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Design Labels: The Words that Divide & Unite Us

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Abstract: This paper explores the limitations and functions of design labels, such as social design, codesign, and sustainable design. It argues for a clearer and more nuanced approach to describing design practices. The authors collected over seventy of such labels and categorized them into five clusters. Four of these clusters derive their name from a necessary element of a design project, namely resources, outcomes, criteria, and methods. The labels in the fifth cluster pertain to specific application domains.

The discussion explores the relations between these labels and the elements they represent, highlighting that each element can evolve during a design project. The authors conclude that the elements can assist students, professionals, and academics to planning and describing the execution of a design practice. It's important to notice that although design labels do not define the practices, they do serve to identify specialist communities, and indicate new directions in the field.

Keywords: Design Terminology, Design Methods, Design for Values, Design Labels

1. Design Labels

Design can be a perplexing discipline for various stakeholders, including the general public, students, professionals, clients, and even academics involved in design research. When it comes to the general public, the perception of a designer is often limited to someone who is brought in to make existing things more beautiful or practical in use, or bring creativity to a process. This results in the common association of design with beautiful chairs, or a brainstorm session.

Students and professionals understand their work extends beyond such narrow definitions. They engage in activities such as problem framing, problem solving, facilitating collaborations, and guiding innovative transitions. Despite this awareness, they often struggle to communicate the full scope of their work to clients or employers. Additionally, academics in the field of design come from diverse backgrounds and focus on different specialized areas. With regularity they propose new terminologies to express new nuances or shifts in emphasis. Consequently, all these stakeholders employ shorthand labels to convey their unique approaches to doing design.

The wide range of design practices is evident in the extensive assortment of "design labels" that signify different approaches or even professional identities. Figure 1 provides a selection of these labels as an illustration.

value-based design fashion design user centered design design for smart cities pluriversal design speculative design graphic design experience design computational design by methods packaging design design for wellbeing experience design universal design design for emotion design for government co-design medical design design for interaction social design food design communication design design for social impact information design design for behavior change strategic design wood-based design ux design from resources experience-driven design transition design book design industrial design design for sustainability in domains textile-based design ai design smart material design furniture design brand design automotive design systemic design design for emerging technologies interaction design glass design biomimicry design design for aging game design for criteria design for the majority user interface design systems design digital design data-driven design exhibition design visual design product design critical design landscape design integrated design agile design sustainable materials design metal-based design interior design ceramic design service design interface design of outcomes human centered design participatory design design for health web design inclusive design virtual reality design sound design iterative design

Figure 1.   There is a great variety of Design Labels, each giving a different nuance or emphasis.

There are numerous design labels, possibly hundreds if we count every paper which points out another nuance of a proposed practice. The set of 77 labels in Figure 1 was compiled by the authors from a few sources: from the internet, from names of design programmes, and methods named in general handbooks, e.g., Kumar (2012), Martin & Hanington (2012), van Boeijen, Daalhuizen, & Zijlstra (2020). The collection process was stopped at 177 terms, as we felt the process saturated: we had enough to do sensible clustering and stopped getting 'surprising new finds.' Niche terms referring to specific product parts or new approaches in design research (academics also brand their methods) were excluded from the set. However, terms that were deemed familiar to a broad audience and had been encountered frequently in prior instances were retained.

We acknowledge the presence of bias in the process of compiling and selecting the design labels. It is important to note that all three authors have been working in a single large design department for twenty years. Over time, this department has transitioned from its roots in product design to encompassing the design of interactions, services, and addressing systemic challenges. Consequently, the collection of labels may not adequately represent the areas of art & design, architecture, or fashion. However, it is assumed that the underlying principles of how labels refer to design practices may exhibit similarities across these domains. The goal of this study was not to create a comprehensive dictionary. Rather, we try to distinguish general patterns in how labels are used to describe how designers do what they do.

These labels (see figure 3 for a clustered and more readable list) are important as markers for what designers do, how they do it, or what they value. But most labels do not indicate a cut-and-clear way of doing design. There are several problems regarding 'being clear about how designers do design'. Here we discuss some of these per addressed audience.

The **general public** may mistake the 'distinctive word' of a label as a definition of why and how the design is done. They may interpret different labels to imply different ways of working.

For those in **professional practice** it can be important to show they offer the up-to-date service. In the past two decades there has been a rapid succession of new attention points that come into the design process: context, participation, ethnography, cocreation, experience, interaction, services, and sustainability. In a commercial context, designers want to show that they are up to scratch. The confusion surrounding design practices is further exacerbated by the rise in popularity of *design thinking* gone light. This trend has increased the visibility of design but has also created the illusion that every manager with a template can do design in an afternoon workshop (Kolko, 2018).

The communication culture in both **academia** and **commercial design practice** is not helping. New slogans are introduced, claiming new positions, and defining these by their contrasting it to a recent predecessor rather than explaining the design itself: *functional design* was rejected by *user-centered design* was rejected by *human-centered design*. That in its turn should now be dropped for *planet-centered design*, *more-than-human design* or yet another label, because in its turn it is deemed

narrow, biased, and irresponsible. But what design offers and how it is done is often left underexposed.

Those in search of an education get their first impression of a **design school** through the name of its design programme. Questions of identity surface with regularity at many schools: should the word 'industrial' be dropped from *industrial design* because students have moved to designing experiences and interactions? Or should design schools drop 'product' from *product design*, because they now emphasize services? Reasons to keep a label can vary. At an engineering university, *experience design* may be too artsy for the colleagues in adjacent disciplines. Dropping an established name as *product design* may alienate the alumni whose diploma carried that name, and fresh alumni may have difficulty to introduce their skills to future employers.

In this paper we want to make sense of this diversity of 'design labels'. What does it mean to say a designer is doing one of these? Are the labels mutually exclusive or overlapping? The intended beneficiaries of this might be 'those who are confused', in the first place the students. The channel to reach them is the academics and other educators that teach them. Our goal with this paper is to provide a foothold to help explain 'what it is that we do' rather than 'what flag we wave'.

2. Earlier attempts to find order

The evolution of design disciplines has received attention in the literature. Several authors have addressed trends and developments, and pointed out how the focus of design changed, diversified, transformed. Liz Sanders' (2008) 'evolving map of design practice and design research' identified changes in methods and the role of the user. Buchanan's (2001) Four Orders of Design started a discussion about the rising complexity of challenges that designers address and outcomes they produce. Sanders & Stappers (2014) pointed out that the word 'design' itself is problematic, in that it carries a variety of meanings, both as a verb and as a noun, which can make it unclear if it refers to an outcome, a community, and activity, or a phenomenon.

One particular inspiration that will return in the analysis of labels below was the 'design dashboard' of the Institute Without Boundaries (Stevens & Watson, 2008). The dashboard clarified that designers need to make a choice of about three factors: how they engage their client, what form of outcome they aim for, and what values will underly their decision. It was published as a parody of a digital product, with a user manual. The product carried a range of buttons by which designers could 'set' their intentions, and that was all it did. The value for 'engagement' could range from designing for the client, or guiding the client, or just giving recommendations and letting the clients do the designing themselves. Outcomes could be products, services, or strategies. And for values the given options were 'social', 'ecological' and 'economical' (a fancy way to say 'for profit'). For a while, the dashboard was a 'hit' on the internet, with various physical 'products' appeared, and instructions how to lasercut the 'product'.

Although we acknowledge that the discussions in the broader literature are important for the development of the field, our purpose here is more practical, maybe more superficial: make sense of how the words are used in everyday communication. Going in-depth in all the discussions about the development of (parts of) the field is beyond the scope of this exercise.

3. Clustering Design Labels

The set of labels was clustered guided by the question 'why do they have that name?'. This resulted in five clusters tagged *for, by, from, of,* and *in*. Figure 2 lists the cluster tags, the elements they refer to, and gives an example design label for each of these, and depicts the relation between the cluster tags as a box-and-arrows diagram. The diagram is in *IDEF0* box-and-arrow format, used in systems modelling in software and organisation to show how a process step is related to others. Figure 3 shows the diagram with the full set of labels. We now discuss each cluster in turn.
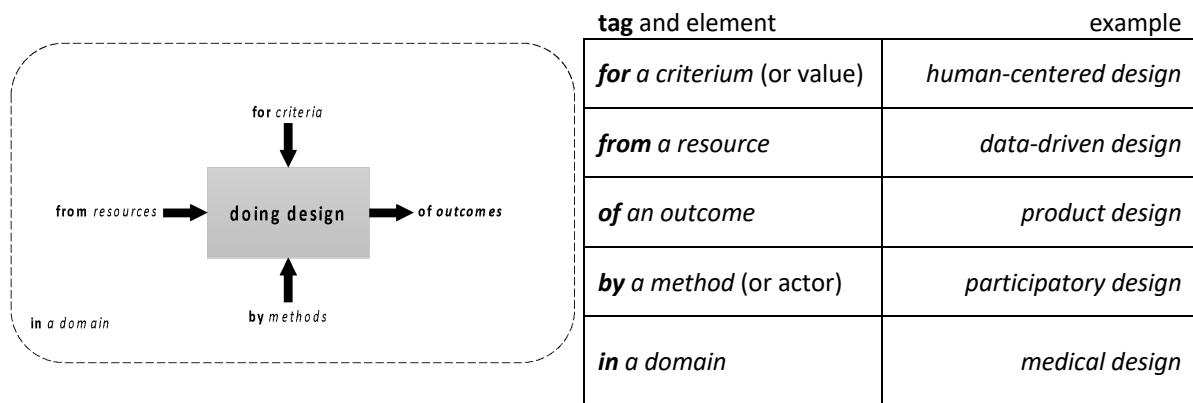
tag and element	example
for a criterium (or value)	*human-centered design*
from a resource	*data-driven design*
of an outcome	*product design*
by a method (or actor)	*participatory design*
in a domain	*medical design*

Figure 2.   The five cluster tags, visualized as an IDEF0 box-and-arrow model (Wikipedia, 2023).

The cluster *for* a criterium refers to the values that are used to make decisions. *Design for wellbeing*, *design for sustainability* can deal with any types of outcomes and inputs. Their defining quality is the values they strive for. We didn't find a *design for profit* label being explicitly used these days, putting it up front as your main driver is not as popular as it once was, but the value of 'economic viability' is rarely hidden in (commercial) practice.

The clusters *from* a resource and *of* an outcome reflect the 'traditional' industrial design practice, where designers worked with industries who manufactured a relatively stable category of products (cars, furniture, household appliances) from relatively stable resources (metal, wood, plastic, print). Many design labels refer to the outcomes the client commissioned: Graphic design produces print objects and visual artefacts in general, fashion design produces clothing. On the resource side, digital design uses digital technology to produce outcomes, and sustainable material design strives to make the best use of plentiful or scarce resources.

The cluster *by* a method highlights the methods that are used in doing design. Examples are *speculative design*, *critical design*, *agile design*; several of the recent methods emphasize that design these days is less the traditional image of the sole creative sitting at his drawing board but involves increasingly more actors in different roles: *participatory design*, *codesign* can be applied across purposes and outcomes.

Finally, the cluster *in* a domain contains labels which refer to a larger application area or context where the design is happening, such as *healthcare design*, *design for government*. Within such a domain, there can be several outcomes, resources, and methods, but there usually is an identifiable set of stakeholders and actors, regulations and locations that keep the various projects together. Although the general clustering went straightforward, justifying whether a label should go in this cluster or that one is not always easy. Some examples illustrate how the actual discourse about the design practice associated with a label can follow different elements, or combinations of those elements. For example, *service design* is understood by some merely as referring to an outcome: 'the design of services' as opposed to products. Whereas several academics refer to service design as 'delivering value in use' (Vargo & Lush, 2004) or designing for use contexts, where products, among other products and systems service people in their needs (Kimbell, 2010). Sleeswijk Visser (2013, p11) provided an overview of seven different lenses on how service design was understood by different scholars and professional communities a decade ago. Likewise, for some people *automotive design* is just 'the design of cars'; for others, it is about more than the vehicles, including issues of mobility and transport in general.

In Figure 2 *social design* is placed under *in* a domain of social or societal problems. This emphasizes 'where' the practice is performed. For other authors, the criteria element is more important. Tromp and Vial (2022) specified Social Design not by the direct manifestation of the outcome as a product or service, but by its social contribution. The general aim of designing for the Common Good is divided into several social values: resilience, care, responsiveness, political progress, and social capital.

Finally, the current surge in Artificial Intelligence impacts on several sides *AI design* can refer to 'designing services that run on AI' (***from***), 'designing AI so it becomes usable for people' (***for***), 'designing in the context of AI-induced developments in society' (***in***). Also, a single label can cover very different approaches. *Design for sustainability* (or *sustainable design*) gives-home-to both material-oriented engineering approaches to optimize production and reclaim, and human-oriented campaigns for behavior change. These approaches share values but employ very different methods. Figure 3 shows the labels from Figure 1, grouped along the elements in Figure 2. It shows that some, but not all, labels that go with an element share the same etymological logic. But the above discussion also points out that each label highlights only one element of the practice. Yet each design practice has to deal with all of the elements, not just the one that is highlighted.
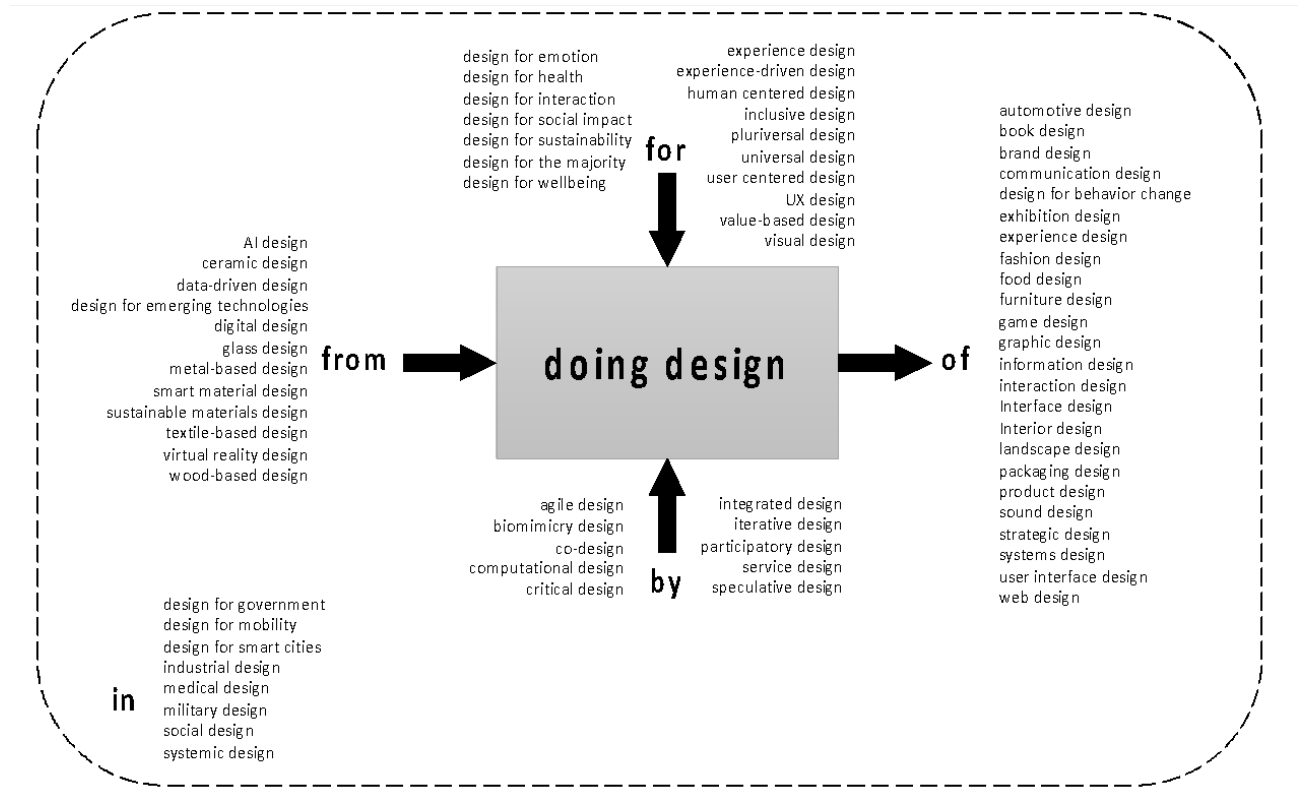

Figure 3.   The labels of Figure 1 arranged in the five clusters.

3. From Labels to Elements

We propose that any design project encompasses all five elements. It proposes a way to manage resources to realize outcomes; in it, actors use methods and criteria to guide their decisions; and every design project occurs in a context. And all these elements have been evolving over the past decades (e.g., Voûte et al, 2020).

Taken together, the elements help to tell the whole story of a given design practice. Although labels may suggest a 1:1 correspondence of label to one element, a practice employs elements 'on all sides of the box' and occurs in a context. And the elements are not independent. Here are three important observations about these relations:

1. **The story of a design practice can start from any element but must address all others.** Some design projects start with the need for an outcome (**of** an ambulance service), others with a way to use waste materials (***from*** leftovers). For a design agency specialising in codesign, the ***by*** *a method* is the reason they are called in. But in each of these projects, there must be resources, criteria, method, and outcomes. Some are defined at the start of the project; others get filled in along the way. Some may not be mentioned but will still be

there in some way. The design dashboard (Stevens & Watson, 2008) urged designers to be more explicit about them.

2. **Labels can emphasize a single element but imply combinations of elements.** For example, *social design* addresses a specific type of situation (*in* inner city living), uses certain criteria (*for* human wellbeing) for its decisions, and often (but not always) is done *by* methods of codesign.

3. **Each of the elements can be replaced during the design process.** A project may have started from a brief to create a product or an interface, but then change to producing a service around it (*of*). That may in turn bring in new criteria (*for*), and methods (*by*), and resources such as IT (*from*). As insights grow during a project, values may shift from economic to sustainability issues, may shift from using scarce materials to fewer threatening ones. The design team may find that their initial evaluations require more intensive study of the context (*in*), bringing in more stakeholders, and managing a more complex collaboration (*by*). In design education, students should be trained with situations in which certain combinations of these elements, e.g., the impact (**for**) and the outcome (**of**), are explicitly open or fixed (van Boeijen et al, 2020, p14).

As a bottom line, when designers and educators communicate about how to do design, present a project, offer consultancy services, or explain an educational program, they do well to address all the elements of the model.
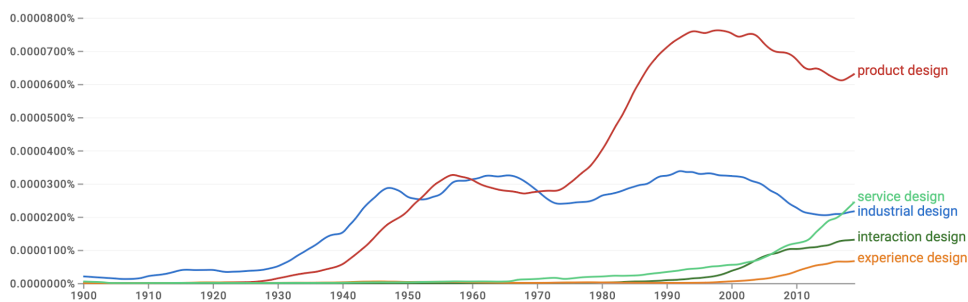

Figure 4. A Google NGram (https://books.google.com/ngrams/, consulted 9 June 2023) of some design labels illustrates how the labels rise and wane in frequency.

Finally, we should give one caveat of the model. Design labels, like all words, originate in a specific situation, place, and time, and do not remain unchanged during their use. The model of Figures 1-3 may give the impression that their use is static. In counterpoint, Figure 4 shows the frequency by which some of these labels appear over time in the collection of books that Google digitized. It suggests that a critical history of these terms might bring further food for thought.

4. Conclusion: what do we tell the students?

In this study we looked at design labels and found that in themselves they have limited explanatory power and may hide rather than convey the depth and nuances of design practices. Nevertheless, students, academics, and design professionals use them when they say 'I do social design', 'I do codesign', or 'I do design for sustainability'. Within their immediate community (school, department, company), with whom they share their practice, this may be enough. But to other audiences (broad conferences, aspiring applicants looking to enroll in a design programme, new clients and stakeholders, the general public) the labels are less helpful.

So, there are two main lessons. Lesson number one is to be aware that the meaning of labels can be confusing, even misleading. Lesson number two: better 'talk the walk', addressing the five elements can help to tell a fuller story.

Yet labels remain relevant, not for definition of any specific element but for three other reasons.

Some labels identify communities of practice, with connected network, values, methods and language, with dedicated conferences and journals. Examples are the Service Design Network, the Participatory Design Conference, and the journal Codesign, as well as the traditional professional organisations of product developers.

Some labels set the agenda for policies for, for example, curricula development and research. For example, More-than-human design expresses an ambition and does not refer to specific ways of working with all ingredients defined yet.

Some labels are brands, flags that people wave to indicate where they stand (especially if it is in a trendy, new place). Design agencies (and education programmes) operate in a competitive, commercial context where 'new ways to create value or address problems' are valued. When a new trend comes along, it will be claimed, as was the wave of Design Thinking in management field. But along with the trends, the distinctive value of these brands may wane, and the labels lose popularity, even when the practice continues.

Both academics and practitioners, but especially educators can do better. We can explain what the expected outcome or impact of the project is, what criteria are considered, what outcomes to expect, what resources are expected, and what methods are used by which actors. And to realize that some of these may need to change during the project, and how decisions about each element has implications for the other elements.

This way we support our design students to develop a vocabulary for their future design roles and argue about the engagements, outcomes and values when doing design. Not just by 'waving a flag' but by clarifying how they do what they do.

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