Abstract

"See me! Not my gender, race, or social class":
Combating Stereotyping and prejudice mixing digitally manipulated experience with classroom debriefing.

INTRODUCTION

Not only does stereotyping, based on various social categories such as age, social class, ethnicity, sexuality, regional affiliation, and gender serve to simplify how we perceive and process information about individuals (Talbot 2003: 468), it also builds up expectations on how we act. If we recognise social identity as an ongoing construct, and something that is renegotiated during every meeting between humans (Crawford 1995), it is reasonable to speculate that stereotypic expectations will affect the choices we make when interacting with another individual. Thus, stereotyping may form the basis for the negotiation of social identity on the micro level. For example, research has shown that white American respondents react with hostile face expressions or tone of voice when confronted with African American faces, which is likely to elicit the same behaviour in response, but, as Bargh et al. point out (1996: 242), "because one is not aware of one's own role in provoking it, one may attribute it to the stereotyped group member (and, hence, the group)". Language is a key element in this process. Our hypothesis is that linguistic stereotyping acts like a filter making us notice those features which we expect to find, and toning down other features. An awareness of such phenomena, and how we unknowingly may be affected by the same, is, we would argue, essential for all professions where human interaction is in focus (psychologists, teachers, social workers, health workers etc.).

RAVE (Raising Awareness through Virtual Experiencing) funded by the Swedish Research Council, aims to explore and develop innovative pedagogical methods for raising subjects' awareness of their own linguistic stereotyping, biases and prejudices, and to systematically explore ways of testing the efficiency of these methods. The approach is the use of digital matched-guise testing techniques, thus upgrading an established method for recording stereotypical views on accents (Lambert et al 1960) with regard to applicability, and reproducible and transparent research practices. Previously matched-guise techniques could not be applied to gender studies, and even in accent studies, there was the issue of the uniqueness of each recording. However, with digital methods, it is now possible to create two versions of the same recording differing only with regard to one variable (e.g. perception gender codified in terms of pitch and timbre) in a procedure that is fully reproducible and transparent.

We are confident that there is a place for this, in our view, timely product. There can be little doubt that the zeitgeist of the 21st centuries first two decades has swung the pendulum in a direction where it has become apparent that the role of Humanities should be central. In times

when unscrupulous politicians take every chance to draw on any prejudice and stereotypical assumptions about Others, be they related to gender, ethnicity or sexuality, it is the role of the Humanities to hold up a mirror and let us see ourselves for what we are. This is precisely the aim of the RAVE project.

In line with this thinking, open access to our materials and methods is of primary importance. Here our ambition is not only to provide tested sample cases for open access use, but also to provide clear directives on how these have been produced so that new cases, based on our methods, can be created. This includes clear guidelines as to what important criteria need to be taken into account when so doing, so that our methodology is disseminated openly and in such a fashion that it becomes adaptable to new contexts.

METHOD

The RAVE method at its core relies on a treatment session where two groups of test subjects (i.e. students) each are exposed to one out of two different versions of the same scripted dialogue. The two versions differ only with respect to the perception of the gender of the characters, whereas scripted properties remain constant. In one version, for example, one participant, "Terry", may sound like a man, while in the other recording this character has been manipulated for pitch and timbre to sound like a woman. After the exposure, the subjects are presented with a survey where they are asked to respond to questions related to linguistic behaviour and character traits one of the interlocutors. The responses of the two sub-groups are then compared and followed up in a debriefing session, where issues such as stereotypical effects are discussed.

The two property-bent versions are based on a single recording, and the switch of the property (for instance, gender) is done using digital methods described below. The reason for this procedure is to minimize the number of uncontrolled variables that could affect the outcome of the experiment. It is a very difficult - if not an impossible - task to transform the identity-related aspects of a voice recording, such as gender or accent, while maintaining a "perfect" and natural voice - a voice that is opposite in the specific aspect, but equivalent in all other aspects, and doing so without changing other properties in the process or introducing artificial artifacts.

Accordingly, the RAVE method doesn't strive for perfection, but focuses on achieving a *perceived credibility* of the scripted dialogue. However, the base recording is produced with a high quality to provide the best possible conditions for the digital manipulation. For instance, the dialogue between the two speakers are recorded on separate tracks so as to keep the voices isolated.

The digital manipulation is done with the Praat software (Boersma & Weenink, 2013). Formants, range and and pitch median are manipulated for gender switching using standard offsets and are then adapted to the individual characteristics of the voices. Several versions of the manipulated dialogues are produced, and evaluated by a test group via an online survey. Based on the survey result, the one with the highest quality is selected. This manipulated dialogue needs further framing to reach a sufficient level of credibility.

The way the dialogue is framed for the specific target context, how it is packaged and introduced is of critical importance. Various kinds of techniques, for instance use of audiovisual cues, are used to distract the test subject from the "artificial feeling", as well as to enforce the desired target property. We add various kinds of distractions, both audial and visual, which lessen the listeners' focus on the current speaker, such as background voices simulating the dialogue taking place in a cafe, traffic noise, or scrambling techniques simulating, for instance, a low-quality phone or a Skype call.

On this account, the RAVE method includes a procedure to evaluate the overall (perceived) quality and credibility of a specific case setup.This evaluation is implemented by exposing a number of pre-test subjects to the packaged dialogue (in a set-up comparable to the target context). After the exposure, the pre-test subjects respond to a survey designed to measure the combined impression of aspects such as the scripted dialogue, the selected narrators, the voices, the overall set-up, the contextual framing etc.

The produced dialogues, and accompanying response surveys are turned into a single online package using the program Storyline. The single entry point to the package makes the process of collecting anonymous participant responses more fail-safe and easier to carry out.

The whole package is produced for a "bring your own device" set-up, where the participants use their own smartphones, tablets or laptops to take part in the experiment. These choices of using an online single point of entry package adapted to various kinds of devices have been made to facilitate experiment participation and recording of results. The results from the experiment is then collected by the teacher and discussed with the students at an ensuing debriefing seminar.

In the debriefing seminar after the exposure, students, organized in small groups, have an opportunity to reflect on the results from the experiment. Since any difference between the groups was the result of the participants' rating, their own reactions to the conversations, there is something very concrete and urgent to discuss. Thus, the pedagogical application for the set-up is to confront students or other participants with their own stereotypical assumptions. With the method described here, where the dialogues are identical except for the digital manipulation,

perceived differences in personality and social behaviour can only be explained as residing in the beholder.

FINDINGS

At this stage, we have conducted experiments using the RAVE method with different groups of respondents, ranging from teacher trainees, psychology students, students of sociology, active teachers, the public at large etc, in Sweden and elsewhere. The experiments have been carried out in other cultural contexts, in the Seychelles, in particular, in order to test the generality of the hypothesis regarding a filtering function. Gendered stereotypes are different in the Seychelles; it has been described as a matriarchal society "where women and girls have many advantages over men and boys" (African Development Bank, 2009) which makes the country a suitable reference point for cross-cultural comparisons.

All trials conducted addressing gender stereotyping have supported our hypothesis that linguistic stereotyping acts as a filter. In trials conducted with teacher trainees in Sweden (n = 61), we could show that respondents who listened to the male guise overestimated stereotypical masculine conversational features such as how often the speaker interrupted, how much floor space 'he' occupied, and how often 'he' contradicted his counterpart. On the other hand, features such as signalling interest and being sympathetic were overestimated by the respondents when listening to the female guise.

Results from the Seychelles have strengthened our hypothesis about linguistic stereotyping. Surveys investigating linguistic features associated with gender showed that respondents' (n=46) linguistic gender stereotyping was quite different from that of Swedish respondents. For example, the results from the Seychelles trials showed that floor space and the number of interruptions made were overestimated by the respondents listening to the **female** guise, quite unlike the Swedish respondents, but still in line with our hypothesis since the stereotypes relating to gender puts women in a position where they can e.g. interrupt.

Trials using psychology students (n=101) have similar results. In experiments where students were asked to rate a case character's ('Kim') personality traits and social behaviour, our findings show that the male version of Kim was deemed more unfriendly and a bit careless compared to the female version of Kim, who was regarded to be more friendly and careful. Again, this shows that respondents overestimate aspects that confirm their stereotypic preconceptions.

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