

Documentation for 'design decision-making 2020 interviews' (DDM2020) data shared on the UK Data Service ReShare repository

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About the project

There has been a great deal of focus in the sustainability sector in recent years on the importance of the role of design, and of making better design decisions, in order to achieve sustainable production and consumption. There is a wealth of prescriptive academic literature proposing ways of making more sustainable design decisions, often from a rational, engineering design perspective. Numerous tools and methods are offered to designers to help improve their decision-making taking into account multiple criteria. Yet there is recognition in science and technology literature, often based on ethnographic research, that professional designers working in industry may have limited power to make design decisions in practice, and that instead a complex network of stakeholders is involved. Related to this, there have been ongoing debates about whether designers can be responsible for the impacts of the things they design, such as the impacts on the environment, if their agency to make decisions is limited. Yet there is limited empirical research on how designers themselves report their roles in design decisions and who may be responsible for decisions. There is also a focus in prescriptive design literature on how to take stakeholders' values, including designers' values, into account in design decision-making. For example, the Value Sensitive Design method proposes that stakeholders' values can be identified and used to inform design decisions. Yet there is limited understanding of how personal values may come into the design process when a specific values-focused method is not used.

This project seeks to examine these three psychological concepts of decision-making, personal values, and responsibility from the perspective of how they are constructed and managed in talk about sustainable design, using a discursive psychology (DP) approach. While interviews are commonly used to study how designers work, they are usually analysed using content analysis of participants' talk, whereas DP enables examination of both sides of the interview interaction and takes into account how prior talk influences what is said. Talk about design has been collected for this project using semi-structured interviews with sustainability-focused product designers, and from video recordings of panel discussions at design conferences. Extracts of data have been transcribed using Jefferson notations, to indicate features such as change of pace, volume, pauses, and laughter, to give richer insights into the interactional talk and actions. Analysis of extracts focuses on patterns in how designers talk about design decisions and other types of decisions, how they portray the role of personal values in their work, and how different types of responsibility are constructed regarding responsibility for sustainability in design. Findings based on common sequences noticed in interactional talk provide insights into the designers' portrayal of their roles and identities.

Keywords: design and technology, sustainability, interviews (data collection), decision making, moral values, responsibility, identity, roles.

About this data

Overview of the data: The dataset 'design decision-making 2020 interviews' has been produced as part of a PhD in psychology at the University of Edinburgh, by Liz Cooper. The main data source for the project is semi-structured interviews where sustainability-focused product designers are asked about decision-making, personal values, and responsibility for

sustainability. The dataset is comprised of words-only transcripts of sixteen semi-structured interviews with product designers, and a further document containing extracts from these interviews transcribed using Jefferson notation, which is used for discursive psychology/conversation analysis. In the interviews, product designers give accounts of specific design projects in which they have sought to embed environmental sustainability, and also talk about the role of the designer more broadly.

Ethics and permission: Ethics approval was given for the project by the University of Edinburgh’s School of Philosophy, Psychology and Language Sciences Research Ethics Committee on 29th May 2020, submission number 324-1920. Participants received an information sheet by email in advance of interviews explaining the aims of the project, details of the interview method, how their data would be securely managed and stored, and what they were being asked to consent to. Consent for using and sharing anonymised data was gained verbally at the start of each interview, during which time any concerns of the participants were also addressed. Permission has been given by the participants to share the anonymised interview transcripts with other researchers via a data repository.

How the data were collected: Semi-structured interviews were planned with sustainability-focused product designers. An interview guide was prepared to ask questions about a design project of the participant’s choice, focusing on how decisions were made, the role of personal values, and responsibility for sustainability. Participants were recruited primarily via LinkedIn, through directly contacting members who described themselves as product or industrial designers working on or interested in sustainable design. Sixteen interviews took place by video call (during a coronavirus pandemic when many places were locked down), using Microsoft Teams, from July to October 2020. Interviews lasted an average of forty-five minutes.

Details of participants and products talked about:

	Location	Sex	Type of project talked about	Product type	Length
1	Germany	M	Professional - in-house	Furniture	73:23
2	India	M	Professional - in-house	Packaging	48:02
3	US/Netherlands	F	Professional - in-house	Luggage	45:43
4	Argentina/Italy	M	Professional - independent	Furniture	65:53
5	UK	F	Internship	Child's bike	41:25
6	UK	F	Student project plus previous work in industry	Cycling backpack	39:20
7	France	F	Student project plus previous work in industry	Architectural outdoor space	42:29
8	Netherlands/Brazil	F	Student project plus previous work in industry	Plant sensor	29:30
9	US	M	Professional - design agency	Packaging	29:28
10	Spain	M	Design competition	Compost bin	54:13
11	Brazil	M	Professional - independent	Facemask	39:07
12	UK	M	Professional - in-house	Electric vehicle charge point	37:00
13	US	M	Professional - in-house	Vehicles	51:40
14	Canada	F	Professional - in-house	Yoga mat	40:08
15	Germany	F	Professional - independent	Lamp	35:10
16	UK	M	Professional - independent	Plastic cup	59:03

Transcription: Words-only transcripts of the full interviews have been produced (omitting brief introductory chat, verbal consent to take part being given, and thanks/goodbyes at the end). Any names of people, organisations or products have been removed. Additionally, Jefferson notations (indicating things like change of pace, pauses, laughter...) have been added to extracts from the interviews that were used for closer analysis. Timings have been given for these extracts to indicate where in the interviews they have been taken from. An explanation of notations used is presented in the table below (from Wiggins, S., 2017. *Discursive Psychology: Theory, Methods and Application*. Sage: London). Given the large amount of data transcribed, and the time-consuming nature of transcription, the researcher accepts there are likely to be small errors in transcription. In some places, talk is marked as inaudible, either where speech wasn't clear, or where the recording quality dropped for a moment and words were missed. It should also be noted that the Jefferson transcriptions represent an interpretation of the verbal data – different aspects would likely be noticed by different researchers transcribing in this way.

Transcription symbols used in Jefferson notation extracts (Wiggins 2017):

(.)	A micro-pause around one tenth of a second
(1.2)	A pause or silence, measured in seconds and tenths of seconds
=	Latched talk, where there is no hearable gap between words (can occur within a turn at talk, or between speakers)
::	Stretched sounds in talk; the more colons, the longer the sound, as in rea::lly l::ong sounds
CAPITALS	Talk that is noticeably louder in contrast to the surrounding talk (sometimes shouting) N.B. capitals are also used in some cases where an acronym is spoken e.g. PET or UN
<u>Underlined</u>	Emphasised words, or parts of words, are underlined
°	Degree symbols enclose noticeably °quieter° talk, with double degree signs indicating °°whispering°°
> <	'Greater than' and 'less than' symbols enclose talk that is at a faster pace (>speeded-up< talk) than the surrounding talk
< >	'Less than' and 'greater than' symbols enclose talk that is at a slower pace (<slowed down> talk)
↑ ↓	Upward arrows indicate a rising pitch in talk, downward arrows indicate falling pitch
£	British pound sign indicates smiley voice or suppressed laughter
#	Hashtag indicates 'creaky' voice such as when someone is upset.
[]	Square brackets indicate the start (and end) of overlapping talk
hh	hhs indicate audible breaths. A dot followed by hs (.h) indicate audible inbreaths; without the dot (as in hh) is an outbreath. Within a word (as in 'ye(h)s'), this indicates laughter while talking ('interpolated laughter'). The more hs, the longer the breath.
Huh/heh/hah	Laughter can be represented with outbreaths that have vowel sounds within them.
'yes'	Single quotation marks are used to indicate reported speech or thought
(())	Double brackets (sometimes without italics) contain details about other features that have not been transcribed, e.g., ((waves hand))
(Unclear)	Words in single brackets are the transcriber's best guess at what was being said, or (unclear) or (inaudible) if it really can't be heard clearly