Socratic Dialogue as a Method for Moral Inquiry in HCI*

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ABSTRACT

There is an increasing awareness that designers play a pivotal role in the ethical implications of their designs. Accounting for these implications is challenging, as designers are often confronted with a variety of stakeholders, with different interests, and different underlying moral values and standpoints. In order to make informed design choices, moral inquiry is needed to reveal the relevant moral values and standpoints in a specific design context. Designers require methods to perform such inquiry. Socratic dialogue is a method in which a group of participants jointly finds an answer to a philosophical question. Socratic dialogue is mostly used in education and training. This abstract argues that Socratic dialogue can also be used to support moral inquiry in design and research contexts. The basic elements of a Socratic dialogue are described, and its use as a method for moral inquiry in design and the larger field of Human Computer Interaction (HCI) is examined.

1 INTRODUCTION

There is a growing awareness that technology has ethical implications for society, and that designers have an influence on these implications. In the field of HCI, increased attention is paid to ethical questions in the design of technology, like which consequences of technological applications are desirable and which are not, who is responsible for these consequences, and how should be accounted for them during the design process [13]. Multiple scholars have argued that designers should account for the ethical implications of technology during the design process, and proposed methodologies that support designers in doing so (e.g., [1,4,11]). These methodologies, among others, offer tools, techniques and methods to map stakeholders, values, technologies and effects, and support critical and reflective thinking. Yet, it often remains difficult for designers to weigh different interests and values, and make design choices with ethical implications.

A challenge in (supporting designers to) accounting for the ethical implications of a technology during the design process, is that every design situation is unique. People's moral values and standpoints differ per culture, region and person, and they change over time. This holds for users, other stakeholders and designers. Thus, as moral standpoints differ for each design situation, it is important that designers conduct moral inquiry to account for ethical implications in that specific context. For HCI researchers, particularly those focusing ethics, methods for empirical research into moral values and standpoints are relevant as well [5]. Socratic dialogue facilitates moral inquiry by supporting participants of the dialogue to express their ideas, values and assumptions, and help the group to find joint answers to ethical questions [2,6]. Socratic dialogue is particularly suitable for 1) helping participants to make their (implicit) moral standpoints, values and assumptions explicit, 2) facilitating a group of people to create a common perspective on a situation.

The aim of this abstract is to examine the use of Socratic dialogue as a method for moral inquiry in design, and the larger field of HCI. The ideas presented in this abstract stem from a research project in which a series of three Socratic dialogues was held to discuss professionals' responsibilities regarding the use of algorithms that provide targeted content to consumers. Participants of the sessions were a mix of professional internet designers and marketeers, design students and teachers, and HCI researchers. The sessions were guided by the third and fourth author of this abstract, who are both professional facilitators with ample experience in facilitating Socratic dialogues in a variety of situations.

2 SOCRATIC DIALOGUE

Socratic dialogue is a technique for structuring dialogues, developed in the early 20th century [8]. In a Socratic dialogue, a group of 5-15 participants, guided by a facilitator, jointly finds an answer to a philosophical question, for example, "What is integrity?" or "Is art a matter of taste?". Socratic dialogue offers a structure that enables participants to establish a well-underpinned moral position towards the question by analyzing arguments, emotions, causes, drivers and motives that they deem relevant. Socratic dialogue is no to be confused with Socratic questioning, a method of
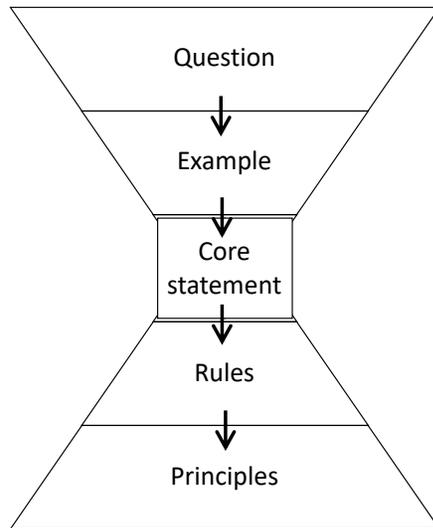
Figure 1. The hourglass model of Socratic dialogue.

asking questions, used by Socrates to examine ideas and reveal contradictions in knowledge, described by Plato.

The five-phase hourglass model (see Figure 1) structures an often used variant of the Socratic dialogue [6]. Following this model, first, the participants formulate a general question. Second, participants select and examine a real-life experience of one of the participants. It is important that the participant whose experience is selected has a detailed memory of the recalled situation, including what she observed, thought, felt, and did, and that the other participants can relate to the experience. Third, participants verbalize a core statement in which the relation between the examined experience and the general question is summarized. The core statement involves a judgement. Fourth, the core statement is used to derive general rules that answer the question. Fifth, participants identify general principles justifying these rules.

The facilitator plays a crucial role in a Socratic dialogue. She provides clear instructions to the participants, structures and directs the dialogue, remains neutral regarding the content, makes sure that all participants feel free to speak, speak clear and concisely, listen carefully to each other, treat each other respectfully, postpone their judgement, and adopt an open, inquisitive attitude.

Socratic dialogue is often used in education and training (e.g., [7,9,10]), and in organizational settings, where it can support strategic decision making and mission statement development processes (e.g., [3,12]). Socratic dialogue has rarely been applied as a research method. A notable exception is provided by Wortel and Verweij [14]. In their study on civil-military relations, they found that Socratic dialogue can reveal the (moral) values of participants through inquiry, criticism and reasonableness.

3 SOCRATIC DIALOGUE IN HCI

What to use it for? In the field of HCI, Socratic dialogue can be used to qualitatively investigate the moral values and standpoints of its participants around a number of topics. First, a Socratic dialogue can concern *technology*, e.g., "What is a virtual assistant?" or "How should technology influence behavior?". Second, it can address the *context of use* of a technology, e.g., "What makes something a home?". Third, it can concern an *important concept* like a value, emotion or phenomenon, e.g., "What is loneliness?". Fourth, it can concern *stakeholders*, both direct (i.e., the user) and indirect, e.g., "When are parents responsible for their children's behavior?". Fifth, it can address the *design* process, e.g., "What are the responsibilities of a designer?", "When should users be involved in the design process?". Questions in a Socratic dialogue can also address multiple of the elements mentioned above. For instance, the question "What is appropriate use of mobile phones in public space?" involves both a technology (mobile phones) and a context of use (public space). A Socratic dialogue leads to joint answers to such questions.

Who participates? In the context of HCI, participants may be users, stakeholders, domain experts, technological experts, designers or researchers. As participants in a Socratic dialogue jointly try to answer a question by critically examining and adding to each other's contributions, in general, it is desirable to compose a diverse participant group (regarding role, age, gender, etc.). Yet, to have a meaningful dialogue, it is crucial that all participants are able to relate to the topic based on first-hand experiences and empathize with the experiences brought up by others.

Socratic dialogue requires willingness of participants to engage with an open, honest and cooperative attitude. A possible obstacle is that important stakeholders are not willing or allowed to participate in that manner. For instance, a company may not want (its employees) to reveal its strategy or position, particularly on a morally sensitive topic. Another obstacle is formed by power relations between participants, outside of the Socratic dialogue, e.g. superior-inferior or client-contractor, which may cause certain participants to speak less freely.

How to achieve valuable research outcomes? The aim of doing research may conflict with the aim of a having good dialogue. In phase 1 of the hourglass model, Socratic dialogue demands that participants together formulate a question. The researcher (or designer), however, may a clear preference for a research questions that suits her research agenda. A solution is to prepare a question beforehand and give participants the opportunity to adjust the question. The aims of research and dialogue may also conflict at the start of phase 2, when participants select one example. Socratic dialogue favors maximum agreement among all participants, but again, the researcher may have clear preference for one question over another. A way to deal with this tension is to ask participants to prepare examples beforehand, making sure that they are relevant.

A key question in this context is what role the researcher should take. She could be present during the dialogue without contributing to it, but this may hinder the open and safe atmosphere that the method requires. She could also adopt the role of facilitator, but this requires experience, and a strong commitment to facilitate in a neutral, non-judgmental way. Moreover, as facilitation requires full attention, it may impede absorbing the content of the dialogue. The researcher could also be one of the participants. The downside of this option is that it may obstruct the collection of 'objective' results. However, in a design situation, the influence of the designer or researcher is impossible to fade out, so, also based on our own experiences, being one of the participants seems to be the most natural role for the researcher.

4 CONCLUSION

A Socratic dialogue is often an enriching experience for its participants. We believe that it also offers a promising method for moral inquiry in design, and the larger field of HCI. Socratic dialogue is particularly useful in situations in which stakeholders find it difficult to make their moral values and standpoints explicit, and in which finding agreement among stakeholders is important.

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Maaike Harbers is a professor of applied sciences at Rotterdam University of Applied Sciences, where she leads the Artificial Intelligence & Society group. Her research focuses on the intersection of artificial intelligence, ethics and design. In her work, she develops methods and tools for designers to create interactive, intelligent systems in a responsible manner. She has a PhD in Artificial Intelligence, a MSc in Artificial Intelligence and a MA in Philosophy.

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