy than any other building around it despite having a constant static temperature of about 22 degrees Celsius (71 degrees Fahrenheit).

How to create a lot of ideas

Idea generation happens randomly, so having great ideas is not a task that can be approached directly. The only way to increase the likelihood of having great ideas is to increase the amount of ideas that you have at your disposal to form connections. Ideas, no matter how simple, are the raw materials for higher-level ideas. The more ideas you have, the more material your mind will have to associate and generate good ideas. Being prolific, then, is the key to having great ideas. There's no trade off between quantity and quality; they are intrinsically linked and it is only through quantity that you get quality. If the best way to get quality ideas is by creating them from a vast pool of ideas, then we need to have as many ideas as possible. Here are some ways that can help you to develop a pool of ideas from which to start funnelling down to a narrower and deeper focus.

Brainstorming

Brainstorming is a way for you to come up with many ideas in a short period of time, by working in a group. It's based on the way that your mind naturally works when you're being creative, and it is something that you can do intentionally when you need to create more options or ideas for your research project:

- Defer judgement: no criticism right now. Do you remember how people once said that flying was impossible? Don't be one of the naysayers. At some point, it is important to judge an idea, but don't do it while you're trying to generate ideas.
- Go for quantity: the more ideas you come up with, the more likely it is that one or more of them will be a great idea.
- Look for unusual or wild ideas: worry about how to make it work later, so look for as many 'crazy' ideas as you can – the wilder the better.
- Combine and build on ideas: 'piggyback' one idea on to another to create a new idea.

By using these principles when you look for new ideas or options for your project, you give yourself permission to come up with ideas that you might not otherwise pay any attention to, but that actually make sense when you tailor them, or add something else to them. Start with a problem that interests you and come up with ideas about how to research it: what is the problem? How does it connect with other contexts or problems? Before you start, tell yourself how many ideas you want to come up with – maybe 30 ideas if your problem is well defined or 100 ideas if you want some really bizarre ideas – and don't stop until you come up with that number. You may want to give a value to each idea and double the value for the next idea and so on. The aim here is to stretch for one more idea, because it may be worth a lot.

Movement ladder

You can also use a movement ladder to generate ideas. This works well when you already have a good research idea but need some inspiration. You can use it to define your concept, by looking for the idea behind the solution you need. If your project concept is to research levels of motivation in designers in SMEs, the broader concept is not perhaps motivation, but the overall performance of the design organisation. You then think about all the specific things that fit within this concept. Examples might be:

- Decrease turnover
- Increase differentiation
- Increase competitiveness
- Improve the image of the organisation

Keep going and get as many as possible on the list. Then go back down a level and apply these to your current research idea, adapting as necessary. This technique can often produce multiple ideas that you might not have considered previously. Think about your current way of looking at your research project: 'what is the concept and what need am I fulfilling?'

Random word

The random word technique, originally devised by Edward de Bono as an aid to research, is another useful, fun and unique way to generate new ideas. Choose an object at random, or a noun from a dictionary, and associate that with the research concept you are thinking about. This technique is also known as the method of focal objects. For example, imagine you are thinking about how to improve Wikipedia. Choosing an object at random from an office, you might immediately spot a fax machine. Fax machines are becoming rare. People send faxes directly to known phone numbers. Perhaps this makes you think of providing ways to embed wiki articles in emails and other websites, as is done with YouTube videos. Does it stimulate other Wikipedia ideas for you?

You can use provocation by declaring usual perceptions out of bounds, or provide a provocative alternative to the usual situation under consideration. Prefix the provocation with the term 'X' to signal that the provocation is not a valid idea put up for judgement but rather a stimulus for new perceptions.

Alternatively, simply challenge the way things have always been done or seen, or the way they are, simply to direct your perceptions to explore beyond your current mindset. For example, you could challenge the convention of coffee cups being produced with handles; the challenge here is a directive to explore without defending the status quo. Handles exist because cups are usually too hot to hold directly, so perhaps coffee cups could be made with insulated finger grips; or tailor-made coffee cup holders similar to beer holders could be produced.

Suspend judgement and don't be overly logical with information at every step of the way. This allows for the formation of different patterns of thought and association. By generating alternatives and creating a quota of ideas, you can overcome creative blocks to formulating different ways of looking at things.

Mind maps

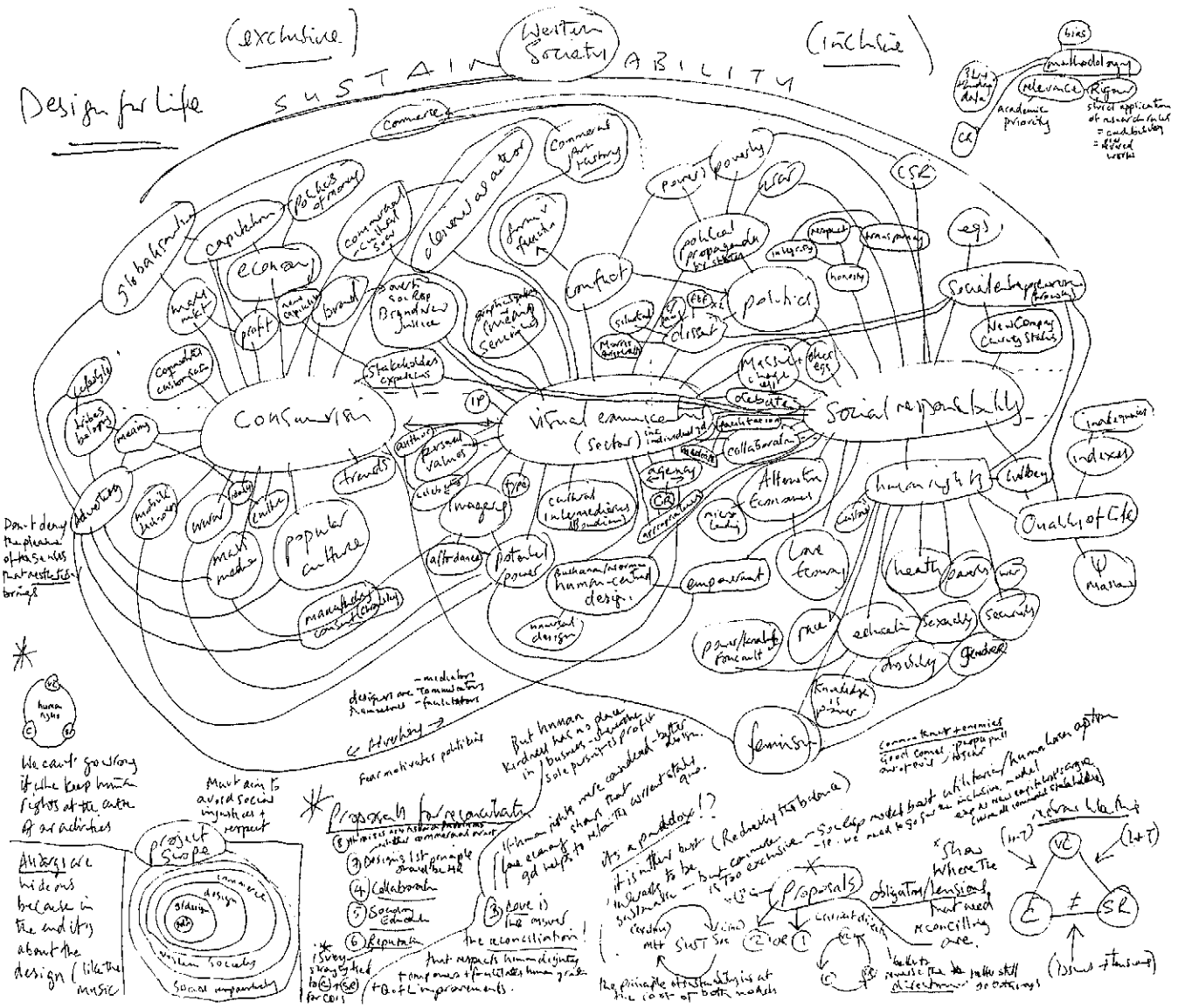
Another method for generating research ideas is to use mind maps, which are visual diagrams with lines and bubbles representing ideas and the relationships between them. The core idea sits in the middle with related topics branching out from it. Ideas are further broken down and extended until your page looks like an impressionist painting of a spider colony.

Mind maps can be very useful because they are fast to create and no effort is wasted. Hierarchy and categorisation are visually and clearly defined and rather than writing out lots of descriptive phrases, only the key ideas are represented. Symbols and diagrams can be included to illustrate ideas, enabling the mind map to be read at a glance. Mind maps can be used in three different ways within research projects, which we shall now explore further.

Mind maps allow you to brainstorm and get ideas from your head quickly down on paper. They lend themselves especially well to free association. By recording, then rapidly reviewing freely generated ideas, we can find connections and new relationships between concepts that we otherwise might have missed. Drawing your ideas is also ideal for remaining in a creative mode where more logical and rigid methods might take you off track.

As you listen to a lecture or read a book you can very quickly create notes using a mind map. You can use large branches for chapters or key points, with detail added from them. A whole book can be summarised on one page and it is remarkable how well you can recall the information later and use it in your research with only the map as a guide. You can also use mind maps to plan your project. In one diagram you can represent everything that needs doing – the relationships between tasks, for example (what has to be done before something else can be).

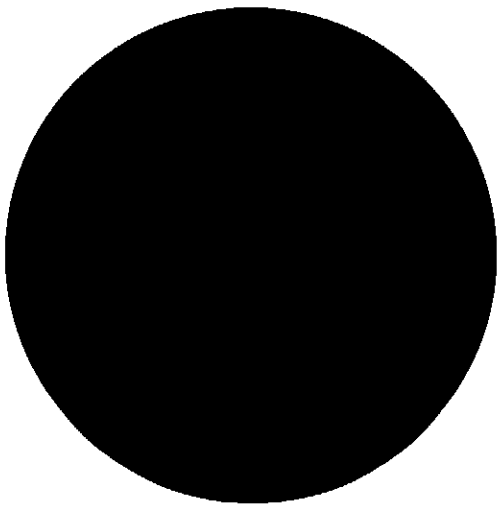
Figure 3
MIND MAP



This is an example of a mind map which has been used to generate and sort ideas for a research project around the concept of sustainability. It represents a brainstorming of ideas around the key components of consumerism vs. social responsibility, which explores arguments and develops tentative proposals for reconciliation of these apparently polarised realms of social life. Courtesy of Aly Rhodes.

Ideas association

You can also try ideas association techniques, by associating different ideas which are stimulated from a simple shape. Take a look at the following symbol, for example.



What do you see? A black dot? What else do you see? How about a very large full stop? What else can you think of? Here are some other ideas:

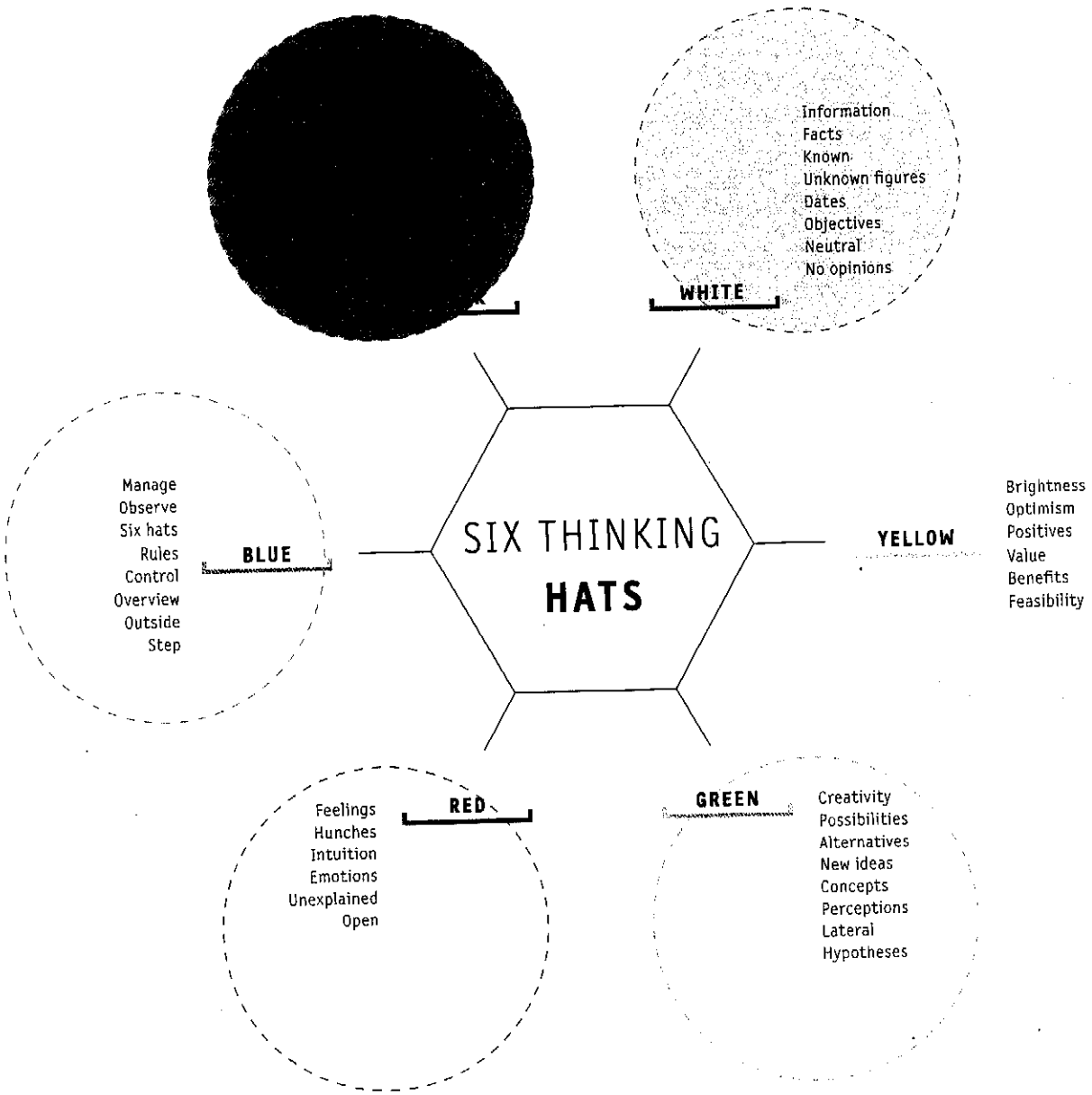
- An overhead view of a cup of black coffee
- A very dirty basketball
- An open sewer cover
- The pupil of an eye
- A passageway with no lights
- A black hole in space
- A bullet hole through the page

Instead of accepting the first answer that comes to mind, try and go beyond it; be open to and create more ideas. This tool is practical when our normal automatic perceptions tend to keep us trapped 'within the box'. Thinking inside the box means accepting the status quo. Charles H. Duell, Director of the US Patent Office, famously said, 'everything that can be invented has been invented.' That was in 1899: clearly he was thinking inside the box! In-the-box thinkers find it difficult to recognise the quality of an idea because they routinely believe that an idea is an idea and a solution is a solution. In fact, they can be quite stubborn when it comes to valuing an idea. They are masters of the creativity-killer attitude such as 'that'll never work' or 'it's too risky'. They also believe that every problem needs only one solution; therefore, finding more than one possible solution to a problem represents a waste of time. However, thinking 'outside the box' requires different attributes that include:

- A willingness to adopt new perspectives in relation to day-to-day events
- An openness to do different things and to do things differently
- Focusing on the value of finding new ideas and acting on them
- Striving to create value in new ways
- Listening to others
- Supporting and respecting others when they come up with new ideas

Out-of-the box thinking requires openness to new ways of seeing the world and a willingness to explore. Out-of-the box thinkers know that new ideas need nurturing and support. They also know that having an idea is good, but that acting on it is more important.

Figure 4
EDWARD DE BONO'S 'SIX THINKING HATS'



'Six Thinking Hats' is a technique that allows you to separate thinking into six categories. Each category is defined with a coloured 'thinking hat'. By mentally wearing and then switching hats you can redirect your thought processes. Thinking techniques like these enable you to come up with creative solutions and organise your thoughts and ideas. Thus, the white hat, for instance, calls for needed or known information, the red for feeling or intuition and the black hat for judgement or why something may not work.

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DEFINING THE RESEARCH PROBLEM

Turning ideas into research projects

This section aims to show you how to funnel initial ideas down into a research framework for your research. The dissertation is intended to provide you with an opportunity to explore at length some aspects of theory, methods, knowledge or skills that you have been introduced to on your course. We will explore the four types of learning objectives – substantive, processual skills and concepts, methodological skills and processes, and self-knowledge – within this section. When you are planning your research project, you should think about the kind of learning you consider most suitable for you and your topic; first, you will be selecting a broad area of interest, such as workplace design, or a topic that draws together material from many areas. But you should also consider the type of learning that you want to focus on.

Four types of learning objectives

Although one type of learning may be dominant in your project, you will probably be expected to address all four learning objectives. Whichever type of project you choose to do, remember that the primary aim is to enhance your own learning in an area of your choice. You may not be able to define these learning objectives very precisely and even if you do, they may change during the course of your project. However, try to reflect on the kind of learning objective that you are pursuing and revisit this from time to time during your project. Once you have defined your learning objectives, you can move on to selecting a topic.

Substantive

A substantive learning objective would be reflected in a statement such as: 'I wish to learn more about motivation amongst designers within the car industry.' Here you will seek to further your knowledge of the topic and explore relevant theory to it. One outcome of such an inquiry might be to rethink the concepts or models of practice involved. As such, the learning has *substance* as opposed to you merely learning about a process.

Processual skills and concepts

Processual skills and concepts reflect on problems and solutions – implementing techniques, concepts and models. This may lead you to a better understanding of potential barriers and problems involved in implementation, which could, in turn, inform you about how to approach other similar circumstances. This approach would be reflected in a statement such as: 'I wish to learn more about how to apply strategic design auditing in an organisation.'

Methodological skills and processes

You may want to focus on the way in which research is undertaken by using methodological skills and processes. This type of learning focuses on the way that knowledge is generated from data. An example of this would be reflected in the statement: 'I wish to gain a critical understanding of how to research the perception of design, developing debates on how to collect data, and in particular gaining an understanding of subjectively meaningful emotions using focus groups.'

Self-knowledge

You might focus mainly on self-knowledge, expanding your thinking and reflective abilities in order to understand your own learning and actions: 'I wish to confront the area of project management, which is difficult for me, to inform myself how I might develop my personal organisational skills.'

Research is what I'm doing when I don't know what I'm doing.

— Wernher von Braun

Selecting a topic

Having reflected on your course and what has captured your attention, you have probably already selected a topic and generated many ideas around it. You may also want to think forward to your future career and to think about what will make you marketable. In addition, reflect on your strengths and weaknesses, on what is achievable for you and what resources you can easily draw on. When you have clarified these issues, you can move on to consider your research question.

First, you need to be clear about what a research question is. It is the question around which you wish to have a conversation, build an argument and essentially answer. It frames your endeavour and it is the central point around which all your decisions and all your dialogue will revolve.

In order to define your research question, you need to refine the topic and develop the research questions by:

- Defining your topic area
- Defining the nature of your project
- Defining the issues that you will explore
- Analysing where relationships exist between the issues that you are exploring

The tricky part is to make sure that you don't get confused about your phenomenon of interest when formulating a specific research question. Although you will be interested in quite a few issues, you might end up having to let things go, otherwise you may end up with a project that is too big for you to tackle in sufficient depth within the period of time you have. You may find you need to focus on one question, rather than the four or five that you had initially considered. You may also find that the question you have defined is too big and needs to be focused in on even more. This is all part of the natural process of honing in on your topic, and you shouldn't be overly discouraged by this.

THINK BOX

How can you funnel down?

You can funnel down to a research question by narrowing the area of research from the topics that you have studied. For example:

- Design processes
- Design brand strategy
- Consumer context

This can then be narrowed further to phenomena of interest:

- Strategy development processes
- Motivation
- Sustainable development

From here, the next stage is to narrow further down to a learning objective and/or research question:

- 'To reflect on the implementation of design management as a competitive strategy.'
- 'To find out what the motivational and hygiene factors are for designers in the car industry.'
- 'To explore differences in the approach to sustainable development in product design in France'.