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Socratic Questionnaires: New interactive Online Methods in Experimental Philosophy of Language

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Background

In the 21st century, philosophy of language has taken an experimental turn: questions about the nature of meaning and communication are now informed by the methods of the cognitive sciences, including the use of linguistic experiments.

PHILOSOPHY of LANGUAGE

- the investigation of the **nature of language in reality**.

"foundational questions in philosophy of language concern the nature of meaning, understanding, and communication."

(Davies, 2006, p.29)
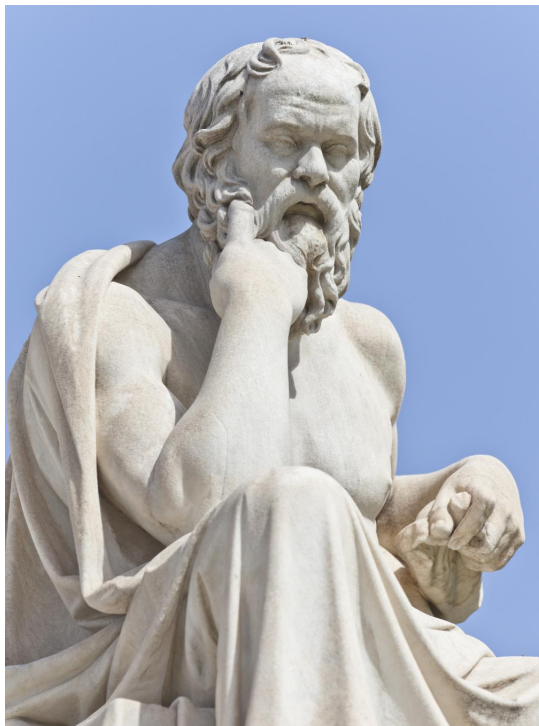
Hypothesis

Some philosophers have argued that experiments using standard surveys do not tell us anything philosophically interesting because experimental participants do not have enough time or the right motivation to think hard about their answers.

Aim

To test this argument by giving participants plenty of time to think about their answers, and do so in a naturalistic conversational setting where they are asked to **explain** and **defend** their answers against pushback from the experimenter. This conversational setting is a "Socratic Questionnaire". We then compare responses in a Socratic Questionnaire with (a) responses in a standard survey format, and (b) responses in a "quasi-dynamic" survey format that mimics some features of the Socratic Questionnaire but without relying on an actual conversation with a live person.

Methods	Participants
1. Online chats	- Online chats (50 participants)
2. Survey 1	- Survey 1 (45 participants)
3. Survey 2 which is less sophisticated than survey 1	- Survey 2 (50 participants)
	Requirements:
	- fluent in English
	- no restrictions on age, gender, and occupation
	- no participants from previous studies should be included to avoid learning effect.

My Favourite Conversation

Among the 50 chats I have done, this is the most remarkable conversation I had. As the flow of the conversation followed a pre-written script, it seems to the participant that the one talking to them is a robot. It really made my day!

(16:33:55) User 1: I have question though.
(16:34:01) User 2: yes, please ask
(16:35:17) User 1: this might sound stupid or whatever but are you like a real person on the other end or a robot. I'm confused, initially I thought the messages were automated but now now this feels like a real chat
(16:35:48) User 2: Oh, I am a real person
(16:36:12) User 2: Can i do anything to prove that I am a human being?
(16:36:55) User 1: omg this is insane and exciting at the same time.
(16:37:13) User 2: why is that? hahahahahaha 😂😂😂
(16:37:24) User 1: uhm maybe your name, I don't know
(16:37:56) User 1: coz I thought It was just a survey you know
(16:38:03) User 2: It might not be a very good idea to tell you my name haha
(16:38:09) User 2: but yea, I am a real person
(16:38:17) User 1: omg there are emojis wow

User 1: The participant
User 2: The research Assistant

Take away from the project

- Learnt operating different online applications to carry out investigation on conversational experiments
- It was really surprising to see people having very different ideas towards the same scenarios
- It was also interesting making people change their mind by describing the same scenario with a different usages of word and structure

Referencing:
Davies, M. (2008). Foundational issues in the philosophy of language. The Blackwell Guide to the Philosophy of Language, 19-40. doi:10.1002/9780470757031.ch1

Socratic questionnaires

There are 2 types of scenario (including the colour scenario and the gameshow scenario), 2 versions are there for each type of scenario. In total, 4 situations will be presented to the participants. The scenarios will be presented randomly, situations from the same type of scenario will not be presented in a consecutive order.

The chats

The conversations were guided by the Research Assistant using a pre-written script. The questionnaires were divided into four parts.

Introduction
- Asking for participants' participation consent
- Giving instructions

User 1: The participant
User 2: The research Assistant

(13:11:41) System: >> User 1 has Connected
(13:12:14) System: >> All chat participants have arrived. You may now chat!
(13:12:14) System: >> User 2 has Connected
(13:12:17) User 2: Hi
(13:12:36) User 1: Hi
(13:12:45) User 2: Thanks for participating in this study. Feel free to ask questions in the chat at any point.
(13:12:55) User 2: You will be given four short scenarios to read, and I'll be asking for your reactions to them. After you respond to the four scenarios, I'll ask you to explain why you responded in the way that you did, and then I'll ask some further questions about what you thought about the scenarios. Finally, I will ask you some basic demographic information.
(13:12:59) User 2: Does that sound okay?
(13:13:27) User 1: Ok

Response to scenarios
- Four scenarios are presented in a random order
- Participants giving their responses

Justification
- Asking for justification with pre-written questions based on the responses the participants made.

Pushing back
- Pushing back the justifications by stating a different response as the participants on the same scenario and request them to give their opinions towards the statement.
- If a participant gave a different answer to the two version in the colour scenario, the research assistant will ask:

"So you have explained why you gave different responses to the two color scenarios. Some people think that sentences such as "the walls in our apartment are brown" are true or false regardless of the context in which they are made. How would you respond to this point of view?"

Online tools

Prolific
For recruitment of the participants
Connecting eligible participants to the project
Make payment to the participants

ChatPlat
An online conversational tool
Placing participants into interactive chats
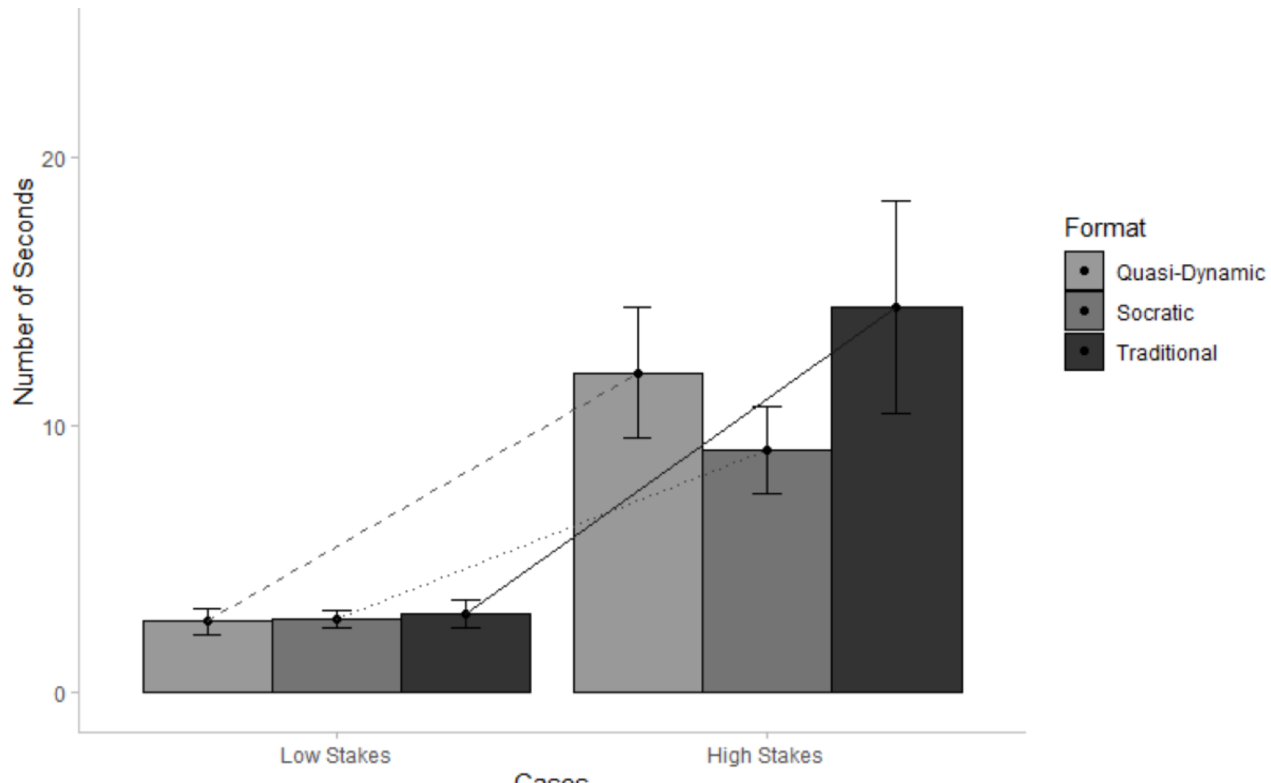Achieving the text of the ensuing conversation

Qualtrics
An online survey platform

qualtrics XM

Findings

We **did not** find a significant effect of conversational format
- No evidence showing that giving people more time to think about their answers, in more naturalistic settings, leads to responses to philosophical scenarios.

Results in differences in responses to the Game Show scenarios in this experiment.