Forensic Linguistics and Biology as/via Language and Gender Ratio

Dr. M.Sc. Senka Majetic [1]
Independent Researcher
B&H

ABSTRACT

The background of the "Forensic Linguistics and Biology as Language and Gender Ratio" issue could be summarized as attributed to the previous and current "structuralist variation paradigm (neglect)". When Forensic Linguistics is being mentioned, idiosyncrasy, nicknames, pseudonyms, loaning words, editorial variety in news media, broadcasting variation, personal variation, individual differences, circumstance variation, humour variation might be taken into account (cf. Crystal, 2000). The biological background of linguistic gender could be attributed to Darwin! Also, the main features of the so-called scientific register form a variable recognized as a set of register-specific functional verbs. The methods are an attempt to indicate a parallel between language and gender variable via statistics and controversially established list of female linguistic features normally attributed to "female language deficiency and difference" linguistic status. Therefore, it is essential to indicate the fact that the very essence of variation is already established physiological difference (cf. the illustrated in Figure 1). A scale based on mainly behavioural approach (cf. Tannen) enables methodologically led principle of authorship detection using gender variation as an initial in linguistic (gender) recognition procedure. The main finding of the study is an attempt to establish a set of parameters which, when combined with advances in statistics and computing, could be used as a forensic test of the "linguistically" produced as well as a parallel illustration of biologically physiologically dependent "gender linguistic variable". The conclusion is based on referring to the literature and is also an attempt to establish a parallelism between Forensic Biology and Forensic Linguistics as analogous to gender variable status in Linguistics.

Keywords: Forensic Biology, Forensic Linguistics, Language and Gender, Variational Linguistics, Darwinism

INTRODUCTION

An overview of the current literature is mainly "a sameness in scope" categorization, in compliance with which principle Forensic Biology is concerned mainly with DNA, and no more than that! However, the tendency to prove the originality of one's/somebody else's work is a direct link to its, enabled by the forensics´, forensic essence. Crystal (2000) shows the relation of idiosyncratic behaviour in terms of "demonstrating identity", in accordance with which main claims "the structuralism factuality" can be used to locate features of linguistic deviance that are of literary or every other interest. According to the same source (cf. Crystal, 2000):

> Some of these features are in widespread use, entering the definition of literary genres; others are restricted to individuals, forming the identification of potential stylistic features whether shared or idiosyncratic […] (Crystal, 2000, p. 423).

The structuralism ratio, in line with Crystal (2000), is being described as follows:

> [T]he more we know about the structuralist possibilities of language, the more we shall spot points of stylistic interest *when*[2] they arise […] (p. 423).

---

[1] Corresponding Author

[2] Emphasis S. M.!

Moreover:

[a]nd the more we shall be able to explain the nature of the effects; but the first step *the recognition*[3] of distinctiveness - is intuitive (in Crystal, 2000, p. 423). The "objectivism" i.e. the step forward the "more objective" approach to the issue of linguistic (and other) creation concerning structuralist paradigm, most notably a gender linguistic issue, "has seen considerable progress in providing *alternative methods*[4] for arriving at stylistic decisions, aided by developments in statistics and computing" (p. 423) (cf. Crystal, 2000). The notion is being recognized as "*stylostylistcs* and *sociometry*" […] accumulat[ing] a large body of *alternative*[5] procedures and several textual problems of *uncertain*[6] authorship (p. 423), which is (in Crystal, 2000) being recognized as "(Forensic) stylometry" (p. 423) including the following:

The basic approach is to calculate the frequency and distribution of a small number of linguistic variables in a text, comparing texts of unknown or uncertain authorship with comparable texts whose authorship is known (p. 423).

The (in Crystal: 2000) illustrated discourse analysis (cf. p. 423) of Henry James' and Austin's text production of 50 most common words which are than being reduced into 28 most significant, is an insight into the basic essence of (forensic) discourse analysis (in Crystal, 2000).

MATERIALS AND METHODS

The most significant discriminators (reduced) list, containing (in Crystal, 2000) 28 words is to be used (cf. Crystal, 2000). The words which are to be detected are as follows:

1 this	11 an	21 had
2 and	12 that	22 with
3 could	13 very	23 from
4 a	14 they	24 was
5 be	15 no	25 their
6 all	16 them	26 his
7 where	17 so	27 him
8 if	18 be	28 little (p. 423).
9 to (inf.)	19 not	
10 by (prep.)	20 herself	

Figure 1: Discriminatory (28) words (reduced) list

The main problem investigated is the authorship uncertainty. Therefore, the null-hypothesis is as follows:

The idiosyncrasy of the discourse could be established via frequency count using the discriminatory word set scale parameter. The test sample includes the keyword "heatwave" and is a 150-word long text from the daily online newspaper "The Independent" and "Mirror Online" accessed on 15th August 2024. The article selection is being determined exclusively via a predetermined keyword test. The general hypothesis that the idyosincrescy is to be determined and confirmed via the discriminatory word scale frequency test is being used as a marker of a potentially unique style. The additional goal is to present the usefulness of the approach and the need to use a similar approach when dealing with gender variable issues. The limitation of the approach is a test sample approach which is generally an insight into a state of affairs. The relation with the gender variable when the "structuralist armchair method" is
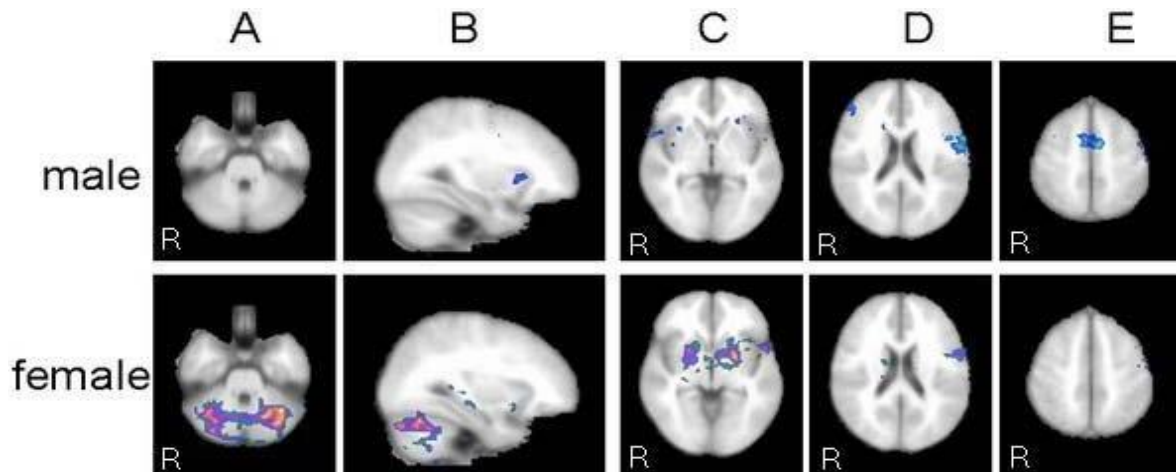
---

[3] Emphasis S. M.!
[4] Emphasis S. M.!
[5] Emphasis S. M.!
[6] Emphasis S. M.!

taken into account is a (derived) consequence of a parallel undevelopment and then the development of linguistic gender-dominated variation. The origin of the gender variable is frequently being denied! However, Darwinism-based theory is still being mentioned in one context or another! The illustrated (cf. what follows) indicates the physiological difference visible during the communicative act (cf. the MR scan as illustrated):

Figure 2: MR scan male-female brain (the physiological difference) (Majetic, 2024a, p. 19)

which when combined with the VIP statements: "One tongue is enough" (cf. Majetic, 2019/20, p. 162, Jespersen etc.) led to the creation of "deficiency theory" where the language of women had been considered deficient, male the norm, the change known as the "difference theory" is the origin of the linguistically motivated counter activity. Additionally, a well-known instruction set handbook publicised as the "lawyer tactic manual" of the time has considered a female defendant a special court case due to the fact that the comprehension concept is to be accomplished via communication (cf. Majetic, 2019/20, introductory sections). Also, the primarily grammatical distinction of gender variable/s (e.g. Indo-European linguistic group vs. other groups) (cf. Majetic, 2024a, p. 21) like *active he, she*, it vs. *aktivan, aktivna, aktivno* variation example within which the gender distinctiveness of the BCS gender linguistic variable is immediately recognizable and does not cross the grammar barrier! Also, after the painful changes, shifts and the need for conversions from Old into Middle and after Modern English variable, the need for the change seemed irrelevantly simple as the state of the norm is finally being structurally well established. In addition, the current newspapers, among other things, unfortunately report the following:

> [a]fter the adoption of the Law on Gender Equality in 2021, he stated that the law written in this way consciously works to destroy *the structure*[7] of the Serbian language, i.e. the Serbian national identity and that it tries to change the established *grammatical norms*[8] of the language, forcing double phrases that are not in the spirit of the language (Glas Srpske, 2024).[9]

> [n]akon donosenja Zakona o rodnoj ravnopravnosti 2021 godine, iznio je da tako napisan zakon svjesno radi na unistavanju *strukture*[10] srpskog jezika, odnosno srpskoskog

---

[7] Emphasis S. M.!

[8] Emphasis S. M.!

[9] Translation S. M.

[10] Emphasis S. M.!

nacionalnogg identiteta te da pokusava da izmjeni ustaljene *gramaticke*[11] norme jezika, forsirajuci dvojne fraze koje nisu u skladu s duhom jezika (Glas Srpske, 2024).[12]

leading the linguistic gender variable towards an alternative pathway… The relationship of Forensic Linguistics and Biology, in terms of gender variables in language, could be seen via the application of Robin Lakoff's female language parameters according to which female language is being described as follows: […]

proposes that women's speech can be distinguished from that of men in several ways (part of the gender deficit model), including:

1. Hedges: Phrases like "sort of", "kind of", "it seems like"
2. Empty adjectives: "divine", "adorable", "gorgeous"
3. Super-polite forms: "Would you mind..." "...if it's not too much to ask" "Is it okay if...?"
4. Apologize more: "I'm sorry, but I think that...
5. Speak less frequently
6. Avoid curse language or expletives
7. Tag questions: "You don't mind eating this, do you?"
8. Hyper-correct grammar and pronunciation: Use of prestige grammar
9. Indirect requests: "Wow, I'm so thirsty." – really asking for a drink
10. Speak in italics: Use tone to emphasise certain words, e.g., "so", "very", "quite" (in Majetic, 2023a, pp. 116-117).

After being described as the female "friends or so" research objects communicative act discourse analysis bias usable after the statistical (re)approach when combined with Tannen's behavioural sociopragmatic parameter scale, the original biologically originated gender variation diversification scale is being constructed (cf. the confirmed hypothesis in Majetic, 2023a; Majetic, 2023b; Majetic, 2023c; Majetic, 2023d).

RESULTS

The linguistic variation is being identified via the discriminatory reduced word test in the test sample obtained on 15th August 2024, containing the keyword "heatwave", taken from "The Independent" and "Mirror Online", containing 150 words in total. The discriminatory word "this" is identified three times in "The Independent" sample, four occurrences in "Mirror Online". The use of modals is the characteristic of "Mirror Online", the assertiveness of "the Independent"! The relative pronoun set is also found in "the Independent" which is enough to illustrate the difference in context and syntactic variation from "Mirror Online's" presentation of the described daily heatwave phenomenon.

A gender linguistic parameter identification practice is to apply sample discourse procedure similar to illustrated discriminatory test practice! For the analysis purpose a simple "word find" tool can be used, the insight into the shown result is a necessity due to the fact that for example if "an" is not separated via blank space it is recognized and counted as part of a word etc. - just a glimpse into the presented is an insight into potential overview of a/the hypothesized variation. Motivationally speaking, no other tool is necessary for the follow up descriptive conclusion result.

---

[11] Emphasis S. M.!
[12] Emphasis S. M.!

CONCLUSIONS

The main conclusion is the ratio: Forensic Linguistics : Forensic Biology = Language : Gender, presenting a current parallel status of the gender variable notion!

The current status of Forensic Biology is being directly linked to DNA sampling, discarding any further research of the phenomena! The real-world application of forensics´ into authorship issue, faced with constant claims and reclaim demands of/for the produced, shifts the forensic scope of Biology beyond DNA via inclusion of gender linguistic variables as long (its) disputed variable limited by grammatical exclusive status and enabled by constantly disputed societal (linguistic) parameters.

The need to address and expand the scope of Forensic Biology could be seen via a practical, real life, example where Huxley as the author of "Brave New World" (cf. Majetic, 2024b) has been described as not being one and as the one going into details of in vitro technology without the at the time not more than DNA structure popularization which is later being explained by Huxley's relative relations with biologists.

In the time when in vitro is an alternative for trans generation families and is occasionally being stopped due to the number of attempted fertilizations, if the fertilized is being considered a potential child, as the trans group members demand a uterus creation not for reproduction but abortion sensation (cf. Majetic, 2024c), the interdisciplinarity of gender and Biology creates a current demand trend analogues to Forensic Linguistics : Forensic Biology = Language : Gender, via this study, popularised proportion.

REFERENCES

Blackshaw, E. (2024, August 12). *UK weather: Exact dates 'second August heatwave' will send temperatures soaring again.* The Mirror. https://www.mirror.co.uk/news/uk-news/uk-weather-exact-dates-second-33445615

Crystal, D. (2000). *The Cambridge encyclopedia of the English language*. Cambridge: CUP.

Glas Srpske. (2024). https://www.glassrpske.com

Majetic, S. (2019/20). *A sociolinguistic analysis of asynchronous communication with special reference to gender differences in language use* [Unpublished Ph. D. dissertation]. Sarajevo: University of Sarajevo.

Majetic, S. (2023a). Applying medical truths to qualitative, descriptive and statistical gender spotting analysis of telephone conversations and dialogues of elderly population speech in Muriel Spark's novel Memento Mori, revisiting the deficit and genderlect models combined with interdisciplinary trends. *Eximia, 6*(1), 113–128. Retrieved from https://eximiajournal.com/index.php/eximia/article/view/223

Majetic, S. (2023b). Sociolinguistic, morphosyntactic, semantic and stylistic gender detection oriented comparative analysis of opening and topic sentences of an article published by The Guardian, The Daily Mirror, The Telegraph and The Independent. *Eximia, 6*(1), 90–110. Retrieved from https://eximiajournal.com/index.php/eximia/article/view/233 4

Majetic, S. (2023c). Animal Farm by George Orwell "Speech Act" Detection and Alienation Motif Symbol Operator Corpus Analysis Discussion. *Eximia, 12*(1), 109–123. https://doi.org/10.47577/eximia.v12i1.341

Majetic, S. (2023d). The Interdisciplinarity of Misogyny, Misandry and Misanthropy Gender Variations Corpus Analysis of Orwell's 1984. *Eximia, 12*(1), 133– 144. https://doi.org/10.47577/eximia.v12i1.351

Majetic, S. (2024a). *A Practical Overview of Semantic Variation Parameters of Gender Linguistic Variable and/or Semantic Variation Parameters of Gender Linguistic Variable Discourse Analysis Scheme.* Sarajevo: Master Graf.

Majetic, S. (2024b). *Huxley's Brave New World Postmodern Society Artificial Fertilization Dilemma/Solution Motif Gender-oriented Linguistic Elements Corpus Analysis and Ethical Issues Discussion*. Sarajevo: Master Graf.

Majetic, S. (2024c). The Interdisciplinarity of Language and Society: Gender Variation Variable. *Journal of Education, 7*(2), 45–87. https://stratfordjournals.org/journals/index.php/journal-of-education/article/view/2254.

Noyce, E. (2023, September 4). *UK weather mapped: Heatwave in your area as Indian Summer sees temperature soars to 31C*. The Independent. https://www.independent.co.uk/weather/uk-weather-forecast-heatwave-where-b2404535.html