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ВЕРБАЛНАТА ИРОНИЯ: РОЛЯТА НА ПОЛОВАТА ПРИНАДЛЕЖНОСТ НА ГОВОРЕЩИЯ – АДРЕСАТА И МОДАЛНОСТТА НА СТИМУЛА

Анотация

Иронията в езика е сложна и многостранна тематика, която привлича интереса както на лингвистиката, така на психолингвистиката и когнитивистиката. Изследвания в последните две научни области посочват все по-често колко важно е да се отчитат индивидуалните различия и тяхното влияние върху използването и разбирането на иронията. Нещо повече, тъй като иронията е вградена в контекста, стимулите, използвани в експерименталните изследвания, би трябвало да се стремят да симулират колкото е възможно повече от съответните контекстни маркери. Тази статия се състои от преглед на съвременната литература, която се отнася до ролята на половата принадлежност в използването и разбирането на иронията, доколкото полът е фактор, повлияващ езиковото поведение като цяло. Допълнително е представен дизайнът на експериментално изследване на иронията, използващо аудиовизуални стимули. Използването на структурирана рамка на емпирично изследване върху иронията би могло да подобри качеството на получените резултати посредством контролиране на различни фактори, свързани с говорещите и със ситуацията, които не се ограничават само до пòла.

Ключови думи: психолингвистика, вербална ирония, различия по пол, компютърно базирани изследвания, аудиовизуални стимули

Introduction

In her study of irony in literature, Zofia Mitosek (2013) remarks: "The fact that no single irony exists – that there are several strains of irony – makes defining it an impossible dream of structural unity, and, simultaneously, attracts mockery. The most that can be said is that irony is an anthropological situation that, in a gesture of distance, goes beyond unambiguous utterances and interactions. That is very little ([55]: 12)."

Indeed, though research on verbal irony is employing increasingly more advanced paradigms (including neuroimaging, e.g., [9], [11], [36], [65]) and develops more precise theories of irony use and comprehension, a definitive answer remains elusive: Both Colston ([22]) and Utsumi ([68]) suggest that no single theory of irony has been able to adequately describe this phenomenon. New theoretical accounts also continue to be introduced (e.g., [19]). As a result, contemporary research is increasingly focusing on the aforementioned anthropological situation, that is, the factors related to the interlocutors who both use and attempt to understand irony (e.g., [10], [14], [15]). The following article will present an overview of recent research on the role of gender in irony use and research. Gender was chosen as a topic of review as it is strongly associated with differences in language use in general (see [23], [34]). Additionally, the influence of the modality of stimuli most commonly employed in irony research will be considered, and a method of using audiovisual stimuli will be proposed.

Linguistic Theories of Verbal Irony

Theoretical accounts of irony are chiefly the domain of linguistics ([50]), and these accounts center around the description of specific features used to communicate and interpret ironic messages. The distinction between *blame by praise* (e.g., "Great job!" when someone has failed a task) and *praise by blame* (e.g., "Now you messed up!" when someone has accomplished something) is commonly included (see [15] for a more detailed account). The situational context of ironic utterances is usually paid less attention, though the question of motivation for irony use and the role of shared contextual knowledge does figure in some theories (e.g., [70]).

In general, two theoretical approaches can be distinguished. The first one, the *pragmatic model* (see, e.g., [4]), posits that irony involves saying the opposite of what is meant, while the second model of *irony as echo* claims that irony is a negatively tinged recalling of a previously heard (or generalized on the basis of a mental conception of its speaker) statement in circumstances underscoring its falsity or its ridiculous quality ([70]).

A recent model ([19]) proposes a conceptualization of irony in three dimensions: (a) language, that is, the way irony is marked through syntax and morphology (rhetorical questions, using diminutive forms) or, in the case of written texts, descriptions of ironic intent; (b) thought, or what speakers communicate through ironic messages, and (c) communication, or the deliberateness (or a lack of thereof) of being ironic. The authors state that this dimensional view of the phenomenon of irony "can be used to structure debates in the field of irony studies in that scholars can explicitly indicate at which level of analysis their interest in irony lies" (p. 26), which could potentially alleviate definitional issues and help link together studies on various aspects of irony.

A major topic of research also concerns the cognitive processing of irony. Those supporting the one-stage model argue that, given access to appropriate

contextual cues, the ironic interpretation of an utterance will be achieved from the outset, while the two-stage model includes the discarding of the inappropriate, literal interpretation and the arrival at the nonliteral, ironic one (see [13]).

Linguistic theories of irony largely ignore the social situation in which irony emerges in favor of focusing on the ironic utterances themselves ([14]). Moreover, they are often based on an arbitrary selection of examples, meant to support the theory in question. As a result, they do not necessarily correspond to the nature of irony as it emerges in real-life interactions: "In theory-orientated papers, authors most frequently rely on (recurrent) invented instances or overheard real-life examples. In either case, their origin appears to be irrelevant, inasmuch as they serve illustrative purposes only, validating the workings of a chosen theoretical model of irony and/ or undermining another. […] Additionally, the canonical examples of irony are unequivocal and fail to bring out the complexity of the phenomenon manifest in utterances made by language users (speakers in natural conversations, speakers in the media, fiction writers, or script writers)" ([29]: 620).

However, it is important to note that these theories attempt to describe a very complex phenomenon, which requires references to concepts and constructs going beyond the commonsensical opposition of literal and nonliteral. By translating irony from this surface-level understanding into multifaceted process models, they open up new avenues and directions of empirical research.

Gender and verbal irony

As was mentioned above, the gender of both the speaker and the addressee of an ironic utterance seems to be a particularly important factor influencing both irony use and comprehension. A broad conclusion is that men use language in a more instrumental, task-oriented way, while women's language is focused on social purposes: Lakoff ([49]) described women's language as "powerless and humorless compared to men's" ([49]: 558), while Tannen ([66]) distinguished between female *rapport talk* and male *report talk*. However, methodological issues and inconsistent results disrupt such a unified picture ([57]). Analyzing a large corpus of written data, Newman et al. ([57]) confirmed that women were more likely to use language in order to discuss other people, as well as their own emotions, while men – to describe objects and events. Men also spontaneously selected objects as conversation topics more than did women, pointing towards gender differences in language use increasing in less restraining contexts (but remaining generally small, [57]: 229). This conclusion is supported by the fact that similar differences in language use between the genders also seem to emerge on the Internet: though intended to be an egalitarian, anonymous space, gender-stereotypical tendencies of communication have been carried over to online communities and communication from interpersonal interactions (see, e.g., [52], [67]). For example, Mo, Malik, and Coulson ([56]) performed a meta-analysis of studies related to gender differences in the use

of health-related support groups online, and have found evidence suggesting that in female-only and male-only groups, the users displayed language features stereotypical of their gender (i.e., women focused more on emotions and support, and men – on information and practical considerations). However, in mixed-gender groups, these differences were less pronounced.

Lampert and Ervin-Tripp ([50]) have also found differences in humor use between men and women, with male interactions involving more teasing than female interactions. In mixed-gender contexts, however, men teased less in favor of self-directed jokes, while women teased more. Interestingly enough, regarding online contexts, Guiller and Durndell ([36]) have found that men use humor more often than women in online discussion groups. On the other hand, Orgard ([46]) found examples of women using humor in online breast cancer support groups, while Pérez Sabater found an absence of humor usage in Spanish-language online health support groups, while in English-speaking communities, a reverse trend emerged: "women utilize wordplay and humour [in menopause-related groups] while in men's erectile dysfunction groups there is a complete absence of humorous wordplay" ([59]: 281).

As irony is closely tied to humor ([46]), it seems reasonable to expect gender differences in irony use, as well as comprehension. This has been the subject of a growing body of research.

In his landmark study of a corpus of real-life conversation, Gibbs ([32]) found that males were more likely to use sarcasm than women. Men also rated themselves as more sarcastic than women in a study by Ivanko, Pexman, and Olineck ([43]) and by Holtgraves ([41]). Similarly, Colston and Lee ([23]) found that men were more likely to respond with irony than women. These results build upon earlier experiments, which have shown that males were seen as more sarcastic than females when they uttered comments without obvious communicative intentions (Katz, Piasecka & Toplak, 2001, qtd. in [23]) and that men were more likely to rate irony as humorous, while women – as offensive ([44]). Men also rated themselves as more ironic than women in the study by Milanowicz ([52]), where they tended to describe irony positively, as a way to amuse others and build rapport, whereas women saw irony more negatively, as a means of underscoring their disapproval with more meanness. This is consistent with earlier research ([40], [56]) showing that the perception of politeness in language is, to an extent, a function of gender. Thus, women in the study by Ivanko et al. ([43]) "were more apt to recognize the critical (and thus impolite) function of ironic criticisms" (p. 265). Similarly, a study of parent-child conversations by Recchia, Howe, Ross, and Alexander ([56]) showed that mothers were likely to use irony in situations of conflict, whereas fathers used irony both in positive and negative contexts.

It is also worth mentioning the study of Bruntsch and Ruch ([15]), who have shown that irony use was positively correlated with trait psychoticism and the *histrionic self-presentation style*. As the authors explain, psychoticism was linked to irony use because of its "low inhibition to offend others

by callously exposing their weakness by ridiculing irony" (p. 142). The histrionic self-presentation style, on the other hand, involves a tendency to engage in attention-drawing, *as-if* behaviors, of which irony might be a good example. Importantly, men consistently achieve higher psychoticism scores than women ([51]), and men were found to be more likely to engage in histrionic self-presentation than women, possibly as an extension of an evolutionary strategy to attract mates (with men displaying humor and women showing approval by laughing; [58]). Indeed, the histrionic self-presentation style was found to be correlated with humor production ([59]). Thus, while still requiring further research, these links might offer additional explanations for men's greater preference for irony.

Regarding the motivation to use irony, Colston and Lee ([23]) suggest that the ambiguity inherent in irony might make it more appealing to men because of their inherently greater propensity to risk-taking, or that irony might be a more effective tool for expressing negative emotions or aggression, which men might be more inclined towards "for power or competitive purposes" (p. 302). In male-female contexts, however, according to Lampert and Ervin-Tripp ([50]), teasing helps men build rapport and solidarity with each other, while for women it is a way of establishing themselves in a position equal to men. The interplay of speaker and addressee gender was also shown to be significant by Milanowicz and Kałowski ([53]): Women were more likely to use irony in response to men than other women. As the authors report, "it can be that women keep the playful tone in conversation with men but it can also be that they give men a taste of their own medicine" (p. 231), which is consistent with the findings of Lampert and Ervin-Tripp ([50]). Drucker, Fein, Bergerbest, and Giora (2014) suggest in turn that this may be done in order to counterbalance the stereotypical power dynamics existing between the genders, as in their research, women rated scenarios in which women derided men using sarcasm as the funniest, and those in which women derided other women as the least funny. Men, meanwhile, displayed no such preferences, enjoying sarcasm equally across the board, and to a greater extent than women.

Drucker et al. ([27]) summarize that "aggressive humor is simply a preferred type of humor among men. Male bonding seems to be based on it" (p. 565), which would be consistent with the research mentioned above, showing that men prefer sarcasm and irony much more than do women, and generally have a more positive attitude towards it. This was elaborated upon by Milanowicz, Bokus, and Tarnowski ([54]), who reported that while men used irony more often than women in response to ironic comments from speakers of both genders, women were ironic the most often when responding to blame by praise (i.e., ironic criticism, positive literal meaning and negative figurative meaning) from men and they were rarely ironic towards other women. In the praise by blame (i.e., ironic compliments, negative literal meaning and positive figurative meaning) context, however, women reacted mostly with misresponses, indicating a lack of understanding of the figurative meaning.

Regarding the blame by praise and praise by blame distinction, men were more ironic to other men in the former context, and more ironic towards women in the latter. The authors suggest that these results might be explained by women's greater sensitivity to context and conditional rules of behavior, which allows them to attune their language use to the situation more effectively. Indeed, in an eye-tracker study, Shen and Itti ([64]) found that women attended more to the eyes and the bodies of the speakers than men, which possibly gave them an advantage in interpreting nonverbal signals. Additionally, Baptista, Macedo, and Boggio ([68]) reported that when looking at cartoons showing ironic utterances, women made more eye fixations than men, and these fixations were of longer duration. Despite eye-gaze patterns between men and women, however, the authors found no gender differences in irony comprehension in their task. Thus, "the same outcome was achieved using different strategies between genders" (p. 165).

The above summary points towards gender being an important variable to consider in verbal irony research, both because of the differences between men and women in irony use and comprehension, as well as because of the factors underlying those differences on a behavioral level. However, the dynamic, context-dependent nature of irony also demands particular attention to be paid to the stimuli employed in experimental studies. This matter will be considered in the following section.

Stimuli in Experimental Verbal Irony Research

The traditional experimental design employed in irony use and comprehension involves displaying both ironic and nonironic utterances to the participants, allowing for reaction time measurement or comparison of various ratings (humor, aggressiveness, likelihood of responding in kind, etc.). The utterances are most commonly presented as written text, either on paper or digitally (see, e.g., the studies collected in [33]). The stimulus utterances can either be aimed directly at the participant reading them, or they can be presented as emerging in a conversation between two people that the participant is reading about/observing and is asked to then imagine themselves as the actual addressee (see, e.g., [40]). Researching computer-mediated communication (CMC) is also a recent trend (e.g., Filik et al., 2016; Thompson & Filik, 2016; [72]), as is analyzing corpora of internet communication (e.g., [55], [41]). Additionally, the ironic utterances are often separated into blame by praise and praise by blame comments (e.g., [11], [16]).

Although instances of audio (e.g., [3], [24], [57]) and audiovisual (e.g., [25], [44]) stimuli usage can be found in the literature, they are relatively uncommon (however, see [17] for a novel paradigm combining auditory cues and participant action).

Employing chiefly written (sentences, or sentences combined with pictures) stimuli, however, deprives the participants of access to various prosodic markers of irony, which, while not necessary are present in everyday interac-

tions and play a part in irony use and understanding. For example, Bryant and FoxTree ([17]) have found that irony is associated with a distinct prosodic profile, but that it is also similar to the prosody of anger or of asking questions.

However, Cheang and Pell ([21]) found that participants recognized sarcasm well on the basis of prosody, but only in their native language. They report that "the conventions for signalling sarcasm in the voice vary in important ways across languages, yielding poor cross-linguistic recognition of this attitude" (p. 220). Despite these different conventions, prosodic marking of irony remains common across languages. Voyer, Thibodeau, and Delong ([69]) have also found that tone of voice interacts with the context of a sarcastic utterance "so that the tone of voice can serve to emphasize the contrast between context and literal meaning to promote the perception of sarcasm" (p. 48). On the other hand, Deliens, Antoniou, Clin, and Kissine ([26]) reported that, when supplied with adequate amounts of prosodic cues of irony, listeners will disregard contextual information in the process of arriving at an ironic interpretation of the heard utterance. Additionally, facial cues might also influence irony detection (see, e.g., [12]).

Since irony is deeply context-relevant, simulating as much of those contextual features as possible through employing audio-visual stimuli in experiment designs seems to be pertinent in order to obtain accurate results and, thus, be able to arrive at a more complete picture of verbal irony as a phenomenon in social interactions.

As regards the content of the ironic utterances themselves, following Dynel ([29]), it can be surmised that relatively simple, conventionalized phrases are typically used. For example, the study by Kreuz and Glucksberg ([47]) – the first Google Scholar result when searching for "verbal irony" – gives the following example of an ironic stimulus: "'It's probably going to rain tomorrow,' said Jane, who worked for a local TV station as a meteorologist. The next day was warm and sunny. As she looked out the window, Nancy said 'This certainly is awful weather.'" (p. 377). A similar example comes from Kumon-Nakamura, Glucksberg and Brown ([48]): "[Danny] was obnoxious in the way he showed off his knowledge. Jesse, one of Danny's classmates, said "You sure know a lot." (p. 7). A more recent example comes from Akimoto et al. ([9]): "[When skiing] you got scared looking down a big slope. You miserably went down with the help of your friend. 'You are a good skier!'" (p. 1170).

On one hand, uncomplicated and easy to understand utterances/scenes help eliminate interference resulting from personal humor preferences and competence. On the other hand, they contribute to the lowering of external and ecological validity ([18]) – the experimental situation is rendered unnatural, which can potentially distort the results. In contrast, the experiment by Calmus and Caillies ([20]) can be quoted as an example of more complex ironic utterance stimuli – the participants were faced with such comments as "We really took our time getting to know each other. That's why we decided to separate" or "This new show isn't bad. It's complete rubbish" (p.

48). However, it is worth noting that these stimuli were displayed without context, whereas the short scenes mentioned earlier provided contextual information. Presence or absence of information on the situational context might influence the interpretation of ironic utterances, and thus needs to be taken into account when designing experimental stimuli (see, e.g., [56]).

Lastly, an interesting question related to external and ecological validity of verbal irony research concerns the modality of the participants' responses to the presented ironic stimuli. The effect of either writing responses down or uttering them out loud, as well as of addressing them directly to the speakers of the ironic stimuli versus answering a general question of "How would you respond?" requires further study in order to isolate potential interference effects.

Proposed Research Design Employing Audiovisual Stimuli

The Irony Comprehension Task (*Zadanie Rozumienia Ironii,* [6], [5]) is a computer program, written in the ePrime programming language, which has been employed previously by Banasik ([7]). Aimed at children, it combines short scenarios being read out loud by a narrator with graphical illustrations. After listening to the scenario, the children were prompted to select their answers on a touchscreen. The method presented below was addressed at adult participants and it involved more complex video stimuli, as well as recording the participants' responses and measuring their reaction time. As was mentioned above, using audiovisual stimuli allows prosodic and non-verbal cues to be taken into account in the research design, which makes the experimental situation closer to a real-life interaction, as it attempts to reconstruct the complex network of contextual factors from which irony arises and on which it is dependent. Moreover, visual stimuli engage the viewers' attention more effectively, and they have been shown to provoke more intense emotional reactions (see, e.g., [35]), which might also further increase the experiment's verisimilitude.

The program was written in the Python programming language by the second author (Ł. Malanowski). It displayed short video clips, recorded for the purpose of the research. The clips consisted of a narrative introduction read out loud to provide the context, and then showed an actor facing the camera, visible from the shoulders-up, who spoke either an ironic or a nonironic utterance aimed directly at the participant/viewer (e.g, "Nice job! You're a real genius."). The program then recorded the participant's responses, spoken into a microphone, and their subjective ratings of the utterance's humor and meanness, selected on a slider with a range of 0-100. Additionally, extracting the participants' reaction time was possible by measuring the time window from the beginning of the recording to the start of the participant's utterance. Thus, the data collected by the program allowed for both qualitative (the character of the responses) as well as quantitative (the frequency of ironic responses, average ratings) analyses.

The program was used in an experiment conducted as part of the first author's master's thesis, examining the influence of gender on irony understanding and reception ([58]). The program's flexible, modular structure enabled easy use of varied stimuli (male and female actors, blame by praise and praise by blame irony) and their linking and ordering in such a way as to avoid repeated usage of the same stimulus or to deliberately create a subgroup of participants viewing only a specific stimulus category (e.g., men only viewing stimuli with female actors). Moreover, the program was found to be intuitive in use for the participants – all participants correctly executed the experimental tasks and had no problems adjusting to the requirement of addressing the actor in the video in first person when making their responses. The experiment also involved a gender stereotype activation task ([71]), showing that the program can be used in conjunction with additional tasks. It can also be modified to measure the potential role of factors other than gender in irony use and understanding, for example, age, social status, spoken language, context, and so forth, by incorporating adequately prepared stimuli into the framework it provides. Moreover, collecting reaction times, subjective ratings, and recorded responses opens up a wide range of potential analysis methods, as was mentioned above.

The study conducted with the use of the Python program and a stereotype activation task revealed that activating the stereotype of the participant's gender caused them to perceive irony from men, but not from women, as funnier than nonirony. Irony spoken by women (but not by men) was also rated as more harsh than humorous. These results are consistent with the literature reviewed above. Importantly, the participants correctly recognized the majority of ironic stimuli as ironic, and they rated ironic utterances as more humorous and more critical than they did nonironic utterances, which could signal that, when translated from written text into comments spoken on video, ironic stimuli remain comprehensible and accessible for the participants.

Enriching the experimental tasks using multimedia stimuli follows the contemporary trend of employing computer programs in research, and the method suggested in this article can be considered a notable step towards developing a more advanced and uniform paradigm of examining individual differences in verbal irony use and understanding. Considering how deeply embedded irony is in social interactions, recreating this context to the greatest degree possible seems worthwhile. Empirical verifications of theoretical models of irony together with measuring and analyzing the impact of a wide array of speaker- and situation-related factors will enable a deeper understanding of this phenomenon.

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