LEGE ARTIS

THE ACOUSTIC IMAGE OF IRONY
(BASED ON AMERICAN ELECTORAL SPEECHES)

Inna Zabuzhanska* ID

Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University,

Vinnytsia, Ukraine

Lukáš Pieš ID

University of SS Cyril and Methodius in Trnava, Trnava, Slovakia

Corresponding author*

Abstract. The prosodic dimension of irony is in the focus of this research. The present study illustrates the prominent role of irony in American electoral political discourse from the pragmatic point of view represented by outstanding American politicians: Donald Trump, Joe Biden, Nancy Pelosi, and Hillary Clinton. The paper presents the results of the acoustic analysis and confirms the complementary role of suprasegmental variables (fundamental frequency and intensity) in expressing irony.

Keywords: irony, sarcasm, prosody, debate, political discourse, pitch, intensity.

1. Introduction

Irony is a general semiotic phenomenon, realised in linguistic objects of varying degrees of complexity, as well as in other sign systems (in various types of art). Irony and sarcasm are the most prevalent forms of non-literal communication in our culture (Lœvenbruck et al. 2013: 3537).

Scholars unanimously agree that irony has capacity to express the subtlest nuances of meaning, both positive and negative, which in most cases do not amount to the transmission of an opposite meaning (Палєй 2008; Lœvenbruck et al. 2013). This significantly complicates the process of its identification and understanding, especially for an unprepared reader/listener. Therefore, inferring or decoding

ironic intents and their adequate interpretation requires the analysis of the context, various verbal and non-verbal means, as well as the presence of some background knowledge on the part of the addressee (Палєй 2008; Athanasiadou 2020; Kumwapee & Jitwiriyanont 2020: 440). Otherwise, the speaker will not achieve the pragmatic goal of irony, which will lead to a communicative failure. Ironic contexts are characterised by integrity, completeness of the expression of thought and a special organisation based on the violation of the communicative norm. The ironic microtext is constructed in such a way that the addressee simultaneously receives two variants of the content, expressed in the same form (Ланчуковська 2003: 6-7).

Heiko (2004) claims that irony deliberately makes some concepts or values acute, but is always aimed at something serious. By ridiculing seriousness, irony allows subjectively solving difficult logical problems, relieving emotional tension: "...ironic mood acts as a game of imagination and mind, where mental concern is cut short by skepticism and overcome emotionally, plunging from reality into the world of symbols" (Гейко 2004: 106).

The practically oriented problem of acoustic cues marking ironic utterances has been troubling phoneticians across the globe (Bryant 2012; Bryant & Fox Tree 2005; Cheang & Pell 2008; Chen & Boves 2018; Marková et al. 2009; Lœvenbruck et al. 2013; Schlöder 2017; Xu 2019), yet remains open to investigation. The available data is rather controversial. Based on the literature reviewed, it is noteworthy to mention dubious results, specifically, language-dependency and cross-study variety of F0 mean and F_0 range marking ironic and sarcastic utterances. For instance, irony was expressed with a lower F_0 mean in English (Cheang & Pell 2008; Chen & Boves 2018), Thai (Schlöder 2017), Arabic (Qaiwer 2020), and Spanish (Ciglič 2017). French speakers seem to use a higher pitch level and a wider pitch span to express sarcasm and irony (Lœvenbruck et al. 2013) and so do the Italians. Conversely, lower mean F_0 is observed in Cantonese (ibid.). Along with this, Marková et al. concluded the lack of homogeneous strategy of adjusting prosodic parameters while expressing irony in Slovak (2009). On the other hand, Bryant and Fox Tree reported absence of any specific prosodic marking of verbal irony (2005). Such differences could result from a number of factors. Primarily, scholars utilize different methodologies and approaches in each particular study. Notably, many of these works focus on isolated utterances in lab-based studies. Therefore, such studies analyse mainly non-spontaneous ("posed") speech. When exploring the aspects of verbal irony, researchers typically describe speech produced by actors instructed to speak sarcastically or ironically. Conducting such experiments, Bryant and Fox Tree (2005) state that actors often indicate sarcasm by lowering their pitch, raising their amplitude and speaking more slowly. They call the aforementioned characteristics as an ironic tone of voice (ibid.). There has been a small stream of studies on gender differences on

sarcasm and irony in Spanish, English and Cantonese, yet the scholars report mixed findings (Lœvenbruck et al. 2013).

The fundamental aim of this research paper is to illustrate the complementary role of prosodic parameters of spontaneously produced ironic speech extracted from American electoral political discourse.

The paper is organised in the following way: in **Section 2** a general background on verbal irony is given due attention. This section also highlights some previous work on prosodic parameters of the phenomenon in question. **Section 3** presents the details on data collection, instruments, and approaches to the phonetic experiment. Following on from this, **Section 4** lays out the results in terms of descriptive statistics. **Section 5** concludes the paper with suggestions for further work on related topics.

2. Verbal irony in political discourse

As an aesthetic category, humanity has known irony since the time of Socrates. From then on, the artistic forms of irony and its aspects have significantly changed. Each stage of its development is unique and important in developing the experience of world perception for humanity, which has been reflected not only in speech, literature, but also in fine arts and culture (Кохан 2022).

The following definitions of irony are available in linguistics. In a narrow sense, irony is a trope. In a broad sense, it is a complex linguistic and mental phenomenon and as well as discourse that characterizes a special worldview and expresses the author's critical attitude (Палєй 2008; Holdcroft 1983). Leech and Short (1981: 142) give a more precise definition of irony calling it a pragmatic principle, which enables the speaker, through breaking one or more of the cooperative principal maxims, to be impolite while seeming to be polite.

In terms of verbal irony, there exist various definitions. Searle regards verbal irony as a linguistic device utilized to convey an opposite meaning from the literal meaning embedded in its linguistic form (1991), while Cheang and Pell define it as expressions in which the intended meaning of the words is different from or the direct opposite of their usual sense (2008: 366).

Verbal irony is a form on non-literal language, in which speakers communicate implied propositions that are intentionally contradictory to the propositions contained in the words themselves using the relevant contextual information (Bryant 2012; Bryant & Fox Tree 2005: 257; Gonzalez-Fuente et al.

2016; Grice 1975; Kumwapee & Jitwiriyanont 2020: 439). It is noteworthy to state that context is one of the main pragmatic factors in determining the intended meaning of the ironic utterances. Interpretation of the utterance as ironic can be the result of an incongruity between context and the utterance. This contextual incongruity is the allusion to a failed expectancy meaning a contrast between what is expected and reality (Riviere et al. 2018: 3).

Linguistic research in communication has repeatedly demonstrated the difference between irony and sarcasm. According to Merriam Webster's Dictionary (*s.a.*), sarcasm is a sharp and often satirical or ironic utterance designed to cut or give pain; a mode of satirical wit depending for its effect on bitter, caustic, and often ironic language that is usually directed against an individual. Meanwhile, scholars continue disputing about the irony-sarcasm relationship. Gibbs (2000) suggested that sarcasm, hyperbole, understatement, rhetorical questions, and jocularity are all kinds of verbal irony while Cheang and Pell claim that verbal irony is a key subtype of sarcasm (2008: 366). In a similar vein, Bryant and Fox Tree treat sarcasm as is a particular kind of personal criticism leveled against a person that incorporates verbal irony (2005: 261). Given its phonological standpoint, the present study treats irony and sarcasm synonymously.

Politicians especially like to ironize in political debates, interviews, television shows, etc. The analysis of the existing literature reveals that irony involves not a reversal of evaluation, but a reversal of attitudes about social actors to draw a positive self-image.

In political discourse, irony is an evaluative message communicating an attitude about the opinion and the action of an opponent – the addressee of ridicule – but mainly addressed to a third party independent of the victim being present or absent. In such a way, ironic statements help (de) emphasize negative/positive traits attributed to Them/Us leading to positive self-presentation and negative other-representation (Qaiwer 2020: 14).

Paley concludes that politicians often resort to irony as a technique of verbal aggression, which primarily performs an invective function. Politicians often use ironic appeals, greetings, compliments, words of thanks, sympathy, offers of help, etc., to portray the opponent negatively criticizing, objecting, reproaching, and ridiculing him/her. In these statements, the addressee's unfriendly attitude towards the interlocutor is expressed, tension in communication increases, veiled negative attitude, feelings of contempt or indignation are reflected. Ironic use of language etiquette according to the rules of an aggressive strategy can result from toxicity (Petlyuchenko et al. 2021) and be a trigger for conflict (Палєй 2018; Panasenko et al. 2018; Pieš 2022; Zabuzhanska & Yamchynska 2022). In line

with Paley, Qaiwer came to the conclusion that irony in political debates serves in aggression and defense represented through several mechanisms, among which is a paradox and reversing the communicative expectation, providing absurd conclusion, and ambiguity (2020: 17).

Complementary to these findings, Kamil and Al-Hindawi (2017) showed that irony becomes an extremely effective tool that allows politicians to express their point of view on political events taking place in the world, influence the consciousness of the audience and even manipulate it, affecting the behavior, desire, belief, and emotions of others to their self-interests without evident detection of their communicative intention. Manipulation is a discursive phenomenon and nowadays political figures utilize it to affect the thoughts (and indirectly the actions) of the recipients (Fedoriv 2016: 2; Jasim & Sabah 2021; Stashko 2018; Stashko et al. 2020). The ideological framework of "positive self-presentation" and "negative other-presentation" is the central umbrella under which manipulation can exist and work freely. The findings might help linguists, journalists, and political analysts to understand how politicians use the linguistic features in their discourse to affect the audience's thoughts and behaviour manipulatively.

Irony is created by means of all language levels – phonetic, lexical, morphological, syntactic, etc. Speakers convey implicit information to listeners by manipulating language and prosody (i.e., intonation and stress patterns), among other features, to express a particular message (Cheang & Pell 2008: 366).

2.1 Prosodic irony

Prosody refers to all suprasegmental aspects of speech, including pitch, duration, amplitude, and voice quality that are used to make lexical and post lexical contrasts and to convey paralinguistic meanings (Xu 2019: 314; Zabuzhanska & Yamchynska 2022: 216). Speech prosody is a hierarchical structure consisting of a limited number of levels, which not only governs its constituents, but also determines their relative prominence (Xu 2019). There has been a vast bulk of research on emotive meanings conveyed by prosody. The reason for such a genuine interest is that speakers convey a rich set of meanings suprasegmentally. It should be noted that the intonation palette of any language is versatile – from positive manifestations of various feelings to negative ones, which undoubtedly affects the emergence of new shades of meaning in a word, sometimes very significant and even opposite. Scholars call emotion and attitude-related prosody affective prosody, emotional prosody, or vocal expression of emotions and attitudes. This phenomenon is widespread not only in linguistics but also in neurolinguistics (Meconi et al. 2018). It covers such aspects as vocal attractiveness, charisma, dominance, sarcasm, irony, idiosyncratic prosody, etc.

Bryant and Fox Tree come up with the statement that speakers use overall F_0 contours for affective expression. These contours reliably correlate with basic emotional categories across various languages (2005: 258). Specifically, Rodero and Larrea (2020: 80) report the high pitch to convey positive emotions (euphoria, excitement, and joy) while the low pitch is mainly associated with negative psychological states such as sadness and depression. Some linguists hypothesize the perception of low-pitched voices as more credible and reliable – an indispensable quality while persuading and manipulating (Zabuzhanska et al. 2022: 276).

The interface between prosody and irony is a relatively recent area of study. There are different opinions regarding the acoustic cues associated with sarcastic intent and the manner in which linguistic context interacts with prosody to project a sarcastic message. A preliminary survey of the data suggests that utterances are sometimes perceived as ironic because of the particular "tone of voice" (Ківенко 2019; Bryant & Fox Tree 2005: 258).

Interlocutors mark irony both on the segmental and suprasegmental levels. It is the sound hyperarticulation that, according to Lœvenbruck et al. (2013: 3537), marks irony on the segmental level. Regarding the suprasegmental level, speakers actively employ prosodic modulations in marking ironic speech and listeners can rely on these prosodic parameters to detect an ironic intention. Prosodic features such as pitch range expansion, syllable lengthening and specific intonational contours (also known as "ironic" pitch contours) are common prosodic variables that languages use to mark irony in speech (Riviere et al. 2018: 165).

In French, Deliens et al. (2018) carried out the lab-based experiment and came up with the following results: context is a highly reliable cue to understand sarcasm but its processing is ***time consuming***. Listeners use prosodic cues to make an accurate discrimination between sarcastic and literal meaning with ***the least processing effort***.

3. Material and methods

The object of this research is an ironic speech act, while the subject of the study is the prosodic means of its manifestation in spontaneous speech.

The methodology comes from the already elaborated stepwise procedure (Chen & Boves 2018; Gonzalez-Fuente et al. 2016; Kumwapee & Jitwiriyanont 2020; Lœvenbruck et al. 2013; Zabuzhanska & Yamchynska 2022) and presents a rationale since firstly electoral speeches of the most outstanding American politicians were selected as the research material, from which expressions

of irony were selected (indicating the target word) and then the intonational phrases underwent an acoustic analysis. The unit of research was phrases in which politicians expressed irony.

The material under investigation included speeches by famous American politicians, given their popularity among the nation's population (The most popular politicians 2022). The research was not aimed at investigating whether there is a difference in acoustic cues of irony between male and female speakers; however, bearing in mind that prosody is a universal feature of speech, it seemed logical for the research to take into account this factor as well.

The corpus consisted of four speeches produced by Joe Biden, six speeches by Donald Trump and four speeches by female politicians – Hillary Clinton and Nance Pelosi. The total duration of the analysed extracted ironic utterances amounts to 45 minutes 23 seconds.

Acoustic value extraction and calculation were conducted with the help of such computer programs as Praat (Boersma & Weenink 2021) and Speech analyzer (2022). It is accounted for Praat being the leading program utilized during phonetic experiments. Furthermore, such acoustic descriptions have the merit of being relatively objective and exercising multi-level markup of speech, including the graphic visualization of oscillograms and intonograms.

The research was limited to two prosodic parameters, namely pitch and intensity. For the pitch variables, such parameters of fundamental frequency (F_0) were observed: mean F_0, minimum F_0, and maximum F_0 with their subsequent measuring in Hertz (Hz). Speaking about intensity variables, mean, minimum, and maximum intensity were measured in decibel (dB).

4. Results and discussion

Following Lanchukovska (Ланчуковська 2003), the current research elaborates such types of ironic utterances as the irony of irrelevance, micro-contextual (classical) irony, macro-contextual irony and, finally, globalising irony. These types are presented with a gradual increase in emotionality and the number of objects of critical evaluation.

The irony of irrelevance arises upon the violation of the Maxims of Manner – avoid ambiguity. It is characterised by the absence of opposition of evaluative values. Micro-contextual (or classical) irony violates the Maxims of Quality – do not say what you think is wrong. It is characterised by the opposition of evaluative values within one statement/utterance. The manifestation of macro contextual irony requires a context that exceeds the minimal unit of the text, thus violating the

Maxims of Manner – be brief. Globalising irony, which is in the focus of this research, carries the most intense critical load. The logical-communicative basis of this type is the violation of the second postulate of the Maxims of Quality – do not say what you do not have sufficient grounds for, which manifests itself in unfounded generalisations, the globalisation of random observation, and the transformation of individual, that is, random, characteristics into a general one. This irony is full of such indicators – the target words – as *everyone*, *always*, *never*; it often contains *hyperbole*. Therefore, hyperbolic generalisation, illogical connection of a trivial premise, and a general conclusion bring the argument to absurdity (Ланчуковська 2003: 8-9).

146 ironic utterances were extracted from the available material: 75 utterances by Donald Trump, 38 utterances by Nancy Pelosi, 27 utterances by Joe Biden, and only 6 by Hillary Clinton. Such an amount of ironic utterances on the part of Donald Trump can be justified since this politician "ironies" everything (McClennen 2017). It is already common knowledge that his "sarcasm" is part of his rhetorical strategy on which he has relied for several years on the campaign trail and in the White House (Woodward 2020).

The following extracts illustrate the most vivid examples of irony selected in the course of this research:

Donald Trump:

(1) *"I began such a campaign because I was so **tired**… of seeing such foolish things happening in our country".*

(2) *"I guess I have been a **politician**".*

(3) *"Education was a **disaster**. Everything was a **disaster".***

(4) *"She is allowed to do it. And I am not. Sound **fair**. Sounds **fair**".*

(5) ***"Crazy** Nancy Pelosi".*

(6) *"I do not respond to her. She is a **waste of time**".*

(7) *"Pelosi is a **sick** woman. She has got **a lot of mental problems**".*

(8) *"Nancy is **incompetent**. She should go to her district and clean it up".* (Donald Trump vs Nancy Pelosi… *s.a.*)

Hilary Clinton:

(9) *"Are you a **teacher**?"*

(10) *"That represents **exactly** who he is".* (Clinton vs. Trump… *s.a*)

Nancy Pelosi:

(11) *"He is our president. And I'd rather he would not be taking **something** that has not been approved by the scientists, especially **in his age group and his weak group"**.*

(12) *"**I pray** for the president".* (Donald Trump vs Nancy Pelosi… *s.a.*)

Joe Biden:

(13) *"The president has **no** plan. He did **nothing**. He waited and waited and waited".*

(14) *"President Trump did a **phenomenal** job".* (Final 2020 presidential debate… *s.a.*)

The acoustic analysis of the fundamental frequency demonstrates that the utterances containing irony are mainly marked by the wider range of F_0 and the prevalence of high pitches, especially on the target word, i.e., expressing irony on the part of the speaker. The following Figure (1) illustrates the ratio of high and low pitches of ironic utterances for each politician. Specifically, 72% of the ironic utterances by Donald Trump have high pitch, while 28% are marked with the help of low pitch. Joe Biden's irony is marked prosodically with such a ratio: 55% (high pitch) vs 45% (low pitch). Nancy Pelosi also makes use of high pitch (66%) when expressing irony while ironic utterances by Hillary Clinton roughly balance (51% are high-pitched and 49% are low-pitched).
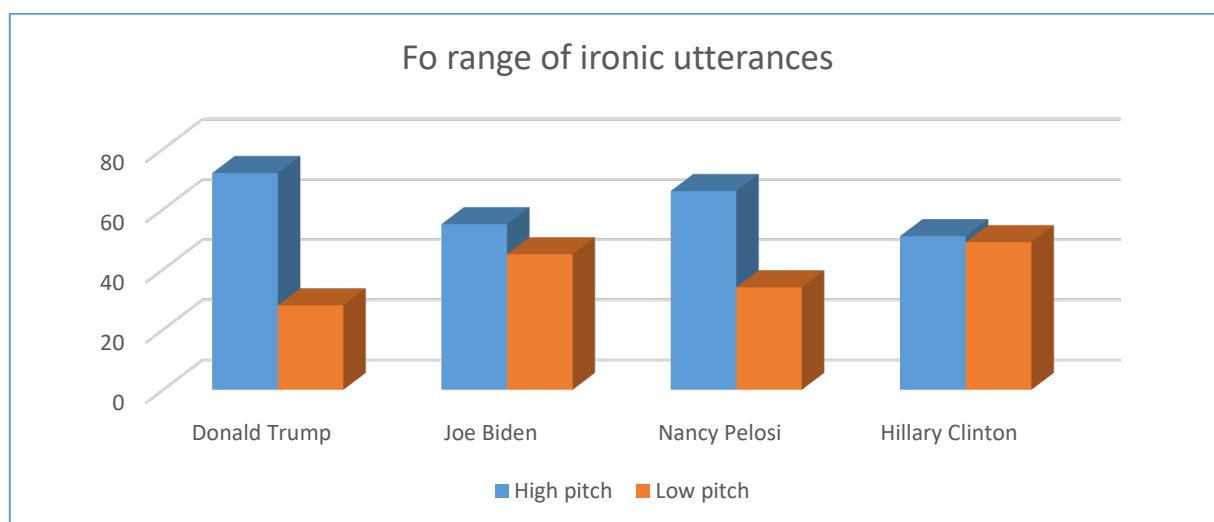

Figure 1. Distribution of utterances with low and high pitches (Source: Own processing)

Figure 2 generally presents the results of the amplitude parameters. The analysis provides evidence in favor of the complementary role of intensity while expressing irony. All the speakers emphasized the target word in the majority of their ironic utterances (Donald Trump – 85%, Joe Biden – 79%, Nancy Pelosi – 73%, Hillary Clinton – 83%).
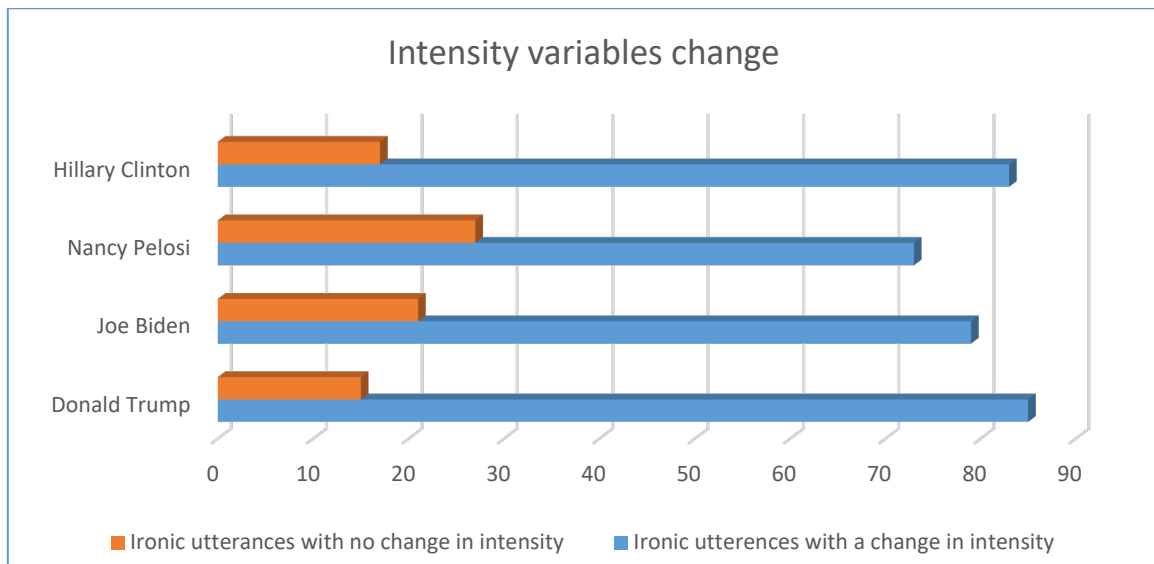
Figure 2. Distribution of utterances with and without intensity dynamics
(Source: Own processing)

The present acoustic analysis echoes recent research, however is different in the approach since it focused on the study of spontaneous speech. In terms of pitch variables, the obtained results confirm the already existing ones (see Section 2). However, amplitude range reports statistical significance, which contradicts the results obtained in the lab-based conditions.

Moreover, though gender peculiarities were not among the tasks of the research, the analysis allows some imprecise conclusions: within the general acoustic characteristics found for irony and sarcasm, there are no significant gender differences across the acoustic variables under investigation.

5. Conclusions

This research is a small step towards raising awareness of the key role prosody plays in expressing irony. A vast bulk of research on irony has been conducted in such domains as philosophy, aesthetics, linguistics, literary studies, psychology, etc.

Cases of the use of irony in the text of the English-language political discourse are often not so obvious and do not lie on the surface. Irony plays an important role in the political discourse, providing the speaker with a unique opportunity to express his/her cynical and derisive attitude to the described objects and people in question, events, including a sharp range of emotional shades.

Irony itself does not contain a discrediting character, but is characterised by significant expressiveness, as it has an emotional and evaluative perlocutionary effect. In such a way it is

intertwined with the problem of linguistic representation of manipulative strategies and tactics. It is an integral part of political discourse, including political speeches and debates.

The key characteristics of irony are the presence of a pragmatic goal and the desire to make an emotional impact on the consciousness of the addressee. Important takeaways show that such suprasegmental variables as fundamental frequency and intensity are significant acoustic cues that help additionally signal ironic intention on the part of the speaker. Similarly, the addressee can use them to detect the irony in political discourse. Based on the examples analysed so far, changes in the pitch and more importantly – in the intensity – often play the decisive role for the recognition and correct interpretation of verbal irony by the audience.

The results of the current study show that in an American political discourse key politicians actively employ prosody as such ironic utterances contribute to preserving the image of the speaker and to the negative representation of the opponent. Therefore, acoustic cues for signaling irony and sarcasm are discourse-specific. Although gender did not yield significant results in this study, the investigation of a larger set of segmental and suprasegmental variables might be fruitful in further research.

References

1. Athanasiadou, A. (2020). Irony in constructions. In *The diversity of irony*. Athanasiadou, A. & Colston, H.L. (eds.). Berlin – Boston: De Gruyter Mouton, p. 78-90. DOI: 10.1515/9783110652246-004

2. Boersma, P. & Weenink, D. (2021). *Praat [computer program]. Version 6.1.52*. Available at: https://praat.ru.uptodown.com/windows

3. Bryant, G.A. (2012). Is verbal irony special? In *Language and linguistics compass*, 6 (11), p. 673-685. DOI: 10.1002/lnc3.364

4. Bryant, G.A. & Fox Tree, J.E. (2005). Is there an ironic tone of voice? In *Language and speech*, 48 (3), p. 257-277. DOI: 10.1177/00238309050480030101

5. Cheang H.S. & Pell, M.D. (2008). The sound of sarcasm. In *Speech communication*, 50, p. 366-381.

6. Chen, A. & Boves, L. (2018). What's in a word: Sounding sarcastic in British English. In *Journal of the international phonetic association*, 48 (1), p. 57-76. DOI: 10.1017/S0025100318000038

7. Ciglič, B.P. (2017). The role of prosody in the expression of irony in Spanish. In *Linguistica*, 57 (1), p. 255-278. DOI: 10.4312/linguistica.57.1.255-278

8. *Clinton vs. Trump: The second 2016 presidential debate* (video). Available at: https://www.youtube.com/watch?v=7fmzBwnmQJM

9. Cole, J. (2015). Prosody in context: A review. In *Language, cognition and neuroscience*, 30 (1-2), p. 1-31. DOI: 10.1080/23273798.2014.963130

10. Deliens, G., Antoniou, K., Clin, E., Ostashchenko, E. & Kissine, M. (2018). Context, facial expression and prosody in irony processing. In *Journal of memory and language*, 99, p. 35-48.

11. *Donald Trump vs Nancy Pelosi: The most epic clashes of all time* (video). Available at: https://www.youtube.com/watch?v=sqhvcrOPOXE

12. Fedoriv, Ya. (2016). Speaking to the global audience: A case study into the message transformation. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava*. Warsaw: De Gruyter Open, I (2), p. 1-36. DOI: 10.1515/lart2016-0009

13. *Final 2020 presidential debate between Donald Trump, Joe Biden* (video). Available at: https://www.youtube.com/watch?v=UCA1A5GqCdQ.

14. Gonzalez-Fuente, S., Pilar, P. & Noveck, I. (2016). A fine-grained analysis of the acoustic cues involved in verbal irony recognition in French. In *Speech prosody 2016*, Boston, USA, May 31-June 3, p. 902-906. DOI: 10.21437/SpeechProsody.2016-185

15. Gibbs, R.W. (2000). Irony in talk among friends. In *Metaphor and symbol*, 15 (1), p. 5-27. DOI: 10.1207/S15327868MS151&2_2

16. Grice, P. (1975). Logic and conversation. In *Syntax and semantics*, 3. Cole P. & Morgan, J.L. (eds.). New York: Academic Press, p. 41-58.

17. Heiko, S.M. (2004). Sociocultural meaning of the concept of "irony": A philosophical analysis. In *Bulletin of Cherkasy Bohdan Khmelnytsky National University. Series: Philosophy*, 49 (2), p. 104-112. / Heiko S.M. Sotsiokul'turnyj zmist ponyattya "ironiya": Filosofs'kyj analiz. In *Visnyk Cherkas'koho natsional'noho universytetu imeni Bohdana Khmelnyts'koho. Seriya: Filosofiya*, 49 (2), s. 104-112. / Гейко С.М. Соціокультурний зміст поняття "іронія": Філософський аналіз. In *Вісник Черкаського національного університету імені Богдана Хмельницького. Серія: Філософія*, 49 (2), с. 104-112.

18. Holdcroft, D. (1983). Irony as a trope, and irony as discourse. In *Poetics today*, 4 (3), p. 493-511. DOI: 10.2307/1772029

19. Jasim, M.R. & Sabah, S.M. (2021). A semantic and rhetorical study of manipulation in two English and Arabic political speeches. In *Arab world English journal*, 11 (4), p. 426-444. DOI: 10.2139/ssrn.3764301

20. Kamil, S.I. & Al-Hindawi, F. (2017). *The pragmatics of manipulation in British and American political debates*. Hamburg: Anchor Academic Publishing.

21. Kivenko, I.O. (2019). Intonational organization of expressions of ironic gratitude. In *Transcarpathian philological studies*, 7 (1), p. 87-92. / Kivenko I.O. Intonatsijna orhanizatsiya vyslovlyuvan' ironichnoyi podyaky. In *Zakarpats'ki filolohichni studiyi*, 7 (1), s. 87-92. /Ківенко І.О. Інтонаційна організація висловлювань іронічної подяки. In *Закарпатські філологічні студії*, 7 (1), с. 87-92.

22. Kokhan, N.M. (2022). Methods of formation of postmodern irony in works of Ukrainian land art. In *Art and design*, 2, p. 151-161. / Kokhan N.M. Pryjomy formuvanniya postmodernists'koyi ironiyi u tvorakh ukrains'koho lend-artu. In *Art and design*, 2, s. 151-161. / Кохан Н.М. Прийоми формування постмодерністської іронії у творах українського ленд-арту. In *Art and design*, 2, с. 151-161.

23. Kumwapee, N. & Jitwiriyanont, S. (2020). Expressing the opposite: Acoustic cues of Thai verbal irony. In *Proceedings of the 34th Pacific Asia conference on language, information and computation*. Hanoi, Vietnam, October 24-26, p. 439-446.

24. Lanchukovska, N.V. (2003). *The pragmatic aspect of intonation in the realization of irony in an English-language literary text (experimental-phonetic research)*. Synopsis for the thesis for the candidate degree in philological sciences. Speciality 10.02.04 – Germanic languages. Odesa: Odesa I.I. Mechnikov National University. / Lanchukovs'ka N.V. *Prahmatychnyj aspekt intonatsiyi v realizatsiyi ironiyi v anhlomovnomu khudozhn'omu teksti (eksperymental'no-fonetychne doslidzhennya).* Avtoreferat dysertatsiyi na zdobuttya vchenoho stupenya kandydata

filolohichnykh nauk. Spetsial'nist' 10.02.04 – hermans'ki movy. Odesa: Odes'kyi natsional'nyi universitet im. I.I. Mechnykova. / Ланчуковська Н.В. *Прагматичний аспект інтонації в реалізації іронії в англомовному художньому тексті (експериментально-фонетичне дослідження).* Автореферат дисертації на здобуття вченого ступеня кандидата філологічних наук. Спеціальність 10.02.04 – германські мови. Одеса: Одеський національний університет ім. I.I. Мечникова.

25. Lœvenbruck, H., Ben Jannet, M.A., D'Imperio, M., Spini, M. & Champagne-Lavau, M. (2013). Prosodic cues of sarcastic speech in French: Slower, higher, wider. In *14ᵗʰ annual conference of the international speech communication association (Interspeech 2013)*. Lyon, France, August 25-29, p. 3537-3541.

26. Leech, G. & Short, M. (1981). *Style in fiction: A linguistic introduction to English fictional prose.* London: Longman Group.

27. Marková, P., Filippová, E. & Volín, J. (2009). Suprasegmental markers of irony in acted and natural discourse. In *Proceedings of 19ᵗʰ Czech-German workshop speech processing*. Prague, September 25-27, IPE ASCR, p. 56-60.

28. McClennen, S.A. *The bitter irony of Donald Trump*. December 23, 2017. Available at: https://www.salon.com/2017/12/23/the-bitter-irony-of-donald-trump/

29. Meconi, F., Doro, M., Schiano Lomoriello, A., Mastrella, G. & Sessa, P. (2018). Neural measures of the role of affective prosody in empathy for pain. In *Sci Rep*, 8: 291. DOI: 10.1038/s41598-017-18552-y

30. *Merriam Webster's dictionary*. Available at: https://www.merriam-webster.com/dictionary/sarcasm

31. Paley, T.A. (2018). Irony as a means of political manipulation: The linguistic aspect (on the material of English-language political discourse). In *Scientific notes of V.I. Vernadsky Taurida National University. Series: Philology. Social communication*, 29 (68), № 1, p. 30-35. / Palyej T.A. Ironiya yak zasib politychnoyi manipulyatsiyi: Linhvistychnyj aspekt (na materiali anhlomovnoho politychnoho dyskursu). In *Vcheni zapysky Tavrijs'koho natsional'noho universytetu imeni V.I. Vernads'koho. Seriya: Filolohiya. Sotsial'ni komunikatsiyi*, 29 (68), № 1, s. 30-35. / Палєй Т.А. Іронія як засіб політичної маніпуляції: Лінгвістичний аспект (на матеріалі англомовного політичного дискурсу). In *Вчені записки Таврійського національного університету імені В.І. Вернадського. Серія: Філологія. Соціальні комунікації*, 29 (68), № 1, с. 30-35.

32. Panasenko, N., Greguš, Ľ. & Zabuzhanska, I. (2018). Conflict, confrontation, and war reflected in mass media: Semantic wars, their victors and victims. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava*. Warsaw: De Gruyter Poland, 2018, III (2), December 2018, p. 132-163. DOI: 10.2478/lart-2018-0017

33. Petlyuchenko, N., Petranová, D., Stashko, H. & Panasenko, N. (2021). Toxicity phenomenon in German and Slovak media: Contrastive perspective. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava*. Trnava: University of SS Cyril and Methodius in Trnava, VI (2), December 2021, p. 105-164.

34. Pieš, L. (2022). Threats related to false identities in the cyberspace. In *QUAERE 2022. Conference materials.* Hradec Králové: Magnanimitas akademické sdružení, p. 325-332.

35. Qaiwer, S.N. (2020). A study of irony in political discourse. In *Arab world English journal: Special issue on the English language in Iraqi context*, p. 2-17. DOI: 10.24093/awej/elt2.1

36. Riviere, E., Klein, M. & Champagne-Lavau, M. (2018). Using context and prosody in understanding irony: Variability amongst individuals. In *Journal of pragmatics*, 138, p. 165-172. DOI: 10.1016/j.pragma.2018.10.006f

37. Rodero, E. & Larrea, O. (2020). Audio design in branding and advertising. In *Innovation in advertising and branding communication*. Mas-Manchón, L. (ed.). New York: Routledge, p. 69-85. DOI: 10.4324/9781003009276

38. Schlöder, J.J. (2017). Towards a formal semantics of verbal irony. In *Proceedings of the workshop on formal approaches to the dynamics of linguistic interaction (ESSLLI 2017)*. Toulouse, France, July 17-21, p. 56-60.

39. Searle, J.R. (1991). Metaphor. In *Pragmatics: A reader*. Davis, S. (ed.). Oxford – New York: Oxford University Press, p. 519-539.

40. *Speech analyzer*. (2022). A computer program. Available at: https://software.sil.org/speech-analyzer/

41. Stashko, H. (2018). Phonetic and syntactic stylistic means in media space: Manipulation or emotional commonplace? In *Communication today*, 9 (2), p. 132-142.

42. Stashko, H., Prykhodchenko, O., Čábyová, Ľ. & Vrabec, N. (2020). Media images of Slovak and Ukrainian presidents: 'I/we' binary pronominal opposition in political speeches. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava.* Trnava: University of SS Cyril and Methodius in Trnava, V (1), June 2020, p. 350-389.

43. *The most popular politicians.* (2022). Available at: https://today.yougov.com/ratings/politics/popularity/politicians/all

44. Woodward, A. *Six times Donald Trump used 'sarcasm' to gaslight America*. April 27, 2020. Available at: https://www.independent.co.uk/news/world/americas/us-politics/donald-trump-sarcasm-twitter-jokes-gaslight-inject-disinfectant-a9486966.html

45. Xu, Y. (2019). Prosody, tone and intonation. In *The Routledge handbook of phonetics*. Katz, W.F. & Assman, P.F. (eds.). New York: Routledge, p. 314-356.

46. Zabuzhanska, I., Martovič, M. & Hekelj, M. (2022). Audiobranding in American and Slovak telecommunications advertising: A linguistic standpoint. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava*. Trnava: University of SS Cyril and Methodius in Trnava, VII (1), June 2022, p. 267-304.

47. Zabuzhanska, I. & Yamchynska, T. (2022). Communicative silence in political discourse: A case study on American and Ukrainian presidential speeches. In *Lege artis. Language yesterday, today, tomorrow. The journal of University of SS Cyril and Methodius in Trnava*. Trnava: University of SS Cyril and Methodius in Trnava, VII (2), December 2022, Special issue, p. 208-224.

Contact data

Author # 1

name:	**Inna Zabuzhanska**
academic title / rank:	CSc. (Philology) Assistant Professor
department:	Department of the English Language
institution:	Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University 32, Ostrozkoho St., Vinnytsia, 21001, Ukraine
e-mail:	izabuzhanska@vspu.edu.ua
fields of interest:	Phonostylistics, media linguistics, phonetics, postmodernism studies, political discourse.

Author # 2

	name:	**Lukáš Pieš**
	academic title / rank:	PhD student in Media studies
	department:	Department of Media Education
	institution:	University of SS Cyril and Methodius in Trnava 2, Nám. J. Herdu, Trnava, 917 01, Slovakia
	e-mail:	pies1@ucm.sk
	fields of interest:	Media education, media literacy, journalism, media studies.