

The cost of language attitudes

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Abstract

Data on language attitudes is generally incomparable across studies and context. This paper proposes an experimental approach building on economic theory to elicit preferences about language use in a comparable unit – money. The central element of the experiment is a collaborative problem-solving task in pairs. Participants are offered incentives to use a different language for the task, yielding data on revealed preferences about language use. The cost of language attitudes can be computed as the payoff difference between the utility-maximising language set and the observed choice; psychic costs explain the persistence with suboptimal language sets.

Keywords: language attitudes, behavioural game theory, psychic cost, problem-solving task, revealed preferences

Introduction

Language attitudes are ‘complex constructs drawing on the individual as well as on the collective’ (Grin 2003:45) and difficult to operationalise. As a result, language attitude data is not comparable, neither across studies nor, at times, within a single project. This is due to the lack of a common measurement for attitudes and methodological obstacles with self-reported data e.g. social desirability bias (Graeff 2005). An experimental design to elicit language attitudes needs to focus on revealed preferences and observed behaviour, as in the sociolinguistic matched guise test (Agheyisi & Fishman 1970).

This paper outlines a decision-making experiment building on economic theory in order to quantitatively measure attitudes as motivating factors for each decision. The experiment is inspired by a game-theoretical model of minority language use and bilingualism (Iriberry & Uriarte 2012; Uriarte & Sperlich 2016). This model describes an individual’s payoff (the personal utility derived from communication) as a sum of the communicative benefits minus costs of speech production, but also includes a benefit or ‘frustration cost’ for using the (dis-)favoured language in communication (Uriarte & Sperlich 2016). A laboratory experiment building on this model can control payoffs and provide insights to the psychic costs of language use through offering incentives. Under the premise that participants only change their behaviour if they consider this decision to be beneficial (i.e. higher utility), incentives and payoff penalties correlate to the hidden psychic costs or benefits of using a preferred language.

Methodology

The experiment consists of a collaborative problem-solving task in pairs that requires participants to use their language skills. Throughout the experiment, participants are offered incentives to change their language use, thereby making the task easier or more difficult. These offers are tied to a monetary premium or penalty which the participants simultaneously accept or reject. As this experiment elicits information on willingness-to-pay (WTP) and willingness-to-accept (WTA), it is necessary that the language regime and the premiums/penalties are enforced. WTP and WTA are reported in monetary units and form a central piece of data together with statistics about the successful completion of the problem-solving task. The use of money to measure linguistic performance may appear problematic to some linguists, however, we are not measuring the value of a language or ranking languages. Money is a medium of exchange and can help with the comparison of results across studies, while also providing access points for interdisciplinary research with economists and social scientists.

The collaborative task

Participants will be assigned in pairs and told to solve communicative issues using their linguistic repertoires. The task must have unambiguously quantifiable results, such as correct answers per minute, where one participant holds information the other needs to find out. Possible tasks are: compare two lists of words and find dissimilarities, find differences between images, solve odd-one-out word lists, or complete simple translation tasks depending on the skill levels of the participants. Each task must be short to allow for repetition during the experiment, leading to iterations of the same task with the same partner using the same language(s). A set should have at least ten repetitions before any alterations. Successful completion of tasks is tied to a monetary payoff which sets variable participant compensation depending on their individual success. Participants need to know about the exact payoffs at each step and their performance so far, so that they can make informed decisions about alterations thereby revealing their WTA/WTP. The task can thus be performed in a face-to-face setting or through computers in a laboratory environment. In the laboratory setting, interaction needs to be monitored either during the experiment or by recording the session to prevent cheating. In a face-to-face setup, it is important that participants do not see each other's answer sheets.

Experimental procedure

The first step is to inform participants about the rules and to elicit basic sociolinguistic information. Participants are then introduced to the type of task and try it without recording results. The first recorded set will use a language regime in which the participants are both comfortable, as this helps to establish the baseline of correct answers. Afterwards, the supervisors declare a new

language regime for the subsequent set. Following the second set, participants are offered a change in the language regime with higher payoffs for adopting a more difficult regime (based on the participants' linguistic repertoires and skill levels) or lower payoffs for the introduction of additional tools (e.g. dictionaries, reference lists, transcriptions). With the conclusion of each set, earned money cannot be lost in subsequent sets. This is necessary to prevent loss aversion or the endowment effect to impact decisions. The actual payment of each participant's compensation will follow at end of the experiment, after several iterations with different partners (to even out high- and low-performing partners). Supervisors need to monitor participants' well-being throughout the experiment and allow participants to withdraw at any time.

Variations

The experiment allows for different variations: Participants may be monolinguals speaking a common foreign language, bilinguals, or mixed groups. It is possible to conduct the experiment with participants who do not share a common language if sufficient tools and resources are provided, and rewards are adjusted accordingly. Furthermore, languages which none of the participants speak can be included in the experiment (at a higher payoff). The latter option can be useful to test extreme cases of WTA/WTP or for eliciting outgroup attitudes about particular languages.

Discussion

The goal of the experiment is to express language attitudes in monetary value. Since attitudes are only indirectly elicited through revealed preferences, their approximation happens by comparing successful completion of tasks to the baseline. Under the hypothesis that participants will try to maximise their utility, they will select the language regime which provides the highest payoff consisting of monetary rewards and 'frustration cost'. As the supervisors have control over the payments for each correct answer, it is possible to create situations in which participants should not want to change their language regime. If they persist with a regime that offers a suboptimal payoff measured against the baseline, the difference can be attributed to the psychic costs of language attitudes – positive effects of using a preferred language or avoiding costs of disfavoured languages. While it remains difficult to isolate attitudes, this approach allows for a quantification of the differences in a comparable standard unit of money.

Sociolinguists may point out the experiment presumes 'monolingual' participants in a set who will not use the full range of their linguistic repertoire. While the experiment is not naturalistic in terms of communication, the abstract reduction is necessary to control for language as a variable. As similar tasks might be familiar to participants from their experiences in instructed language classrooms, this can be introduced as 'rules' of the game. Caution is

advised for vulnerable groups, e.g. minority languages, who faced a history of stereotyping and discrimination.

If interactions are recorded, the raw data may be repurposed for linguistic research (in agreement with the participants), as it contains valuable information on language learners' strategic competence and the negotiation of meaning in foreign languages. The latter is useful for interactional sociolinguistics and related frameworks (e.g. Language Management Theory).

References

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