Image of the Human in Service Design: An Interview-Based Case Study

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Abstract

The present study focuses on the underlying assumptions guiding the work of service designers. In this study, we analyze how "the image of the human" can affect service designers' speech, and we discuss the implications that different images of "the human" may have in the design process. More specifically, we ask the following: a) How do service designers make an abstract concept of the human tangible and meaningful in their speech?, b) What kind of social representation of the human emerges?, and c) How do designers solve possible contradictions in the image of the human?

The research material consists of seven interviews with Finnish service design professionals. The interviews are analyzed using a theory-driven qualitative analysis for which social representations theory forms the theoretical background. The results show that the participants share a twofold image of the human that, on the one hand, emphasizes the diverse nature of the human but, on the other hand, sees the human from the psychological point of view as a motive- and ability-driven user. This image is characterized by contradiction, as the participants explicitly doubt the ability of service-design tools to capture the full nature of the human but simultaneously trust their personal skills as professionals to understand the human. This study expands the development of service-design standards by contributing an insight that lays bare a key presupposition of design professionals—the way in which designers delineate the meaning of "the human" vs. a user. Based on our empirical results, we argue that reflection on the underlying conceptions of human nature should be part of the design process, and training service designers to avoid either simplifying or over-emphasizing certain human features should be considered.

Keywords

service design, image of the human, social representation theory, design standards

Introduction

Service design[1] refers to the development and design of services. Design may target physical services (such as designing a customer service point and its practices) as well as designing intangible services (such as a webpage-user interface; Wetter-Edman, 2011, pp. 60–61) or developing the attractiveness and efficiency of existing services (Moritz, 2005). Common to the different definitions is that the design is user-oriented, that is, service design can also be described as a human-centered approach (Holmlid, 2007). To be able to successfully practice the profession, a designer must be able to understand the service being developed, including, for example, the needs, motives, and technical skills of the people using the service. In other words, as the service design refers to the development of services, taking into account the usability, attractiveness, and distinctness of the service, the designer needs to constitute an image of the users of the service (Corry, Frick, & Hansen, 1997; Stickdorn, 2011, pp. 30–33). In the present paper, we focus on the everyday conceptions that service designers rely on when they discuss the people they design for; these are "the images of the human" that designers hold when they develop and design services.

The images of the human that influence a specific profession are historically and culturally constructed (Burr, 2002, pp. 4–7). Service design is a relatively new field that gained academic status in the mid-1990s (Wetter-Edman, 2011). For example, Cockton (2014) outlined the development of the field from human-computer interaction (HCI) to user-centered design (UCD), to user experience (UX) and interaction design (IxD; see also Carroll, 2013). Forlizzi and Battarbee (2004) grouped different approaches in experience research as product-centered, user-centered, and interaction-centered models and found the roots of approaches in such different disciplines as cognitive science, business, and philosophy.

The different names of the different periods suggest how the focus on practice has gradually moved from mere usability to the emotional side of using a service. Changes in the focus of the discipline have affected how the human is seen in the design process. The HCI approach utilized models of cognitive psychology and was based on the image of the human as an individual "data processor." User-centered design emphasized the individual's perspective and the human as a user of ready-made products (Turner & Turner, 2011). Human-centered and empathic design in the 2000s suggested a more heuristic approach to the human (Wetter-Edman, 2011, pp. 73–74) and implied the image approaching the human as an emotional being. Blomkvist, Holmlid, and Segelström (2011) have suggested that, in the future, service design will draw increasingly from social sciences and perhaps emphasize more the social connectedness of humans instead of individual agency.

Researchers and designers have discussed the needs to develop the practices in the field. For example, Cockton (2014) highlighted the necessity of reflective, creative practices to renewal. Wright and McCarthy (2008) discussed the possibilities of and obstacles to self-reflection in the context of empathetic design. There are, in fact, several reasons why analysis of and reflection on the background premises of design practice is useful. Previous studies (e.g., Vatrapu & Pérez-Quiñones, 2006; Wallace & Yu, 2009) pointed out that, in global user interface development, cultural differences may become a challenge. The image of the human is both culturally and historically bounded (Burr, 2002) and, for example, taking the different cultural-specific modes of thinking into account (Wagner, Duveen, Verma, & Themel, 2000) may help in understanding why some design projects ultimately fail. Discovering the key preconceptions guiding the practice may also help in learning the limitations of the tools used, for example, in the design of accessible services for various minority groups (Zitkus et al., 2013).

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[1] Instead of *interaction design* or *user experience* the term *service design* is used in the present study. Service design (in Finnish: *palvelumuotoilu*) is the prevalent term in Finland, where the term can be considered to form a neutral umbrella term for different orientations of design as it does not define the human (for example, in the terms "user" or "consumer").

The Image of the Human

The image of the human[2] refers to the conceptions of essence, characteristics, and the factors affecting the behavior of our fellow humans (Burr, 2002). Rauhala (2005) defined the concept in more detail, stating that the image of the human includes all the suppositions or basic attitudes we have when we approach a human being. It is possible to distinguish lay conceptions as well as different discipline-specific conceptions of the human, but all of them guide how we perceive the human being and what kind of attributions and accusations we make (see, for example, Kruse, 1998).

The image affects the methods and tools we use in the analysis of human behavior (e.g., Rauhala, 1977). Also, in service design the outcome of the design process will be different depending on whether we approach the human as a motive-driven individual or a social being in the first instance. Rauhala (2005) highlighted the heuristic usability of critically analyzing these underlying guiding principles. By becoming aware of and making visible the assumptions and possible prejudices that affect the practice in a certain discipline, it is possible to realize potential biases in the work processes and to thus develop the field.

The image of the human is a broad and an abstract concept that is not easy to grasp. In the present study, we suggest that the image of the human could be approached as a social representation, in other words, as a socially shared idea of the defining characteristics of the human. Social representations refer to Moscovici's (2008) theory of social construction of everyday knowledge. Social representations create reality by affording certain perceptions and constraining others (Oyserman & Markus, 1998). In this sense, just as we come to know ourselves and others in terms of activated social representations, these also frame how we perceive humans in general.

Socially shared conceptions help us to communicate with our group members, orientate towards the world, and conceptualize an abstract phenomenon or object. Social representations theory is of practical value as it analyzes both mental features (values and ideas) as well as practices constituting a certain conception (Moscovici, 1973, p. xviii). In the present study, the human is the abstract concept that the service designers seek to clarify and to which different characteristics are associated. The constructed idea materializes itself in the design process and product.

Oyserman and Markus (1998) studied social representations of selfhood and have shown how the image of the self differs if it is seen, for example, as either from an individualistic or a collectivistic perspective. There are also several studies exploring designers' self-perception (e.g., Farrell & Nielsen, 2013; Law, Roto, Hassenzahl, Vermeeren, & Kort, 2009). Zantjer and Gonzales (2015) studied the self-representations of user-experience professionals and showed how the professionals use different descriptions to present themselves to different audiences. However, as far as we know, there are no previous studies addressing the designers' conceptions of other human beings, that is, the people they design for.

To reflect the image of the human is perhaps more typical of other fields of creative work apart from service design. As early as the 1970s, Rauhala (1977) theorized how architects apply different conceptions of the human when they are planning spaces where people live, work, and interact. A more recent example can be found from urban planning, in which Gehl (2010) utilized systematic observation of human activity in planning cityscapes. In principle, the same space is designed differently if the sense of sight is given more weight than the sense of hearing. Alexander and colleagues, in turn, have demonstrated how modern architecture could and should take different aspects of a human, such as emotional needs, better into account (Alexander, Neis, & Alexander, 2012).

The present analysis of image(s) of the human in service design complement the findings of the previous studies addressing the self-perception of designers (Farrell & Nielsen, 2013; Law et al., 2009; Zantjer & Gonzales, 2015). The need for such self-reflection in the field of service design has already been addressed (Cockton, 2014; Rosenzweig, Nathan, Manring, & Racherla, 2018).

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[2] In the previous literature, terms such as *nature of man*, *conception of man*, *image of man*, *Menschenbild* and *Lebensform* were used to refer to the conception of human nature (Rauhala, 2005). In the present study, we found the term *image of the human* more neutral and accurate.

Indeed, the role of service design in designing public services increases the need for the ability to grasp the perspectives of, for example, different minority groups, and solve usability problems, which will become increasingly important (e.g., Zitkus, Langdon, & Clarkson, 2013).

Central Concepts of Social Representations Theory

Social representations theory provides both a theoretical and empirical background in approaching the image of the human in service design. We argue that, just as social representations of self are crucial in framing our self-conception (Oyserman & Markus, 1998), social representations of the human are substantive in guiding our orientation towards others. Social representations are constructed in social communication that are in turn based on previously socially constructed conceptions.

Social knowledge is seen to be actively processed in the communication and networks of people (Moscovici 1981, p. 183). For example, service designers constantly shape their conceptions and practices through education and journal articles as well as informal discussions in workplaces and seminars. Through these discussions, emerging ideas are negotiated and either rejected or included in the shared professional knowledge of designers. According to the theory, social representations are constructed and maintained through basic processes called *anchoring* and *objectification* (Moscovici, 1984). The other concepts in play include *cognitive polyphasia* and *themata*, referring to the organizing principles of everyday knowledge, which are described in the following paragraphs.

To be functional, social knowledge needs to be meaningful. Anchoring is the process by which emerging conceptions are integrated into the network of previously discussed topics. Anchoring gives the social representation a meaning and generates a system of interpretation (Moscovici, 1984). As a result of this meaning-making process, anchoring gives a name and identity to the object under discussion. For example, Philogène (1999) showed how the naming of a certain group at a certain time reflects changes in how we perceive this group and how we may interact with it. The anchoring may either create a sense of familiarity or stigmatize the other (Kalampalikis & Haas, 2008). In the context of service design, for example, different labels (such as user, customer, or consumer) provide different frameworks for interpreting the object of the design.

The concept of objectification refers to a process by which an abstract idea is made tangible through a metaphor, trope, or icon. The process of objectification includes the selection of information (what are the characteristic features of the object), schematization (what is typical of the object), and naturalization (as when the object becomes a part of reality; Jodelet, 2008). In the process of service design, a design tool called the *persona* is one example through which the abstract and distant user is made tangible and visible. In particular, fictitious user profiles have also been criticized for reflecting the designer's stereotypes instead of the users' true features (Floyd, Jones, & Twidale, 2008, pp. 24–25). However, for example, Nielsen and Hansen (2014) highlighted the applicability of the persona as a tool.

The last step of the objectification process—naturalization—refers to the phase in which the object becomes a well-settled and self-evident part of thinking and practice (Jodelet, 2008; Philogène, 1999). For example, in the history of service design, the emergence and setting of different ways of approaching the design process from product-centered to user-centered and interaction-centered models (Forlizzi & Battarbee, 2004) demonstrate the turns when previously new ideas became settled as elementary parts of the field of practice.

The social representations theory underlines the diverse and contradictory nature of human thinking. Cognitive polyphasia and themata are two concepts characterizing this dimension. Cognitive polyphasia refers to Moscovici's (2008) notion that human thinking is characterized by plurality, in other words, that different modes of thinking may exist at the same time within an individual or a group. Cognitive polyphasia has been recognized in several empirical studies (e.g., Wagner et al., 2000), and Jovchelovitch (2008) highlighted that this plurality is a functional way to answer different needs in different social spheres of life. In a field like service design, in which different interests meet (as they do in business, which strives to make services equally usable), it is likely that competing conceptions emerge (see also Oyserman & Markus, 1998). The concept of themata refers to a notion that human thinking often happens through dichotomies such as good–bad or masculine–feminine that are deep-rooted, taken-for-granted ideas that form the implicit underlying structure of human thinking (Marková, 2003).

Anchorings and objectifications are primarily theoretical concepts formulated in terms of the empirical analysis of the social construction of knowledge (Moscovici, 2008). However, they also have methodological value, because by identifying anchorings and objectifications from people's speech, we can interpret how they socially conceptualize a certain object, such as the human. Identifying the elements of the meaning-making process allows us to see the organizing principle (themata) of the conception and to identify the different and potentially contradicting views (cognitive polyphasia).

Critical self-reflection may be a necessity for the future of the service design. Rosenzweig, Nathan, Manring, and Racherla (2018) warned designers about the problem of unchecked bias in which service designers test their own designs, which may lead to the confirmation of stereotypical or at least limited interpretations of the experiences of real users. Rosenzweig and colleagues thus called for a culture of self-reflection among designers. The aim of the present study is to work as an opening for discussion on the principles guiding the design process. Based on interviews, the current study provides an insight into how underlying preconceptions related to the human guide the work of service designers. More specifically, we answer three research questions:

- How do service designers make an abstract concept of the human tangible and meaningful in their speech?
- What kind of social representation of the human emerges in a service designer's speech?
- How do designers solve possible contradictions in the image of the human?

Method

The research material consisted of semi-structured interviews with seven Finnish service designers. The semi-structured interview approach, including different types of questions (open questions, claims, etc.), makes it possible to generate a rich discussion that provides qualitative insight into both the explicit and the implicit assumptions the participants have on the topic (e.g., Flick, 2009, pp. 156–161). Semi-structured questions also allowed us to proceed flexibly from theme to theme (Flick, Foster, & Gaillaud, 2015, p. 66).

Participants

We recruited the seven participants by using personal contacts, a Facebook announcement, and direct email contact. All of the persons we contacted worked under the title of service designer (in Finnish: *palvelumuotoilija*). For practical reasons, all interview participants worked in the capital area of Finland. When the potential participants were contacted, the purpose of the research was briefly described to them, as well as the estimated time required for conducting the interview.

The sample of the study does not represent any specific sector, level of training, or experience but broadly represents the field of service design. This is justified in order to answer the research questions that seek to give an explorative view of the image of the human in service design. The participants have experience working with the development of both digital and analogue services and working in private, public, and third-sector design projects. The length of the participants' experience in the field varies from a year to more than ten years, with an average of six years in the field. All of the participants have a higher education background and five out of the seven have a degree in service design (Aalto University/Laurea University of Applied Sciences). From the theoretical background of the study, it is fair to say that participants form a group, sharing a special knowledge, which within the group is a type of everyday knowledge.

Procedure

Informed consent and permission to record the interview were collected before the interview was conducted. At the beginning of the interview, we stressed that there were no right or wrong answers to the questions and claims. The principles of expert interview techniques were consulted during the preparation of the question structure. In practice, the service designers were interviewed as professionals, whose knowledge about the discussed topic differs from that of laypeople's understanding. Professional speech is typically characterized by the use of jargon, and professionals have often previously reflected on the principles guiding their work (Renedo &

Jovchelovitch, 2007; Walmsley, 2014). Our interest was in the knowledge related to the expert role, and the participants were approached as representing their professional group. In general, the goal was to reveal existing knowledge in a way that it becomes accessible to interpretation (Flick, 2009, pp. 165–169).

The interview started with a question concerning the participant's education and experience in the field. Next, the participant was asked to describe her/his work, the design methods used, and a previous project demonstrating human-centered design. The participant was also asked to define the image of the human in service design. Questions were accompanied with sub-questions, if needed, and the order of questions was modified following the flow of the participant's speech. After the first part of the interview, the participant was presented with four claims in which they needed to take a stance on the role of human-centered design, the skills and tools of service design, the preconceptions guiding design, and the role of the image of the human in general in the design process. The interview structure is presented in the Appendix.

The material was collected in winter 2018. The length of the interviews varied from 45–61 minutes. Recorded interviews were transcribed and, as part of the transcription, references to interviewees' workplaces or identifiable design projects were removed. The length of the transcript was 88 pages in Times New Roman, font 12, line spacing 1.15.

The interviews were analyzed following the principles of data-driven thematic analysis, with the aim of identifying recurring and prevalent patterns within the data and reducing the material to top-level concepts widely shared among the participants. In practice, the analytical steps included familiarizing oneself with the data, searching for recurring content, and generating an idea of the shared conceptions among the interviews (Flick, 2009, pp. 323–328). Both authors read the transcripts several times, created memos, and discussed their findings. The final analysis was based on their shared observation of the recurring contents. Next, the themes identified were analyzed with theory-driven analysis, in which the guiding theoretical framework was constituted by social representations theory (Moscovici, 2008). The principal processes of knowledge formation, anchoring, and objectification (Moscovici, 1984) were used as analytical tools. For identifying anchorings, we interpreted which pre-existing categories service designers drew from when describing the human, and what kind of comparisons, classifications, and naming this meaning-making process included. By identifying objectifications, we interpreted how service designers made the human tangible in their speech. The last steps of the analysis were interpreting the characteristics of cognitive polyphasia and themata. To avoid repetition, in the next section, the findings of thematic analysis are presented briefly, and the theory-driven analysis is reported in detail.

Results

The participants were eager to ponder the questions and claims presented. Some of the interviewees had already reflected on similar questions while others found the questions more difficult to ponder. The thematic analysis showed that there are two principal perspectives, or frames, from which the service designers construe the image of the human in their work. On the one hand, participants spoke from the position of the service-design professional: We named this conception as the "profession-centered image of the human." On the other hand, participants distanced themselves from their professional standards and used a conception that we named as the "person-centered image of the human." In other words, in the context of service design, the interviewees differentiated between the ways that the human is understood in work, on the one hand, and in everyday life, on the other. The participants combined these two perspectives flexibly.

In the next step, the findings of thematic analysis were examined further by analyzing what objectifications and anchorings the participants use when they take either a professional- or a person-centered approach to the human. The aim of this theory-driven analysis was to obtain more information about how service designers make an abstract concept of the human tangible and meaningful and to answer the first research question. We describe the main findings of the two phases of analysis in the following sections. Following the principles of the expert interview method (Flick, 2009, p.165), the excerpts are chosen to demonstrate shared ways of speaking. In the excerpts, the abbreviation "P" refers to participant.

Profession-Centered Image of the Human

Speaking from the perspective of the design professional, participants emphasized that service designers' approach to the human is characterized by objectivity and a scientific-like approach, in which the designer's preconceptions are put aside and the image of the human is continually constructed as the result of the design process. Objectivity was pursued by using design tools such as user pathways and personas. The participants emphasized the need to follow the protocols and iterate the findings throughout the process to "ensure that we are on the human centered path" (P1). The participants were confident of their skills of conducting this kind of approach, and they denied the effect of personal conceptions:

> In any situation you are not designing based on your own conceptions […] when you are doing things well then it cannot be based on any of your own ideas […] I am not a kind of omniscient actor but I facilitate the understanding and knowledge [found in the process]. (P5)

In the excerpt above, Participant 5 disclaimed the possibility that subjective ideas of the designer would affect the design process "in any situation," but the designer's role is to stay in the background and to be responsible for the research process and following protocols.

Even though the participants claim to be only neutral facilitators, they explicitly refer to certain psychological models and theories such as the self-determination theory and Maslow's hierarchy of needs to schematize the human in service design. For example, towards the end of the interview, Participant 5 defined the image of the human in service design:

> Definitely, it sees the user… or the human through people's social… I mean maybe mostly through the hierarchy of needs. It [the theory] has in many ways reflected the image of the human. (P5)

Psychological concepts and theories referred in the interviews also represent information selection as they create an image of the human as self-determined persons making decisions, based on their own needs and motivations. The selected perspective excludes, for example, social psychological theories explaining the human behavior through group membership.

The previous excerpt also demonstrates how participants typically referred to the human during the interviews; interviewees often first used the term *user* and soon corrected their words to refer to *the human*. In general, the participants anchor the human to concepts such as customer, user, consumer, and client. These conceptions create a more specific frame of how the designer should approach the human. In the same breath, participants also noted that, in practice, the used concepts may lead to a limited understanding of human nature, but are used in spite of this because they are practical for the design process:

> I agree that [the term user] is a lot more business-oriented than the term human being is. We see people as users and not humans. On the other hand, I do not have a negative association with that term. As far as I remember, the users have been humans. (P4)

Participant 4 argued that the different terms are almost synonyms, but also admitted that the term user has a different implication ("a lot more business-oriented"). Participants also pondered the different implications of different terms used in the field:

> There is a point in emphasizing the human-centered perspective, where we make it visible that the customers are also human with their diverse needs and motivations, and not just to reduce them as subjects, that they are not only users or customers but also humans […] it feels that terms such as user or customer simplifies too much. (P2)

As Participant 2 stated above that people are not only "users or customers but also humans," the statement implies that the different terms used leads to a different approach taken in the design process. When taking a critical stance towards the principles of design, participants unanimously argued that human-centered design would allow a holistic approach to the diverse nature of the human (see Wetter-Edman, 2011, pp. 73–74).

Statements such as "to understand that we are all humans underneath" (P3) and "it is so business oriented that we see people as users instead of humans" (P4) summarize the

contradictions appearing in designers' speech when they start to reflect the image of the human from the professional's perspective further. This critique was crystallized to design tools such as personas and user journeys, which are, according to the participants, practical but may bias the constructed image. Taking a critical stance brought the next perspective on the human in the interviews. We describe this other approach, called person-centered image, in the following section.

Person-Centered Image of the Human

While the participants emphasized the ideal of a science-like objectivity in the design process, they also saw problems in the tools used and limitations in the prevailing perspective in the field. In such a contradictory situation, participants complemented the profession-centered image with their personal image of the human. Encountering the conflict in the profession-centered image of the human, the participants stated that service designers cannot actually deny the role of personal preconceptions in their work:

> There is no simple definition [of the image of the human in service design], but it is such a subconscious idea, you know, so difficult to conceptualize as it comes… it depends on… the image of the human is based on our personal life history, all of the people [we have met]. (P3)

Participant 3 emphasized that the image of the human is something unconscious and unique to each person. It should be remembered that the participant still speaks from the expert position even while taking a perspective highlighting the subjective knowledge of human nature. Unlike the profession-centered perspective, the person-centered one was characterized by a subjectivity that was seen as a positive feature in design because it allowed one to take the diversity of the human better into account.

In the person-centered position, service designers schematized the human as unique individuals and "such a tricky, tricky, tricky being" (P4) and objectified the human as a diverse creature, whose nature is hard to grasp, from the user- or customer-centered perspective. The image was anchored to a holistic human-centered view that also had characteristics of so-called empathic design (Wetter-Edman, 2011). The holistic-subjective point of view was contrasted with other approaches like in the interview with Participant 3:

> Then I realized that my co-worker and I had such different images of the human. […] he had such a mechanistic image […] that the human is like a machine and we just take the data and use it in design. (P3)

However, as the constructed idea of a holistic, but subjective, approach in design would have been in explicit conflict with the profession-centered image—characterized by objectivity and neutrality—the subjective lay-conceptions were described as a strength of the designer. Participants highlighted their personal knowledge of human nature:

> Hey, I have done thousands of inter… I mean deep interviews; I am really familiar with… I know the models of human behavior […] you should have a kind of model you can exploit, that you have a deep understanding of human that you can make decisions with confidence without doing research. (P7)

In the excerpt above, Participant 7 claimed that the experience provided a sufficient knowledge of human behavior to be able to take the different sides of human behavior into account in the design process. Quite the opposite to the profession-centered perspective, the interviewee claimed that a practice-based mental schema could supersede the research in this process.

Multiple Ways of Thinking the Human in Service Design

In this section, we interpret the findings of thematic analysis in the light of social representations theory. This section answers the research questions: What kind of social representation of the human emerges in a service designer's speech? and How do designers solve possible contradictions in this image?

The participants typically started to define the image of the human in service design by underlining the objective research process, which was, according to them, characterized by transparency and lack of bias. When participants re-evaluated these claims in the context of the subsequent questions of the interview, they concluded that the positivistic approach leads to a limited and reduced, even one-sided, understanding of the human. This situation, in which the

service designers questioned the ideals of their profession, constituted an explicit contradiction. This conflict was, however, resolved by emphasizing the designer's personal knowledge of human nature and subjective skills as a professional. In the social representation shared by the service designers, the human is on the one hand seen as something that is possible to conceptualize with the design tools and protocols (and that is often described by psychological concepts of motivation and needs). On the other hand, the human is unique and diverse by nature and requires a more heuristic approach to understand.

The two ways in which participants spoke in the context of their work constitute the organizing principle of the social representation of the human in service design. This principle constitutes two dichotomies through which the topic was discussed: According to the interviewed designers, the person-centered image represents a more holistic understanding of human nature and is characterized by subjectivity, while the professional-centered image offers a more narrow but objective information. Based on the analysis of the interviews, we interpret the dichotomies of objectivity–subjectivity and simplicity–diversity to constitute the themata of the shared social representation. Interviewees such as Participant 2 explicitly balanced these different dimensions:

> *I think that the other side is also emphasized, that humans are not stereotypes but they are diverse […] I think that service design attempts to emphasize a kind of rich image of the human, even though in practice we need to make those generalizations.* (P2)

This excerpt demonstrates a conflict in which the diverse nature of human and generalizations for practical reasons exist simultaneously. As the excerpts in the previous section show, in this situation participants emphasized their personal insight to untangle the cognitive dissonance caused by the two simultaneously existing ways to conceptualize the human in the profession: "I am really familiar with… I know the models of human behavior" (P7).

The appearance of contradictory ideas concerning the same object demonstrates the diverse nature of human thinking—cognitive polyphasia. The fact, that the different modes of thinking were used flexibly to avoid self-questioning can be described as selective prevalence, in which the different modes of thinking exist at the same time and are used functionally in different situations (Jovchelovitch & Priego-Hernandez, 2015). This finding corresponds with previous results on how thinking in professional and personal roles are combined in everyday life (Renedo & Jovchelovitch, 2007).

Conclusion

In the present study, we analyzed how service designers conceptualize the image of the human in guiding their work. The results showed that the designers used a twofold image to talk about the human: On the one hand, from the profession-centered perspective the human was seen as an object whose nature could be reliably discovered by using the design tools and ideals of objective research. In this frame of speech, the role of the service designer was to be a neutral facilitator of knowledge gained through tools such as persona and user pathways. On the other hand, the participants took a critical stance towards the possibilities of objective analysis of the human, and they identified the risk of simplifying the diverse nature of the human too much. From the person-centered perspective, the participants admitted that the designer's own preconceived ideas and life experiences are always present in the design process and could be utilized to gain a richer understanding of the people using the service.

In the light of social representations theory (Moscovici, 2008), the image of service design was built on the themata of objectivity–subjectivity and simplicity–diversity. Interviewed designers used different aspects of this underlying structure, in a manner characterized as selective prevalence, to functionally serve the participants' needs to maintain a positive self-image and an idea of the possibilities of their field.

Our findings are in line with previous studies. Brady and Schreiber (2013) had similarly shown that designers use comparable, flexible definitions to describe themselves for different audiences. The results demonstrate how the image of the human in service designers' work is constituted by professional and personal ideas (see Moscovici, 1981; Walmsley, 2014). Just as the previous studies show that designers hold multiple professional identities (Zantjer &

Gonzales, 2015), the present finding demonstrates that designers also apply different features to the human using their product(s).

Rosenzweig and colleagues (2018) as well as Cockton (2014) called for reflective analysis of the principles of service design, and Rauhala (2005) highlighted in general the usefulness of critical reflection on image(s) of the human in different fields of practice. In the context of service design, this call for recognition is especially relevant as the approach of the field is often framed as human-centered (e.g., Holmlid, 2007), but, as the present results suggest, this approach is still partially based on certain psychological theories and models and belief in the effectiveness of design tools.

The present study contributes to the empirical development of service design standards by contributing this insight on the thinking of design professionals. For example, Flick (2009) identified the situation in which the participant changes perspective from professional to personal as one problem of an expert interview. However, in the present study, the person-centered frame of speech was intertwined with the profession-centered frame and does not mean that the speaker would have changed the role from which she/he spoke. The findings show that the designers are aware of the limitations of customer- and user-centered approaches; at the same time, however, they maintain an idea of the research processes as being objective. These diverse ideas of the nature of the human may end up on a collision course in situations in which the practical reasons lead to a narrow perspective on what constitutes the human they are designing for.

This study is not without its limitations as it was based on a relatively small dataset from a specific geographical area. The participants also represent professionals with a different length of career in the field. Their experience affects the self-image of these professionals (Zantjer & Gonzales, 2015), and it is likely that it may affect how they perceive the "others" too. The different projects on which the participants have worked on may also have had an effect on how they started to reflect on the characteristics of the people using the service. The interviews, however, showed coherence and saturation in the ways in which the image of the human was discussed and in this sense the validity of the study can be considered good. It should be remembered that in the present analysis, following the principles of the expert interview, the focus was on the shared conceptions concerning the discussed topic. Besides sharing certain ideas and practices, design professionals are also individual persons with unique creative ideas and ways of working.

Cultural differences that affect our ways of thinking and acting should be taken into consideration to understand different ways of using services and to explain the reasons behind a certain conception (Vatrapu & Pérez-Quiñones, 2006; Wagner et al., 2000; Wallace & Yu, 2009). In the present study, the participants shared conceptions that represent a Finnish and, in a broader sense, a Western way of drawing from psychological and individualistic models of human behavior. The one-sided image of the human in the design process may explain why some global projects ultimately fail (see Oyserman & Markus, 1998). In the future, more research should be directed to how cultural differences, for example in the dimensions of individualism–collectivism, or divergence in cultural values are considered in projects designing services intended for global use.

The present study is exploratory because theoretical conceptualization and empirical analysis of image(s) of the human are rare in both service design and social psychology. This study presents one theoretically justified approach to analyzing the preconceptions that guide the work of designers. In future studies, the analysis could be extended to that of a designers' education and learning materials. A discursive approach to teaching materials as well as an ethnography in observing the design processes and how the different images of the human are possibly negotiated and evaluated in practice would supplement the expert interviews.

This study does not aim to argue that one image of the human is better than the other. Neither do we claim that taking the diverse nature of the human into account would always lead to the best results. Different design objectives may require employing different images of the human. However, it is possible that this activation would require that deep-rooted ways of thinking are made conscious.

Wright and McCarthy (2008) emphasized the possibilities for training empathy skills in design. One step toward becoming more self- and other-aware could be a reflection addressing the naturalized ways of thinking that guide our everyday practices. In the future, service design is expected to draw more from social sciences (Blomkvist, Holmlid, & Segelström, 2011). It is also likely that when service design in its different forms further establishes its place in shaping societies, social scientists will be increasingly interested in analyzing the field and the practices that design our lives as well as the guiding conceptions behind the processes.

Tips for User Experience Practitioners

The following tips can help practitioners explore what it means to design for the human in regards to their studies:

- In design education as well as in practice, the underlying principles and perspectives should be considered explicitly.
- Being aware that several images of the human exist helps to avoid the collisions with co-workers in design projects but becoming aware of them requires conscious reflection.
- The images of the human are cultural and historical constructions, and there are always alternative ways to see the human in design.
- A team should discuss and define a shared image of the human already in the early stage of the design process.

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Appendix: Semi-Structured Interview

The following are the questions and claims we presented to the participants in each interview.

Questions:
1. Describe briefly what your job description as a service designer includes.
2. What does human-centered design mean to you?
3. Think of your previous project and explain how human-centered design was reflected in your work.
4. How would you define the image of human in service design?

Claims:
1. The human-centered approach is the starting point for service design and is reflected in the used tools.
2. As a service designer, I have a great capability to mediate people's needs.
3. Pre-assumptions about people guide my work as a service designer.
4. As a service designer, I use my own image of the human to constitute an idea about the user of the product.