## Case Studies

This method involves an in-depth analysis of specific cases relating to a particular subject area. Researchers may consider a single case, or compare two or more cases to examine a particular phenomena. There are many different ways to approach a case study and the choice of cases is crucial for this method to be effective. In design, common examples of ‘cases’ include a particular designer or a specific design.

Types of cases can include:

* Typical cases - illustrates an example that is considered normal in the subject area
* Outlier Cases - extreme examples of the subject under study
* Influential cases - examples that had a significant impact on the subject area
* Most Similar - two or more cases that are very alike with the exception of one issue or area that is central to the research question
* Most Different - two or more cases that are completely different from each other with the exception of one issue or area that is central to the research question

Case studies can be very useful in design to examine contextual influences on specific artists, designers and movements.

## Discourse Analysis

This method focuses on analysing different forms of communication. It investigates the many ways people communicate in order to establish, uphold or challenge different theories and norms. Different communication methods include text, speech, audio-visuals, media, art and architecture, fashion, performance, human movement, urban planning etc.

Discourse analysis can involve:

* Examining the way a specific communication method is used to express an idea or theory
* Comparing the way different methods work together to express an idea
* An examination of semiotics (this is the use of symbols and visuals to express meaning)

For instance, if a researcher wants to study how the ideas of masculinity and femininity have evolved over time, they could analyse the book covers of genres typically associated with men and women. They would investigate how these cover designs have changed and assess how the images and visuals affect the message conveyed on the covers.

## Thematic Analysis

Thematic analysis involves systematically identifying recurring themes or patterns within creative works, such as paintings, sculptures, fashion designs, graphics, photos, or interior designs. It helps designers gain insights into the underlying ideas, emotions, and messages conveyed in their own designs or in the work of other designers. This method also offers an understanding of the deeper meanings and cultural context embedded in visual expressions.

For example, let’s say you have been hired by a business owner to revamp their restaurant. You start by examining the existing space. A thematic analysis could reveal design elements such as a minimalist style, monochromatic colour schemes, and nature-inspired decor. This can help you to understand the space’s current state which can guide your future design choices.

## Practice Based Research

This method is often used in the arts; typically for anyone who wishes to analyse the processes involved in creating a piece of work. Note that it is different from practice as research where the researcher engages in arts practice solely for the purpose of developing the craft. Practice based research means having a clear research question in mind, taking detailed observations of the processes as they occur, and engaging in reflective practice of both the observations, and the finished work, in order to address the research question.

For example, a painter might be interested in exploring the effect of using digital technologies for preparatory work on ideas generation. They could record themselves during drawing sessions, keep a logbook of different environmental factors such as, was the room cold, were they alone, time of day, length of session etc. They would also keep a journal to take note of emotional states, problems with the practice, unexpected benefits of the practice etc. When the work is complete they will then reflect on their observations in order to draw conclusions both from their observations and the finished work.

## Historical/Biographical Research

This research method is about collecting evidence in order to interpret an aspect of the past. It can be used in design to explore key movements, gain insight into the life of specific people, or to examine the development of specific styles at particular periods of time.

Primary sources of data may include buildings, or historical artefacts, such as furniture, artworks or historical records. Secondary sources would include interpretations from others about the subject in question. These interpretations will involve an understanding of the who, what, where, when and why of a particular topic. They are typically found in books, journals, interviews and videos. You will then collect and analyse different points of view on the work, in order to construct an argument and draw conclusions.

## Surveys

Surveys are a classic research method for understanding people’s attitudes towards a wide range of issues. They are often used in marketing and business research, psychology and the social sciences and in a large variety of other disciplines.

Surveys can be quantitative or qualitative in nature. Often, you will be able to make use of large surveys that have been compiled by other people and/or agencies. However, you can also create your own surveys by constructing questionnaires, transcribing or coding the answers and analysing the results. One disadvantage is that you must be very careful in structuring the questionnaire, in order to avoid getting biassed results. You must also consider how many participants you will need to get accurate results, how you will share the survey with potential participants and how you will protect their confidentiality.

# Research Bias

Research bias refers to the errors or prejudices that may surface in a research project and can skew outcomes or create errors in interpretation. It can happen when:

* The choice of research method is inappropriate to the study being conducted
* The designer/researcher has prior ideas or beliefs that influence their interpretation of the outcomes or
* The sample of people, designs, numerical information, articles, historical information etc. that you want to analyse are inappropriate for answering the question you have raised

For example, you are questioning the design options for an eco-friendly cafe. You decide to survey your eco-conscious friends and family. You also use language in the survey that suggests you already believe an eco-friendly style is a positive decision. There is bias in this study because:

* You have only surveyed people who already like eco-friendly interiors
* You have created a survey that leads people to answer in a particular way

An awareness of bias means that you are more likely to take steps to reduce the chances of producing inaccurate information that will impact the effectiveness of your designs.

## A note on ethics

Similar to bias, it is important to pay attention to ethics in your work. Designers have the power to shape perceptions and influence opinions through the messages they convey in their work. It is vitally important to approach any project with integrity, to respect cultural sensitivities, and to strive to be truthful in all communications.

Ethical research can involve:

* Refusing to fulfil client’s wishes that may violate ethical standards in the industry
* Giving credit to the original creators of a work and not plagiarising the work of others
* Refrain from promoting harmful stereotypes in your work
* Respecting the privacy and security of all stakeholders in the project and that of your audience.

While research is very important, it is also vital that the right type of research is carried out at different times within the research and development phase, as well as the design phase. This helps to understand, inspire and guide the development of a design from concept to application. Solid, relevant and trustworthy research will provide a solid base for the clear development of a Design Proposal.