

Lotta Hakanen

"LET XIR DO WHATEVER XE WANTS"

A corpus study on neopronouns ze, xe and zie

ABSTRACT

Lotta Hakanen: "Let xir do whatever xe wants" – a corpus study on neopronouns ze, xe and zie Bachelor's Thesis
Tampere University
Bachelor's Programme in Languages
October 2021

Tämä tutkielma käsittelee kolmea englannin kielen neopronominia ze, xe ja zie ja niiden käyttöä neljän eri korpuksen pohjalta käyttäen apunaan diskurssianalyyttistä näkökulmaa. Yksi tutkielman keskeisimpiä motiiveja on sukupuolivähemmistöjen kohtaama syrjintä ja se, miten yksittäiset sanavalinnat ja väärinsukupuolittaminen voivat aiheuttaa sukupuolidysforiaa ja jopa mielenterveysongelmia. Työn tarkoituksena on lisätä tietoa inklusiivisesta kielestä ja selvittää vastaukset kolmeen tutkimuskysymykseen: milloin nämä pronominit syntyivät ja mitä muutoksia ne ovat käyneet läpi ajan saatossa, kuka niitä käyttää ja miksi, ja mitä eri kirjoitusasuja niillä ja niiden eri muodoilla on.

Työn taustateoriaosuudessa määritellään keskeisimpiä käsitteitä liittyen sukupuolivähemmistöihin sekä käsitellään näiden yhteisöjen historiaa. Teoriaosuus käy myös läpi kielen muutoksen eri käsitteitä ja vaiheita. Materiaali- ja metodiosuudessa esitellään tutkielmassa käytetyt korpukset sekä tutkielman metodit ja niissä kohdatut ongelmat.

Analyysiosuus paneutuu syvemmin kolmeen pronominiin, niiden konteksteihin ja käyttötapoihin. Tutkielmassa analysoitiin pronominien määriä eri korpuksissa, internetlähteitä, joissa niitä esiintyi, sekä esiintymien ajankohtia. Myös konkordanssia, kollokaatteja ja pronominien possessiivi- ja akkusatiivimotoja käsitellään lyhyesti.

Tutkielman keskeisimmät tulokset ovat laajalti hypoteesien mukaisia: neopronominien käyttö on lisääntynyt viime vuosien aikana, mutta niitä on esiintynyt jopa 1800-luvulla. Neopronominien käyttäjät ovat enimmäkseen nuoria, sukupuolibinäärin ulkopuolelle sijoittuvia henkilöitä, ja niitä käytetään paljon myös fanifiktio- ja roolipeliyhteisöissä. Hypoteesin vastaisesti neopronominien erilaisia kirjoitusasuja ei löytynyt kovinkaan paljon. Se johtuu enimmäkseen korpusten laadintaan ja niiden edustavuuteen liittyvistä ongelmista, joista kerrotaan lisää esimerkiksi metodiosiossa.

Avainsanat: neopronominit, inklusiivinen kieli, muunsukupuolisuus, transsukupuolisuus, sukupuolivähemmistöt

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

Table of Contents

| 1. Introduction | |
|--|----|
| 1.1 Motivation | |
| 1.2 Research questions and hypothesis | |
| 2. Theoretical background | |
| 2.1 Key concepts of the study | |
| 2.1.1 Inclusive language and gender minorities | |
| 2.1.2 Lexical innovation and neologisms | |
| 2.2 Historical background | 8 |
| 3. Materials and methods | 11 |
| 3.1 Materials | 11 |
| 3.2 Methods | 12 |
| 4. Results and discussion | 14 |
| 4.1 Numbers of hits in different corpora | 14 |
| 4.2 Context | 16 |
| 4.2.1 Internet sources | |
| 4.2.2 Concordance | |
| 4.2.3 Collocates | 21 |
| 4.3 Possessive and accusative forms | 21 |
| 5. Conclusion | 23 |
| Bibliography | 25 |

1. Introduction

The 2010s have made gender neutrality and sensitivity exceedingly visible in our everyday lives, as social media spreads information fast and internet activism is at its peak. The world is becoming increasingly more accepting towards gender minorities and due to this they have started to become more heard in issues regarding their own rights.

One of the groups of people who face substantial oppression are nonbinary people — they exist outside of the gender binary and are still constantly fighting for their place in society. Some nonbinary people still use the binary pronouns *he* and *she*, but many prefer to use gender-neutral pronouns, for example singular *they* (McNabb 2017, 9). In addition to this, *they* has become more widespread in situations where people are not aware of a person's gender (Bradley 2020, 5). This is better than using the generic *he*, for example, which is seemingly gender-neutral because it has been defined so, but still creates the image of a male for the recipient. However, there are also newer gender-neutral pronouns, called neopronouns, "that are increasingly used in place of 'she,' 'he,' or 'they' when referring to a person" (UNC Greensboro, *Neopronouns Explained*).

The purpose of this study is to research how frequent neopronouns *ze*, *xe* and *zie* are in today's world and where and how they are used. Section 2 provides the theoretical background for the study, and section 3 discusses the materials and methods of the study. Section 4 delves deeper into the data and analyzes it.

1.1 Motivation

Language shapes our views and thoughts, and in the case of minorities the wrong kind of language can truly harm others. For example, in a study done by Stonewall and University of

Cambridge it was found that "nearly one in four (23 per cent) lesbian, gay and bisexual young people have tried to take their own life at some point" and "more than half (56 per cent) of gay young people deliberately harm themselves, which can include cutting or burning themselves" (2012, 4). For trans youth these numbers are often even higher, as gender minorities are generally more discriminated against. According to The Trevor Project's National Survey on LGBTQ Youth Mental Health 2020, young trans people who had their pronouns respected by most of the people close to them were half as likely to attempt suicide than those whose pronouns were not respected. Thus, it is not insignificant which words are used when referring to people and more specifically, which pronouns. This study aims to shed more light on the importance of inclusive language and provides an indepth look into the three gender-neutral neopronouns ze, xe and zie.

The internet holds a substantial amount of information about neopronouns written mostly by young, nonbinary people themselves, but I was not able to find any previous academic studies considering this specific subject, and therefore this is an important topic to research. There are some studies about the singular *they*, the phrase *he/she*, and inclusive language in general, which will be useful in providing some background information about both gender and pronouns.

1.2 Research questions and hypothesis

The research questions for this thesis are:

- 1) When have the pronouns *ze*, *xe* and *zie* first appeared and how have they changed over time?
- 2) What different spellings do these pronouns have?
- 3) Who uses these pronouns and why?

It is possible that these pronouns have existed longer than might be expected, but have become slightly more widespread in recent years. Due to them not being mainstream yet, I assume there are several different spellings for all their grammatical forms. It is assumed that they are used by transgender people who do not fit into society's prevalent binary norms – probably younger people rather than old, as nowadays information about trans identities and trans people's right to use gender-appropriate pronouns is more accessible via the internet.

The study is a quantitative one, because it is based on four different corpora and the numerical amounts of different pronouns, although it does have characteristics of a qualitative research as the context in which they appear is also examined. I will attempt to find when these pronouns have first been used and by whom, and what changes they have undergone since. I will also pay attention to the spellings of their different forms and their frequency with the help of other sources. Due to the shortage of peer-reviewed studies on this relatively new topic, some non-scholarly sources, which reflect the views expressed in the popular discourse, will be examined to broaden the overview on the issue.

2. Theoretical background

The theoretical section of this thesis covers multiple topics. First, it explains and defines the key concepts related to the study, and then it delves into the history of gender neutrality and pronouns.

2.1 Key concepts of the study

The core concepts of this study are inclusive language and its ties to different gender minorities, and lexical innovation and neologisms, more precisely neopronouns and their use.

2.1.1 Inclusive language and gender minorities

When discussing inclusive language, we must first understand different gender identities and especially gender minorities. The word *trans* comes from Latin and means "across", "over" or "beyond" (Online Etymology Dictionary, s.v. *trans*). In today's English, the meaning of the word has transformed and it now refers to "a person whose sense of personal identity and gender does not correspond with their birth sex" (Lexico, s.v. *trans*). The word *trans* is usually utilized as an adjective in the compound word *transgender*. The opposite of this is *cisgender*, which means a person whose birth sex aligns with their gender identity (ibid.).

Transgender is often used as an umbrella term for different gender minorities. This study mostly concerns the non-binary, genderqueer, genderfluid and agender identities, among others, all of which are identities that do not fit into the binary system of being male or female, and therefore gender-neutral pronouns are popular among these communities (Seta ry).

Transphobia has been a widespread set of fears and prejudices for decades and even centuries. It can be seen in the numbers of hate crimes towards trans people (Uniform Crime

Report 2018; Transgender Day of Remembrance), and in our everyday lives as *microaggressions*. Nisha Nair et al. define microaggression as "[a] subtle form of bias and discrimination such as slights, snubs or perceived insults directed toward minorities—" (2019, 870). Microaggressions can be accidental, but they do usually trace back to some level of prejudice, conscious or not.

The 2019 Netflix documentary *Disclosure* shows how trans people have been the punch line of a joke or, alternatively, the target of horrendous violence on movie screens for decades, and not just far in history. Entertainment is still being made at the expense of trans people. Inclusive language is a tool we can use to make life safer and easier for trans people: according to Bradley, many researchers agree that language influences our image of gender, and therefore our behaviors regarding it (2020, 3).

Gender sensitivity has been a topic of public discussion especially in childcare in recent years – it essentially means that children should not be forced to act or look a certain way based solely on their gender. The European Institute for Gender Equality defines gender sensitivity as "[an] aim of understanding and taking account of the societal and cultural factors involved in gender-based exclusion and discrimination in the most diverse spheres of public and private life". It is a common misconception that someone wants to erase gender completely, which is not the intention behind using more inclusive language. The goal is in fact the complete opposite: to recognize gender and how it affects people in their everyday lives. That is why gender sensitivity is a better term than gender neutrality in most contexts, but in this study, we are discussing pronouns that are gender neutral.

Gender minorities have started to advocate for a more gender-sensitive world to avoid assumptions and hurtful misgendering which can lead to gender dysphoria. *Dysphoria* means "an intense feeling of discomfort with one's assigned gender" (McNabb 2017, 243). The main idea behind gender sensitivity is that the gender assigned at birth should not necessarily

define a person's gender for the rest of their life, because genitals do not equal gender (ibid. 5). Another key point is that gender is not binary. This can be seen not only in different gender identities, but in the biological sense with intersex people. Intersex means someone whose genitals and/or genes are ambiguous and not clearly male or female (Hughes 2002, 769).

"Results indicate that resistance to gender-neutral language is driven by sexist (but not necessarily hostile) attitudes about gender as much as by linguistic conservatism, though both contribute to grammatical judgments" (Bradley 2020, 1). Considering conclusions such as the ones Bradley makes, it seems that many people may argue that neopronouns are not grammatically correct, when in reality they might also have a problem with nonbinary identities being visible. Requesting for others to refer to oneself with new pronouns is a part of the social transition many trans people decide to go through with (McNabb 2017, 7).

Transitioning means all the measures a transgender person takes to feel at peace with their own gender. All trans people do not transition at all, and some may only choose to complete the process in one aspect – social, medical, surgical, or legal. Although nonbinary people do not necessarily transition to fit society's idea of a specific gender, they might still want to change some things to avoid being misgendered and to feel comfortable, but this is by no means mandatory (ibid. 7-8).

2.1.2 Lexical innovation and neologisms

Language has always changed and will always keep changing. The attitude people have towards language change in general is usually negative – there was a time when some new words in a dictionary, such as *advisory* and *presidential*, were considered downright vulgar (Yule 2014, 58). But when a certain group of people persistently continue using a word they invented, it might advance and start spreading. In case of English, which is a lingua franca,

this is even more evident than in other languages, because it gets influenced by the people who speak multiple languages (Anesa 2019, 36).

The way language changes with society's attitudes is visible in the terms that have been used about trans identities in the past: *transvestite* is still sometimes used today, but only to refer to a cross-dresser, not a gender identity. *Transsexual* (or *transexual*) was also used for a long time. Nowadays it is considered a misleading and offensive term, because being trans is not a sexual orientation (McNabb 2017, 6-7). New words appear when we need them to describe a new concept. Of course, being nonbinary is not merely a new trendy concept, but the visibility of people outside the gender binary in mainstream media is. With a more accepting atmosphere nonbinary people feel like they can demand their rights, for example the use of gender-neutral pronouns.

A neologism is a "newly coined word or expression" (Lexico, s.v. *neologism*), for example *chillax*, which comes from the verbs *chill* and *relax*, and is used to tell someone to calm down. According to McArthur et al. (2018), there are nine categories of neologisms which most English neologisms can be divided into: compounding, derivation, shifting, extension in grammatical function, abbreviation, back-formation, blending, borrowing and root-creation or coinage. The process behind the example above is *blending*, mixing two different words together. Neopronouns, or novel pronouns, seem to be the rarest type of neologism called *root-creation*. It means creating words "with no previous known meaning whatsoever" (ibid.). Neopronouns are newly created pronouns that are gender-neutral, singular and in third person (Bradley 2020, 2). They are used mostly in the gender-neutral sense, to avoid misgendering or, in some cases, just unnecessarily gendering people.

Yet even in this rare type of neologism, the place of neopronouns is not entirely clear.

Are they even neologisms? They were coined based on already existing pronouns (more or less, depending on the neopronoun in question), but pronouns are not normally coined in the

same way as other parts of speech are, and furthermore, new pronouns are not created very often. It seems that neopronouns might be their very own type of lexical innovation and not a part of neologisms at all. Although, when you think about it, the word *neopronoun* itself is a neologism – "a relatively recent or isolated term, word, or phrase that may undergo the process of entering everyday usage, but that has not been fully accepted into language" (Čilić & Plauc 2016, 115). It is still in the process of being used in our everyday language but may be getting there. As it has been already established, the topic of gender diversity is recent enough that there are no umbrella terms in the English language for all the new terms, and therefore it is not easy to determine whether neopronouns are neologisms or not.

2.2 Historical background

Although nonbinary gender identities are nothing new among many indigenous peoples, only two genders have been recognized throughout most of Western history, and colonialism has erased nonbinary identities in many cultures where they did exist before (McNabb 2017, 33-48). Therefore gender-neutral pronouns have mostly been used to describe a person whose gender is unknown in the situation but is still expected to be either male or female.

Although the idea of gender has remained somewhat the same in the English language, Bradley pointed out that pronouns have changed drastically throughout the history of English (2020, 2). This can be seen by examining the different periods of English language: the third-person pronouns went from gender-neutral to gender-distinctive to discussing whether singular *they* was even a valid option (Darr & Kibbey 2016, 77-79). The singular *they* has been observed to have first appeared in the beginning of the Modern English period, which began around 1500 AD, although an example from as early as 1395 has also been found (ibid. 79).

Singular *they* has apparently been in and out of use for centuries, but what other options have been proposed throughout history? "'Zie' and 'hir' were first used by the transgender and genderqueer community, yet these options were considered too feminine since 'sie' means 'she' in German and 'hir' is a feminine pronoun in Middle English" (Darr & Kibbey 2016, 75). Across the internet and based on the data of this study, it looks like this statement is not entirely true – of course, some people might find them too feminine, but they are still used.

Several sources mention the pronoun *e*, which inflects the same way as *he* or *she* (McNabb 2017, 253). It is likely that the pronoun was derived from the capitalized version *E*, which was created by Michael Spivak in his book *The Joy of TeX* and is also often called the "Spivak pronoun". The accusative form of *E* is *Em* and the possessive is *Eir* (Spivak 1990). This is rather interesting, as the book is about mathematics, which one would think has nothing to do with gender-neutral pronouns – but of course, pronouns are everywhere in the English language, and no one can avoid them completely. One of the websites that was included in the data of this study mentions *ne*, *ve* and *ey*, as well as the three *ze*, *xe* and *zie*, which I will discuss in more detail (Gender Neutral Pronoun Blog).

One of the earliest and most successful neopronouns is *thon*, which is a contraction of "that one" and was created by Charles Crozat Converse in 1858 (Merriam-Webster). The pronoun was included in two dictionaries, *Funk and Wagnalls, Supplement to A Standard Dictionary of the English Language* in 1903 and *Merriam-Webster's Second New International Dictionary* in 1934, and people used it varyingly for decades, but eventually it did not become popularized (ibid.).

The editor of an online journal called *The Progress Report*, Fred Foldvary, wrote an article titled "Zhe, zher, zhim" in 2000, in which he discusses gender-neutral pronouns and offers his own proposition (hence the neopronouns in the title). He states that the singular

they is grammatically incorrect and "creates linguistic confusion" and describes the whole problem in relation to generic he – this shows where the gender neutrality conversation was in the early 2000s.

It usually takes some time for new words to be accepted into our everyday language, and in the case of something as deeply engraved into society as gender, it is no wonder that the process of gaining broader acceptance has been perhaps even slower. Darr & Kibbey state: "While there have been many gender-neutral pronouns introduced, none have seemed to work their way into mainstream English. These terms are specific to transgender and genderqueer communities, which makes it difficult for them to be used by people outside of those communities" (2016, 75). The reason why none of these gender-neutral pronouns have become established could be exactly this – cis people do not see the need for a gender-neutral pronoun because the issue does not concern them personally and as they are the majority, trans people alone cannot make a pronoun mainstream. A famous (and rather rare) case of a novel pronoun being well-established is the Swedish gender-neutral pronoun hen, which was created to be used alongside the feminine hon and masculine han (Vergoossen et al. 2020, 2).

Out of all the options, the specific pronouns *ze*, *xe* and *zie* were selected for this study because they provide the interesting aspect of being homophones, yet still distinctive pronouns among LGBTQ+ communities. Additionally, based on what I have personally observed on social media, these neopronouns seem to be the most potential ones to become mainstream.

3. Materials and methods

This section first focuses on the data that will later be analyzed in section 4, and then on the methods the data will be examined with. First, I explain the concept of corpus linguistics and introduce the corpora I used in this study. Then, I define discourse analysis and sociolinguistics and finally, discuss some of the problems of this study in the methods section.

3.1 Materials

According to Meyer, there are different opinions among linguists on what the definition of a corpus should be, but one is "any collection of texts (or partial texts) used for purposes of general linguistic analysis" (2002, 11-12). Corpus linguistics is a methodology for analyzing that data: McEnery and Hardie state that a corpus-based approach can be taken to several areas of linguistics (2012, 1). Corpus linguistics includes plenty of quantitative research because it studies patterns, but the interpretation of results is qualitative research.

This is a corpus-based study, and the data was collected from four different corpora, which will now be introduced briefly. The Intelligent Web-based Corpus (henceforth iWeb) has approximately 14 billion words of internet data from 2017 and is the largest corpus utilized in this study (Davies 2018). The Global Web-based English corpus (henceforth GloWbE) is quite similar to this, although it has significantly less data (1.9 billion words) and covers the years 2012-2013 (Davies 2013). To complement these, the Corpus of Historical American English (henceforth COHA), which has 475 million words of data from 1820 to 2019 (Davies 2010), and the British National Corpus (henceforth BNC), which has 100 million words from the 1980s to 1993 (Davies 2004), were used. This many corpora were

examined because they include data from very different eras and sources, and the number of these pronouns in any single corpora proved to be small in general.

3.2 Methods

Discourse means "language beyond the sentence", and discourse analysis is the study of language in texts and conversation (Yule 2014, 140). Discourse analysis examines the broader picture, not just the components of a sentence or utterance – it aims to understand the complexity of a conversation (ibid. 139). Although this study concerns pronouns, which are individual words, the social discourse around them is a significant part of the research.

"The term sociolinguistics is used generally for the study of the relationship between language and society" (Yule 2014, 257). It examines language in its social context and becomes intersectional with other fields, such as psychology and sociology (ibid. 257).

Language, like anything else in our society, does not exist in a void. There are several different factors – age, gender, social class, etc. – that affect what kind of language people use, and the sociolinguistic point of view will aid in answering one of the research questions of this study: who uses these pronouns and why?

The collection of the data from corpora was done manually, as searching for the neopronouns *ze*, *zie* and *xe* proved to be slightly problematic. One of the issues was that *ze* is often used instead of *the* when describing someone's French accent in writing, hence it took some time to manually find the relevant hits where *ze* was used as a pronoun. Another problem was that there were multiple instances where especially *xe* was written in capital letters, and thus was an acronym for something irrelevant to this study. These were the most noticeable ones, but there were several other similar issues. To get around these problems, I used the search words "xe/ze/zie VERB", to avoid hits where they were not used as pronouns. This indicates that some instances may have been accidentally overlooked, and

therefore this study does not necessarily provide exact facts, but rather general information about the pronouns.

The possessive and objective forms of the pronouns were eventually left out, because the amount of corpus data would have been too large for the scope of this study. They will, however, be discussed briefly, as the forms are yet to become established and right now each pronoun has multiple options for these forms.

4. Results and discussion

This study was conducted by searching for three different neopronouns *xe*, *ze* and *zie* in four different corpora. These specific pronouns were chosen, because they are homophones, hence they are essentially the same pronoun, pronounced the same, but spelled differently (Yule 2014, 116). In this section, I will display the results of the study: the findings from the corpora. Both tables in this section contain the findings from the corpora that were manually collected and expected to be pronouns, but there were still some false positives included in these numbers, as will be discussed later.

4.1 Numbers of hits in different corpora

| | iWeb | GloWbE | СОНА | BNC | total |
|-------|------|--------|------|-----|-------|
| ze | 27 | 6 | 1 | 0 | 34 |
| xe | 54 | 12 | 1 | 0 | 67 |
| zie | 16 | 14 | 0 | 0 | 30 |
| total | 97 | 32 | 2 | 0 | 131 |

Table 1. Numbers of each pronoun in each corpus

Table 1 shows how many times the pronouns appeared in the different corpora. These numbers were counted manually, as they were small enough overall. The BNC had zero instances of any of the pronouns, which I did not find surprising. It could have been expected to have at least some data, though, as it does contain data from the 1980s and early 1990s, which was not that long ago.

COHA has data from as early as the 1820s, but it was no surprise at first that some instances were found, as its scope of time extends all the way to 2019. When looking closer

at the two hits, though, it was discovered that they were from 1833 and 1897. It seems that *ze* and *xe* do function as pronouns in those cases, but whether they are gender-neutral neopronouns per se is hard to say. Below are the contexts of both hits.

- (1) Above him was a huge red transparency bearing the name and likeness of Patrick J. Gleason, candidate for Mayor of Greater New York, and the Gleason battle s xe outlined in Electric lights which shine far at night. (COHA, 1897, NEWS)
- (2) Boy with thy blac berd, I rede that thou blin, And sone set the to shrive, With sorrow of thi syn; Ze met with the marchandes And made tham ful bare; (COHA, 1833, FIC)

The first example might be an error made by an optical scanner that is used to create an electronic edition of an older text – the extra "s" before the pronoun supports this claim, as it could be a similar mistake as well. The second example was found to be an extract of a poem by Laurence Minot from the early 1300s. The spelling of English pronouns was not yet standardized in Middle English, and therefore it is probably not a gender-neutral pronoun but merely a regular, gendered one with an older spelling. The time the poem was written is also centuries away from the era COHA is supposed to represent. These are a couple of examples of what kind of problems occurred in the research.

Most of the hits were from iWeb and GloWbE, which was to be expected, as they both only contain data from the 2010s. According to these corpora the pronouns seem to have gained larger usage in recent years, although GloWbE had the largest frequency per million words, and even that was only 0.02.

When we look at the rows horizontally (Table 1), we can see that apparently xe is the most popular spelling overall, and overwhelmingly so in iWeb. As mentioned before in the theory part of this study, at some point zie was practically abandoned as an option, because it resembles the German feminine pronoun sie, both in spelling and pronunciation. However, it can be seen in Table 1 that zie does not appear in the corpora significantly less frequently than the other two spellings, although it does seem to be the least popular of the three.

According to McNabb, "the most common gender-neutral [sic.] pronouns are they/them/theirs and ze/hir/hirs" (2017, 251). This may be true in some contexts, but according to this corpus study the spelling ze was less popular than xe. On the other hand, when someone writes about neopronouns specifically, it is possible that they have heard the pronoun somewhere and then write it down to their best ability, in which case the spelling could be any of the three. Studying homophones creates some problems overall – they are distinctive words, but especially on a topic as relatively new as this, which relies heavily on informal contexts, there is always a chance of misinterpretation.

4.2 Context

In this section the context of the findings is discussed. First, there is a table of all the internet sources that the pronouns were found in, and then examples of concordance are discussed. Finally, I briefly explain the problems that were present when trying to examine the collocates of the pronouns.

4.2.1 Internet sources

The websites where the pronouns were found can be seen in Table 2. The list goes from most to least hits, and the "other" category is for all the sites that only had one instance of any of these pronouns. The total numbers for *ze* and *xe* are different here than in Table 1, because this table does not count for the non-web hits from COHA.

The page with the most hits, springhole.net, is some type of creative writing community that was founded in 2002. On the front page it says the following: "Welcome to springhole.net, a place for writers, roleplayers, artists, and other creative people to find help, inspiration, or just some fun!" The site creator themself is nonbinary and uses *xe/xir* pronouns in their own content, which explains the high number of *xe* on Table 2.

| | all | xe | ze | zie |
|--------------------------------|-----|----|----|-----|
| springhole.net | 41 | 41 | 0 | 0 |
| shakesville.com | 9 | 0 | 0 | 9 |
| freethoughtblogs.com | 8 | 6 | 2 | 0 |
| philome.la | 7 | 4 | 3 | 0 |
| autistichoya.blogspot.com | 4 | 4 | 0 | 0 |
| ladygeekgirl.wordpress.com | 3 | 0 | 3 | 0 |
| pinknews.co.uk | 3 | 0 | 0 | 3 |
| hijacked.com.au | 2 | 0 | 2 | 0 |
| vulture.com | 2 | 0 | 2 | 0 |
| asexuality.org | 2 | 0 | 2 | 0 |
| naspa.org | 2 | 0 | 2 | 0 |
| goodmenproject.com | 2 | 0 | 0 | 2 |
| findingwonders.tumblr.com | 2 | 2 | 0 | 0 |
| feministe.us | 2 | 0 | 0 | 2 |
| pervocracy.blogspot.com | 2 | 0 | 0 | 2 |
| universityoflies.wordpress.com | 2 | 0 | 0 | 2 |
| starshipnivan.com | 2 | 0 | 0 | 2 |
| other | 34 | 9 | 17 | 8 |
| total | 129 | 66 | 33 | 30 |
| | | | | |

Table 2. Number of all three neopronouns in different websites.

According to Lexico, fanfiction is "fiction written by a fan of, and featuring characters from, a particular TV series, film, etc.", and role playing is "the acting out of the part of a particular person or character, for example as a technique in training or psychotherapy" or "participation in a role-playing game". One could assume that most fanfiction writers and roleplayers are on the younger side, and so was probably the site

founder when they started it in 2002 – the age is important because it provides more information about who uses neopronouns. When creating new characters, or new identities for existing characters, writers can decide for themselves which pronouns the character will use. This way they can create entire worlds where using gender-neutral pronouns is the norm.

The website that has the second most hits, shakesville.com, is described like this on the front page: "Welcome to Shakesville, a progressive feminist blog about politics, culture, social justice, cute things, and all that is in between." It is not surprising that a page that calls itself a feminist blog contains gender-neutral pronouns, as the current wave of feminism considers plenty more than just cis women, although the drop in the number between this one and springhole.net is relatively big. Other sources in the table with names that give a hint about more progressive content are pinknews.co.uk, asexuality.org, feministe.us, plus in the "other" category, transequality.org and genderneutralpronoun.wordpress.com.

Overall, several of these sources are blogs: there are pages from Blogspot, Wordpress, and Tumblr, and other sites that have the word "blog" in their address. For example, the page with the third most hits, freethoughtblogs.com, seems to be a platform for various blogs that are listed on the front page. This explains why the pronouns *xe* and *ze* were used variably, because different authors might have opted for different pronouns – a similar thing probably occurred with the page with the fourth most hits, philome.la. This could not be examined further in the scope of this study, though. There are also different categories of posts on the front page at freethoughtblogs.com, one of which is titled "Gender and Sexuality", which seems like an optimal platform for gender-neutral pronouns.

4.2.2 Concordance

We have discussed the different web pages the neopronouns were found on, but what about the more precise context? Baker et al. define concordance as "a list of all of the occurrences of a particular search term in a corpus, presented within the context in which they occur" (2006, 42-43). Concordance can also be referred to with the acronym KWIC, "key word in context" (ibid. 42).

A problem that arose when studying the concordance of the pronouns was the same one that was already mentioned earlier in this study: acronyms. This happened very often with xe, but occasionally with ze and zie as well. It proved to be impossible to eliminate the cases where the hit was not a pronoun. Capitalization could be seen as suggesting that the word was an acronym, but this was not always the case – sometimes people prefer to write in all lowercase, and sometimes they capitalize a pronoun for emphasis. Because of this problem, this study cannot provide any accurate statistics about the concordances of these pronouns. It will, however, show some examples.

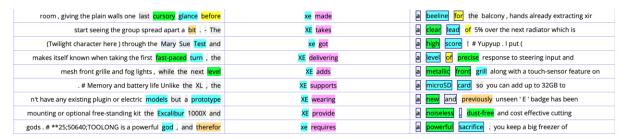


Figure 1. A sample of the concordance of "xe VERB" on iWeb.

As can be seen in Figure 1, in most of the hits xe is capitalized, and this pattern continues outside of the figure. The first, third, and last lines are instances where xe is not capitalized and is clearly a pronoun. When we look at these lines more closely, we can see how the concordance hints that the lines are parts of some kind of story. This matches with our findings in 4.2.1 – neopronouns seem to be common in creative writing online.

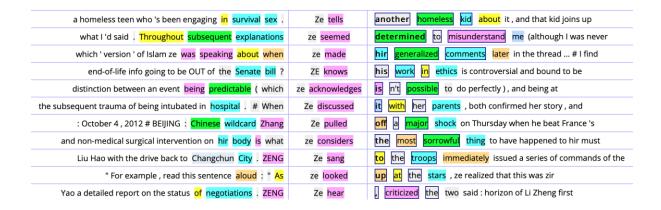


Figure 2. The concordance of "ze VERB" on GloWbE.

Figure 2 shows all the concordances of *ze* in GloWbE. The same occurs here: some of the hits include *ze* capitalized, although the number is smaller than with *xe*. However, there is a different kind of problem. There are two consecutive lines where the word is written *Ze*. In the first one it looks like a name, but due the position of the word in the sentence, it could also appear to be a pronoun whose first letter was accidentally capitalized: "When Ze discussed it...". In the second one, it is part of what is apparently a Chinese name: "Zhang Ze". The last line has a similar situation, as it mentions "ZENG Ze" and later "Li Zheng". Otherwise, the context of the pronoun does not seem to be any specific style or genre. The second last line seems like it is instructing on how to use neopronouns: "For example, read this sentence aloud..." This was something that I in fact expected to see more of in the data.

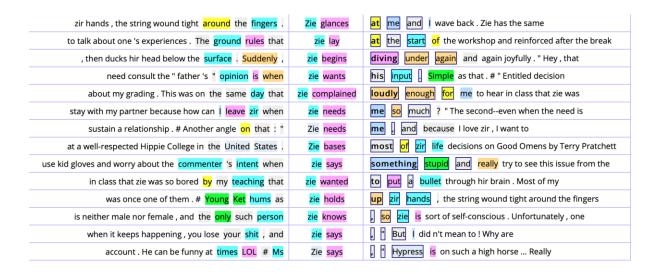


Figure 3. The concordance of "zie VERB" on GloWbE.

All of the concordances for *zie* are visible in Figure 3. It seems that this spelling provides the least confusion – the only instance where *zie* is definitely not a pronoun is the last line, where it is someone's last name. Other than that, the instances seem relevant. The lines seem similar to the ones in Figure 1, like storytelling.

There are no specific reasons as to why these examples in figures 1, 2 and 3 were selected from the specific corpora they were. The results were very similar in each one, so the choice was made at random.

4.2.3 Collocates

A collocate is a word that occurs nearby another word (Baker et al. 2006, 36-37). There are certain expectations we might have when searching for collocates of a word in corpora, but in the case of pronouns it could be anything. For the purpose of this study, it appears that the collocates did not provide much new information – the overall context has already been examined and is more important than individual words.

Another problem was that to eliminate the instances of *ze*, *zie* and *xe* as something else than a pronoun as much as possible, the searches "ze/zie/xe VERB" were utilized again in this part, so the corpus did not show the verbs that come right after the pronouns as collocates. For these reasons, collocation has been left out of this study as there is no efficient way to analyze it accurately and from a relevant point of view.

4.3 Possessive and accusative forms

This section will include less analysis of the corpus data and more speculation and discussion based on other sources. Because they have not been established into our mainstream language yet, *ze*, *xe* and *zie* all have several different possessive and accusative forms. Some options that were found online are *xe/xir/xem*, *xe/xyr/xem*, *zie/zir/zir*, *ze/hir/hir* and *ze/zes/zem*

(genderneutralpronoun.wordpress.com). It seems that *zie* and *ze* are even more interchangeable with each other than with *xe*, probably because of their shared initial letter.

When I briefly looked at the possessive and accusative forms of the pronouns on iWeb, it was obvious that most of the hits for *hir* were from Middle English, and therefore they were found rather irrelevant for this study, which specifically concerns neopronouns. It is an intriguing fact to note, though, that this specific pronoun has existed for centuries, even if the meaning was different. Judging by the example of the table below, it seems to have been a different spelling of the feminine accusative form *her*, which was stated in the theory section of this study as well.



Figure 4. Examples of *hir* in iWeb

5. Conclusion

This study faced multiple problems, and one might say that one of its results is that this is a difficult topic to study. Due to the neopronouns not being established yet, finding relevant data and credible background information proved to be challenging at times. Nevertheless, there are some interesting results.

The research questions of this study were:

- 1) When have the pronouns *ze*, *xe* and *zie* first appeared and how have they changed over time?
- 2) What different spellings do these pronouns have?
- 3) Who uses these pronouns and why?

The first question was partly answered in section 2.2, as there was some historical information about the pronouns. The analysis of the data in section 4.1 failed to prove this, though, as it was discovered that the earliest hits on COHA were not proper candidates of the pronouns examined. The most significant change over time is that the pronouns have definitely been used more in the 2000s.

As ze, xe and zie are homophones, they are essentially different spellings of the same pronoun. Another pronoun that fits into this category is zhe, which was briefly mentioned in section 2.2. Furthermore, it seems that a similar pronunciation with the initial sound varying is very common, as there are also pronouns such as ve and e. These are of course all derived from he and she.

As to who the general user of neopronouns is was also discussed in the theoretical background section of the study and received more proof in the analysis section.

Neopronouns, including the three researched here, are a tool for gender minorities to express their identities and feel more comfortable in their gender expression. An interesting

observation was that the neopronouns are heavily used in fanfiction-type content on the internet.

In conclusion, it could be expected for this study to be followed by several more on similar topics in the upcoming years. Language change is inevitable, and it will be interesting to observe which neopronouns become the most popular ones (or perhaps singular *they* will become the standard), or if there will just be increasing numbers of new pronouns used alongside each other.

Bibliography

Anesa, Patrizia. 2019. Lexical Innovation in World Englishes: Cross-fertilization and Evolving Paradigms. Routledge.

Bradley, Evan D. 2020. The influence of linguistic and social attitudes on grammaticality judgments of singular 'they'.

Čilić, Ivona Šetka and Plauc, Jelena Ilić. 2021. "Today's Usage of Neologisms in Social Media Communication." *Društvene i humanističke studije* 6.1(14): 115–140. Web.

Darr, Brandon and Kibbey, Tyler. 2016. "Pronouns and Thoughts on Neutrality: Gender Concerns in Modern Grammar," *Pursuit – The Journal of Undergraduate Research at the University of Tennessee*: Vol. 7: Iss:1, Article 10. Available at: vol7

Davies, Mark. 2004. *British National Corpus* (from Oxford University Press). Available online at https://www.english-corpora.org/bnc/.

Davies, Mark. 2013. *Corpus of Global Web-Based English*. Available online at https://www.english-corpora.org/glowbe/.

Davies, Mark. 2010. *The Corpus of Historical American English (COHA)*. Available online at https://www.english-corpora.org/coha/.

Davies, Mark. 2018. *The iWeb Corpus*. Available online at https://www.english-corpora.org/iWeb/.

The European Institute for Gender Equality. "Gender sensitivity."

https://eige.europa.eu/thesaurus/terms/1218 Accessed 25 May 2021.

Feder, Sam. "Disclosure". 2020. Netflix.

https://www.netflix.com/search?q=disclosure&jbv=81284247

Foldvary, Fred. 2000. "Zhe, zher, zhim". The Progress Report.

https://web.archive.org/web/20110131054544/http://www.progress.org/fold162.htm Accessed 18 May 2021.

Gender-neutral pronoun blog. "The Need for a Gender Neutral Pronoun".

https://genderneutralpronoun.wordpress.com/ Accessed 10 August 2021.

Guasp, April. 2012. "The School Report: The experiences of gay young people in Britain's schools in 2012". Stonewall & University of Cambridge.

https://www.stonewall.org.uk/system/files/The School Report 2012 .pdf

Hughes, I.A. 2002. "Intersex". BJU International, 90, 769-776.

LGBTA Wiki. "Neopronouns". https://lgbta.wikia.org/wiki/Neopronouns#E Accessed 10 August 2021.

Lexico. Powered by Oxford. https://www.lexico.com/ Accessed 10 August 2021.

McArthur, Tom, et al. 2018. "The Oxford Companion to the English Language", Oxford University Press. Second Edition.

McEnery T, Hardie A. 2012. *Corpus Linguistics: Method, Theory and Practice*. Cambridge University Press. Accessed 10 May 2021. https://search-ebscohost-

com.libproxy.tuni.fi/login.aspx?direct=true&AuthType=cookie,ip,uid&db=e000xww&AN=4
08835&site=ehost-live&scope=site

McNabb, Charlie. 2017. *Nonbinary Gender Identities: History, Culture, Resources*. Rowman & Littlefield Publishers, 2017. *ProQuest Ebook Central*,

https://ebookcentral.proquest.com/lib/tampere/detail.action?docid=5104248

Merriam-Webster. "We added a gender-neutral pronoun in 1934. Why have so few people heard of it?" https://www.merriam-webster.com/words-at-play/third-person-gender-neutral-pronoun-thon Accessed 18 May 2021.

Meyer CF. 2002. *English Corpus Linguistics : An Introduction*. Cambridge University Press. Accessed May 10, 2021. https://search-ebscohost-

com.libproxy.tuni.fi/login.aspx?direct=true&AuthType=cookie,ip,uid&db=e000xww&AN=1 12619&site=ehost-live&scope=site

Nair, Nisha, Deborah, C. G., & Murrell, A. J. 2019. "Microaggression experiences of different marginalized identities." *Equality, Diversity and Inclusion: An International Journal*, 38(8), 870-883. doi:http://dx.doi.org.libproxy.tuni.fi/10.1108/EDI-12-2018-0221

Online Etymology Dictionary. https://www.etymonline.com/ Accessed 15 April 2021.

Seta ry. "Muunsukupuolisuus". https://seta.fi/sateenkaaritieto/sukupuolen-moninaisuus/muunsukupuolisuus/ Accessed 4 May 2021.

Spivak, Michael. 1990. "The Joy of TeX. A Gourmet Guide to Typesetting with the AMS-TEX macro package." American Mathematical Society. https://ctan.math.illinois.edu/info/joy-of-tex/joyt2.pdf

UNC Greensboro. "Neopronouns Explained".

The Uniform Crime Report. "2018 Hate Crime Statistics". https://ucr.fbi.gov/hate-crime/2018/topic-pages/victims. Accessed 16 April 2021.

Transgender Day of Remembrance. https://tdor.info/ Accessed 5 May 2021.

The Trevor Project. 2020. "2020 National Survey on LGBTQ Youth Mental Health". New York, New York: The Trevor Project.

Vergoossen, Hellen P., et al. 2020. "Are New Gender-Neutral Pronouns Difficult to Process in Reading? The Case of Hen in SWEDISH." *Frontiers in Psychology*, p. NA. *Gale Academic*

OneFile, link.gale.com/apps/doc/A641133393/AONE?u=tampere&sid=AONE&xid=ff42cab a. Accessed 4 May 2021.

Yule, George. 2014. The Study of Language. Cambridge University Press. Fifth Edition.