University College Cork (UCC)



Dissertation Title

"The case of Gender Neutral Language in bilingual speakers of Greek and English"

Student Name Vasiliki Aliki Tzoutza

Student Number 122108011

Module Code AL6010

Course MAAPL

DirectorDr. Barbara Siller

Supervisor Dr. Seána Ryan

Date of Submission 24/09/2023

Table of Contents

1	Introduction	10
1.1	Non-binary language: Definition & Background	11-12
1.2	Hypothesis & Scope of the Thesis	13-14
1.3	Methodology Outline & Research Topics	15-16
2	Literature Review	17
2.1	Introduction	17-19
2.2	Language & Non-Binary Identities	19-20
2.3	Historical Background	21-25
2.4	Language Classification	25-28
2.5	Examples of NBL in some Indo-European Languages	28-34
2.6	Gender Neutral Language in the European Parliament	34-36
2.7	Gender Neutrality & Bilingualism	36-38
2.8	The "Foreign Language Effect"	38-39
2.9	Conclusion.	40-41
3	Methodology	42-43
3.1	Theoretical Framework	43
3.2	Data Collecting.	44-47
3.3	Data Processing.	48
3.4	Profile of Participants	49
3.5	Hypotheses	50
3.6	Limitations & Risks	50-51
4	Data Analysis	52
4.1	Questionnaire Results/Quantitative Data (Section B)	52
4.1	.1 Familiarity with Non-Binary Language Use	52-53
4.1	.2 Context of Exposure to Non-Binary Language	53-54
4.2	Attitudes of Non-Binary Language Use in English	55
4.2	2.1 Acceptability & Adoptability:	
	Grammatical Features in English	56-60
4.2	2.2 Conclusions of linguistic attitudes in NBL (English)	60-61

	4.3 A	Age Group Comparison	61
	4.4 A	attitudes of Non-Binary Language Use in Greek	61-62
	4.4.	1 Acceptability & Adoptability:	
		Grammatical Features in Greek	62-67
	4.4.	2 Conclusions of linguistic attitudes in NBL (Greek)	67
	4.5 A	Age Group Comparison	68
	4.6 E	Evaluation of Participants' Answers in Section D	68
	4.6.	Data Analysis & Interpretation of interview findings	69-73
	4.7 I	nterview Results/Qualitative Data	73-74
	4.7.	1 General Observations	75
	4.7.	2 Qualitative Data Analysis: Interview 1	75-77
	4.7.	3 Qualitative Data Analysis: Interview 2	78-79
	4.7.	4 Qualitative Data Analysis: Interview 3	80-81
	4.8 I	Discussion & Final Remarks	81
	4.8.	1 Research Question 1	82-84
	4.8.	2 Research Question 2	84-85
	4.8.	Research Question 3	85-87
	4.9	Limitations	87-89
	4.10	Conclusion of Data Analysis	89
5	Conc	usion	90
	5.1	Analysis of Research Questions	90-92
	5.2	Evaluation of the Methodology	92-94
	5.3	Limitations & Recommendations for future research	94-95
	5.4	Important Findings of the study	95-96
		Bibliography	97-108
		Appendix A: Questionnaire Sample	109-119
		Appendix B: Interview Questions & Transcripts	120-130
		Appendix C: Tables	131-132
		Appendix D: Information Sheet and Consent Form	133-137
		Appendix E: Ethics Approval Form	138-151

List of Tables

Table 1	53
Table 2	54
Table 3	82

4

Declaration

This is to certify that the work I am submitting is my own and has not been submitted for

another degree, either at University College Cork or elsewhere. All external references and

sources are clearly acknowledged and identified within the contents. I have read and

understood the regulations of University College Cork concerning plagiarism and

intellectual property.

Signed: Vasiliki Aliki Tzoutza

Date: 24/09/2023

Acknowledgements

I would like to express my gratitude to my supervisor, Seána Ryan, for her support, guidance, and encouragement throughout the preparation of the study. Her advice and feedback helped me turn my thoughts into this thesis. Thanks to her profound supervision, the research process was an extraordinary and inspiring experience. I truly appreciate her extensive knowledge and willingness to provide guidance on a topic including language aspects of both English and Greek.

I would also like to thank the academic staff of the master's program of Applied Linguistics for making my studies at UCC a truly fruitful and valuable experience.

In addition, I would like to thank every person who participated in this thesis, whose opinion shaped the outcome of the research in a unique way.

Finally, I would like to thank my family, especially my parents and sister for wholeheartedly supporting my education. A special mention goes to a beloved family member, Hera.

Abstract

The present thesis aims to investigate the issue of linguistic attitudes towards gender neutral (non-binary) language use in Greek and English, two language systems of differing grammatical structure. Considering the language index of grammatical gender dimensions (Gygax et al., 2019), natural gender languages (such as English) present various morphosyntactic differences with grammatical gender languages (such as Greek), a significant linguistic dissimilarity potentially impacting the way speakers perceive gender dimensions (masculine, feminine, neutral). With an emphasis on neutrality, the recent emergence of non-binary language features on a legislative level (e.g., that of the European Parliament) has raised questions around whether suggested guidelines on gender neutral language could be reasonably implemented in language settings other than English. Focusing on the Greek language system, a hypothesis is generated on the potential limitations Greek speakers face when using non-binary language features. On a secondary note, perceptive restrictions which may arise from the Greek grammatical structure in relation to the concept of non-binary identities are addressed. Using a mixed method approach, bilingual speakers of Greek (L1) and English (L2) are incorporated into the investigation of how language taxonomy based on grammatical gender distinctions impacts the use of non-binary language. Finally, the study also deals with the possible impact of bilingualism on the adoption of neutralization processes in Greek and English, as well as how foreign language use may affect the perception of non-binary identities.

Key Words: linguistic attitudes, non-binary language, gender-neutral language, bilingualism, grammatical gender, Greek bilinguals, sociolinguistics

Glossary

cognitive bias: unreasoned and flawed thought processes that individuals may experience when processing information

Foreign Language Effect (FLE): the notion that communication in a foreign language impacts speakers' cognition in aspects such as decision-making and evaluative skills (Keysar, et al. 2012; Circi, et al. 2021)

Greek Language question: a highly controversial topic that occurred in Greece after the Greek war of Independence (1821) and was finalized after the restoration of democracy (1976), with the establishment of *Demotic Greek* (language of the people) as the official language of the Greek state. The contrasting variant *Katharevousa* (purist language), which was mainly used in formal settings and sparingly in everyday life (unlike Demotic), was progressively replaced by Demotic Greek in language settings such as education and formal registers. In linguistics, the phenomenon is described as *diglossia*, whose roots can be traced in antiquity (e.g., Ancient Greece, Late Antique Syria, Mesopotamia). Today, the official language of Greece is referred to as *Modern Greek*, *Standard Modern Greek* or simply, *Greek*.

metacognitive processes: thought processes of critical awareness that include the way individuals evaluate, monitor and reflect on cognitive events

metalinguistic awareness: the ability to reflect on language properties (such as morphology, phonology, syntax) and understand their function beyond the purpose of communication

neologisms: the creation of any new word, phrase or morpheme that is introduced to our everyday language (e.g., *Latinx*, gender neutral term to refer to Latin American individuals)

non-binary language: an umbrella term used to indicate features of language that avoid references towards a specific gender (male or female) or to specifically refer to people who do not identify with the traditional binary. Gender neutral grammatical constructions and words have also been adopted by non-binary people to indicate gender non-conformity. The term *gender-neutral language* may be also used to refer to non-binary language issues. translanguaging: the dynamic process of practicing two or more languages to produce meaningful communicative activities, in which the speaker experiences different thought developments.

List of Abbreviations

FLE – Foreign Language Effect

L1 – First Language

L2 – Second Language

GG - Grammatical Gender

NBL – Non-Binary Language

RAE – Real Academia Española

1. <u>Introduction</u>

One of the central aspects of language research focuses on how individuals understand the world as reflected through language use. As a bilingual speaker of Greek (L1) and English (L2), observing how information is processed when code-switching initiated the author's interest in investigating the structures of language in order to explain the relationship between linguistic systems and perception. In particular, the study focuses on the sociolinguistic perspective of gender neutrality in the selected languages of Greek and English. The reasoning behind the morphosyntactic comparison on the grounds of nonbinary language is supported by the idea that grammatical properties potentially impact speakers' perception and comprehension upon the matter. For instance, considering Gygax's et al. (2019) Language Index of Grammatical Gender Dimensions to Study the Impact of Grammatical Gender on the Way We Perceive Women and Men, the crosslinguistic comparison included in the thesis is an attempt to explore how two language systems of differing grammatical structure, Greek (grammatical gender language) and English (natural gender language) accommodate the representation of people identifying as non-binary as well as the comprehension of such identities by binary interlocutors. Therefore, the study primarily deals with the morphosyntactic dimensions of gender neutrality in the selected languages as investigated through linguistic attitudes, whilst cross-linguistic perspectives on gender language processing (e.g., perception, comprehension) are secondarily discussed.

1.1. Non-binary language: Definition & Background

Non-binary language (NBL) is a term indicating the intentional avoidance of gender specifying linguistic features used for the description of non-binary individuals, whose gender identity is unmatched with the traditional binary (Barker, 2017). General terminology such as *gender-neutral language* and *gender-inclusive language* might also refer to linguistic choices for the shunning of gendered referencing, even if such terms technically apply to the elimination of sexist language.

The relationship between language and gender has attracted the attention of both public opinion as well as the research community. More specifically, the feminist movement of the 1960s and 1970s resulted in political and legislative reforms of an influential nature throughout the following decades (Ludbrook, 2022). For instance, international organizations (e.g., the United Nations) made significant efforts for the promotion of gender equality, including the implementation of gender inclusive language policies in declarations such as the *Convention for the Elimination of all forms of Discrimination Against Women*, 1979 (Rincker et al. 2019)

As of recently, the emergence of non-binary language has increased the visibility of individuals self-identifying beyond the traditional gender binary. According to Byram (2016), the reflection of non-binary individuals through language is correlated with the quality of inclusiveness. As a result, language properties facilitate the prominence of members of society marginalized by implicit standards concerning gender distinction. Nevertheless, the controversial nature of the issue has rendered the formal establishment of gender-neutral language a challenging task which is fraught with difficulty for each sociocultural environment.

Although the recognition of non-binary language features would potentially ameliorate the quality of life of members of the non-binary community by reducing the level of discomfort when being accidently misgendered by others (Barker, 2017; through Hansen & Zoltak, 2022), the implementation of gender-avoiding language strategies meets numerous challenges in each language system. As Hord (2016) mentions, speakers of gendered languages are faced with several grammatical challenges including changes in personal pronouns, adjectives, adverbs, etc. As a matter of fact, such seemingly simple modifications in everyday grammar have evoked a plethora of reactions. Effectively, the voicing of various unsupportive notions, questioning the argumentation of the non-binary movement has been extended on a sociopolitical and linguistic level, where extensive criticism is noticed on an ideological and grammatical level.

In relation to Sociolinguistics, the interdisciplinary field endeavoring to explain social occurrences through the lens of language, the rise of non-binary language use has been a relatively recent topic. In addition to its sociopolitical significance, the issue provides plentiful opportunities for linguistic research. Whereas the observation of lexical processes and changes are generally common in language studies, modifications of grammatical items, such as pronouns, which do not follow the conventional binary gender form, is considered a rare linguistic phenomenon, worthy of further investigation. Therefore, the research community has been focusing on analyzing aspects of the issue such as linguistic attitudes and language neutralization strategies.

1.2. <u>Hypothesis & Scope of the Thesis</u>

The societal progression of our era has led to practical solutions on issues of gender identity. Notable international organizations (e.g., European Union, Council of Europe, UNESCO, etc.) have been aiming to regulate through legislation the abolishing of sexist tendencies in language use as well as the promotion of the non-binary, by establishing frameworks for the implementation of gender-inclusive language, which oftentimes facilitating gender-neutrality. Having studied the European Union's agenda (2018) on neutralization processes in all European Union's official languages, a hypothesis was made for the purposes of this research study, which is based on the pragmatism of such an objective. While the idea of promoting a gender-inclusive language framework is a promising example of sociopolitical advancement, linguistic concerns might point at unrealistic expectations in some language systems.

From an academic perspective, issues in relation to non-binary language features have been mainly studied in commonly spoken language systems such as English, Spanish, and French. However, in the context of Greek linguistics, literature focusing on language and gender is limited to the investigation of the traditional binary gender and sexist tendencies. As a result, the insufficient research data in the Greek medium was a significant motive for the exploration of the present topic. Additionally, non-binary language features present a plethora of distinctive linguistic elements that provide several opportunities for scientific exploration. For instance, the interrelation between gender identity and pronoun use is a central point in gender neutral language. However, such grammatical functions (e.g., gender-neutral pronouns and neutralized word formation processes) are rare cases of over time language evolution.

Particularly, taking into consideration Gygax's et. al. (2019) grammatical gender language taxonomy, the present study focuses on investigating how grammatical structure can affect speakers' perception of non-binary identities in two different language systems, despite their ideological stances. For instance, English, as a natural gender language (lack of classification of inanimate nouns to grammatical gender distinctions), presumably facilitates the use of neutralized language as well as the comprehension of non-binary identities due to the lack of multiple morphosyntactic mechanisms to determine gender. Greek, on the other hand, requires multiple morphological modifications in order to facilitate a grammatically acceptable neutrality based on the language's three way grammatical gender categorization (masculine, feminine, neuter).

In order to explore this issue, these two language systems of different grammatical gender structure, English and Greek, have been selected to be studied in detail. The selection of those languages is also a conventional choice, as the study is conducted on bilingual speakers in the context of Greece. The participation of bilingual speakers facilitates the study by allowing the investigation of further research topics, apart from a grammatical language taxonomy comparison. For instance, issues such as the perceptive ability of bilinguals and the effects of foreign language use can be explored as secondary points of research. In addition, bilingual participants are able to share their opinion about the differences in observing and using non-binary language (NBL) in either language system through questionnaires and interviews. It is worth mentioning that the *metalinguistic awareness* possessed by bilingual speakers reinforces the in-depth investigation of linguistic attitudes, as their linguistic experience in different language systems enhances evaluative skills on linguistic matters, specific referring to language features (e.g., grammar, syntax) and creates an overall consciousness on language issues (Alipour, 2014). Lastly, as the hypothesis of the study has been initiated by the differences in realization and

adoption of NBL language as a result of bilingualism, it is essential to conduct the study with the incorporation of bilingual speakers.

1.3. Methodology Outline & Research Topics

The study employs a mixed methodology, analyzing the data gathered from a quantitative and qualitative perspective and therefore, incorporates both questionnaires and structured interviews, including various assessing tools to measure linguistic attitudes and comprehend the impact that grammatical gender might have on perceiving non-binary identities. The design of the study is organized in accordance to Bonnin & Coronel's (2021) framework, evaluating linguistic attitudes towards *Gender-Neutral Spanish*.

The aims of this study are focused on the investigation of linguistic attitudes towards non-binary language based on collection of quantitative and qualitative data from the participation of developmental bilingual participants of Greek (L1) and English (L2).

In particular, the following research questions are to be assessed:

- 1. How do participants perceive the use of non-binary language features in Greek in comparison to English?
- 2. Do grammatical differences between Greek and English impact participants' usage of non-binary terms, despite their ideological stances?
- 3. To what extent could Greek as a gendered language accommodate non-binary identities, according to the participants?

Therefore, the thesis includes the investigation of several sociolinguistic aspects related to the matter of non-binary language, with an emphasis on whether the Greek language, as a grammatically gendered system could include solutions for an appropriate description of non-binary individuals. Secondarily, processing levels of non-binary language in both languages are addressed, aiming to detect how cross-linguistic gender-neutral language could can affect interlocutors' understanding of the concept of non-binary identities.

2. <u>Literature Review</u>

2.1. Introduction

In the field of sociolinguistics, the correlation of language and gender identity has been extensively explored. Nonetheless, despite the respectable amount of studies on the reflection of gender in language systems, the emerging non-binary language broadens the horizons of sociolinguistics for further research. The following literature review will focus on the exploration of gender neutrality as observed through different language contexts. The main purpose of this investigation is to contrast the language systems of English and Greek regarding the differing mechanisms to accommodate gender neutrality and their impact on speakers' perception of the concept of non-binary identities. Accordingly, a hypothesis is proposed considering the adoption and acceptance of gender-neutral features in the contrasting languages. Specifically, it is assumed that English, as a natural gender language, accommodates non-binary terms more efficiently than Greek, a grammatical gender language. Consequently, speakers' language use and mental perception is hypothetically considered more restricted in the latter case. Particularly, the review aims to cover various relevant themes of gender-neutral language. Such topics deal with;

- a) the historical context of the concept of gender neutrality as developed in several settings;
- b) the selected taxonomy of languages as categorized by grammatical gender distinction;
- c) examples of non-binary language proposals in some Indo-European languages;
- d) the framework of the European Parliament towards gender neutrality in its official languages;
- e) the discussion of bilingualism in the expression of gender neutrality as observed in speakers of different grammatical gender language systems;

Thus, it is important that information is provided from a historical, linguistic, and sociopolitical perspective prior to conducting research. Particularly, a presentation of the
historical background includes pivotal points to comprehend the emergence and influences
of non-binary language use in our societies. Additionally, the language index of
grammatical gender (GG) is of utmost significance, since the nature of this study is
comparative, as English and Greek are classified into separate GG categories and therefore,
use different strategies to express neutrality. The inclusion of other Indo-European
languages in this literature review should be beneficial to observing similarities and
differences within other systems with structural relationships. Moreover, evaluating the
issue on an institutional level, that of the European Parliament, brings to the surface the
impracticalities of adopting a similar framework into different linguistic systems for factors
unrelated to ideologies, but rather to morphosyntactic barriers. Therefore, by involving the
issue of bilingualism, it is feasible to uncover functions of some language systems (e.g.,
English) to accommodate gender-neutrality more efficiently than others (e.g., Greek) as
reflected by the speakers' code-switching choices.

2.2. <u>Language & Non-Binary Identities</u>

Human language is characterized as a distinctive tool that enables individuals to convey purposeful messages (Pagel, 2017). However, its functions are not solely limited to the production of communicative acts. In fact, within the field of sociolinguistics, the association of language features and identity factors has been discussed by renowned scholars, who developed central theories regarding the construction of identities through language. To cite an instance, Bourdieu's (1977) framework on the sociological interpretation of linguistic matters stressed the *symbolic power* of language, apart from its communicative functions (Norton, 1997). Therefore, Bourdieu's pivotal ideas encouraged the theorization of language as a linguistic system practiced within a social context, valuing factors such as gender, background, class for the attribution of identity (Norton, 2009) through; Hornberg & McKay, 2010). In reference to Llamas and Watt (2010), the relationship between language and identity is an essential component of human experience. In particular, the authors of Language and Identities (2010) highlight that language functions play a crucial role in determining people's identity, as it connotates information for the description of people's appearance, behavior, and background. Additionally, another central aspect of language and identity is the progressive, continuous nature that determines the interrelation which is influenced by the constantly shifting contexts of communication (Llamas and Watt, 2010). Therefore, language features allow the attribution of people's unique traits that mark several key facets of their identity.

On this account, fundamental principles developed in the area of language and identity may be engaged in the exploration of language and gender neutrality. Notwithstanding this, according to Skubich (2019), linguistic systems and gender have been thoroughly investigated by the research community with an evident priority on the binary distinction, overshadowing the existence of non-binary identities.

The dynamic nature of human speech has facilitated the visibility of marginalized communities (Diaz et al., 2022). Considering the interrelation between language evolution and social development, the gradual recognition of non-binary identities in society is signified in morphological shifts and lexical additions, worthy of linguistic analysis. As Darr (2016) notes, the reflection of humans' intrinsic traits may be denoted through simple language features, such as pronouns.

The emergence of gender-neutral language is pertinent to every participant in communicative acts. Despite the self-representative use of neutralized features, binary individuals' language choices are vital to thoughtful interaction with non-binary referents and contribute to the communication of inclusive language. Nevertheless, on a pragmatic level, this task is challenged by factors beyond attitudes and ideologies.

According to Gygax et al. (2008), grammatical gender influences mental representation of speakers in different language systems. Taking into consideration the strongly different construction of grammatical gender in two selected languages; English and Greek, a hypothesis is created on the grounds of establishing non-binary language use. Specifically, in the former case, English as a *natural gender language* might accommodate the visibility and acceptability of non-binary identities more effectively than Greek, a classified *grammatical gender system*. As a result, speakers' ideological perception of the non-binary might be influenced by grammatical construction. The question is posed on whether language systems impact the adoption of the emerging non-binary features despite the speakers' ideological attitudes on third gender identities.

2.3. <u>Historical Background</u>

According to Vergoossen (2021), language planning in gender inclusiveness has been primarily centered around enhancing the visibility of women to challenge androcentrism. Specifically, the feministic movement of the 1970s initiated the need of linguistic change in the English language to diminish sexist tendencies, influencing other linguistic systems as well. Recently, however, the concept of non-binary identities has been progressively gaining recognition (Thorne et al., 2023), urging the inclusion of non-binary gender options in spoken and written language. The gender-neutral language reformation played a significant role for transgender liberation as well, which emerged in the 1990s (Zimman, 2017). In fact, transgender communities encouraged the initiation of gender-neutral language in an attempt to destress the explicit use of conventional binary language (Hord, 2016). Therefore, to employ their eclipsed identity, transgender and non-binary people incorporated the use of linguistic features such as pronouns and lexicon in a way to accommodate their individuality (del Caño, 2019). To fill the language gap, pronouns had to be semantically shifted, whereas formulation of new lexicon was also necessary (Wong, 2017).

However, as the present world is characterized by various forms of interconnectedness, such as globalization and multiculturalism, we might erroneously attribute the unprecedented emergence of gender-neutral identities as an innovative trait of our advanced era. Despite the linguistic and ideological flourishing as emerged in commonly spoken languages (like English), non-Western communities have been advocating the incorporation of non-binary systems for centuries.

Dozono (2017) presents a thorough overview of the indigenous cultures who had put the traditional binary into question, rendering its present time evolution less pioneering than

what we might think. Specifically, in his article, *Teaching Alternatives and Indigenous Systems in World History: A Queer Approach*, the author mentions elements of third gender identities as observed in the indigenous Latin American cultures of Oaxaca. For instance, the term "muxes" has been used in Southern Mexico to indicate biologically male, self-identifying non-binary people, adopting mixed characteristics of both traditionally assigned genders in their appearance and behavioral patterns (Mirande, 2016). Dozono aptly comments that such lexical evidence functions as proof of how non-Western cultures had conceptualized the world prior to the era of European colonization. Such terms cannot be comprehended the same way the Western World conceives third gender identities, as they are not necessarily related to sexual preferences or transsexuality, but rather describe the combination of both genders into a third identity.

As explained by Dozono (2017), other linguistic features indicating non-binary systems are found in India ("hiras"), Native American communities of Canada & USA ("two spirit people/ twospirited"), Fon language of Dahomey & Benim ("mino" warrior women), Hawaiian & other Polynesian Cultures ("Mahu").

Turning our attention towards Greek, language and gender-related studies have been investigated by Greek scholars in the past. (Makri-Tsilipakou, 1989; Canakis, 2011; Pavlidou, 2015). In recent years, efforts have been made to promote gender inclusive language in order to diminish the use of generic masculine terms. On the other hand, as mentioned by Pavlidou (2015), gender studies have been delayed in the case of Greek, in comparison to other European languages such as English, German, and French, as a result of the political repression of the Greek military junta of 1967-1974. Pavlidou (2015) mentions that research on language and gender issues in Greece emerged in the 1980s, as influenced by *international tendencies*. On the other side, non-binary language use is considered a significantly contemporary approach to embracing inclusiveness, which has

not been widely established in Greece. Specifically, unlike English, in which evidence on gender-neutral language dates back to the 15th century (Grove, 2021), no documented data has been reported in earlier stages of the Greek language. In fact, the issue of non-binary language in Modern Greek has not been investigated in detail by Greek scholars, but has recently raised concerns among translators, journalists, authors, as well as academic communities. Due to the acknowledged restrictions of the Greek language in denoting gender neutrality when referring to individuals, a significant dilemma has been created towards the adoption of neutralization strategies. As mentioned by Georgiopoulou (2022), Greek author Filippos Mandilaras considered language shifts a challenge, but also a great opportunity to investigate elements of the Greek language, since it fundamentally includes a third gender option. According to Georgiopoulou (2022), during Mandilaras's process of writing a book with two gender-fluid characters, the author considered gender neutral language as a way for the younger generation to react to binary conventions and labelling. Additionally, in 2018, the Center for Translation Studies (Κέντρο Εκπαίδευσης Μεταφραστών) published guidelines concerning the use of gender-neutral language, focusing mainly on diminishing sexist language (Georgiopoulou, 2022). Moreover, in April 2022, the Aristotle University of Thessaloniki (AUTH) accomplished the innovative incorporation of a third gender option for the participants of Center of Education and Lifelong Learning offered by the university. Such events indicate the first elements of adaptation of Greece towards non-binary acknowledgement in society and language.

In an English-speaking context, the case of gender neutral language in English has been discussed to a much greater extent than other Indo-European languages in both public opinion and academic fields. Specifically, advocacy for the representation of genderneutral identities stemmed from the pivotal *second wave feminist movement*, arising in the 1970s, a social battle against the use of discriminatory attitudes and language with the

primary example of the generic *he* pronoun (Hord, 2016). However, the use of generic pronouns has been historically observed in literature. According to Grove (2021), the singular usage of the personal pronoun *they* is by no means a novel addition to the English lexicon. In fact, McWhorter (2008) comments that in the *Sir Amadace* story written in the 1400s, the phrase *Iche mon in thayre degree* ("Each man in their degree) includes the use of singular *they* pronoun. (McWhorter 2008, pp.65; through Grove, 2021). Another example is found in William Shakespeare's *Much Ado About Nothing*, who included his own use of singular *their* as observed in the line "God send everyone their heart's desire", in the 17th century. (Grove, 2021). It is worth mentioning that the pronoun is used to describe generic references, rather than gender neutral identities. Therefore, on a grammatical level, generic linguistic features have been detected in earlier stages of the English Language. However, on a conceptual level, the use of terms indicating non-binary identities has not been clarified.

In modern era, the most common linguistic elements used for the expression of gender-neutrality in English are "preferred pronouns" and "singular they" (Bonnin & Coronel, 2021), whose adoption encourages both gender equality and non-binary conformity. In particular, according to Hord (2016), despite the disapproval of gender-neutral morphology by prescriptivists characterizing such language use as *ungrammatical*, encouraging perspectives are noticed in English-speaking media through the incorporation of gender-free language.

On an institutional level, the inclusion of gender neutral options in English is noticed in several universities. For instance, Harvard is one of the major American universities, presenting gender classification protocols extended to more than two options, indicating that students are given the opportunity to select preferred pronouns to complete their registration (Bonnin & Coronel, 2021).

Finally, such language tendencies have played an impact on other linguistic systems (e.g., French, Spanish, Italian, German, Swedish), which have developed alternatives for the expression of gender-neutrality through adaptations based on their morphological structure.

2.4. <u>Language Classification</u>

In the field of linguistics, gender neutrality is signified through different morphosyntactic devices based on the structure of each language system. Therefore, language classification is a necessary process to comprehend the grammatical and semantic mechanisms that interlocutors make. Hord (2016) highlights that grammatical gender systems have a direct impact on how speakers process gender neutrality. King (1991) and McConnell-Ginet (2011) support this notion, by underlining that genuine gender-neutral implications are not found in systems like French, as efficiently as in English. As a result, it is significantly harder for speakers of French to make use of gender-neutral language.

Gygax et al. (2019) note that acknowledgement of gender in society is partly established by the way we communicate. Specifically, in gendered language systems including, Greek, Spanish, French, Italian, etc., gender neutrality - whether on a grammatical and/or semantic level - features more complex processes. As Stahlberg et al. (2007) mention, grammatical gender languages require much more effort to formulate language neutralization strategies because of the large amount in grammatical shifts of personal nouns and pronouns. This variation has led to the establishment of taxonomies of language based on the way nouns are organized in gender systems.

Accord to the grammatical gender taxonomy proposed by Gygax et al. (2019) grammatical gender taxonomy, the following categories include:

- 1) Grammatical gender languages: in which (in)animate nouns are in grammatical agreement with lexical features such as determinants, adjectives, and pronouns (e.g., Greek, Spanish, German, Italian)
- 2) Languages combining features of grammatical gender and natural gender: in which grammatical gender distinction exists for inanimate nouns and some animate nouns, linguistic distinction for male or female referents is indicated through pronouns (e.g., Norwegian, Dutch)
- 3) Natural gender languages: in which no grammatical gender classification of inanimate nouns is observed, whereas animate nouns do not indicate gender identity but rely on personal pronoun use (e.g., English, Swedish)
- 4) Genderless languages with elements of grammatical gender; in which the majority of animate nouns and some personal pronouns are used without gender distinction, few gendered suffixes are observed (e.g., Basque)
- 5) Genderless languages: in which no gender-marked constructions are observed, but occasionally some gender suffixes referring to animate nouns (e.g., Turkish, Finnish)

When we look at the two languages at the centre of this study, it is obvious that English and Greek present significant differences within their grammatical function, resulting in the speakers' distinctive semantic conceptualization of gender. As previously mentioned, English is classified as a natural gender language, indicating the lack of grammatical gender in nouns and inflections. Accordingly, English, and other natural gender languages, such

as Swedish, are morphologically constructed to accommodate gender neutrality more effectively than gendered-based systems. Particularly, in a study conducted by Hord (2016), participants claimed that reflecting non-binary identities is more manageable in English, making statements about their disappointment in expressing themselves in gendered languages. For instance, the study includes the following respondents' revelations:

"In learning French I have noticed how much gender neutrality the English language allows" (Respondent 164)

"French makes me sad when I think about gender-neutral language" (Respondent 151)

"[In] German I struggle a lot with language and [I am] often very unhappy with the situation of Gender gender neutral language [...] That the language is very gendered is a big problem in my life" (Respondent 98)

On the other hand, Greek follows a different morphosyntactic system of assigning gender. Ralli (2002) & Karayannis et al. (2021) propose a *three-way gender distinction* system, where gender functions as a feature of a noun stem in agreement with the syntactic processes of the utterances (Kaltsa et al., 2017). Particularly, Greek includes salient criteria to designate gender. According to Karayannis et al. (2021), those include; a) *lexical*, where specific terms *inherently* indicate gender (e.g., mitera "mother"); b) *morpho-phonological*, where suffixation in nouns signals gender class (e.g., kathig-itria "female professor"); c) *referential*, where gender is specified pragmatically. Therefore, gender neutrality is challenged in a Greek-speaking context, due to the morphological constraints, as well as the lack of officially established non-binary lexicon. As Pavlidou (2015) specifies, particular focus is required in the role of grammatical gender in Greek, since "every Greek

noun [...], and other element in the sentence controlled by the noun has to be marked for grammatical gender". As cited, McConnell-Ginet's (2003:91 through; Pavlidou, 2015: pp.5) makes an insightful comment regarding the Greek and English gender discrepancy; "If for English speakers it is difficult 'to talk about a third person without attributing sex to them', simply because of the gendered third person pronouns she and he (and the like) in the English language, then one realises how often speakers of Greek have to automatically/routinely/subconsciously accommodate questions of sex-attribution"

Therefore, this classification is particularly useful for cross-linguistic comparisons and documentation of the mental effects that morphological features might have on speakers.

2.5. Examples of Non-Binary Language in Indo-European Languages

As explained, each language system includes different strategies to accommodate gender inclusiveness, due to the distinctive morphological properties as well as the localization challenges. Generating the example of gender-neutral languages such as English and Swedish, neutralization mechanisms are significantly more applicable for grammatical and semantic purposes in comparisons to gendered systems like Greek, Italian, Spanish, and French.

Specifically, the English language accommodates gender fluidity through several language tools, including pronouns, neologisms, honorifics, even proper names. The most common feature can be attributed to the use of the generic *they* pronoun. Dating back to the 15th century (Grove, 2021) evidence reveals the use of singular *they* to avoid assuming referents' gender. As Grove (2021) mentions, the alternate functions of *they* pronoun covered the lack of grammatical generic features. Over the years, its generic use has been applied to indicate non-binary identification, shunning discriminatory language, and

effectuating the linguistic visibility of marginalized groups. To this day, singular *they* exemplifies one of the most well-established features of non-binary language in English. Other linguistic features include neologistic pronoun sets that are frequently used by individuals who do not ascribe to binary gender. According to Imborek et al. (2017), preferred pronouns such as *ze/zir/zirs*, *hir/hirs*, *ne/nir/nirs* might be included in official documents depending on the country's policies towards gender-inclusive language. Another example includes the newly coined usage of non-binary honorifics. In Chui's (2021) article focusing on evolving language, the use of gender-neutral title of *Mx* is mentioned, an officially added lexical item to the Oxford Dictionary as recently as 2015. Referring to the traditional titles (Ms, Miss, Mrs, Miss), the author comments on their restrictive and discriminatory usage for individuals with non-binary self-identification, raising the need to linguistically and politically establish such neologistic terms.

Like English, the Swedish language falls into the category of natural gender morphology, where two third person grammatical options indicate gender ("han" for males, "hon" for females). Endeavoring to include more gender-fair elements in, the gender-neutral pronoun hen first emerged in the linguistic spectrum of Swedish in 2012 in different publicized works. (Vergoossen et al., 2021). Despite the initial skepticism, the implementation of gender-neutral conclusions by Swedish speakers was gradually associated with positive attitudes. As Gustafsson Sendén et al. (2015) mentions, a remarkable shift to a more positive outlook and increased use of third gender-neutral hen pronoun was observed since 2014. In contrary with other European languages, Swedish presents promising adoption of gender neutral features, since it is expected that unfavorable reactions will be normalized hereafter (Gustafsson Sendén et al., 2015). For instance, one of the results of Gustafsson's et al. (2015) study indicates that different attitudes were observed over time, where the initial resistance to the use of "hen" in 2012 was almost nonexistent three years later.

In the case of Greek, Pavlidou (2015) notes that language and gender studies were not developed in Greece until the 1980s. As mentioned by Pavlidou (2015), the reasons behind this delay could be mainly caused by the political situation of the country. However, after the fall of the military regime in 1974, crucial sociopolitical changes occurred, facilitating the investigation of linguistic research on gender-related issues in the Greek language. Firstly, the end of the chronic *Greek language question* signified the resolution of language tensions with the establishment of *Demotic Greek* (vernacular variant of Modern Greek) as the official language of the state (Gkaragkouni, 2009). At the same time, the emergence of the feminist movement in Greece prompted the questioning of gender-related representation in language. As a result, the progressive political stability as well as the influence from international tendencies on language and gender issues enabled the establishment of extensive research on the matter.

However, despite the authorized termination of *Greek diglossia*, language-related issues continued being a point of concern in Greece, challenging the incorporation of newly developed features (Dendrinos & Theodoropoulou, 2007). According to Dendrinos & Theodoropoulou (2007), during the 1980s, notable academics warned of a decline in the Greek language. This indicated that any change, especially in the case of linguistic borrowing and foreign influences, would connote a threat against the pure form of the Greek language. Despite the lack of official data on the attitudes of gender neutrality in Greek, the prevailing resistance against foreign impact (mainly that of English) might truly hinder the acceptability of gender-neutral language. On an institutional level, the establishment of gender inclusive language policies is mostly absent, and third gender visibility is significantly underdeveloped in comparison to other European countries, such as Sweden.

On an academic level, most studies conducted on the Greek language have focused primarily on sexist language between the traditional binary, placing a noticeable question mark over any linguistic occurrence of non-binary features. Therefore, non-binary inclusion is not officially reflected in the Greek language system. However, recent suggestions include the use of plural pronoun "αυτοί/autoi" (they/them) in a similar fashion with generic they pronoun or the use of grammatical neutral suffixes. Other solutions are found in graphemic methods in gender neutral writing (Haralambous & Dichy, 2019) as suffixation to avoid gender references including; a) usage of a vertical bar to include both male and female suffixes in words (e.g., mathitis/tria "male student, female student), b) usage of "@" grapheme to omit gendered suffixation (e.g., mathit@). However, graphemic suffixations are non-existent in formal Greek and can be typically observed on Internet communications. Specifically, the combination of Latin letters and graphemic suffixations to communicate in Greek on online environments could be technically categorized as *Greeklish*, a term generally referring to the transliteration of Greek alphabet characters with equivalents of the Latin alphabet and/or numbers (Koutsogiannis & Mitsikopoulou, 2003). However, the literature does not include non-binary language features of on-line communications in Greek as part of the hybrid system of Greeklish. In regards with administrative language applications, as cited by Kouvela (2016), in 2016, the Greek Ministry of Internal Affairs published instructions on the "Insertion of the gender dimension in administrative documents", in which the use of both male and female forms are recommended (through Haralambous & Dichy, 2019). However, such ministerial recommendations were formally intended to apply gender-fair language to battle sexist stereotypes.

On a similar note, the incorporation of non-binary language in Spanish is very limited, due to its morphological structure. As a grammatical gender system, Spanish morphology and lexicon ensures the depiction of the masculine or feminine binary, rendering linguistic neutralization solutions particularly more challenging than English or Swedish. In fact, the Spanish language has been characterized as "androcentric", with the reflection of gender asymmetries (Diaz et al., 2022). According to Bonnin and Coronel (2021), the visibility of feminist approaches (as appeared in both literacy criticism and public opinion) instigated efforts of linguistic activism for Spanish speakers. Despite the argumentation against the establishment of gender-inclusive language by the Spanish Royal Academy "Real Academia Española" (RAE), rendering inclusive morphology as unnecessary, actions against linguistic became more noticeable in the late 90's and early 00's (Bonnin and Coronel, 2021). Specifically, grammatical alternatives were proposed in order to facilitate the referencing of people whose gender-identity does not agree with the traditional binary. The innovative gender-neutral options included the replacement of binary morphemes -a and -o by x or -@ (Bonnin and Coronel, 2021). However, due to pronunciation restrictions, in 2012, a new option including the morpheme -e was introduced. As Papadopoulos (2022) comments, Spanish presents the most gender-inclusive innovative solutions among the Romance languages. In the paper A Brief History of Gender-Inclusive Spanish, Papadopoulos (2022) explains that the e and x gender inclusive morphemes are most frequently proposed to enhance visibility of non-binary Spanish speaking people. In addition, the generic pronoun elle has recently gained popularity as an alternative grammatical representation for the non-binary. Nevertheless, as the most prominent institution of prescriptive Spanish, RAE strongly rejects the official establishment of linguistic gender-neutrality, despite the increasing validation of its usage by universities and other institutions (Papadopoulos, 2022). Notwithstanding the limited research on gender-neutral Spanish, recent studies have focused on pedagogical practices in genderneutral (including non-binary) Spanish (Diaz et al. 2022; Tosi, 2019) and linguistic attitudes (Bonnin & Coronel, 2016).

Presenting close similarities with the previously mentioned systems, the Italian language is heavily gendered, hence the increased challenges in avoiding the assumption of gender through grammatical mechanisms. Armellini (2023) mentions the partial appreciation in gender neutral language proposals with the introduction of suffixes such as asterisks "*", and the use of "schwa" (a) to promote gender inclusiveness. However, as cited, Italian linguists of *Accademia della Crusca* express opposing views to such innovative alternatives (Armellini, 2023).

The French language sets another example of a grammatical gender linguistic system, whose morphology determines masculine and feminine forms. In a francophone context, the issue of gender-inclusive language emerged with the rise of the feminist movement of the 1970s (Péters, 2020). Earlier neutralization proposals included pronouns such as "ille", "iel.", "yel.", "ielle" (Labrosse, 1996). In his detailed paper, Péters (2020) explains the introduction of newly formed morphemes to accompany gender-neutral pronouns such as "lae", "cellui", and "celleux". Such neo morphemes are the result of contractions of traditional French pronouns, constituting attempts to promote gender inclusiveness. Additionally, inclusive punctured affixes ("point median") are also frequently used to denote gender-inclusiveness, especially on online settings (e.g., étudiant.e) (Shroy, 2016). Nevertheless, formal establishment is yet to occur as such shifts have sparked controversy within France as well. Unlike Canada's supportive stance towards *Écriture inclusive*, the French Government has expressed its opposition to legal proposals of inclusive language (Burnett et al., 2021). Consequently, the contrast between France and other Frenchspeaking countries brings into question the discouraging position of the former, where sociolinguistic factors need to be investigated.

However, in all aforementioned instances, those radical linguistic changes are yet to be normalized on a verbal and political level. Grammatical innovations are not always perceived as an evolving process of the dynamic nature of language, where opposing grammarians and political adversaries have expressed their opposition to the formal establishment of gender-neutral proposals.

2.6. Gender Neutral Language in the European Parliament

In an institutional context, organizations such as the European Parliament and the United Nations have implemented policies and proposed guidelines to reinforce gender neutrality in legislative language (Hugues, 2020). In the former case, Papadimoulis (2018), Vice-President of the European Parliament underlines the pioneering actions of the institute to adopt *multilingual guidelines* to embrace linguistic and cultural blossoming, enhancing gender neutrality in all official languages. As mentioned, procedures to include genderfair languages were introduced since the 1980s, finding successful grounds at the present time within International and European frameworks (including the United Nations, European Commission). Nevertheless, such guidelines appear to emphasize the establishment of equality between the two binary genders, whereas references to non-binary individuals are not clarified, despite their practicality for third gender identities.

From a linguistic perspective, the case of the European Parliament is of particular interest, since a) the evolving nature of language is considered in a political context, b) gender-neutrality is proven to be impractical in various language systems despite the ideological intentions.

Aiming to ensure the promotion of gender inclusive language to a permittable extent, guidelines recommend its adoption by administrative members such as translators and

authors in the language events of writing, translating, or interpreting. As the Vice-President notes, even though authors and interpreters have awareness of the principles of gender-neutral language, multiple restrictions hinder its applications. For instance, intentions for particular use of binary language need to be respected, whereas unintentional mistakes when interpreting rapidly may occur. Lastly, cross-linguistic constraints that render neutralization strategies inapplicable should be considered.

Placing the attention on the multilingual context, the European Parliament's guidelines appear to include awareness of the difficulties of incorporating gender neutral principles in all official language contexts. Therefore, the institution recommends a variety of strategies based on the grammatical typology of the specific system. (Papadimoulis, 2018). Following a three-way language taxonomy on the grounds of grammatical gender, in natural gender languages (e.g., English, Danish, Swedish), reduction of gender specific features is suggested. In that case, neutralization is mostly implied, indicating the avoidance of referring to a particular gender ("Spokesperson" instead of "Spokesman"). In regard to grammatical gender languages, the category within which Greek, Romance & Slavic languages fall, the European Parliament clearly states the impracticality of neutralization processes, due to the grammatical agreement of lexical terms with personal pronouns that always indicate a specific gender. Therefore, alternative solutions are recommended, including feminization strategies, suggesting the use of feminine suffixes to traditionally masculine terms. As well-intended this could be for the avoidance of sexist language, this proposal does not appear useful to incorporating gender-neutrality in grammatical gender languages as it occurs in English. In the last category of genderless languages (e.g., Estonian, Finnish, Hungarian), no particular suggestion is included, since their morphological structure does not designate grammatical gender.

In general, the European Parliament suggests the avoidance of masculine terms (e.g., manpower), honorifics (replaced by full names) regarding all official languages but sets specific guidelines for English as a widely used communicative medium. Specifically, *plural forms, imperatives, pronoun omission, passive voice* are recommended, whilst generic use of "they" pronoun is characterized as a neologism, yet to be established (European Parliament, 2018).

2.7. Gender Neutrality & Bilingualism

This section of the Literature Review will look specifically at the features related to gender (specifically neutrality) in bilingual language processing. In general, regarding the functions of the bilingual brain, literature commonly suggests the influence of L1 features towards L2 processing (Odlin 2005, Jarvis and Pavlenko, 2008; Serratrice, 2013; through Nicolaidis et al., 2021). As discussed previously, languages are classified based on their grammatical gender system. Scholars (Mullen, 1990; Konishi, 1993; Heartlé, 2017; Gygax et al., 2019) have expressed interest in investigating the potential correlation between grammatical gender language taxonomy and speakers' perceptions of gender representation. In the case of gender neutrality conceptualizations, speakers of nongrammatical gender/genderless languages putatively present more liberalized stances towards gender fairness issues in comparison to speakers who designate the gender of lexical terms (Perez & Tavits, 2019). In line with Perez and Tavits (2019), cognitive psychologists support the notion that language has an impact on humans' thought processes. The way language and cognition are intertwined is examined in the *Linguistic* Relativity hypothesis (Sapir-Whorf) (Samuel et al., 2019). Specifically, according to Samuel et al. (2019), evidence of how language shapes speakers' cognitive processes is found in various research areas (e.g., task-based color discrimination/matching). However, Samuel et al. (2019) highlight that the parameter of grammatical gender has been

considered an effective tool for research on linguistic relativity. More particularly, attention is brought to how different languages assign grammatical gender to nouns. For example, several languages' grammatical structure determines the gender category of nouns (e.g., in Italian *il letto*; masculine), unlike English (e.g., *bed*; no gender based semantic gender system).

Consequently, gender varieties in language systems potentially influence individuals' attitudes towards questions of gender identity. For instance, in their study, Perez and Tavits (2019) examined gender attitudes between bilingual speakers of Estonian (genderless language system) and Russian (grammatical gendered language system). The results brought to the surface that the former group presented non-judgmental views towards gender equality in politics, suggesting the role of gender-neutral language in advancing gender perception.

In the matter of non-binary use as perceived by bilinguals of different noun class systems, a limited literature explores code-switching processes and *translanguaging* in relation to adopting different identities. Particularly, Li (2011; through Kaplan, 2022) notes that *translanguaging* considers the ways people present different identities in different contexts through multilingual acts. In a study focusing on *binary constrained code-switching* (Kaplan, 2022) examined the language alternation behaviors on identity issues. Participants included non-binary bilinguals of French and English, who were asked to provide descriptions of themselves in each language. The results indicated the following striking points; a) the difficulty participants faced in using non-binary language in French, owing to the lack of language features, and anticipated negative attitudes with interlocutors, b) the significantly preferable use of English in describing gender neutral identities due to its morphological system, accommodating gender neutrality, as well as the plethora of lexical terms to accompany the description of identity issues.

As a result, based on the pre-existing studies, it could presumably be supported that speakers of Greek might cope with analogous issues in perceiving and using gender neutral language, in contrast with an English-speaking context. Notwithstanding this, further investigation needs to be conducted.

2.8. The "Foreign Language Effect"

Bilingualism is nowadays mostly correlated with a variety of advantages in terms of intercultural communications, career opportunities, but also cognitive and socio-emotional processes (Dewi et al. 2021). With an emphasis on the functions of the bilingual brain, several studies have highlighted the effects of foreign language use on brain abilities like cognitive control, evaluative skills, decision-making and moral assessment. In particular, in reference to the foreign language effect, Białek (2023) suggests that when using a nonnative language, speakers experience metacognitive processes that affect the act of making decisions, especially when including risk factors. Bialystok & Craik (2010) report research on the interrelation between language and cognitive functions, as attributed to bilingualism. Specifically, in the article on Cognitive and Linguistic Processing in the Bilingual Mind evidence is evaluated for bilingualism's effect on cognitive ability and executive-control function. The findings present beneficial aspects of the ability to speak more than one language. In addition, a study carried out by Keysar et al. (2012) supports that speakers of a foreign language experience cognitive effects such as reduced emotional response and increased analytical thinking, due to the decrease in automative thinking when speaking a language other than their first one. For the conduction of the study, the research team included bilingual participants who were assigned to complete a series of tasks in either their first or foreign language. In the experiments followed, participants were asked to respond to questions based on decision-making. The results suggested that speaking in a foreign language has an impact on decision-making, which was mostly associated with

boosted emotional distance and deliberation, leading to disinclination to tendencies of biased thinking. Specifically, it is suggested that first language (L1) use is correlated with a higher degree of automative thinking, while second language (L2) use is linked with reduced automaticity in emotional processing. (Keysar et al., 2012; through Pavlenko, 2012). As a result, the researchers concluded that bilingual speakers were less prone to *cognitive biases* when using a foreign language (Keysar et al., 2012; through Białek, 2013). In terms of the effects of foreign language use on moral reasoning, Hayakawa et al. (2017) conducted experiments with the participation of bilingual speakers with a L2 of either German, English, or Spanish to evaluate subjects' responses on *moral dilemmas*. The findings indicated that foreign language use might increase careful consideration, but also inhibit emotional thinking, affecting deontological actions. In addition, it was mentioned that foreign language use potentially increases speakers' ability of performing practical acts, as they "feel less".

Based on the aforementioned literature on foreign language use and cognition, it could be hypothesized that bilingual speakers using non-binary language features present different thought processes when making linguistic choices in two languages. However, despite the findings of relevant literature on brain function of bilinguals, the explanation of cognitive and linguistic mechanisms in is need of further research.

2.9. Conclusion

In conclusion, the linkage between social movements and linguistic shifts brings to the surface the progressive character of the contemporary era to challenge stability and unconventional social norms. On a positive note, the cumulative use of the emerging non-binary language features is recognized as a crucial issue seeking plausible solutions to facilitate the visibility of marginalized individuals, hence the increased attention by the scientific and political communities in the recent years. Additionally, the investigation of historical events regarding language and gender identity uncovers the evolving character of the contemporary era and the successful efforts of marginalized communities to gain visibility within society. However, apart from their sociopolitical value, such shifts should not be disregarded due to their rare linguistic emergence.

It is also worth mentioning the differing degree of visibility and acceptability of similar language shifts in each language context. For instance, in the case of Greek, the issue of gender neutrality was belated in comparison to other European contexts. The lack of scientific research on non-binary language features of Greek indicates the limited interest in that area. Admittedly, the concept of third gender identities has not flourished in Greece as it has in other European countries. On the other hand, the impact of globalization and Anglocentrism is reflected in language shifts, where such neutralization tendencies mainly stem from the English medium, which is often considered a threat to other languages. Generating the example of the European Parliament guidelines, despite the non-discriminatory intentions, proposals observed in English cannot be applied to other European languages, pointing out the linguistic constraints of grammatical gender languages. By exploring the morphological features of the contrastive languages of Greek and English, it is evident that common proposals cannot be practiced. Therefore, adopting a non-binary language framework might be hindered by linguistic constraints, rather than

ideological beliefs. Consequently, the attention is placed on whether gender language classification could potentially impact the way speakers perceive third gender identities.

In the following research, the issue of bilingualism will play a central role in determining the correlation of non-binary perception in languages of different grammatical gender classification. The question is raised on whether Greek, as a grammatical gender language, hinders the conceptualization and adoption of the non-binary language features, unlike the case of English. By comparing the language attitudes of bilingual speakers of Greek and English (*Questionnaire Section C*), it will be attempted to investigate the impact that primarily linguistic factors have on the use of non-binary language use. Finally, considering the influence of foreign linguistic tendencies on the Greek language, another question is raised on whether speakers of Greek should ignore the recent emergence of non-binary neologisms or adapt to morphosyntactic and lexical modifications to include genderneutral features (e.g., pronouns, honorifics, suffixes) (*Questionnaire Section D*).

The next chapter refers to the description and justification of the research methodologies and instruments included to support the study. In addition, the section outlines the reasoning behind focal points including; the design of the study, data gathering, participants' characteristics, background assumptions, and constraints assessment.

3. <u>Methodology</u>

In sociolinguistics, the design and creation of research projects is characterized by high levels of complexity requiring rigorous selection when choosing a methodological approach. Bearing in mind the aim of deciphering the interrelation of language choices with social phenomena, a merely numerical evaluation of linguistic data might lead to insufficient results, hence the necessity of extending the methodology to include qualitative grounded research instruments that might facilitate more in-depth examinations.

In this study, the collection of data is designed based on a mixed method research activity, in an attempt to provide an insightful exploration of linguistic opinions as depicted through questionnaire and interview answers. Specifically, the incorporation of the aforementioned research tools places the emphasis on the investigation of the linguistic attitudes of bilingual speakers of English and Greek in order to bring answers to the following research questions:

- 1. How do participants perceive the use of non-binary language features in Greek in comparison to English?
- 2. Do grammatical differences between Greek and English impact participants' usage of non-binary terms, despite their ideological stances?
- 3. To which extent could Greek as a gendered language accommodate non-binary identities, according to the participants?

According to Bonnin & Coronel (2021), attitudes concerning inclusive language are classified in two variables; a) linguistic ideologies, and b) gender distinction position. In

this case, both variables will be investigated, due to the interconnected impact on the speakers' linguistic choices. However, the central point of the research is primarily of linguistic value as the language choices of the participants might depict the morphological challenges that Greek possibly presents in comparison to English regarding non-binary features.

3.1. Theoretical Framework

Based on Bonnin & Coronel's (2021) theoretical framework, the study aims to explore nuances of attitudes towards non-binary features in both languages. Specifically, the main three distinctions include:

- a. Acceptability
- b. Adoptability
- c. Rejection (linguistically or ideologically related)

As Bonnin & Coronel (2021) mention, *acceptability* indicates attitudes in which participants accept the use of non-binary language features in communicative acts produced by others. On the other hand, *adoptability* reveals the willingness to include gender-neutral language use in the participants' distinctive language choices. Lastly, *rejection* is considered to be linked with linguistic or ideological factors (e.g., peculiar language choice or opposing ideas towards gender neutrality).

3.2. <u>Data Collection</u>

The data collection aims to analyse linguistic attitudes towards gender neutrality in both languages in the light of to the participants' responses. In order to achieve this a mixed type of methodology, including quantitative and qualitative research tools has been selected so that both numerical results as well as deeper insights from questionnaires and interviews can be investigated.

In regard to the former method, a questionnaire has been designed to collect subjects' observations. As a research tool, survey questionnaires have been particularly useful as a convenient method of collecting a significant amount of data in an expeditious, adaptable, and versatile manner. In the field of language research, questionnaire distribution has been favoured due to their applicability for the aim of reviewing language attitudes (Dörnyei & Taguchi, 2009). Therefore, its psychometric properties facilitate the purpose of language research to collect valid and reliable data and consequently, analyze it in statistical work. Particularly, this surveying instrument has been adjusted to the needs of the survey based on the ranking scale design of Bonnin & Coronel (2021), who evaluated subjects' attitudes towards *Gender-Inclusive Spanish* in a two-dimension model; a) acceptability (assessed as acceptance, weirdness, and non-acceptance) and b) adoptability (willingness to incorporate gender neutral features in speech).

The questionnaire consists of four sections (A,B,C,D) including several fixed questions to be self-completed by the participants in order to reflect a wide variety of opinions towards non-binary language in Greek as an L1 and in English as an L2. Subjects have been notified about the informative utility of the questionnaire, suggesting that no answer is considered "incorrect", but rather appreciable. Therefore, the questions have been composed in an effort to encompass a variety of attitudes that might support the hypothesis that

grammatical gender impacts the perception of speakers towards the concept of third-gender identities in the contrasted languages.

At the beginning of the questionnaire, participants are asked to fill in a few factual questions to provide a clear subject description that will be evaluated in the process of data analysis. More particularly, demographic characteristics such as age, gender, country of origin, and level of education are included since such background data might be considered of high relevance to the interpretation of the findings. Moreover, additional information regarding the language level of the participants is asked since the survey is focused on bilinguals.

Following the completion of personal details in Section A, a series of general questions (scale ranking/ multiple choice) regarding subjects' familiarity with gender neutral language in both English and Greek is introduced. Collecting data such as degree of awareness and frequency to being exposed to gender neutral features is essential for the association of linguistic attitudes, since the rate of exposure to such sociolinguistic phenomena might impact participants' overall views. For instance, high levels of exposure to gender neutral language use in English presumably contributes to the normalization of neutralization processes in comparison to infrequent use of such features in Greek.

In Section C of the questionnaire, following the example of Bonnin & Coronel sentences that describe a specific stance to evaluate linguistic attitudes, twelve utterances (six for each language) are included and adjusted based on typical non-binary features of each language system. The utterances are created in an attempt to detect participants' linguistic attitudes towards specific non-binary features in each language. In addition, the utterances are included in an effort to contrast the morphological distinction of the comparing systems

and evaluate whether non-binary language features could be effectively incorporated in communicative contexts of languages such as Greek (grammatical gender language).

It should be noted that the utterances used portray common characteristics of non-binary language as observed in each context. For instance, in the English language, the use of singular they/them pronouns is considered a typical example of non-binary features. However, neutralized and graphemic suffixes are commonly used in Greek to imply gender-neutrality. As a result, including utterances that present equivalent linguistic phenomena of non-binary language was considered more suitable than implementing literal translation procedures of the same examples in both languages. Specifically, translation practices could potentially lead to several challenges (such lack of equivalence in neologisms, omission of suffixes) as both English and Greek present a different degree of adaptability to non-binary expression. In addition, the study's focal point is maintained on the grounds of linguistic attitudes in a pragmatic context. Therefore, it should be clarified that the use of utterances do not examine non-binary language in the field of Translation.

The utterances were formulated based on observations on similar communicative activities that have been traced in various internet sources including non-binary focused articles, interviews published on web sites, and examples of online dictionaries. However, the utterances included are slightly modified for the purpose of originality. In addition, each instance of speech presents a distinctive feature of non-binary language use, in order to detect if/which specific neutralization processes in grammatical features is found more acceptable than others in both languages. Thus, subjects are asked to select the description of linguistic attitudes that expresses their opinion towards the use of non-binary features in all 12 instances of written communicative activities.

The final section, D, includes 14 questions in the form of mainly multiple choice, and with the completion of specific short answers where needed. The questions in Section D are created to provide an in-depth understanding of similar and differing sociolinguistic stances of bilinguals in English and Greek, emphasizing the concept of non-binary perception based on grammatical and mental processes made when code-switching as observed in bilingualism.

However, considering the challenges of investigating attitudes in sociolinguistics, a qualitative type of research method is also employed. Specifically, for the third research question, concerning the question of Greek as a system to accommodate non-binary language, an interview with 3 participants (1 from each age group) has been organized in order to fill the research gap of the questionnaires and explore the matter thoroughly. In addition to this, another objective is to explore participants' identity as bilinguals and how this might impact their perception on non-binary language. It is worth mentioning that the interview type includes both structured and discursive strategies, indicating the application of fixed questions in combination with emerging interrogatives based on the participants' responses. Therefore, this research tool facilitates the qualitative type of research by bringing to the surface more detailed evaluations on the subjects' positions. Lastly, interviews are conducted in the Greek language, as this might be helpful for the interactive practice and an explicit understanding of participants' thoughts.

\

3.3. Data Processing

The data processing includes the careful collection and categorization of participants' answers in order to numerically organize the findings and present them in the summary of percentages for readers' convenience. This approach refers to the mathematical interpretation of quantitative data as included in the research tool of the questionnaire. Specifically, following the gathering and structuring of the subjects' responses using tables (see *Appendix C*) for better transparency of the results, an algorithmic formula is implemented to turn numerical data into the ratio of percentage via online calculators. For instance, participants of Group 1 (see *Table 1* of *Data Analysis*) presented a 60% familiarity rate in total. This percentage was calculating by dividing the overall score of participants' answers representing their degree of familiarity on a scale from 1 (really unfamiliar) to 5 (really familiar) by the overall score of the rating scale question.

Example:

Group 1

Participant 1 (2 out of 5)

+

Participant 2 (4 out of 5) = 9 (participants' total score) / 15 (highest score

possible) = 60%

+

Participant 3 (3 out of 5)

3.4. Profile of Participants

In total, nine participants have been recruited in three age groups. The first category of young adults consists of two female and one male participants around the age of 23-24 years old. The second group of adults includes two male and one female participant aged 28-50 years old, whereas the last category is organized with the participation of three female subjects of 62-70 years old.

All participants are developmental bilinguals of Greek (L1) and English (L2). The criteria of subject selection included two primary language factors: a) native level language competences in Greek, and b) proficient language skills in English. In addition, subjects present various experiences of English language exposure. Specifically, one participant has acquired a bachelor's degree in English Language and Literature, whereas four other participants have spent a considerable amount of time in an Anglophone country or community (1-4 years). In addition, the educational level of the participants is high, with the majority having obtained a Master's Degree. It is worth noting that none of the participants identifies as non-binary. In that way, the study focuses entirely on how willing non-marginalized individuals view gender neutralization strategies, as well as the potential differences in code-switching processes. Finally, participants' anonymity is being maintained throughout this research study.

3.5. Hypotheses

Bearing in mind the grammatical gender language taxonomy (Gygax et al. 2019), and therefore, the morphosyntactic difference between the contrastive languages, it is expected to make the following observations. Firstly, more restricted linguistic ideologies on non-binary language use in Greek and higher degree of adoption and acceptability of non-binary features in English are anticipated. In addition, neologistic pronouns such as ze/zir are believed to be less acceptable and adoptable by participants in comparison to generic they/them use. Lastly, participants' perception of gender-neutral language in English is presumed to be more acceptable to the first age group (young adults) due to the recent, gradually increasing social visibility of non-binary identities.

3.6. <u>Limitations & Risks</u>

It is vital to keep in mind the research constraints presented in the study. Firstly, all participants identify with the traditional binary, rendering the overall evaluation of the case insufficient for individuals who use non-binary terms for self-identification. However, subjects' gender binary is still considered valuable as it correlates with the vast majority of the population. In addition, due to their numerical superiority, binary individuals' positive attitudes on gender neutral language might contribute to the normalization of gender-neutral features in quotidian speech. Another restrictive point is caused by the limited number of participants. Whilst the total of 9 subjects is considered adequate to reach plausible results, the study could presumably bring to the surface a greater variety of conclusions, had the participation been enhanced. Additionally, lack of previous studies in the case of Greek limits the scientific background to support the hypotheses and to compose a thorough literature background. Moreover, considering that gender neutrality constitutes

a relatively recently emerging concept in a Greek context, participants might present unopinionated positions due to the potential lack in knowledge upon the matter. Furthermore, bearing in mind the inadequate scientific sources, challenges to detect bilingual functions are increased. Lastly, the issue presents various multidimensional points such as languages, cultural background, bilingualism, and gender studies determining the complexity of the study to draw certain and unequivocal conclusions.

4. Data Analysis

This chapter deals with the analysis and interpretation of the data collected using both quantitative (through questionnaires) and qualitative approaches (through interviews). The importance of data analysis in this study is to evaluate the linguistic attitudes on non-binary language in English and Greek, as well as to determine the potential impact that grammatical gender has on speakers' language choices and processing of third gender identities. Having completed the process of data collection, the information gathered will be evaluated in a) a numerical/logical approach, using basic arithmetic mean for sum calculation as well as percentage calculators and b) a non-numerical/conceptual type of information assessment.

Furthermore, data indicating personal details (e.g., in Section A), are considered useful for the overall interpretation of linguistic attitudes based on factors such as *age*, *educational level*, *language competence etc*. Lastly, in terms of the analysis of interviews, respondents' quotes have been organized so that it reflects important evident about their point of view on language matters in relation non-binary linguistic construction in English and Greek.

4.1. Questionnaire Results/Quantitative Data (Section B)

4.1.1. Familiarity with Non-Binary Language (NBL) Use

As discussed in the preceding chapter, in order to investigate the linguistic attitudes of bilingual speakers of Greek and English, it is necessary to consider the level of familiarity that participants presented on non-binary language use. Specifically, in Section B of the questionnaire, two parts with general questions were included, aiming to measure participants' awareness of the matter in order to provide reasonable evaluation of the upcoming questions. The results indicated that subjects of Group 2 (26-50 years old) presented the highest level of familiarity with the concept of non-binary language. In

addition, the familiarity index in English received the highest score in Group 1 and Group 2. Regarding the use of non-binary language in Greek, a reduced level of familiarity was observed, especially in the age category of Group 3. Overall, participants of the eldest age group presented the lowest amount of familiarity from a general perspective.

Table 1: Familiarity Index

Familiarity	Group 1	Group 2	Group 3	Total
NBL theme	60%	66%	46%	57%
NBL English	66%	66%	40%	57%
NBL Greek	40%	60%	26%	42%

4.1.2. Context of Exposure to Non-Binary Language

The second part of Section B focused on evaluating the context in which participants might have observed features of non-binary language in English, followed by Greek. Specifically, subjects were asked to answer the questions by indicating their opinion with an "X". Participants could also provide personal ideas in an open-type answer. A variety of responses was observed in the comparison of languages. In terms of English, the category of "Media" (such as Facebook, Twitter, Youtube, etc.) was distinguished, followed by the option of "Movies". On a similar note, the most popular context of exposure in Greek was attributed to "Media", followed by the option of "None". Therefore, the profound impact of social media such as *Facebook, Twitter, YouTube* on non-binary language promotion is evident in both languages. Notwithstanding this, insufficient exposure in the case of Greek signifies the reduced usage and awareness of the matter, in comparison to English. The lack

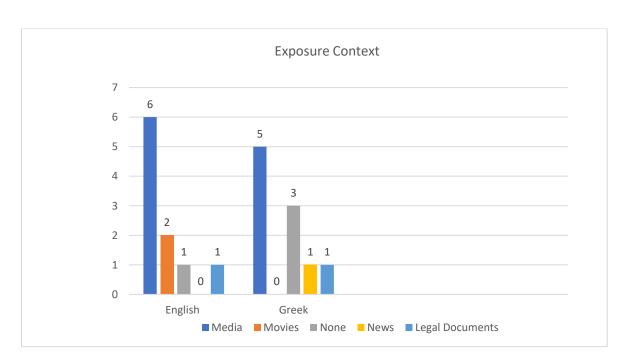
of observing inclusive language features in Greek can be linked with the lower percentages in *Familiarity Index*.

Table 2: Context of Exposure to Non-Binary Language

Context	English	Greek
Media (Facebook, Twitter, Youtube, etc.)	6 (answers)	5
None	1	3
Movies	2	0
Legal Documents	1	1
News (via television, radio, internet)	0	1
Surveys	1	0
*Other	1	0

^{*}Other: "English Professional Documents"

Graphic 1: Context of Exposure



4.2. <u>Attitudes to Non-Binary Language Use in English (Section C/Rating Scale</u> Ouestions)

In Section C, subjects were asked to express their attitudes towards selected linguistic phenomena that indicate the use of non-binary language. The section included two parts: 6 utterances in each language system with features used to refer to non-binary individuals, as well as elements of gender inclusive language. The attitudes were divided in two nuances; the first one evaluating acceptability, unacceptability, and weirdness, and the second one focusing on willingness or unwillingness to use such features on an individual level. Apart from attempting to compare linguistic attitudes towards the selected languages, attention was also drawn to the detection of a potential difference in (un)acceptability and (un)adoptability in specific linguistic features like the usage of generic they pronoun in comparison to neologisms such as ze. Particularly, in Section C (English), utterances A & B included typical use of non-binary language features such as unisex proper nouns ("Alex/Jay") and singular they/them pronouns. Moreover, utterances C & D were intentionally created with the use of non-binary neologistic honorific ("Mx") and neopronouns ("ze/zirself"). Lastly, utterances E & F contained features of generic terms covering gender assumption such as use generic they pronoun and the gender inclusive noun "chairperson" (instead of "chairman" or "chairwoman").

Therefore, the utterances of Section C were formulated in order to detect; a) the differences in linguistic attitudes in the comparing languages, and b) which grammatical and lexical features (e.g., pronouns, articles, neologisms, etc.,.) are considered more acceptable and applicable when using non-binary language.

4.2.1. Acceptability & Adoptability: Grammatical Features in English

Overall, all age groups projected high rates of "acceptability and adoptability" in nonbinary language use in English. However, divergent views were noticed based on the category of utterances, potentially due to the variety of grammatical items used.

a) They/them pronouns

A. "This is my friend, **Alex**. I met them at a concert".

Particularly, in *Utterance A*, the subjects' answers revealed high figures of acceptability (66%) and adoptability (77%), especially as observed in Group 2, in which all participants described the utterance as "Acceptable, and I would use it". Attitudes describing weirdness (33%) and unwillingness to adopt such features (22%) were noticed to be less popular, whereas no answer suggested unacceptability.

B. "Jay is working on Friday night, so they cannot join us".

Similarly, Utterance B was described by participants as "Acceptable, and I would use it", validating the positive attitudes towards the embracement of generic terms to convey non-binary addressing, as primarily noticed in Group 2. In particular, the total rankings indicate mainly acceptability (77%) and adoptability (66%), taking into account smaller percentages of weirdness (22%), no desire for adoptability (33%) and complete rejection of the attitude rendering the utterance unacceptable. The results indicate a reasonable correlation to Utterance A, possibly due to the similar linguistic features used to evaluate subjects' attitudes. Therefore, the combination of unisex proper name with the deliberate usage of singular *they/them* pronouns to signify non-binary identities receives positive responses according to bilingual speakers of English.

In general, Utterance A and Utterance B received similar scores, indicating a general supporting stance towards features such as unisex proper nouns and singular use of *they/them* pronouns.

b) <u>Neologisms (honorifics, neo-pronouns)</u>

C. "Mx. Smith left the wallet on the table".

The instance of Utterance C includes the neologistic honorific "Mx.", which was used in order to evaluate the difference of newly coined non-binary terms in comparison to unconventional use of already existing linguistic features (e.g., pronouns). The results revealed a noticeable hesitation considering the acceptability index, in comparison to the previous phrases. Specifically, data processing indicated a greater variety in attitudes, with the predominant one corresponding to the descriptions of "Acceptable and I would use it" and "Weird, but I would use it". Particularly, in this case, the index of acceptability (44%) and weirdness (44%) received corresponding scores, maintaining however, the willingness to use the neologism "Mx" (33%). It is worth mentioning that 3 subjects expressed no desire to adopt the neologistic honorific, most of them deriving from Group 1. In addition, only one participant described the phrase as "Unacceptable".

It is essential to clarify that Group 2, including adults, showed a remarkable result of positive attitudes, according to which all three subjects provided a full acceptance & adoptability rate, followed by Group 3 of elders who interestingly outnumbered the positive attitude scale in comparison to younger participants. Whereas it is challenging to comprehend the difference of linguistic attitudes towards neologisms based on the age gap, neologisms can be anticipated to be thought-provoking in everyday language use, due to

comprehension challenges, as they include recently coined language elements, especially used within members of the non-binary community.

D. "Ze is a singer and wrote that song zirself".

On a similar note, Utterance D presented uncommon use of neologistic non-binary features of "ze" and "zirself", functioning as third-person subject pronoun and reflexive pronoun, respectively. Such grammatical items were developed in order to fully substitute traditional gender-indicating pronouns as well as the generic use of singular they/them pronoun. As anticipated, the recently emerged linguistic item received the lowest level of acceptability (22%) and adoptability (22%) in non-binary language use as observed in English. The results render the linguistic features equivalent to the attitude description of "Weird, and I wouldn't use it", specifically indicating the utterance as "weird" (55%), with a high percentage of participants showing no desire to use such lexical items (77%). The attitudes of acceptability and unacceptability were embraced by 22% of the participants, respectively. On a similar scale, adoptability of the utterance scored a total figure of 22%. Consequently, the observation of less receptive attitudes towards phrase D, in comparison to other types of English non-binary language, indicate a higher degree of hesitation to the exposure and usage of the neologistic features, potentially because of the rarity in usage and incomprehensible meaning in everyday communicative activities. Lastly, it is worth noting that Group 3 presented the most receptive views on neo-pronouns, followed by Group 2. Therefore, despite the anticipated analogy between positive linguistic attitudes and younger generations, on average, attitudes of Group 1 corresponded with description of "Weird, and I wouldn't use".

c) Gender-Inclusive Terms

E. "A patient must trust their doctor".

Following, *Utterance E* presents a typical usage of gender inclusive language, without necessarily serving the purpose of addressing to non-binary individuals. Specifically, the subject "patient" does not indicate gender, whereas the singular pronoun *their* is used in a generic way to avoid gender assumption. Therefore, the context of this utterance indicates a different usage of the singular *their* pronoun, in comparison to Utterance A & B, in which the interlocutor presumably points out a non-binary reference. Drawing the attention of the results, all subjects gave one of the highest acceptability (88%) and adoptability (77%) scores of Section C in the case of English, corresponding to the attitude description of "Acceptable, and I would use it". A possible justification of the score can relate to the participants' observation towards the difference using pronouns in a generic manner to avoid gender assumption and targeted non-binary usage. The utterance was described "weird" by only one participant, while two participants showed no desire to adopt such features.

Overall, singular *they/them/their* pronouns are positively embraced in all age groups, with the highest acceptable and adoptability degree noticed in Groups 1 & 2.

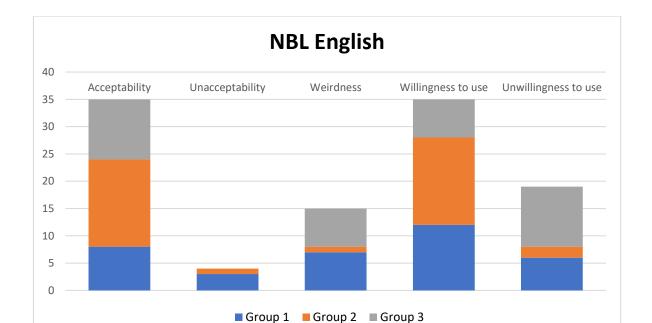
F. "The **chairperson** rejected this proposal".

The last example of Section C in English included the neutralized noun "chairperson", used to evaluate attitudes towards gender inclusive language overall in a pragmatically conventional way (in the sense that no neologisms were used). Participants considered the language use as "Acceptable, and I would use it", pointing a similar result to Utterance E, with 88% describing the phrase as "acceptable" and 77% as "adoptable". Therefore, it would seem that the English language facilitates morphological processes to use gender

inclusive terms, without the need of grammatical irregularities. On average, Group 2 presented the most positive linguistic attitudes in this instance, presenting a perfect score of acceptability and adoptability.

4.2.2. Conclusions of linguistic attitudes in NBL (English)

As a result, based on the ratings of participants, regardless of age group, the evaluation of non-binary language use in English corresponded to the attitude description of "Acceptable, and I would use it". It is worth citing that generic use of singular they pronouns was embraced in a more accepting way in comparison to neologisms. However, the language use received promising linguistic attitudes, in general, rejection of a particular grammatical and/or lexical feature, in terms of unacceptability and unwillingness to use, was observed only in Utterance D.



Graphic 2: Attitudes towards Non-Binary Language in English

4.3. **Age Group Comparison**

The data processing revealed a remarkable outcome of positive attitudes by Group 2 (26-50), which presented a perfect "acceptable & adoptability" rating in several utterances (B,C,E,F). In addition, Group 3 (51-70) also indicated a significant positive acceptance of non-binary language use in English. The youngest participants of Group 1 marked the lowest score comparatively, but still projected positive attitudes overall. However, these results, given the small amount of participants cannot be presented as definitive. In addition, the age factor might be of insignificant consideration as participants' personal stance and individual interest in the matter might provide a more plausible justification to the data interpretation.

4.4. Attitudes to Non-Binary Language Use in Greek (Section C/Rating Scale Questions)

In a similar fashion to the collection of linguistic attitudes in English, the utterances in the Greek language included a variety of phenomena that could be used to refer to non-binary individuals. For example, the proper name "Jason/Ιάσων" was accompanied by the article "το", which is specifically used to refer to neutral words, especially when describing inanimate objects. Therefore, the combination of a neutral article with a male proper name is grammatically unorthodox and semantically confusing, according to the traditional use of the Greek language. Other linguistic processes included neutralized suffixation to describe gender neutrality or to avoid gender assumption. For example, adjectives like "ενεργό/active" in Utterance A, "έτοιμο/ready" in Utterance B, and "αγαπημένα/darlings" in Utterance C are grammatically constructed to describe gender neutrality, but on a pragmatic and semantic level, such suffixation processes could cause misperception and

misapprehension, due to the grammatical gender norm suggesting the usage of male or female suffixes in Greek, when referring to a person. In addition, neutral words, that avoid gender revelation were included in an attempt to evaluate the use of generic terms in Greek. Generating the example of "άτομο/individual" in Utterance B and "φιλαράκι/pal" in Utterance D, such lexical items are grammatically and semantically neutral, which have been hypothesized to function in practice as acceptable alternatives to describe non-binary identities without necessitating morphological modifications in the Greek language. Finally, Utterance F includes the graphemic symbol "@" as suffixation to indicate non-binary identities in written Greek. Technically a variant of "Greeklish", graphemic suffixation is most observed on virtual environments as an unstandardized way to indicate gender-inclusiveness.

4.4.1. <u>Acceptability & Adoptability: Grammatical Features in Greek (Section C/Rating Scale Questions)</u>

The results revealed various attitudes towards the aforementioned linguistic phenomena, but overall, indicated positive approaches towards non-binary language use in Greek, with acceptability and adoptability being favorable.

a) Neutralized suffixations & lexical items

Α. "Το Ιάσων είναι λιγότερο ενεργό σε οργανώσεις."/ "The (neuter) Jason is less active (neuter) in organizations".

Focusing on the first example, the grammatical combinations in Utterance A imply neutrality in an unconventional manner, since the usage of a neutral article to refer to a male proper name is unprecedented, and its recent emergence has been introduced by

member of the non-binary community for self-identification. On average, participants described the phrase as "Weird, but I would use it". Specifically, 55% of the participants selected the linguistic attitude "weird", whereas 55% considered the phrase adoptable. It is essential to mention that the instance received the lowest rating based on the "acceptability and adoptability" index in Section C with sample sentences in Greek, presenting an overall score of 22% regarding acceptability. However, participants' answers indicated the willingness to use such features as implied by the adoptability index, whereas only 2 subjects opted for complete rejection of the utterance in terms of acceptability and desire to use such features. In addition, Group 1, as the youngest age category, presented the most negative inclined attitudes, potentially indicating skepticism, hesitation, and rejection of the untraditional use of a neutral article to describe a grammatically and semantically male proper name. In addition, another justification can be placed on the featuring of the neutralized suffixation of "ενεργό/active (neuter)", instead of the grammatically correct "ενεργός/ active (male), rendering it an odd morphological feature to be ordinarily used in Greek communicative activities. Lastly, Utterance A, was noticed to incite the most negative descriptions in Section C regarding non-binary language use in Greek.

B. "Θα ήθελα να πω στο **άτομο** να είναι ο εαυτός του"./ "I would like to tell the individual (neuter) to be <u>itself (himself grammatically)</u>".

Following, Utterance B was unanimously described by Group 1 and Group 2 as "I consider it acceptable, and I would use it", suggesting complete acceptability and adoptability of producing utterances to avoid gender assumption and describe non-binary identities. In general, the participants showed a notable acceptance and adoptability rate of 88% and 77%, respectively. The specific utterance was coined to evaluate whether Greek speakers

could adopt language mechanisms that facilitate descriptions of non-binary individuals, without drastically modifying traditional language rules. Therefore, in order to avoid grammatical gender morphological converts, the word "individual" is used, a grammatically and semantically neutral word that challenges gender specifications. Consequently, this neutralization process did not evoke negative attitudes. Lastly. the phrase was not described as "unacceptable" by any subject, whereas only one description denoted "weirdness".

C. Καλησπέρα, αγαπημένα!/Good evening, darlings!

Utterance C included a grammatical suffixation that might be perceived as peculiar in Greek due to the grammatical construction of the language and cannot be of equivalence with norms of the English language. Firstly, the adjective "αγαπημένα/darlings" is a neutral gendered word of plural form that typically needs to accompany another word of the same form (e.g., αγαπημένα παιδιά/beloved children). In this case, its usage is rather vague, but deliberately constructed to indicate neutrality in order to substitute traditional greetings of «αγαπημένοι (darling male)/αγαπημένες (darling female). Specifically, participants considered the utterance as "Acceptable, and I would use it", scoring 66% in both nuances of the linguistic attitudes of acceptability and adoptability. Therefore, neutralized suffixes to avoid gender assumption or suggest non-binary addressing can form part of a smooth interaction in the Greek language. However, 33% of the participants showed no willingness to use the utterance, and therefore, its application in an actual context might be questionable, as such utterances might be viewed as ambiguous, without clearly implying non-binary addressing or identification. Regarding

the age group categories, Group 2 (26-50) presented complete acceptance of the utterance, whereas Group 1 (18-25) and Group 3 (51-70) implied greater hesitancy.

D. "Πού είναι το **φιλαράκι** σου; Ξέχασε τα κλειδιά **του** στο τραπέζι". / "Where is your pal? (They [grammatically *It*] forgot their [gram. *its*] keys on the table."

Additionally, the case of Utterance D received overall positive views regarding attitudes of acceptability and adoptability. In particular, 88% of participants considered the phrase "acceptable", and 77% selected the willingness to adopt the linguistic features included in their communicative activities. Similarly, to Utterance B, the lexical elements of the sentence are considered of typical usage, but still facilitate the avoidance of semantically gendered words such as «φίλος/φίλη» (male friend/female friend). The neutralization process in that case is based on the neutral suffix "άκι" which is in general used as a diminutive of the derivational word, without carrying meaning of semantic gender in this case. However, it should be noted that oftentimes, Greek speakers might inherently think of a male, when using this word, as its usage might be considered "loose" to describe a female. Drawing the attention of the participants' answers, on average, an optimistic outlook was concluded, rendering the utterance as "Acceptable, and I would use it". Overall, the utterance does not challenge the grammatical rules of the Greek language, but rather functions as an instance of incorporating gender-neutral lexical items to avoid gender specifications. Therefore, it may be concluded that binary gender avoidance can be accommodated in Greek in an acceptable and practical manner.

E. "Είσαι έτοιμο;/ "Are you ready (neuter)"?

On a similar note to Utterances A & B, *Utterance E* is a rare communicative activity to refer to a non-binary individual, in which the adjective «έτοιμο/ready" (neuter) projects neutrality due to its neutral suffix. Typically, Greek speakers would use either a male or a female suffix (έτοιμος/έτοιμη) to pose this question to the referent. When referring to an individual, this grammatical construction is rather unusual and might cause contextual confusion. However, participants' responses revealed a variety of attitudes. In general, the total amount of ratings resulted in the description of the utterance as "Acceptable, and I would use it", with 55% of participants opting for the "acceptability" attitude, and 66% for the one denoting "adoptability". However, a significant percentage of 33% described the phrase as "weird", presumably due to the unconventionally neutralized suffixation of "έτοιμο/ready" to project non-binary identification.

b) Graphemic suffixation for gender-inclusive language

F. Όλες, όλοι και όλ@ θα είμαστε εκεί!/ "Each and every one of us (f/m/gender-inclusive) will be there!") [loosely translated]

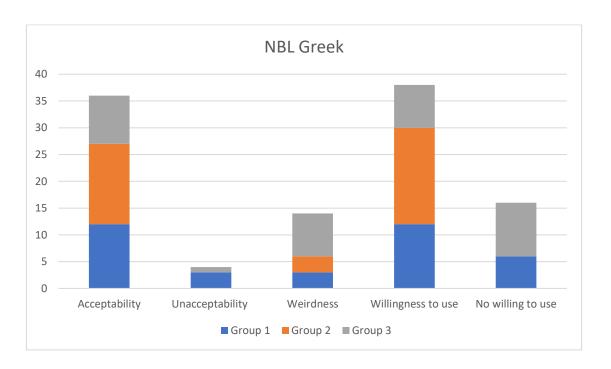
Utterance F is a unique example of a graphemic alternative used in grammatical gendered languages like Greek and Spanish to either facilitate inclusive language by substituting male and female suffixes with the "@" symbol to imply avoidance of sexist language or gender assumption as well as to refer to gender fluid or non-binary people. However, this alternative is constructed solely for the written language form, especially on the Internet, where the "@" symbol is typically used. Interestingly, the majority of participants considered the utterance "acceptable and adoptable" (77% for each attitude), indicating the acceptance of graphemic suffixation as part of inclusive language. In terms of the age

factor, Group 2 presented full acceptance and adoption whereas the 22% of "weirdness" index derived from the participants of Group 3.

4.4.2. Conclusions of linguistic attitudes in NBL (Greek)

Similar to English, participants' linguistic attitudes towards non-binary language in Greek is generally described as "Acceptable, and I would use it". Despite the overall hesitation in the usage of neutralized suffixes in reference to given names (as noticed in Utterance A in Greek), the majority of participants were receptive to using gender neutral terms, neutralized adjectives as well as graphemic suffixes in order to avoid gender assumptions. Such concluding remarks contradict the initial hypothesis, suggesting less positive attitudes towards the acceptance and adoption of NBL in Greek, due to the impact of morphosyntactic factors. Consequently, the results are considered positive for the development of non-binary language in a Greek context.

Graphic 3: Attitudes towards Non-Binary Language in Greek



4.5. Age Group Comparison

On a similar note to non-binary language in English, Group 2 revealed a significant amount of positive attitudes in Greek as well. On average, the age group considered the utterances as "Acceptable, and I would use it". However, placing the emphasis on the participants' details in Section B, it should be taken into consideration that Group 2 denoted the highest degree of familiarity with non-binary language in the selected languages and as a concept in general. Therefore, the participants' pre-existing interest in the main topic is considered the primary factor to justify the acceptability and adoptability index, unlike the age. In general, participants, regardless of the age group, did not present any significant discrepancy in linguistic attitudes.

4.6. Evaluation of Participants' Answers in Section D

The data processing indicated similar conclusions of linguistic attitudes towards the exposure of non-binary language in the systems compared, as calculated in a numerical approach. However, it is essential that further attention be directed towards other aspects of the issue, since the utterances used emphasized mainly linguistic attitudes based on morphological and pragmatical differences.

The questions included in the questionnaire's Section D play a major role in providing a plausible interpretation of participants' linguistic attitudes in a multifaceted manner. Essentially, the section enables a more insightful approach to investigating the possible similarities and/or differences regarding the mental perception participants developed to comprehend the meaning of the utterances in each language.

Specifically, participants were asked to answer 14 follow-up questions of mainly multiplechoice type, also including two short answer questions in order to collect concise replies.

4.6.1. Data Analysis & Interpretation of interview responses/findings

Despite the complementary results in the languages compared as observed in the utterances used in Section C, subjects' responses to the follow up questions of Section D bring to the surface significant details with regards to the perception of non-binary identities based on the target languages as well as the application of gender-neutral language features in each system.

More particularly, Section D begins by shedding light on the crucial issue of developing a clear perception of non-binary identities. Keeping in mind the initial hypothesis, according to which the English language potentially facilitates the perception of gender neutrality to a higher degree in comparison to Greek, the majority of participants appear to validate the presupposition. The data analysis indicated that 7 out of 9 subjects considered the utterances in English to provide a clearer perception of non-binary identities in comparison to Greek, whereas only 1 participant claimed to have the same level of perception in either language. As a result, regardless of the "acceptability and adoptability" index, which focused primarily on grammatical factors, English appears to allow its speakers to develop a clearer comprehension of meaning, potentially due to the lack of grammatical gender in most cases, which might lead to confusion. Specifically, neutralized suffixes in Greek are mostly correlated with the depiction of inanimate objects. Therefore, the modification of neutral articles and adjectives to refer to the non-binary is semantically confusing in the case of Greek. In fact, Subject 1 willingly specified her answer by clarifying that "In English it's easier because it gets mixed up with the context". However, apart from grammatical norms, participants might be able to grasp non-binary identities better in English as their second language. In addition, clearer perception in English might be linked

with influential factors. For instance, in Question 11 brought to the surface to which extent participants considered non-binary friendly linguistic choices a result of English influences. Specifically, when asked whether the emergence of non-binary language is a foreign concept influenced by the English, six participants answered "yes", and three "no". Therefore, participants' perception may be altered based on the contextual environment.

In the following question (Q.2) the emphasis was placed on whether non-binary language features (such as pronouns, neologisms, gender inclusive nouns) are more applicable in English than Greek. The vast majority of participants (8 out of 9) agreed that English can incorporate such features in a more applicable manner, presumably due to the fewer morphosyntactic modifications that need to be made to refer to non-binary individuals.

Moreover, in Question 3, the emphasis was placed on the grammatical rules of Greek functioning as obstacles to embracing non-binary friendly attitudes. Specifically, 6 out of 9 participants agreed that the grammatical construction of Greek challenges attitudes towards non-binary identities, whereas 2 participants disagreed. It is worth mentioning that only one subject considered grammatical rules irrelevant to attitudes.

In Question 4, participants were asked to clarify whether the Greek language system restricted them from supporting non-binary individuals through linguistic processes. The majority expressed their feeling of limitation in Greek (6 out of 9), while 3 participants did not agree to a sense of restriction.

More specifically, examples of participants' views included:

Subject 2/Group 1("Yes")

"I do feel restricted mainly because the neutral grammatical gender that we mostly use for non-binary identities is often used for things rather than for people".

Subject 5/Group 2 ("Yes")

"Sometimes it's hard to "abuse" the word "άτομα" (individuals) and I would like us to have other academically approved words which we can use in a more official context".

Subject 7/Group 3 ("Yes")

"I feel the Greek language structure and elements carry limitations. Needs to change a whole lot of things structure-wise and syntax-wise and grammar-wise which sounds like a paradigm shift".

In reference to the grammatical gender language taxonomy, the study's main hypothesis appears to be in accordance with participants' answers. Specifically, the questionnaire included a direct question to examine if English grammar is considered a fundamentally more suitable system for the description of third gender identities, when compared to Greek. Interestingly, 7 out of 9 subjects state "yes", rendering the grammatical structure of a language system of importance to facilitating non-binary identities.

Furthermore, neologisms played a central role in evaluating linguistic attitudes, as they received the most negative inclined opinions, which are presumably caused by misapprehension of newly coined features. Therefore, as observed in Section D, neologistic features are harder to incorporate when referring to non-binary identities. However, the majority of participants agreed to being more comfortable using neologisms in English than Greek. In particular, 6 out 9 participants stated "yes", whereas 2 admitted to not feeling comfortable regardless of the language. Therefore, participants as non-native speakers of English appear to feel more "linguistically comfortable" in adopting unconventional, newly emerged features in their speech, a mechanism that might be challenging to develop in their first language.

Focusing on subjects' notion of the quality of the language as affected by non-binary language use, 6 out of 9 people considered the incorporation of such elements to have no impact on the quality of English. It is worth mentioning, nonetheless, that the remaining 3 participants answered that such features impact English in a positive way. However, when asked the same question in reference to their first language of Greek, participants' answers were more varied. Particularly, 3 participants stated "yes, negatively", and only 1 participant answered "yes, positively". In addition, 3 participants responded with "it depends", and lastly, 2 selected "no". Therefore, it is evident that people's linguistic attitudes are more skeptical about linguistic modifications in their first language. This phenomenon might be difficult to explain, as speakers might be more willing to maintain quality of their first language, but more amenable in changes in other languages, as they might be less emotionally attached. In addition, their higher sense of perception in their L1 might automatically eliminate unconventional features. Lastly, in the case of the languages compared participants admitted considering English as a more suitable system for nonbinary language use. Therefore, the language's grammatical structure might allow speakers to be more flexible and creative, whereas communicative activities in Greek are morphosyntactically directed by the various rules of the system, rendering any change of higher degree of difficulty in conveying comprehensive messages.

Questions regarding legislative measures for the establishment of non-binary language in the Greek context received a variety of answers. Specifically, in Question 10, most participants (5 out of 9) selected "no" when asked whether non-binary language could be officially established in Greece in the following years. Additionally, the remaining participants expressed more optimistic views (2 replying "yes", 2 replying "maybe"). Furthermore, in Question 14, additional details were evaluated, since 5 subjects considered a legislative framework for the inclusion of non-binary language in Greece "necessary, but

unlikely to be established", whereas only one answer rendered the measure "necessary, but likely to established". Moreover, 3 participants viewed the legislative framework as "unnecessary". The outcome of speculating participants' stances from a legislative perspective is essential to determine the significance and seriousness of a sociolinguistic issue through establishment in law. Therefore, despite participants' pessimistic point of view, understanding the necessity of language security to represent the non-binary community is noteworthy, as observed in the majority of the answers.

Following on from Q.10, Question 11 explored the extent to which participants considered the effort of including non-binary friendly linguistic choices to be a result of English influences. Specifically, when asked whether the emergence of non-binary language is a foreign concept influenced by the English, 6 participants answered "yes", and 3 "no". This result might justify the consideration rendering Greek unsuitable to support the non-binary as efficiently as English, since it is correlated with a foreign notion that needs to be localized under the influence of globalization and other trends projected in speech.

Attention was also drawn to factors with an impact on attitudes towards the non-binary. More particularly, only 1 participant considered language constraints the biggest impact on the issue. The remaining participants indicated their opinion in short, open type answers. Factors like "culture" (7 mentions) and "education" (4 mentions) were named several times, whereas religion, tradition, political and social stances were also included.

4.7. Interview Results/Qualitative Data

The inclusion of qualitative data was considered essential to gain an additional insight into approaching an issue of such sociolinguistic complexity. With an emphasis on *Research Question 3*, concerning the extent to which Greek can accommodate non-binary language

use, the carrying out of short interviews was considered a suitable tool to collect substantial facts about participants' attitudes, which might be difficult to retrieve solely through a questionnaire.

Prior to the completion of the questionnaire, three participants (one from each age group) were asked to take part in short interviews. The selection was random and unrelated to personal details and linguistic competences, but rather a result of convenience of availability and willingness for further participation in the study. Moreover, Interviews 1 & 2 were conducted virtually, whereas Interview 3 was conducted in a designated location (face-to-face interview). Bearing this in mind, the outcome of online interviews could be somewhat different, due to the lack of natural interaction and external interruptions. The questions asked were of mostly fixed type, in order to emphasize specific parts of the questionnaire that required further investigation. However, unplanned questions were also asked. Overall, the three participants were directed towards similar points of issue, since the main aim was to elaborate on the extent to which Greek can accommodate non-binary language use.

As previously stated, the procedure of collecting data through interviewing was conducted in the traditional face-to-face practice, as well as through web-based platforms, due to geographical limitations. In all cases, communicative exchange was audio-recorded via the same device. The completed oral interview was later converted into written form. The transcription and translation included concise elements of the communicative exchange, but only the most crucial and relevant parts have been included in the following section.

Lastly, each participant was notified that confidentiality would be maintained through anonymizing the quantitative and qualitative data.

4.7.1. General Observations

Overall, the interviewees were opinionated on the matter, voicing a variety of considerable views and insights for the wide-ranging evaluation of the issue. However, contrasting points of view between the participants were observed, which might result in difficulty reaching certain results, as several stimulating notions were expressed. Conversely, the assessment of the initial hypothesis, as well as some numerical data on linguistic attitudes were consolidated by the interviewees' thoughts. Therefore, several responses appeared of great usefulness to approaching the subject in detail and elaborating the quantitative data.

More specifically, some views projected a different perspective, unrelated to issues of language, correlating the insufficient incorporation of non-binary language use in Greek with factors like culture, generation gap, and degree of exposure to foreign influences. Other notable points were addressed to the spectrum of bilingualism in mental perception and language choices, whereas grammatically based arguments were also noted.

4.7.2. Qualitative Data Analysis: Interview 1

The first interview was conducted online with a female participant from Group 1 (18-25 years old). The interviewee commented on the differences between grammatical applications and perceptual limitations on the issue of non-binary identities in the Greek language. Specifically, when asked whether Greek can precisely communicate the description of non-binary identities, the participant responded:

"In theory, yes, Greek can communicate the identification of non-binary identities.

However there's a degree of difficulty."

Interviewee 1

In addition, in terms of grammatical features supporting or hindering non-binary language use in Greek, the participant refers to the capacity of a Greek speaker to formulate grammatically sound utterances to refer to non-binary individuals, highlighting the existing neuter gender, used for inanimate objects rather than human beings. Specifically, as observed in the following extract of Interview 1, the participant pinpoints the difference in grammatical properties of the Greek language and perceptual extents its speakers are able to develop.

Therefore, the grammatical facility to imply neutrality might not be correlated with perceptive accuracy in Greek in the case of non-binary identities. Despite the ability to construct neutralized features, the contextual value of the meaning is difficult to be comprehended in comparison to corresponding expression in English.

This phenomenon has been observed in Section C, where the data processing of linguistic attitudes based on utterances English and Greek indicated similar results on a grammatical level. However, results of the follow-up questions in Section D suggested a significant difference in the perceptive ability of the interlocutors to correlate neutralized linguistic items with the concept of the non-binary in Greek.

I: - "In a grammatical sense, there isn't anything that hinders the description of non-binary people. However, in a practical way, there are difficulties in terms of..."

R: - "Perception?"

I - "Perception!"

(...)

I: - "...English is a foreign language and therefore, we use it more "mechanically", without 100% understanding the meaning of the articles and the coloration we give through the

articles when referring to people. However, in Greek, as our mother tongue, the neuter gender exists, which is typically used for inanimate objects, which renders its application difficult to people, as living beings."

Interviewee 1

Nevertheless, in reference to the issue of bilingualism, when asked about perceiving the intentional use of the singular "they/them" pronouns and feeling of more *linguistic liberty* in English, Interviewee 1 replied:

"I understand there is a person who belongs to the non-binary category."

(...)

"I think that in Greek, this movement hasn't prevailed in either social media or everyday life, so by observing it in English, it sounds so foreign to me, in the sense that I have come to a point of "reconciliation" with the "they/them" pronouns, whereas in Greek, it sounds so odd to me.

Interviewee 1

As a result, the issue of perception might not be limited to grammatical factors. External factors (like social media) have an impact on normalization of non-binary language as part of language trends.

4.7.3. Qualitative Data Analysis: Interview 2

The second interview was also conducted through digital platforms and included a male participant from Group 2 (26-50 years old). Particularly, the interviewee's perspective included common points as observed in Interview 1, especially in terms of communicating the non-binary.

"In general, (Greek) is a language that communicates precision. I cannot come up with any reason I mean, grammatically, so, yes. I would say that in English, it might be more difficult, but as I said in the questionnaire, it sounds easier, like more reasonable."

Interviewee 2

As a result, the participant agrees that the Greek language includes the grammatical means to demonstrate neutralizing processes that facilitate the reference to non-binary individuals, but yet, comments about how English delivers the same concept in more "reasonable" way. Following, the participant expresses an original opinion about the difference in oral and written form of Greek, explaining that the latter case accommodates the use of non-binary language better, since Greek speakers are not prepared to adopt such features in everyday speech at this moment, and might unintentionally reject inclusive language.

"...In written form, we can use the "@" symbol, but it is more difficult to express it..."

"...It is a lot easier (in written form). You think before you write, whereas when you speak, something might slip out..."

"It takes a lot of practice. I know a lot of friends of mine that use inclusive language in general. But when you use male and female terms all the time, it is really complicated for the brain. So, maybe it is more reasonable to start with the written form, and then proceed to the oral form. You have to start from somewhere, so your brain gets used to it".

Interviewee 2

Therefore, the participant considers the adoption of non-binary language features a result of "practice" that can be developed in a habitual manner.

Additionally, in the interview, it is clarified that cultural factors play a predominant role in establishing a receptive attitude towards non-binary language features. In addition, other aspects such as generation/age, exposure to foreign influences, social media usage outperform the language structure in adopting inclusive language.

Specifically, the participant commented:

"I don't think that the problem is there (in language features), no. In a lot of cases, it is easier cause a lot of words are neutral by their structure, but I think that the main influence is the part of culture."

"It has a lot to do with the influences they receive, the type of movies they watch and the time they spend on social media being exposed to foreign speech and foreign role models" "It is easier cause it (English) is more neutralized and simplified. It is a lot easier to me, cause in the other case (Greek), you are like "What am I going to say", so, there is the part of judgement, like, what kind of judgement you will receive if I word it that way. If I say this to someone older, for example, to my parents, they won't understand it. It will sound completely crazy, and they will probably say that people like you ruin the language. Also, as much open-minded and ready you might think you are, deep inside, you know that in English it is a lot easier, because it is a lot simpler."

4.7.4. Qualitative Data Analysis: Interview 3

The third interview was completed in person with the participation of a female interviewee from Group 3. The participant's main argument was centered around linguistic factors, especially the structure of the Greek language, rendering the accommodation of non-binary identification a challenging process.

The participant confidently supported the correlation of insufficient perception with morphological features of the Greek language, a point of view similar to Interviewee 1.

"Exactly because of the fact that the Greek language determines, by its structure, the neuter gender "το/it", by giving it however, a different meaning, I think that this change is truly difficult in a conceptual, stylistic, and morphological way."

"Yes, I believe that in Greek the identification of this social group is weird exactly because of the structure of the language and the already existing usage of the neuter gender, that sometimes not only do I consider it weird, but also funny. So, in my opinion, it is because of the issue of the structure of the language".

However, in contrast to the previous arguments, the participant categorically rejected any association between second language acquisition and limited mental perception of the concept. Specifically, the participant highlighted:

"This doesn't have to do with whether English is my first or second language. I just think that languages like English allow this "linguistic expression" more easily than Greek, as my first language. I am associating it with the structure of language, as I said previously."

"I personally don't think that it has anything to do with my first or second language. They are just two different languages with different structures".

As a result, whilst participants presented similar views in general, three major arguments were presented:

- a) Non-binary language features are grammatically applicable in Greek but might result in contextual misapprehension and limited perception of the non-binary, in a pragmatic and semantic sense.
- b) Factors such as culture, foreign influences, age group have an impact on the degree of normalization of non-binary language. Essentially, accommodation of inclusive language is analogous to the degree of exposure to such features, a result of practice and habit, not restricted to morphological constraints.
- c) The structure of the Greek language renders the incorporation of non-binary features "weird" and difficult to fully comprehend.

4.8. <u>Discussion & Final Remarks</u>

The focus of the study has been placed on the investigation of the linguistic attitudes of bilingual speakers of English & Greek towards the issue of non-binary language use. Having evaluated both quantitative and qualitative data, the following conclusions are drawn for each research question.

4.8.1. Research Question 1: How do participants perceive the use of non-binary language features in Greek in comparison to English?

The results of linguistic attitudes in the comparing languages indicated similar linguistic attitudes based on Bonnin & Coronel's (2021) design of the main aspects of "acceptability" and "adoptability". On average, utterances in both English and Greek were described as "Acceptable, and I would use it", as observed in rating scale questions of Section C.

Table 3: Results of Rating Scale Questions in Section C

English	Greek
Acceptability: 64%	Acceptability: 66%
Unacceptability: 7%	Unacceptability: 8%
Weirdness: 27%	Weirdness: 25%
Willingness to Use: 64%	Willingness to Use: 70%
Unwillingness to Use:35%	Unwillingness to Use:30%

However, targeted questions on perception in Section D indicated that although, grammatical features of non-binary language use in both English and Greek are generally embraced, 7 out of 9 participants stated that they have a clearer perception of non-binary identities in English, 1 participant stated that they have a clearer perception in Greek, and 1 participant stated that they have the same level of perception in either language. Several participants clarified that neutralized items, especially the use of neuter articles and suffixes to refer to non-binary individuals in Greek, were grammatically acceptable, but

contextually confusing, due to its traditional use to mostly refer to inanimate objects, diminutives, neuter gendered words, rather than people.

In interviews, 2 out of 3 participants referred to the grammatical capacity to indicate neutrality in Greek, but on a pragmatic level, conveying and understanding the non-binary is difficult, and even "weird" and "funny".

"In Greek the identification of this social group is weird exactly because of the structure of the language and the already existing usage of the neuter gender, that sometimes not only do I consider it weird, but also <u>funny</u>".

Interviewee 3

Another participant also mentioned the different perception she would potentially have of a non-binary person in Greek in comparison to English:

R:-"So, when you read the example with "Jason", do you believe that if this was in English, you would have a different perception of this person that self-identified as "To (neuter article) Jason"?

I: -"Yes". Interviewee 1

Apart from the grammatical gender difference in the contrasting languages, participants referred to factors such as:

a) Bilingualism: the use of English (as participants' second language) impacts the processing of information on the comprehension of non-binary identities, as well as the evaluation of language choices to express gender-neutrality. As a result, the development of increased emotional distance in L2 usage may lead to *utilitarian* actions when communicating in a foreign language (Cipoletti et al., 2016 through;

- Hawakaya et al., 2017), which might allow participants to adopt non-binary features more easily.
- b) Cultural factors: in English, the issue of non-binary identities and language is more common, people might be more educated and have developed a better understanding, hence, perception on the usage of non-binary features in speech.
- c) English as a language system is more simplified, and neutralization processes can be made in an easier and simpler way, where in Greek, multiple morphosyntactic changes are required, challenging the normalization of such features at this moment.

"Also, as much open-minded and ready you might think you are, deep inside, you know that in English it is a lot easier, because it is a lot simpler".

Interviewee 2

4.8.2. Research Question 2: Do grammatical differences between Greek and English impact participants' usage of non-binary terms, despite their ideological stances?

Overall, participants presented high levels of acceptability and willingness to use non-binary features in both languages, regardless of the differences in grammatical structure, as observed in the rating scale questions of Section C. However, in this study, the exploration of participants' linguistic attitudes was limited to only 12 utterances, in total. As outlined in the responses to the multiple-choice questions of Section D, especially in Questions 3 & 4, the majority of participants (6 out of 9) agreed that Greek grammatical rules restrict speakers from showing acceptance towards non-binary identities despite their supportive attitudes on gender-neutrality. For once again, participants' explications

regarding limitations in Greek was connected with morphosyntactic features, especially the neuter article, and the need for multiple grammatical modifications so that every item is in agreement with neutrality. Furthermore, the lack of officially established non-binary lexical items was mentioned as a restriction.

R: -"So, which grammatical features hinder the identification of non-binary people, in your opinion?

I: -"It's the three (gendered) articles, adjectives, pronouns, whereas, I don't think that this kind of difficulty exists with verbs. Exactly because of the fact that the Greek language determines, by its structure, the neuter gender "το/it", by giving it however, a different meaning, I think that this change is truly difficult in a conceptual, stylistic, and morphological way".

Interviewee 2

4.8.3. Research Question 3: To what extent could Greek as a gendered language accommodate non-binary identities, according to the participants?

As previously mentioned, most participants were receptive to using neutralization processes such as neuter articles, suffixes, and lexical items to refer to non-binary individuals. Therefore, in a grammatical sense, the Greek language can demonstrate neutralized features to convey neutrality for gender identification, however, with the risk of misapprehension, confusion, and lack of perception about non-binary identities.

The use/employment of interviews aimed to bring to the surface the notions of Greek speakers on the matter. Particularly, the question "Do you believe that Greek can precisely communicate the description non-binary identities?" was posed to all three interviewees.

Most participants agreed that despite the grammatical facilities to accommodate the nonbinary in theory, the application of such neutralization processes is difficult to normalize and fully understand.

"If we could translate the same examples in both languages, I would consider the ones in English a lot more logical, and in that sense, the English language also expanded the social horizons, whereas in Greek, in every example, it was still difficult and weird."

Interviewee 1

I just think that languages like English allow this "linguistic expression" more easily than Greek, as my first language. I am associating it with the structure of language, as I said previously.

Interviewee 3

On the other side, one participant considered the lack of exposure to the concept of nonbinary identities the main limitation in Greek, and correlated language use with a habit that needs to be practiced.

"I don't think that the problem is there (in language structure), no. In a lot of cases, it is easier cause a lot of words are neutral by their structure, but I think that the main influence is the part of culture."

"…"

"It (the Greek language) would have changed a lot more and a lot faster. For example, the current generation, the so-called "Gen Z" is a lot more ready for many factors. It has a lot to do with the influences they receive, the type of movies they watch and the time they spend on social media being exposed to foreign speech and foreign role models, so it would have changed a lot faster. In the past years, the Greek language has changed. Firstly, the

most conservative types have been simplified, such as, grammar, orthography, so yes. I believe it will change a lot in the following years. But at this moment, it is very difficult, because many believe that this has no place in the Greek language, in the sense that they had counted it out for many reasons. So, the issue is cultural."

Interviewee 2

Therefore, according to the participants' responses, the incorporation of non-binary language in Greek is practically more difficult than English because of the complex morphosyntactic structure of the language or the cultural context in which Greek is spoken. However, contrasting opinions are observed as some participants categorically correlate the difficult to use NBL in Greek with its grammatical structure (Interview 3), whereas opposing views associate the difficulty for gender neutrality in Greek with factors such as age and culture.

4.9. <u>Limitations</u>

As mentioned earier, this study encountered some considerable limitations. In general, it is difficult to reach conclusions with certainty as the overall number of participants is limited to only 9, rendering the amount of participation insufficient to shaping an in-depth opinion on the matter. Another important point of concern is the different level of bilingualism of each participant in English, which could affect the overall outcomes. Despite the fact that all subjects use Greek as their first language, the lower level of English competence could result in limited understanding of non-binary language in English, especially considering the particularity of this type of language use. Another setback is found in the issue of second

language use, in the case of English. In spite of the high level of linguistic competence of the majority of participants in English, the investigation of linguistic attitudes might be impacted by the effects of bilingualism on cognition, perception, executive control and decision-making on language choices. Therefore, participants' personal evaluation of non-binary language features in English might be limited and impacted by imitation behavior when being exposed to non-binary language use by speakers of English (L1).

In addition, whereas the featuring of fixed utterances in Section C appeared of usefulness to quantitatively detect linguistic attitudes on non-binary language use in English and Greek, the total number of 12 phrasal instances is insufficient to evaluate similarities and differences of two language systems upon the matter. Another limitation is found in including different linguistic examples in English in comparison to Greek. Despite the effort made to formulate equivalent examples based on how non-binary language is observed in each language system, a word-to-word translation of the same utterances could result in different outcomes. Moreover, some participants were not as opinionated as others, since they were unaware of the sociolinguistics aspects of non-binary identities. Therefore, part of the results might not be justified on linguistics grounds, but rather lack of interest and/or education on non-binary identities and language.

Another constraint potentially impacting the overall outcome is the comparison of two different language systems based on the responses of sequential bilingual participants. Despite the high level of proficiency in both Greek and English, subjects' unbalanced bilingualism might be linked with different cognitive processes impacted by the *Foreign Language Effect*. Such brain functions might impact evaluative skills and decision-making, due to factors such as emotional distance, linguistic competence, perception, limited language exposure, and foreign influences from native speakers. However, it should be

noted that finding speakers of equal proficiency in both Greek and English would be challenging to identify, as balanced bilingualism is a rare state of linguistic competence.

Lastly, detecting perception through language appears of great difficulty, since grammatical acceptability and perceptive accuracy. As a result, other factors such as culture, education, foreign influences, exposure to social media would be worthy of further investigation.

4. 10. Conclusion of Data Analysis

Notwithstanding the obvious limitations, this study shows promising results for the future of non-binary language in Greek, as on a grammatical level, the aspects of "acceptability and adoptability" were similar to the ones in English, despite the initial hypothesis, which supports the notion that grammatical gendered language systems challenge the inclusion of non-binary linguistic features. However, the discrepancy of the issue on grammatical and pragmatical levels should be noted, as despite the willingness to accept and adopt grammatical modifications to embrace non-binary friendly attitudes, the majority of participants had a clearer understanding of neutral identities in English. In addition, mental perception of the issue in Greek is still questionable since neutralization processes of words could not convey a clear message. Moreover, it was observed that in both languages, participants were less willing to accept and use neologisms, such as newly created honorifies and pronouns. In addition, age factors appeared of no significance in this study. Notwithstanding, the emergence of non-binary language in English has impacted other language systems on a linguistic, but also educational and sociopolitical level, since most Greek speakers of the study appear to have awareness of the issue and the will to enhance the visibility of the non-binary community.

5. Conclusion

This thesis, in its evaluation of the linguistic attitudes of bilingual speakers of Greek and English towards the issue of non-binary language, constitutes an important analysis of an area in Greek linguistics that has previously been under-researched. The quantitative and qualitative research tools employed in this research study have provided a significant insight into the impact of differing morphosyntactical structures on the perceived adaptability of each language when coping with new sociolinguistic norms around the use of NBL. This concluding chapter will summarise the findings of the study, through an evaluation of the Methodology, an exploration of the answers to the Research Questions and the implications for further study in this area.

5.1. Analysis of Research Questions

To begin with, placing the attention on *Research Question 1*, regarding the way participants perceive the use of non-binary language features in the languages compared, from a firmly numerical perspective, the data indicated overall similar results. Particularly, in both language systems, subjects' linguistic attitudes suggested *acceptability* and *willingness to adopt* NBL in both Greek and English. Therefore, despite the initial hypothesis rendering the usage of NBL in Greek less likely to be accepted and adopted, participants' responses revealed corresponding linguistic attitudes, suggesting positive outlooks towards genderneutral features. However, neologisms (such as honorifics, proper nouns, neo-pronouns) were found to be less acceptable and less likely to be adopted as a feature to indicate non-binary referencing in both languages, where gender-inclusive terms that do not disrupt traditional grammar (e.g., patient, άτομο/"individual") were favorable selections in both

cases. However, in the case of English, the incorporation of singular they/them/their pronouns was observed to be more likely to be accepted and adopted in comparison to newly formed pronouns for non-binary language.

In order to achieve a more insightful perspective, conducting interviews was particularly helpful for further clarifications. Specifically, most interviewees commented that NBL features in Greek could be used in communicative activities, although it would be difficult for interlocutors to perceive the meaning of third gender identities, as neuter articles (as common NBL features in Greek) typically refer to inanimate objects.

Research Question 2 dealt with the impact that grammatical differences between Greek and English might have on participants' usage of non-binary terms, with an emphasis on merely linguistic aspects (ideological stances were not evaluated). In particular, a critical observation was made regarding the difference in grammatical acceptance and perceptual accuracy of non-binary language features in the selected languages. Whereas morphosyntactic alterations in order to facilitate the representation of third gender identities were embraced in both systems, it was revealed (through follow-up questions & interviews) that subjects had a significantly clearer understanding of the non-binary in English than Greek. Keeping in mind the grammatical gender taxonomy, categorizing English as a natural gender language and Greek as a grammatical gender language, a hypothesis was made supporting the idea that the adoption of the simplified morphosyntactic features of the former language will potentially enable the use of nonbinary features more efficiently that the latter. Specifically, most participants considered Greek grammatical construction more challenging for the use of non-binary language, clarifying that the language's morphology and syntax restricts the speakers from incorporating NBL features as effectively as in English. Therefore, the multiple grammatical modifications needed to indicate gender neutrality in Greek is considered a complex process on a linguistic and perceptual level, whereas most of those alterations are unnecessary in English, hence, the facilitation of non-binary language features in English.

The last point of interrogation (*Research Question 3*) focused on to what extent Greek as a gendered language could accommodate non-binary identities in terms of linguistic expression. According to the participants' responses, as evaluated in both the questionnaire and interviews, it was suggested that the structure of the Greek language contains the morphosyntactic elements to precisely indicate neutrality, but on a pragmatic level, the meaning of such utterances is complex and oftentimes, unclear. However, it was also stated that non-linguistic factors such as *age*, *education* and *exposure to social media* could contribute to a better understanding of the issue of the non-binary and enable the incorporation of gender-neutral features specifically for the visibility of non-binary individuals.

5.2. Evaluation of the methodology

As mentioned, the approach used for the data analysis in this research study was based on both a quantitative and qualitative methodology, which was thought to be a necessary combination to achieve all-encompassing outcomes. Particularly, the initial hypothesis supporting the notion that grammatical gendered languages (e.g., Greek) cannot accommodate the non-binary as effectively as natural gender languages (e.g., English) needed to be approached in a multi-faceted manner. In fact, several factors needed to be taken into consideration focusing on both languages as communicative systems, but also on participants as individualized speakers of those languages, carrying a specific profile with crucial factors such as age, linguistic competences, educational level, personal views, etc.

The incorporation of a questionnaire was a particularly helpful approach to cover a wide range of differing issues such as participants' profile, grammatical language comparison, linguistic attitudes, bilingualism, and non-binary identities overall. In addition, the evaluation of the research tool enabled the processing of significant results through numerical data, valuable for the correlation with categorical data as observed in the interviewees followed.

It is worth mentioning that the design of the questionnaire, based on Bonnin & Coronel's framework (2021) to collect attitudes on language matters, served as the main body of the questionnaire specifically, and the study in general, as the focal point of the thesis was placed on linguistic attitudes of bilingual Greeks on the issue of non-binary language. Including a variety of utterances with several grammatical phenomena part of non-binary language was essential for the evaluation of the issue in detail, as it resulted that specific grammatical features were more likely to be accepted and adopted in both languages. In addition, the incorporation of corresponding utterances in both English and Greek was critical to compare the grammatical capacities of each system for the expression of gender neutrality using realistic communicative activities. Additionally, follow-up questions were of great significance for further clarifications.

Moreover, the carrying out of interviews in the Greek language was an effective approach which provided an insightful understanding of the data collected, taking into high consideration the sociolinguistic nature of the thesis. Therefore, it was strongly believed that a strictly numerical approach would be restrictive to the achievement of plausible results, as interviewing participants enabled the documentation of participants' views in

their own words. In addition, unexpected points of views were noted, providing a wide-ranging approach to the matter. It is important to mention that participants could accurately communicate their views in Greek, as their first language. However, the conduction of online interviews (2 out of 3) could have slightly impacted the conclusions, in comparison to face-to-face interview since natural flow of conversation and interaction in person could have resulted in less fixed answers.

5.3. Limitations & recommendations for future research

The study presents several limitations in different aspects. In particular, the amount of participants (9 in total) is considered restrictive to drawing conclusions with certainty. In addition, the high educational level of the vast majority of participants might be correlated with open-minded attitudes on linguistic issues. Therefore, linguistic attitudes may be affected by educational factors, apart from the hypothesized morphosyntactic aspect. In addition, the exemplified utterances to collect linguistic attitudes (Section C) were not sufficient to draw conclusions reflecting the entirety of two languages. Moreover, bearing in mind the differences in non-binary awareness of the participants, it is possible to assume that participants lacking in knowledge of the concept could not provide well-thought answers, in comparison to participants already interested in such a particularized sociolinguistic issue.

Therefore, it is important that further research is conducted upon the matter, especially with the participation of a larger number of subjects. While existing literature on similar issues provides essential information, in a Greek context, the emergence of non-binary language features has not attracted the attention of the linguistic community. However, the rarity of the linguistic phenomena as presented in this type of language use, is viewed as an

interesting case for sociolinguistic analysis. It is recommended that the conduction of an extended research is made in order to uncover the potential impact the (in)existence of grammatical gender has on speakers' abilities to perceive different concepts.

5.4. Important Findings of the Study

The results of the study appeared promising for the acknowledgement of how languages evolve and reflect on sociopolitical issues. Unlike the original suggestion according to which the Greek language cannot accommodate non-binary language features as efficiently as English mainly due to its morphosyntactic structure, most participants did not hesitate to accept and adopt gender-neutral terms to imply referencing of the non-binary in either language. Interestingly, age factors were of no significance, despite the assumption that the youngest participants (Group 1) could project higher rates of acceptability and adoptability to NBL. In addition, it is essential to highlight the disagreement of grammatical acceptance and perceptual accuracy in non-binary language features in the selected languages. Specifically, in both cases, participants were receptive of grammatical modifications to facilitate non-binary references, but on a perceptual level, non-binary identities were understood more clearly in English. Participants commented on their difficulty in fully realizing the concept of third-gender identities in Greek mainly due to the incomprehensible neutralizing of articles to refer to human beings (e.g., neuter article «το»), creating interpretation issues. However, it is difficult to explain the confusion based on a strictly grammatical gender distinction of the languages. Considering the participation of bilingual speakers in this study, the effects of foreign language use could potentially influence the outcome of investigating linguistic attitudes. Factors such as cognition, perceptive abilities, decision-making, evaluative skills might be impacted by brain function when using a foreign language. This could be viewed as a limitation of the study as the focal point is placed on morphosyntactic differences of Greek and English.

To conclude, this research study, although necessarily limited in scope and in the time available for data analysis, nonetheless provides a significant window into the linguistic attitudes towards morphosyntactical changes in relation to NBL that are happening in real time, in a specific sociolinguistic and geographical context that has hitherto been overlooked by linguists.

Bibliography (APA 7th)

- Alipour, S. (2014). Metalinguistic and Linguistic Knowledge in Foreign Language
 Learners. Theory and Practice in Language Studies, 4(12), 1-2.

 https://doi.org/10.4304/tpls.4.12.2640-2645
- 2. Armellini, A. (2023, March 20). Italy's language watchdog says 'no' to gender-neutral symbols. *Reuters*. Retrieved from: https://www.reuters.com/world/europe/italys-language-watchdog-says-no-gender-neutral-symbols-2023-03-20/
- 3. Barker, M..J. (2017). *Gender, sexual, and relationship diversity (GSRD)*, 28-30.

 Retrieved from:

 https://www.academia.edu/35928545/Good_Practice_across_the_Counselling_P...
- 4. Białek M. (2023). Why Should We Study the Foreign Language Effect: Debiasing through Affecting Metacognition?. *Journal of Intelligence*, 11(6), 103. https://doi.org/10.3390/jintelligence11060103
- Bialystok, E., & Craik, F. I. M. (2010). Cognitive and Linguistic Processing in the Bilingual Mind. *Current Directions in Psychological Science*, 19(1), 19–23. https://doi.org/10.1177/0963721409358571
- Bonnin, J. & Coronel, A. (2021). Attitudes Toward Gender-Neutral Spanish:
 Acceptability and Adoptability. *Frontiers in Sociology*. 6. 629616.

 10.3389/fsoc.2021.629616.

- 7. Bourdieu, P. (1977). The economics of linguistic exchanges. *Social Science Information*, *16*(6), 645-668
- 8. Burnett, H. & Pozniak, C. (2021). Political dimensions of gender inclusive writing in Parisian universities. *Journal of Sociolinguistics*. 25. 10.1111/josl.12489.
- 9. Byram, M. (2006, October 16th-18th). Languages and Identities. Intergovernmental Conference. *Languages of Schooling: Towards a Framework for Europe*. Strasbourg, France. 1-13. https://rm.coe.int/preliminary-study-languages-and-identities-intergovernmental-conferenc/16805c5d4a
- 10. Canakis, C. (2011). Εισαγωγή: Πόθεν γλώσσα-και-σεξουαλικότητα; Στο Κ. Κανάκης (επιμ.), Γλώσσα και σεξουαλικότητα: Γλωσσολογικές και ανθρωπολογικές προσεγγίσεις.
 13-46. Αθήνα: Εκδόσεις του Εικοστού Πρώτου.
- 11. Chui, K. (2021). Ms, Mr or Mx? The importance of titles and evolving language. *The Bulletin of the Royal College of Surgeons of England*. 103(1). 1-3.
- Circi, R., Gatti, D., Russo, V., & Vecchi, T. (2021). The foreign language effect on decision-making: A meta-analysis. *Psychonomic bulletin & review*, 28(4), 1131–1141. https://doi.org/10.3758/s13423-020-01871-z

- 13. Darr, B. D. (2016). Do They Use 'Them'? Gender-Neutral Pronoun Usage among Queer and Non-Queer College Students. *Chancellor's Honors Program Projects*, 4.
- 14. del Caño, M. (2019). Language, Queerly Phrased: A Sociolinguistic Examination of Nonbinary Gender Identity in French. *Honors Thesis*, State University of New York at New Paltz. 8-10. Retrieved from: https://dspace.sunyconnect.suny.edu/bitstream/handle/1951/70761/Delcano_Honors.pd f? sequence=1&isAllowed=y
- 15. Dendrinos, B. and Theodoropoulou, M. (2007). Language Issues and Language Policies in Greece. European Federation of National Institutions for Language, 4.
 Retrieved from: http://efnil.org/documents/conference-publications/riga-2007/Riga-06-Dendrinos-Mother.pdf
- Dewi, G. P. R., Nitiasih, P. K., Artini, L. P., Suwastini, N. K. A., & Haryanti, N. D.
 (2021). Investigating the advantages of bilingualism: multidimensional research findings. *Eternal (English, Teaching, Learning, and Research Journal)*, 7(2), 423-441.
- 17. Diaz, A. R, Mejía, G., & Villamizar, A. G. (2022). Gender neutral and non-binary language practices in the Spanish language classroom: Tensions between disciplinary and societal changes. *L2 Journal*, *14*(3). 1-12. Retrieved from https://escholarship.org/uc/item/2vm455x0

- Dörnyei, Z. & Taguchi, T. (2009). Questionnaires in second language research:
 Construction, administration, and processing: Second edition. Questionnaires in
 Second Language Research: Construction, Administration, and Processing: Second
 Edition. 1-185. 10.4324/9780203864739.
- Dozono, T. (2017). Teaching Alternative and Indigenous Gender Systems in World History: A Queer Approach. *The History Teacher*, 50(3), 425–447.
 http://www.jstor.org/stable/44507259
- 20. European Parliament. (2018) Gender-Neutral Language in the European Parliament. 1-13. Retrieved from:https://www.europarl.europa.eu/cmsdata/151780/GNL_Guidelines_EN.pdf
- 21. Gabriel U., Gygax P. (2008). Can societal language amendments change gender representation? The case of Norway. *Scandinavian Journal of Psychology*, 49(5), 451–457. https://doi.org/10.1111/j.1467-9450.2008.00650.x
- 22. Gabriel U., Gygax P., Sarrasin O., Garnham A., Oakhill J. (2008). Au pairs are rarely male: norms on the gender perception of role names across English, French, and German. *Behavior Research Methods*, 40(1), 206–212. https://doi.org/10.3758/BRM.40.1.206
- 23. Georgiopoulou, T. (2022, September 20). «Είστε σίγουρ@ ότι η γλώσσα χρειάζεται φύλο;» *I Kathimerini https://www.kathimerini.gr/society/562048456/eiste-sigoyr-oti-i-glossa-chreiazetai-fylo/*

24. Gkaragkouni, O. (2009). The Sociolinguistic Phenomenon of Modern Greek Diglossia: the Outcome of Conflicts between (H)igh and (L)ow Variety and the National Language Question in 19th – 20th c. Greece: an Historico - Sociolinguistic Perspective. *The ITB Journal*, 10(1), 28-33. doi:10.21427/D79J1W

25. Grove, K. (2021). Where Is They?: The Globalization of English and Gender-Inclusive Language. *The English Languages: History, Diaspora, Culture*, 10–21. http://resolver.scholarsportal.info/resolve/19295855/v7inone/10_ittgoeagl_1.xml

- 26. Gustafsson Sendén, M., Bäck, E. A., & Lindqvist, A. (2015). Introducing a gender-neutral pronoun in a natural gender language: the influence of time on attitudes and behavior. *Frontiers in psychology*, 6, 893. https://doi.org/10.3389/fpsyg.2015.00893
- 27. Gygax, P. M., Elmiger, D., Zufferey, S., Garnham, A., Sczesny, S., von Stockhausen, L., Braun, F., & Oakhill, J. (2019). A Language Index of Grammatical Gender Dimensions to Study the Impact of Grammatical Gender on the Way We Perceive Women and Men. *Frontiers in psychology*, 10, 1604. https://doi.org/10.3389/fpsyg.2019.01604
- 28. Hansen, K., & Żółtak, K. (2022). Social Perception of Non-Binary Individuals. *Archives of sexual behavior*, *51*(4), 2027–2035. https://doi.org/10.1007/s10508-021-02234-y

- 29. Haralambous, Y. & Dichy, J. (2019). Graphemic Methods for Gender-Neutral Writing. 41-89. 10.36824/2018-graf-hara2.
- 30. Haertlé, I. (2017). Does Grammatical Gender Influence Perception? A Study of Polish and French Speakers. *Psychology of Language and Communication*. 21. 10.1515/plc-2017-0019.
- 31. Hayakawa, S., Tannenbaum, D., Costa, A., Corey, J. D., & Keysar, B. (2017).
 Thinking More or Feeling Less? Explaining the Foreign-Language Effect on Moral Judgment. *Psychological Science*, 28(10), 1387–1397.
 https://doi.org/10.1177/0956797617720944
- 32. Hord, L. (2016). Bucking the Linguistic Binary: Gender Neutral Language in English, Swedish, French, and German. Western Papers in Linguistics / Cahiers linguistiques de Western: 3, 3-14.
- 33. Imborek, K. L., Nisly, N. L., Hesseltine, M. J., Grienke, J., Zikmund, T. A., Dreyer, N. R., Blau, J. L., Hightower, M., Humble, R. M., & Krasowski, M. D. (2017). Preferred Names, Preferred Pronouns, and Gender Identity in the Electronic Medical Record and Laboratory Information System: Is Pathology Ready?. *Journal of pathology informatics*, 8, 42. https://doi.org/10.4103/jpi.jpi_52_17
- 34. Jarvis S., Pavlenko A. (2008). *Crosslinguistic Influence in Language and Cognition*. New York, NY: Routledge. 10.4324/9780203935927

- 35. Kaltsa, M. & Tsimpli, I. & Argyri, F. (2017). The development of gender assignment and agreement in English-Greek and German-Greek bilingual children. *Linguistic Approaches to Bilingualism*. 9. 10.1075/lab.16033.kal.
- 36. Kaplan, J. (2022). Binary-constrained code-switching among non-binary French-English bilinguals. *Proceedings of the Linguistic Society of America*. 7. 5279. 10.3765/plsa.v7i1.5279.
- 37. Karayiannis D, Kambanaros M, Grohmann KK, Alexiadou A. (2021). Assignment of Grammatical Gender in Heritage Greek. Front Psychol. 8;12:717449. doi: 10.3389/fpsyg.2021.717449. PMID: 34690872; PMCID: PMC8531586.
- 38. Keysar, B., Hayakawa, S. L., & An, S. G. (2012). The Foreign-Language Effect:

 Thinking in a Foreign Tongue Reduces Decision Biases. Psychological Science, 23(6),
 661–668. https://doi.org/10.1177/0956797611432178
- 39. King, R. E. (1991). *Talking Gender: A Guide to Nonsexist Communication*. Toronto: Copp Clark Pitman.
- 40. Koutsogiannis, D. & Mitsikopoulou B. (2003). Greeklish and Greekness: Trends and Discourses of "Glocalness", *Journal of Computer-Mediated Communication*, *9*(1). Retrieved from: https://doi.org/10.1111/j.1083-6101.2003.tb00358.x

- 41. Kouvela, F. (2016). Instruction on the Insertion of the Gender Dimension in

 Administrative Documents. *Minister of Internal Affairs, Secretary of Gender Equality*,

 Athens. Protocol Number 652
- 42. Konishi, T (1993). The semantics of grammatical gender: A cross-cultural study. *Journal of Psycholinguistic Research*, 22, 519–534. doi:10.1007/BF01068252
- 43. Labrosse, C. (1996). *Pour une grammaire non sexiste*. Montreal: Les Éditions du Remue-Ménage.
- 44. Llamas, C., & Watt, D. (2010). Introduction. In C. Llamas & D. Watt (Eds.),
 Language and Identities. 1–6. Edinburgh University Press.
 http://www.jstor.org/stable/10.3366/j.ctv2f4vprr.6
- Li, W. (2011). Moment Analysis and translanguaging space: Discursive construction of identities by multilingual Chinese youth in Britain. *Fuel and Energy Abstracts*. 43.
 1222-1235. 10.1016/j.pragma.2010.07.035.
- 46. Ludbrook, G. (2022). From Gender-Neutral to Gender-Inclusive English. *The Search* for Gender-Fair Language. 1.
- 47. Makri-Tsilipakou, M. (1989). The gender of άνθρωπος: An exercise in false generics.
 Proceedings of the 3rd ISTAL. Thessaloniki: Department of Theoretical and Applied
 Linguistics, School of English, Aristotle University, 61-83.

- 48. McConnell-Ginet, S. (2011). *Gender, Sexuality, and Meaning: Linguistic Practice and Politics*. New York: Oxford UP. Print.
- 49. McWhorter, John. (2008). Our Magnificent Bastard Tongue: The Untold History of English. New York: Gotham Books.
- 50. Mirandé, A. (2016). Hombres Mujeres: An Indigenous Third Gender. *Men and Masculinities*, 19(4), 384–409. https://doi.org/10.1177/1097184X15602746
- 51. Mullen, M. K. (1990). Children's Classification of Nature and Artifact Pictures into Female and Male Categories. *Sex Roles*, 23(9/10), 577–587. doi:10.1007/BF00289769
- 52. Nicoladis, E., Westbury, C., & Foursha-Stevenson, C. (2021). English Speakers'
 Implicit Gender Concepts Influence Their Processing of French Grammatical Gender:
 Evidence for Semantically Mediated Cross-Linguistic Influence. Frontiers in
 psychology, 12, 740920. https://doi.org/10.3389/fpsyg.2021.740920
- 53. Norton, B. (1997). Language, Identity, and the Ownership of English. *TESOL Quarterly*, 31(3), 409–429. https://doi.org/10.2307/3587831
- 54. Norton, B. (2009). Language and Identity. In Hornberger N. and McKay S. (Eds.), *Sociolinguistics and language education*. 350. Clevedon, UK: Multilingual Matters.

- 55. Odlin T. (2005). Crosslinguistic influence and conceptual transfer: what are the concepts? *Annu. Rev. Appl. Linguist.* 25, 3–25. 10.1017/S0267190505000012
- 56. Pagel, M. (2017). Q&A: What is human language, when did it evolve and why should we care? *BMC Biology.* 15. 10.1186/s12915-017-0405-3.
- 57. Papadopoulos, B. (2022). A brief history of gender-inclusive Spanish/Una breve historia del español no binario. Deportate, esuli, profughe, *48*(1), 31-48.
- 58. Pavlenko, A. (2012) Affective processing in bilingual speakers: Disembodied cognition?, *International Journal of Psychology*, 47(6), 405-428, DOI: 10.1080/00207594.2012.743665
- 59. Pavlidou, T.-S. (2015). Introducing the special issue on gender and the Greek language. *Gender and Language*, 9(1), 5–19. https://doi.org/10.1558/genl.v9i1.26938
- 60. Pérez, E. O., & Tavits, M. (2019). Language influences public attitudes toward gender equality. *The Journal of Politics*, 81(1), 81-93.
- 61. Péters, H.M. (2020). Gender-inclusivity and gender-neutrality in foreign language teaching: The case of French. *Australian Journal of Applied Linguistics*, *3*(3), 183-195.

- 62. Ralli, A. (2002). The role of morphology in gender determination: Evidence from Modern Greek. *Linguistics*, 40, 519-551.
 http://dx.doi.org/10.1515/ling.2002.022
- 63. Rincker, M., Henderson, M., Vidigal, R., & Delgado, D. (2019). Evaluating the Representation and Responsiveness of the United Nations Commission on the Status of Women (CSW) to Diverse Women Populations Worldwide. *Frontiers in sociology*, 4, 41. https://doi.org/10.3389/fsoc.2019.00041
- 64. Samuel, S. & Cole, G. & Eacott, M. (2019). Grammatical gender and linguistic relativity: A systematic review. *Psychonomic Bulletin & Review*. 26. 10.3758/s13423-019-01652-3.
- 65. Serratrice L. (2013). Cross-linguistic influence in bilingual development: determinants and mechanisms. *Linguist. Approach. Bilingualism*, *3*, 3–25. 10.1075/lab.3.1.01ser
- 66. Shakespeare, W. (1599/2005). Much ado about nothing. London; New York: Penguin
- 67. Shroy, A. (2016). Innovations in gender-neutral French: Language practices of nonbinary French speakers on Twitter. Ms., *University of California*, *Davis*,2-10.
- Skubich, D. (2019). Language and Gender: Beyond the Binary. 9.
 10.13140/RG.2.2.34143.61608.

- 69. Stahlberg, D. & Braun, F. & Irmen, L. & Sczesny, S. (2007). Representation of the sexes in language. Social Communication. 163-187.
- 70. Thorne, N., Aldridge, Z., Yip, A. K., Bouman, W. P., Marshall, E., & Arcelus, J.
 (2023). 'I Didn't Have the Language Then'-A Qualitative Examination of Terminology in the Development of Non-Binary Identities. *Healthcare (Basel, Switzerland)*, 11(7), 960. https://doi.org/10.3390/healthcare11070960
- 71. Tosi, C. (2019). Discursive marks of diversity. About inclusive language and linguistic education: Approaches to the Argentine case. Álabe, Revista de la Red Universidades Lectoras, 20, 1-20.
- 72. Vergoossen, H. P. (2021). Breaking the Binary: Attitudes towards and cognitive effects of gender-neutral pronouns (PhD dissertation, Department of Psychology, Stockholm University). 25-49. Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-195457
- 73. Wong, L. (2017). Queering communication: How nonbinary gender is changing our language. 2-23. Retrieved from https://static1.squarespace.com/static/571136450442627fff34d2f5/t/5a3d4ab0914 0b75e1946c822/1513966290239/2017+Wong.pdf
- 74. Zimman, Lal. (2017). Transgender language reform. *Journal of Language and Discrimination*. 1. 84-105. 10.1558/jld.33139.

Appendix A: Questionnaire Sample

University College Cork, 2023

Sociolinguistic Survey Questionnaire on Non-Binary Language Features in English & Greek

Dear Participant,

As part of my dissertation on *Non-Binary Language Features in English & Greek*. I am kindly asking you to devote some time to the completion of the following questions. Your answers will be used for the purpose of the study. Thank you for your participation.

Vasiliki Aliki Tzoutza

Glossary

morphology: In linguistics, morphology is used to refer to the study of *morphemes* as small units that carry a specific meaning. Morphology focuses on word construction and how morphemes are joined to form words. For instance, inflectional morphemes indicate gender, number, case (e.g., -ess as in waitress, hostess, actress).

neologism: the term neologism refers to the creation of any new word, phrase or morpheme that is introduced to our everyday language (e.g, Latinx, gender neutral term to refer to Latin American individuals)

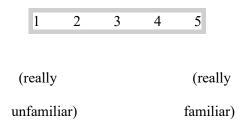
non-binary language: non-binary language is an umbrella term used to indicate features of language that avoid references towards a specific gender (male or female) or to specifically refer to people who do not identify with the traditional binary. Gender neutral grammatical

constructions and words have also been adopted by non-binary people to indicate gender non-conformity.
Examples in English: generic use of personal pronoun "they", neologisms (e.g., ze/hir/hirs)
Examples in Greek: generic use of personal pronoun "αυτό/αυτοί", graphemic suffixation with
"@" symbol (e.g., φοιτητ@), use of neutral gender adjectives (e.g., εγώ ως άφυλο)
Section A. Personal Details: Please answer the following questions. Indicate your option by putting an X in the box with the answer that describes you the best.
1. What is your age group?
From 18-25 years old
☐ From 25-50 years old
☐ From 51-70 years old
2. What is your gender identity?
☐ Man
Woman
☐ Non-Binary
A gender identity not listed (please, specify)
Prefer not to say
3. What is your country of origin?

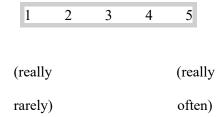
4. Please, specify	your first language(s)
5. Please, select y	your level of English:
	Elementary (A1/A2)
	Intermediate (B1/B2)
	Advanced (C1)
	Proficient (C2)
6. Please, select y	our highest level of education:
	3 rd Grade Lyceum or less
	High School graduate
	Attended University/ College
	Bachelor's Degree
	Master's Degree
	Doctorate Degree (PhD)
	Doctorate Degree (PostDoc)
ction B. General O	restions I: Please rank the following questions by circling the number that

describes your answer the best.

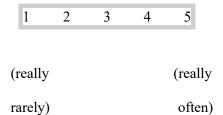
1. On a scale from 1-5, how familiar do you consider yourself with the issue of non-binary language?



2. On a scale from 1-5, how often have you observed non-binary language use (in written or oral form) in English?



3. On a scale from 1-5, how often have you observed non-binary language use (in written or oral form) in Greek?



		ral Questions II: Please answer the following questions. Indicate your option by e box with the answer that describes you the best.
1.	In case you ha	ave observed non-binary language features in English, which was the
		Media (Facebook, Twitter, YouTube, etc.)
		Surveys/Questionnaires
		Literature & Fiction
		Movies
		News
		Legal Documents
		Other:
2.		ave observed non-binary language features in Greek, which was the
	context:	
		Media (Facebook, Twitter, YouTube, etc.)
		Surveys/Questionnaires
		Literature & Fiction
		Movies
		News
		Legal Documents
		Other:

Section C. Rating Scale Questions: Please read the following utterances carefully. To indicate your answer, circle the number that describes your opinion towards non-binary language use.

2 = I consider it acceptable, but I would not use it
3 =I find it weird, but I would use it
4 = I find it weird, and I wouldn't use it
5 = I find it unacceptable, and I would use it
6 =I find it unacceptable, but I wouldn't use it

Examples of Non-Binary Language in English

A. This is my friend, Alex. I met them at a concert.

		1	2	3	4	5	6
--	--	---	---	---	---	---	---

B. Jay is working on Friday night, so they cannot join us.

1 2 3 4 5 6

C. *Mx*. Smith left the wallet on the table.

1 2 3 4 5 6
1 2 3 4 3 0

D. Ze is a singer and wrote that song zirself.

1 2 3 4 5 6						
	1	2	3	4	5	6

E. A patient must trust their doctor.

|--|

		1	2	3	4	5	6	
xam	ples of No	n-Bin	ary La	nguaş	ge in (Greek		
. 1	Γο Ιάσων ε	ίναι λι	ιγότερο	ο ενερ	γό σε	οργα	νώσεις. (Jason [with neuter article] is les
a	active [with	h neut	er suffi	ix] in	organ	izatio	ns)	
		1	2	3	4	5	6	
		1			- 1		· · · · · · · · · · · · · · · · · · ·	
. Θ	α ήθελα ν	α πω σ	στο άτο	μο νο	είναι	ο εαι	υτός του.	(I would like to tell the individue
<i>neut</i>	er noun] to	o be it.	self).					
		1	2	3	4	5	6	
. K	αλησπέρα,	αγαπι	ημένα!	(Good	l eveni	ing, de	arlings! [with neuter suffix])
		1	2	3	4	5	6	
						ι κλειδ	διά του στ	το τραπέζι. (Where is your pal? [ne
oun]	'. (It) forgo	t (its) k	keys on	the ta	ble.)			
		1	2	3	4	5	6	
		. (1		1.2.5				
E/	σαι έτοιμο	; (Are)	vou rea	ay? [1	viin ne	euter s	sujjix])	
. Εί								
. Eí		1	2	3	4	5	6	
	Acc. Ólou re							very any airl "@" suffication" ly
. O	-							very guy, girl, "@" suffixation"] w
	-							very guy, girl, "@" suffixation"] w

Secti	on D	. Multiple C	hoice: Please answer the following questions. Indicate your option by
puttii	ng an	X in the box	with the answer that describes you the best.
1.		Do you thin	k you had a clearer perception of non-binary identities in the utterances in
		English, in o	comparison to the utterances in Greek?
			Yes
			No
			Same level of perception
			Unable to perceive in any language
2.		Do you con	nsider the use of non-binary language features (e.g., they pronoun, non-
		gendered n	ouns, neologisms) more applicable in English than Greek?
			Yes
			No
			Inapplicable in any case
	3.	Do you bel	ieve that Greek grammatical rules hinder the embracement of non-binary
		attitudes?	
			Yes
			No
			Irrelevant

4.	Do you wish to support non-binary identities, but feel restricted in Greek?
	☐ Yes ☐ No
5.	If yes, could you provide specific reasons?
6.	Do you consider English grammar a fundamentally more suitable system to describe
	third gender identities, in comparison to Greek?
	☐ Yes
	∐ No
7.	Do you feel more comfortable in using neologisms in English (as your second
	language) than Greek (as your first language)?
	Yes
	□ No
	I don't feel comfortable in either case
8.	In your opinion, do non-binary language features impact the quality of the English
	language?

		Yes, positively
		Yes, negatively
		It depends
		No
9.	In your opi	nion, do non-binary language features impact the quality of the Greek
	language?	
		Yes, positively
		Yes, negatively
		It depends
		No
10.	. Do you thin	nk that non-binary language could be officially established in Greece in the
	following y	years?
	_	
		Yes
		No
		Maybe
11.		nsider the emergence of non-binary language a foreign concept influenced
	by English	?
		Yes

□ No
12. Do you consider language constraints the biggest impact on non-binary gender
attitudes?
Yes
□ No
13. If not, which is the most important factor (e.g., culture, education, political ideology,
religion, etc.)?
14. According to you opinion a legislative framework for the inclusion of non-binary
language in Greece is:
Necessary, and likely to be established
Necessary, but unlikely to be established
Unnecessary

Appendix B: Interview Questions & Transcripts

Interview 1 (Female, Group 1)

Researcher:

-Do you believe that Greek can precisely communicate the description non-binary identities?

Interviewee:

- *I*n theory, yes, Greek can communicate the identification of non-binary identities. However, in reality, there's a degree of difficulty.

<u>R:</u>

- Which linguistic features, for example, articles, pronouns, suffixes, etc. facilitate the identification of non-binary individuals in Greek, in your opinion?

<u>I:</u>

- In Greek we use the neuter gender in singular or plural to refer to this category, all pronouns, verbs, participles are in agreement with the neuter gender.

<u>R:</u>

-Which features hinder the description of the non-binary, in your opinion?

<u>I:</u>

-In a grammatical sense, there isn't anything that hinders the description of non-binary people. However, in a practical way, there are difficulties in terms of...

<u>R:</u>

-The perception?

<u>I:</u>

-The perception!

<u>R:</u>

-When you read the 6 examples in each language, did you think you felt oddly in the case of Greek for this kind of language use?

<u>I:</u>

-Yes, because, in a way, English is a foreign language and therefore, we use it more "mechanically", without 100% understanding the meaning of the articles and the coloration we give through the articles when referring to people. However, in Greek, as our mother tongue, the neuter gender exists, which is typically used for inanimate objects, which renders its application difficult to people, as living beings.

<u>R:</u>

- When you read the examples in English, did you think that, because of your linguistic perception, this had an impact on your stance? Did you think you were more accepting of the situation as a social issue?

<u>I:</u>

Yes! If we could translate the same examples in both languages, I would consider the ones in English a lot more logical, and in that sense, the English language also expanded the social horizons, whereas in Greek, in every example, it was still difficult and weird.

<u>R:</u>

-So, when you read the example with "Jason", do you believe that if this was in English, you would have a different perception of this person that self-identified as "To (neuter article) Jason"

<u>I:</u>

-Yes.

<u>R:</u>

-Do you consider that the different grammatical structure of the two languages has an impact on the way you view this category of people?

<u>I:</u>

-In reference to the issue of the neuter gender again, which is a difference between the two languages, in Greek, things are theoretically easier, but practically more difficult, being our mother tongue as well, whereas in English, everything is more impersonal, in the sense that the pronouns "they/them" refer to one unspecified individual...without categorizing it.

<u>R:</u>

-So, when you hear the pronouns "they/them", you immediately realize that we are talking about something generic, you're not thinking of two people.

<u>I:</u>

-No, I don't. In contrast, I understand there is a person who belongs to the non-binary category.

<u>R:</u>

-Do you feel more "linguistic liberty", in the sense that you feel more accepting to the use of neologisms in comparison to modifying to this extent your own mother tongue?

<u>I:</u>

-Yes.

<u>R:</u>

-For what reason? Are you more concerned to preserve the quality of Greek?

<u>I:</u>

-No. I think that in Greek, this movement hasn't prevailed in either social media or everyday life, so by observing it in English, it sounds so foreign to me, in the sense that I have come to a point of "reconciliation" with the "they/them" pronouns, whereas in Greek, it sounds so odd to me.

Interview 2 (Male, Group 2)

<u>R:</u>

-Do you think that Greek can precisely communicate the description of non-binary identities?

<u>I:</u>

-Yes, cause in general, (Greek) is a language that communicates precision. I cannot come up with any reason, I mean, grammatically, so, yes. I would say that in English, it might be more difficult, but as I said in the questionnaire, it sounds easier, like more reasonable.

<u>R:</u>

-Which linguistic features, like articles, pronouns, suffixes facilitate the identification of non-binary people?

<u>I:</u>

-The neuter article. I cannot think of anything else. So, yes. The (neuter) article surely helps a lot. But, I am not sure how it is possible to express it with an adjective. In the written form, we can use the "@" symbol, but it is more difficult to express it. I imagine that we could make it (the adjective) neutral.

R:

-So, you also believe that neutral suffixes could help? For instance, instead of saying "όμορφος/beautiful male", we could say "όμορφο/beautiful neutral "

<u>I:</u>

-Yes, it probably helps. You can make a "pattern" out of it in your mind, because it is difficult. In written form, it is a lot easier. You think before you write, whereas when you speak, something might slip out.

R:

-So, you believe that somebody might mistakenly refer to a non-binary person using gendered language in oral form?

<u>I:</u>

-Yes. It takes a lot of practice. I know a lot of friends of mine that use inclusive language in general. But when you use male and female terms all the time, it is really complicated for the brain. So, maybe it is more reasonable to start with the written form, and then proceed to the oral form. You have to start from somewhere, so your brain gets used to it.

R:

- Do you think that Greek might include some features that do hinder the reference to such identities?'

<u>I:</u>

-I don't think that the problem is there, no. In a lot of cases, it is easier cause a lot of words are neutral by their structure, but I think that the main influence is the part of culture. In that case, yes. In the questionnaire, if I am not mistaken, I mentioned culture. I am not just referring to being open-minded. When you do not get exposed to this discussion from a younger age, you won't be in the position to make such thoughts, cause there would be no usefulness.

<u>R:</u>

-So, you believe that if our culture was more receptive, then our language could be adjusted to neutralization processes?

<u>I:</u>

-Yes, it would have changed a lot more and a lot faster. For example, the current generation, the so-called "Gen Z" is a lot more ready for many factors. It has a lot to do with the influences they receive, the type of movies they watch and the time they spend on social media being exposed to foreign speech and foreign role models, so it would have changed a lot faster. In the past years, the Greek language has changed. Firstly, the most conservative types have been simplified, such as, grammar, orthography, so yes. I believe it will change a lot in the following years. But at this moment, it is very difficult, because many believe that this has no place in the Greek language, in the sense that they had counted it out for many reasons. So, the issue is cultural.

··...;

The younger generations use their brain differently. I am not saying they are smarter, but they think differently. They have other influences, so at the same time, they are a lot more ready for this. I also think that the next generation will be a lot more prepared.

<u>R:</u>

- So, when you read the examples in English and then Greek, did it occur to you that you perhaps felt more comfortable in English, considering the lack of such suffixes, or perhaps that it is your second language?

<u>I:</u>

-Yes of course. It is easier cause it (English) is more neutralized and simplified. It is a lot easier to me, cause in the other case (Greek), you are like "What am I going to say", so,

there is the part of judgement, like, what kind of judgement you will receive if I word it that way. If I say this to someone older, for example, to my parents, they won't understand it. It will sound completely crazy, and they will probably say that people like you ruin the language. Also, as much open-minded and ready you might think you are, deep inside, you know that in English it is a lot easier, because it is a lot simpler.

<u>R:</u>

So, you felt that this "linguistic liberty" in English is mostly linked with the fact that it includes your second language or because of grammatical factors? Or even both?

I:

I believe that it is because grammar is a lot simpler and it makes it easier, you don't to adjust it and think all the time. The other thing is that the influences you have received in order to utter a more neutralized speech, so it is a lot easier and logical.

Interview 3 (Female, Group 3)

<u>R:</u>

-Do you believe that Greek can precisely communicate the description of non-binary identities?

<u>I:</u>

-I believe that Greek is a complicated language when it comes to articles and its structure. It is not a suitable language to covey such concepts.

<u>R:</u>

-So, which grammatical features hinder the identification of non-binary people, in your opinion?

<u>I:</u>

-It's the three (gendered) articles, adjectives, pronouns, whereas, I don't think that this kind of difficulty exists with verbs. Exactly because of the fact that the Greek language determines, by its structure, the neuter gender "το/it", by giving it however, a different meaning, I think that this change is truly difficult in a conceptual, stylistic, and morphological way.

<u>R:</u>

-Do you get a weirder feeling when using non-binary language in Greek? If yes, why?

<u>I:</u>

-Yes, I believe that in Greek the identification of this social group is weird exactly because of the structure of the language and the already existing usage of the neuter

gender, that sometimes not only do I consider it weird, but also funny. So, in my opinion, it is because of the issue of the structure of the language. <u>R:</u> -Not the environment of the language? <u>I:</u> -No. It is the structure of the language. <u>R:</u> When you read the examples in English, did you feel a difference in your stance towards the issue? For instance, would you be more supportive? <u>I:</u> Yes. And again, I'm attributing this to the structure of the language. <u>R:</u> -Do you feel more "linguistically liberated" in English? For example, do you feel more receptive to using neologisms? <u>I:</u> -Absolutely. <u>R:</u> -Is this because of the grammar or of the fact that English is your second language? <u>I:</u> -No. This doesn't have to do with whether English is my first or second language. I just think that languages like English allow this "linguistic expression" more easily than

Greek, as my first language. I am associating it with the structure of language, as I said previously.

<u>R:</u>

-So you don't believe that in English, as your second language, you don't develop a full sense of perceiving the usage of "they/them" pronouns, whereas in Greek, you have a deeper understanding.

<u>I:</u>

I personally don't think that it has anything to do with my first or second language. They are just two different languages with different structures.

Appendix C: Tables

Table 1: Numerical data on Familiarity Index

Familiarity	Group 1	Group 2	Group 3	Total
NBL Issue	9/15*	10	7	26 /45
NBL English	10	10	6	26
NBL Greek	6	9	4	19

^{*15} being the perfect score

Table 2: Results of Section D

	S1	S2	S3	S4	S5	S6	S7	S8	S9
Q1	yes	yes	yes	same	yes	yes	yes	yes	no
Q2	yes	yes	yes	yes	no	yes	yes	yes	yes
Q3	no	yes	no	yes	yes	yes	yes	yes	irrelevant
Q4	yes	yes	yes	no	yes	no	yes	yes	no
Q5	Open-ended question								
Q6	no	yes	yes	yes	yes	yes	yes	yes	no
Q 7	i don't feel comfortable	yes	yes	yes	yes	yes	no	yes	i don't feel comfortable

Q8	no	yes,	no	no	yes,	yes,	no	no	no
		positively			positively	positively			
Q9	yes,	yes,	no	no	yes,	it	it depends	it	yes, negatively
	negatively	positively			negatively	depends		depends	
Q10	no	no	no	yes	yes	no	maybe	no	maybe
Q11	yes	no	yes	no	yes	yes	yes	yes	no
Q12	no	no	no	no	no	yes	no	no	no
Q13	culture	culture,	culture,	inclusive	culture,	No	culture	culture,	all factors
		education	education	education	religion	answer		tradition,	mentioned
			religion;					social	
			political						
Q14	unnecessary	necessary	necessary	necessary,	necessary	necessary	unnecessary	necessary,	unnecessary
		but	but	but	and likely	but		but	
		unlikely	unlikely	unlikely		unlikely		unlikely	

S: Subject

Q: Question

Appendix D: Information Sheet & Consent Form

Information Sheet

Thank you for considering participating in this research project. The purpose of this document is to explain to you what the work is about and what your participation would involve, so as to enable you to make an informed choice.

The purpose of this study is to examine linguistic attitudes of speakers of Greek and English on the issue of non-binary language. Should you choose to participate, you will be asked to take part in completing a questionnaire, and if necessary, participate in a short interview with follow-up questions, that will be audio-recorded.

Participation in this study is completely voluntary. There is no obligation to participate, and should you choose to do so you can refuse to answer specific questions, or decide to withdraw from the interview. Once the interview has been concluded, you can choose to withdraw your details at any time in the subsequent two weeks.

All of the information you provide will be kept confidential and anonymous, and will be available only to the researcher and the supervisor. The only exception is where information is disclosed which indicates that there is a serious risk to you or to others. Once the interview is completed, the recording will immediately be transferred to an encrypted laptop and wiped from the recording device. The interview will then be transcribed by the researcher, and all identifying information will be removed. Once this is done, the audio-recording will also be deleted and only the anonymized transcript will remain. This will be stored on the University College Cork OneDrive system and subsequently on the UCC server. The data will be stored for a minimum of

134

10 years. The information you provide may contribute to research publications and/or conference

presentations. Outline the Positive Ethics, the benefits of this research in the wider context. The

data will contribute for the researcher's Thesis submission. I will debrief you afterwards and

answer any questions you may have.

We do not anticipate any negative outcomes from participating in this study. Should you have any

concerns arising from participating in the research, or should it raise any issues for you, the

contact details for support services provided below may be of assistance.

Researcher:

Vasiliki Aliki Tzoutza

alikitzoutza@gmail.com

Supervisor:

Seana Ryan

Seana.Ryan@ucc.ie

This study has obtained ethical approval from the UCC School of Languages, Literature and

Cultures Ethics Committee.

If you have a concern about how we have handled your personal data, you are entitled to this raise

this with the Data Protection Commission.

https://www.dataprotection.ie/

If you have any queries about this research, you can contact:

Researcher:

Vasiliki Aliki Tzoutza
alikitzoutza@gmail.com
+306974082948
Supervisor:
Seana Ryan
Seana.Ryan@ucc.ie
UCC'S Data Protection Officer (DPO) is Catriona O'Sullivan, Information Compliance Manager,
University College Cork, 4 Carrigside, College Road, Cork, Ireland.
Telephone: +353 (0)21 4903949* Email: gdpr@ucc.ie
The Data Controller for this study is Vasiliki Aliki Tzoutza
If you have a complaint about how this research was conducted please contact in writing:
The Ethics Committee,
School of Languages, Literature & Cultures
University College Cork,
Cork

If you agree to take part in this study, please sign the consent form overleaf.

Consent Form

Iagree to participate in Vasiliki Aliki Tzoutza's research
study.
The purpose and nature of the study has been explained to me in writing.
I am participating voluntarily.
I give permission for my interview with Vasiliki Aliki Tzoutza to be audio-recorded.
I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.
I understand that I can withdraw permission to use the data within two weeks of the interview, in which case the material will be deleted.
I understand that anonymity will be ensured in the write-up by disguising my identity.
I understand that disguised extracts from my interview may be quoted in the thesis and any subsequent publications if I give permission below:
(Please tick one box:)

I agree to quotation/publication of extracts from	my interview	Ц
I do not agree to quotation/publication of extract	es from my interview	
Signed:	Date:	
PRINT NAME:		

Appendix E: Ethics Approval Form

Introduction

Postgraduate students of taught MA programmes who are seeking ethical approval should complete this approval form. Ethical review by the School of Languages, Literatures and Cultures is required where the methodology is not clinical or therapeutic in nature and proposes to involve:

- direct interaction with human participants for the purpose of data collection using research methods such as questionnaires, interviews, observations, focus groups etc.;
- indirect observation with human participants for example using observation, web surveys etc.;
- access to, or utilisation of, anonymised datasets;
- access to, or utilisation of, data or case files/records concerning identifiable individuals;
- conducting Internet Research or research online.

The School of Languages, Literatures and Cultures will consider applications for projects of limited complexity and low risk. Please add additional relevant notes to convey what you think is pertinent about the ethical aspects of your study. Projects that are judged to be "high risk" or "too complex" will be returned to the applicant – the applicant should then seek ethical approval with the UCC Social Science Research Ethics Committee.

Application Checklist

This checklist includes all of the items that are required for an application to be deemed complete. In the event that any of these are not present, the application will be returned to the applicant *without* having been sent for review. Please complete the checklist below, and ensure that your application includes all of these prior to submission. Thank you and best of luck with your research.

	Delete as
	applicable
All relevant files are combined into one PDF file (application form, consent/assent forms, information	Yes / No
sheets, data collection instruments, permission letters, etc.)	
Completed Application Form	Yes / No
Information Sheet(s) / Information Statement (i.e. at the beginning of an electronic survey) included	Yes / No
Consent Sheet(s) / Consent Statement (i.e. at the beginning of an electronic survey) included	Yes / No
Data Collection Instrument: Psychometric Instruments / Interview Guide / Focus Group Schedule / Survey Questionnaire / etc. included	Yes / No
Copy of permission letters to undertake research from relevant agencies/services included (if available)	Yes / No /
If this is a resubmission, all the revised and new text is highlighted in yellow	Yes / No / NA
Have you applied for ethical approval for this project from another UCC ethics committee?	Yes / No
If you are under academic supervision, your supervisor(s) have approved the wording of and co-signed this	Yes / No /
application prior to submission	NA

APPLICANT(S) DETAILS

Name of UCC applicant(s)	Vasiliki Aliki Tzoutza	Date 28/2/2023	
	Linguistics-Applied		
Name of Department /	Linguistics/School of Languages,		
School / Research Institute	Literatures & Cultures/ College of	Contact No.	
/ Centre / Unit / College	Arts, Celtic Studies and Social		
	Sciences/ University College Cork		+353 085 7828428
Correspondence Address	Patission Avenue, 242, Athens,	Email	
Correspondence Address	Attica, Greece	Address alikitzoutza@gmail.com	
Course Code/Name and	MAAPL/ Linguistics-Applied	Name of	
		supervisor(s)	
year of course (students only)	Linguistics 2022/23	(students only)	Mrs. Seána Ryan
		•	
Is this a resubmission?	Yes / No	SREC Log No. (1	f a resubmission):

Obtaining ethical approval from the School of Languages, Literatures and Cultures does not free you from securing permissions and approvals from other institutional decision-makers and agency ethical review bodies. These bodies may accept the approval, but researchers are responsible for ensuring they are compliant in advance of collecting data.

Project working title	Attitudes towards the use of Gender-Inclusive Language in Greek-English Bilinguals

If this is a collaborative project / community-based participatory research project / *joint* application with another agency, please complete this additional section:

Names of research
partners / civil society
organisations
collaborating on this
project (this section must be
completed for participatory /
community-based participatory
research studies)
Agency contact person
and position
Agency address
Details of the
partnership (Please identify
clearly the roles and
responsibilities held by each
party in the partnership in
relation to the different aspects
of the research).

		YES	NO
	If your answer falls into any of the shaded boxes below, please address each point later in the application form	Use X402r NA to	
		mark selection	
1	Do you consider that this project has significant ethical implications?		X
2	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	X	
3	Will participation in this project be voluntary?	X	
4	Will you obtain informed consent in writing from participants?	X	
5	Will you tell participants that they may withdraw from the research at any time and for any reason, and (where relevant) omit questionnaire items / questions to which they do not wish to respond?	X	
6a	Will data be treated with full confidentiality / anonymity (as appropriate)?	X	
6b	Does your project require you to carry out a Data Protection Impact Assessment (DPIA) in compliance with <a (children="" 2012="" 2016?<="" acts="" and="" as="" bureau="" defined="" href="https://doi.org/linear.2013/05/2013/2013/2013/2013/2013/2013/2013/2013</td><td></td><td>X</td></tr><tr><td>7</td><td>Will data be securely held for a minimum period of ten years after the completion of a research project, in line with the University's <i>Code of Research Conduct</i> (2016)?</td><td>х</td><td></td></tr><tr><td>8</td><td>If results are published, will anonymity be maintained and participants not identified? (see Q. 30 below regarding open data considerations, if relevant)</td><td>X</td><td></td></tr><tr><td>9</td><td>Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?</td><td>X</td><td></td></tr><tr><td>10</td><td>Will your project involve deliberately misleading participants in any way?</td><td></td><td>X</td></tr><tr><td>11</td><td>Will your participants include children / young persons (under 18 years of age)?</td><td></td><td>X</td></tr><tr><td>12</td><td>If yes to question 11, is your research in compliance with the UCC <u>Child Safeguarding Statement</u> which sets out the legal requirements under the Children First Act 2015?</td><td></td><td></td></tr><tr><td>13</td><td>Will your project require you to carry out " in="" national="" persons)="" relevant="" td="" the="" to="" vetting="" vulnerable="" work"=""><td></td><td>X</td>		X
14	Do you require official Garda Vetting through UCC before collecting data from children or vulnerable adults? (Please note that having a Garda Vetting through another body is not sufficient; a separate UCC Garda Vetting is always required.)		Х
15	Will project participants include people with learning or communication difficulties?		X

	Tring to the state of the state		
16	Will project participants include patients / service users / clients? A service user or client is a person who is		X
	served by or uses the services under consideration as part of this research.		
17	Will project participants include people in custody?		X
18	Will project participants include people engaged in illegal activities (e.g. drug taking, illegal Internet behaviour, crime, etc.)?		X
19a	Is there a realistic risk of participants experiencing either physical or psychological distress?		X
19b	Is there a realistic risk of the researcher experiencing either physical or psychological distress?		X
20	If yes to question 19a, has a proposed procedure for linking the participants to an appropriate support, including		
	the name of a contact person, been given? (see Q. 33)		
21	If yes to question 19b, has a proposed procedure/support structure been identified?		
22	Are the research participants students with whom you have some current/previous connection (module	X	
	coordinator, research supervisor, professional tutor, etc.)?		
23	Will the research participants receive payment / gifts / voucher / or other incentives for participating in this study?		X
	If your research is conducted on the internet, does it involve human participants? (e.g. through web surveys,		
24	social media, accessing or utilising data (information) generated by or about the participant/s; or involve	X	
	observing human participants in their online interactions/behaviour). If yes, please review and utilise the UCC		
	policy for conducting Internet Research.		
			1

ETHICAL APPROVAL SELF-EVALUATION

DESCRIPTION OF THE PROJECT

Ethical review requires that you reflect and seek to anticipate ethical issues that may arise,

rather than reproduce copious text from existing research proposals into these boxes.

Entries should be concise and relevant to the point / question.

25. Very brief description of your study (15-25 words max.)

[e.g. This is a qualitative study of primary school teachers' attitudes towards religious teaching using focus groups to collect original data]

The aim of this study is to investigate the attitudes of coordinate bilingual speakers of Greek and English towards the use of linguistic elements of Gender Inclusive Language through questionnaires and structured interviews of 6 participants divided into three age groups.

26. What is your study about? (100-200 words max.)

The study focuses on the attitudes of developmental bilingual speakers of Greek and English towards Gender Inclusive Language use. The scope of the study includes the comparison of linguistic neutralization processes between English and Greek, considering the differences in grammatical function in gender classification and therefore, in conveying non-binary concepts. More specifically, traditional grammatical norms are affected by the development of non-binary, gender fluid identities, where linguistic phenomena such as pronouns and honorifics are enriched with gender neutral neologisms. However, gender-neutral language tendencies in the

English language may not be used, interpreted, and perceived in a similar fashion in comparison to gendered languages like Greek. The differing grammatical association of gender in Greek might lead to confusion in acceptability and adaptability of non-binary terms to bilinguals when code-switching, despite their ideological stances towards gender neutrality.

27. What are your research questions?ⁱⁱ (The research questions are the overall aim(s)/objective(s) of your study)

- 4. How do participants perceive the use of non-binary language features in Greek in comparison to English?
- 5. Do grammatical differences between Greek and English impact participants' usage of non-binary terms, despite their ideological stances?
- 6. To which extend could Greek as a gendered language accommodate non-binary identities, according to the participants?

28. Who are the participants in your study? (recruitment methods including details of how you will engage with participants, number, age, gender, exclusion/inclusion criteria, detail permissions to be sought / secured already, and how will you recruit participants?)

The total number of participants in the study is six, as organized in three different groups of two persons. Groups will be classified by age (young adults, adults, elders/23-68 years old). Out of the six participants, four identify as female and two as male. Participants will be notified through a recruitment e-mail, including in detail all information necessary for the conduction of the study. The major criteria of selection are based on a)

the nationality, b) age, c) native language (Greek is required), and d) level of linguistic competence in English (proficient speakers are required).

29. Concise statement of <u>anticipated</u> ethical issues raised by your project. How do you intend to deal with them? Please address <u>all</u> items where your answers fell into a shaded box in the self-evaluation above. (350 words max.)

The study does not include significant ethnical issues. The participants will be in full awareness of the research procedures prior the beginning of the study, so that they comprehend the scope of the research and shape a realistic outlook. Participation in the research will be voluntary, maintaining confidentiality and anonymity of the subjects, even in case of publication of the study. In addition. Informed consent in writing will be obtained from the participants, in which they will explain in detail what they consent to take part in the research. Participants will be also informed about their right to withdraw from the project any time and for any reason. It will also be clarified that they are allowed not to answer any question they do not wish to in the questionnaire to be given or the interview to be made. Information about the description and aims of the study will be given before the data collection in order for the participants to be well informed about the purpose of their enrolment.. According to Code of Research Conduct, data will be saved for a minimum of 10 years after the completion of the study. The research does not include any deliberate misleading to the participants. Additionally, all individuals to take part will be adults, who do not belong to any vulnerable group. Therefore, the UCC Child Safeguarding Statement, the Garda Vetting and any "relevant work" will not be necessary. It is worth citing that participants do not face any difficulty in regards with learning and communication. None of the participants is in custody or has been engaged with illegal activities. The subjects will be placed in any kind of distress. Similarly, the researcher will not deal with any physical or psychological distress. The participants have been in the same educational environment as the researcher (secondary and tertiary

education). No kind of financial or material compensation will be given. Lastly, questionnaires will be distributed through electronic devices to the participants.

- **30. Data.** (Please provide your answers to these questions in the white area below)
- (a) How will you collect your data? Provide a brief description and justification of methods and data collection measures to be used. (If conducting an online survey/questionnaire, what survey platform do you plan to use?)
- **(b)** If you are creating audio/video recordings, who will perform the transcription? (If transcription is being outsourced the transcription service needs to be trustworthy, reliable, and confidential. Ensure that data transfer is done securely. Recorded data must be deleted from a mobile recording device. When will the data recordings be deleted from the recording device and who will be assigned responsibility for this?)
- (c) What type of data will you be storing? (Briefly describe the type of data you plan to collect).
- (d) How and where will you store your data?ⁱⁱⁱ (Provide details about both physical <u>and</u> electronic documents. See page 7, Electronic Data Storage for guidance on data storage).
- (e) For how long will you store the data? (A minimum storage period of 10 years is required)
- (f) Who will you share the data with? (Sample prompts: If you plan to make your raw research dataset available publicly as part of the open data movement, or if you are required to do so as part of funding/journal requirements, please address your protocol here (make explicit links to Q. 32 below and show that you have addressed this in your consent form and information sheet). For collaborative/community-based participatory research, please address issues such as shared ownership of data, will data be transferred (how?), publication of findings, etc. If your funder contractually requires you to give them access to the 'raw' dataset, examine relevant implications, including appropriate anonymisation, protocols for secure access to the dataset, etc.).

- (g) If you are planning to analyse an existing dataset, please outline how the original consent process allows for your data analysis.
- (h) If you are planning to request access to health/case files/personal records that were not created for research purposes, please address Data Protection considerations, provide a strong rationale and comprehensively address associated ethical issues.
- (i) If you ticked yes to Q.6b in the Checklist (above), have you submitted your DPIA?
- (a) Data will be collected through a mixed method. The first part of the collection will be based on quantitative approach, where a questionnaire will be provided through UCC Google Form. It is worth mentioning that the access of the Google Form account will be shared with my supervisor. The second part will include an interview with follow-up questions in order to achieve a more insightful view, emphasizing on the third research question.
- (b) Data transcription will be performed by the UCC student. The data will be deleted from the mobile device once the project is complete (est. August 1st). The UCC student is assigned responsible.
- (c) Data should include; a) results from UCC Google Form questionnaires, b) audio recordings from interviews.
- (d) UCC Google Form results will be stored by both the student and the supervisor via UCC's shared account.

 All audio will be recorded and stored on UCC MS Teams, and on the student's password protected laptop.
- (e) Data will be held securely for 10 years on UCC MS One Drive, and my supervisor's UCC computer.
- (f) The data will be shared with the supervisor.

(g)

(h)
31. Arrangements for informing participants about the nature of the study (e.g. information sheets, letters
of invitation, social media information, participant recruitment, focus group welcome/schedule, withdrawal, etc.)
Participants will be provided before the beginning of the survey with information sheets that will be sent to
their e-mail accounts, including all relevant details about the purpose and procedures of the survey. In addition,
recruitment criteria will be thoroughly cited. Their right of withdrawal or avoiding questions in questionnaires/
interviews will be clarified

32. How you will ensure that participants provide informed consent? (cf. Question 4 - attach relevant form(s); address special considerations in terms of children / young people / vulnerable persons / adults who have difficulty in making decisions unaided)

Participants will be asked to provide informed consent in a written document before the beginning of the survey to give consent to enter the survey and claim their right for voluntary and anonymous participation.

Yes / No

Yes / No

33. Outline of debriefing process at the end of the data collection process (cf. Question 9). If you answered
Yes to Questions 19a or 19b, give details here. State what you will advise participants to	o do if they should
experience problems (e.g. who to contact for help – provide name and contact details w	here required.)
Text here	
34. Estimated start date and duration of project (by months)	
April 1st (start date)	
August 1st (end date)	
35. Additional information of relevance to your application	
Text here	
36. Declarations (clickable links to policies and codes quoted here are on the next page)	Delete as applicable

36. Declarations (clickable links to policies and codes quoted here are on the next page)

professional/disciplinary code of ethics, and/or notify the School, where appropriate.

I/we agree that should there be unexpected ethical issues arising during the course of this study, that I/we will utilise my/our

I/we have consulted the UCC Code of Research Conduct (2019) and believe my/our proposal is in line with its requirements.

I/we have consulted the UCC Child Protection Policy and believe my/our proposal is in line with its requirements.	Yes / No / NA
I/we have consulted the UCC GDPR guidelines and declare that our project is GDPR compliant.	Yes / No
Where required under the UCC GDPR Guidelines, I have submitted a DPIA.	
	Yes / No / NA
I/we have consulted the UCC Garda Vetting Guidelines, and where appropriate, researchers on this project have valid Garda	Yes / No / NA
vetting through UCC (having a valid Garda Vetting through another body is insufficient).	

37. Signatures – Reminder all academic supervisors (where applicable) must approve the contents of this application UCC Applicant(s) Academic Supervisor / Principal Investigator /Tutor (where applicable) Vasiliki Aliki Tzoutza Seána Ryan Date: 28/2/23

¹ Relevant work constitutes any work or activity which is carried out by a person, a necessary and regular part of which consists mainly of the person having access to, or contact with, children or vulnerable adults.

If your study approach does not normally require that research questions are set in advance, please provide a rationale in Q. 27. **Do not** include your interview/survey questions in Q27.

Data management should follow the FAIR guiding principles (Findability, Accessibility, Interoperability & Reusability). See, for example, Wilkinson, M. D. et al. (2016) The FAIR Guiding Principles for Scientific Data Management and Stewardship. Full text: http://www.nature.com/articles/sdata201618. It is required that all staff and student researchers store those data which are required to replicate research findings, and the information required to enable re-use of data. Details of the UCC policy on research data storage can be found in section 8 of the Code of Research Conduct (2016): https://www.ucc.ie/en/media/research/researchatucc/documents/UCCCodeofResearchConduct.pdf. SREC advises against storing research data on non UCC approved cloud-based storage services. Physical data must be stored in a locked cabinet and you must specify who has permission to access this data.