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Fostes tu?: Analogical Change in European Portuguese and the Case of the Second Person Singular in the Simple Past (Indicative)

Ana Guilherme

Centro Linguística, Universidade NOVA de Lisboa, 1099-032 Lisbon, Portugal; aguilherme@fcsh.unl.pt

Abstract: This paper sets out to study the second person–number marking in the (indicative) simple past in the history of European Portuguese, with a particular focus on morphological innovations such as *fostes tu*, which are considered deviant. These innovations, according to some brief descriptions in the literature (cf. Piel 1989; Williams 1994), are considered a case of morphological change by analogy; however, it remains to be determined whether it is a case of analogical extension or, possibly, leveling that would have resulted in syncretism. Based on data retrieved from private letters from the 16th to the 20th century by almost illiterate authors, we will argue that this innovation results from an analogical extension, motivated by morphological and pragmatic factors.

Keywords: (indicative) simple past; morphological change; analogy; private letters; historical pragmatics

1. Introduction

This paper sets out to study the second person marking in the simple past (indicative) in the history of European Portuguese, with a particular focus on morphological innovations such as *fostes tu*, considered deviant as the canonical morpheme is *-ste*, inherited from Latin. These innovations have not received much attention from the scientific community, although there have been appeals for their study, given their relevance as a linguistic phenomenon (Peres and Móia 1995; Rodrigues 2004). The investigation carried out by Guilherme (2021) provides a more recent account of this phenomenon.

For this study, data was retrieved from two *corpora* of private letters written between the 16th century and the 20th century (until 1974). There is, impressionistically, the idea that this non-canonical use of the second person singular simple past is somewhat recent, and is an ongoing change, but its development can be traced back to the 18th century, as the following example reveals, taken from a private letter written by Francisco Henriques, tailor, to his wife, Inácia de Jesus, in 1791:

(1) [E]u qua resebi huma carta tua$_{2sg}$ cesta feira da comana pasada eu tomei bem atenção no que mandastes$_{2sg\_innovative\ morpheme}$ dizer.

(a letter from *PS—Post Scriptum—Digital Archive of the Ordinary Writing in Portugal and Spain in the Modern Era*)

'I have received your$_{2sg}$ letter last Friday and I paid well attention to what you send$_{2sg\_innovative\ morpheme}$ me to say'

The innovative morpheme *-stes*, instead of the canonical form *-ste*, inherited from Latin, marking person–number in the second person singular (henceforth 2sg) of the simple past (indicative) (*pretérito perfeito simples*), according to some brief descriptions in the literature (cf. Piel [1944] 1989; Williams 1994), is considered a case of morphological change by analogy; however, it remains to be determined whether it is a case of analogical extension or, possibly, leveling that would have resulted in syncretism.

The morphological changes that have occurred in the history of the Portuguese language, as well as in other languages, are often attributed to analogy, explicitly or implicitly.

But this is not a consensual concept and there is a vast amount of literature on the topic. However, it is still a concept recognized by linguists, although it is often used without proper deepening, and there is often no room for clarification on the types or subtypes of analogy that are referred to (Guilherme 2021). More specifically, there are authors who argue that the manuals of historical linguistics of Romance languages and works that address issues of inflectional morphology need, precisely, further clarification on analogy; namely, they must clarify the question of the directionality of analogical changes (Wheeler 2012, p. 1). This paper also aims to contribute to demonstrate the relevance of the concept of analogy in the context of morphological change and to make evident that a deeper comprehension of the concept may help to understand linguistic change.

To fully understand the phenomenon, it also became important to examine the pronominal forms that accompany second persons of the simple past (indicative) (t*u* and *vós*). Therefore, this research involves an interdisciplinary view—historical linguistics and historical pragmatics—and tries to explain this morphological change by considering the following research questions and objectives:

(i)   To contribute to understanding language change and the role of analogy in language change. As mentioned before, this concept has been used in the field to explain change but "The literature on this theme is vast and controversial" (Lahiri 2000, p. 1). Therefore, does this change result from analogical extension or analogical leveling?

(ii)   Considering (i), what role (if any) did the disappearance of *vós* from the courtesy system, in Portuguese, have in the change?

(iii) How old is the phenomenon?

(iv)   Will the innovative form *-stes* fully replace the canonical *-ste*? In other words, will the change take place in the sense that a significant portion of speakers will use the innovative construction (Fertig 2013)?

This article is organized into the following sections: Section 2 focuses on the concept of analogy in linguistic studies, referring especially to Hock (1991) and, more recently, Fertig (2013). Section 3 traces, in general lines, the diachronic path of the pronominal forms *tu* and *vós* in the courtesy system in European Portuguese. The methodology and *corpus* are then presented in Section 4. The research data and discussion are presented in Section 5. Finally, Section 6 presents the concluding remarks.

2. Analogy in Linguistics: Definition, Processes, and Problematics

2.1. From the Neogrammarian and the Traditional Approach to Other Frameworks

The morphological changes that have happened in the history of the Portuguese language, as well as in the histories of other languages, are often attributed to analogy, either explicitly or implicitly. The neogrammarians were responsible for the relevance they gave to the concept of analogy as a fundamental concept for the understanding of linguistic change, namely morphological change. The neogrammarian school led, above all, to the recognition that analogy, as the basic principle of human language (and cognition), is fundamental to the understanding of linguistic change. It was also in the neogrammarian context that the idea of proportion associated with analogy—Fertig (2013) points out that proportion is equivalent to 'where there is a rule'—began to be further developed. Also, at this point, the traditional perspective on analogy, heiress of the neogrammarian school, was presented through Jerzy Kuryłowicz (Kuryłowicz [1945] 1995) and Witold Mańczak (1958), who played a very important role in understanding what happens when an analogy occurs. This traditional approach, which arises from the neogrammarian dichotomy of phonetic change versus analogy, emphasizes its irregular character, but has brought significant advances since it was able to identify some directionality in analogical operations. However, certain concepts used, such as basic form, and less marked, among others, are open to debate.

The notion of expansion from one pattern is present in several definitions of analogy that are conceived precisely around the idea of generalization from one grammatical relation to another, from one word or form to another, or even generalization from one set

of expressions to another (Campbell 1998, p. 89). That is, it always involves the notion of similarity and the notion of appropriation of one linguistic form from another, or of one pattern from another, and can be conceived as 'internal borrowing': the idea being that in analogical change a language may 'borrow' from some of its own patterns to change other patterns (Campbell 1998, p. 90).

Traugott (2011, p. 25), in an attempt to clarify the concept of analogy, advances two definitions: that of "analogy" and "analogization". The first refers to analogical reasoning, that is, to analogy as a motivation for change, but which does not necessarily lead to change, while the second refers to the mechanism of any change that takes place (Traugott 2011, p. 25).

Fertig (2013, p. 12), in addition, makes new proposals for the definition of analogy as a technical notion and for analogical innovation. They are proposed definitions that reflect the importance of neogrammarian thinking, but simultaneously reflect a less restrictive view of the concept of analogy and a deeper development of the various definitions and approaches that have come before. Thus, (Fertig 2013, p. 12) proposes the following definitions[1]:

Analogy$_1$ (general sense) is the cognitive ability to reason about relationships between elements in one field of knowledge or based on beliefs about another domain. This ability allows us to make predictions/speculations about objects that we do not know based on the knowledge of objects from another domain in which parallel properties are perceived to exist.

(i) Analogy$_2$ (technical sense) is the ability of speakers to produce meaningful linguistic forms from patterns of other forms of language.
(ii) Analogical formation is the linguistic form (morpheme, word, prayer, phrase, etc.) produced by analogy$_2$.
(iii) Analogical innovation is an analogical formation and/or the product of an associative interference that deviates from standard usage norms.
(iv) Analogical change occurs when a significant portion of speakers use an innovative form or set of innovations.

With these revised definitions of analogy, Fertig (2013) presents a broader notion of the concept, in the light of Hock's (2003). Moreover, for this author, analogy$_2$ is a basic capacity of linguistic production and not a mechanism (or a type) of change on its own—nevertheless, it is a capacity that can influence change. In the literature, there is the recognition that analogy is a basic principle of human cognition; however, when applied to the understanding of human language, the question of whether it belongs to performance or competence remains.

Regular Analogical Processes: Proportional Analogy, Analogical Extension, and Leveling

Classical studies in historical linguistics often describe and distinguish proportional analogy (or four-part analogy) and extension on one hand and leveling on the other hand as the major regular subtypes of analogical processes. Proportional analogy is often illustrated through a quadripartite equation (cf. 1) that mirrors the extension of a pattern of morphological relationship to forms that did not originally exhibit such a pattern (McMahon 1994, p. 71; Hock 1991, p. 171; Hock 2003, p. 441), focusing essentially on morphological aspects:

(1)   a: a′
        b: x = b′

Simple examples of proportional analogy can be found in English verbs, as in *teach: taught/catch:x?* (Trask 1996, p. 106), or the case of the regular plural in English, as in *dog: dogs/cat: x?* (Hock 2003, p. 441). Another example, taken from Campbell (1998, p. 92), can be found in Spanish. In Spanish, the pronoun of a direct object varies in gender, but the pronoun of an indirect object does not (2). In some non-standard varieties, it can be found and is called *laísmo*, which results from a proportional change where the indirect object can also change in terms of gender distinction (3).

(2)   *Lo ví* ('I saw him'), *la ví* (I saw her)
        Le di ('I gave him/her something')

(3)   Lo ví ('I saw him'): la ví ('I saw her')
        Lo di ('I gave him'): x?: *La di* ('I gave her
        something')

It should be noted, however, that not all proportional analogical changes can undoubtedly fit into this mathematical equation, bearing in mind that linguistic change will not always obey principles as logical and homogeneous as those governing mathematical laws: "Not all cases considered proportional analogy can be easily represented in this proportional formula, and some cases not normally thought to be proportional analogical change can be fitted into such a formula." (Campbell 1998, p. 91). Nevertheless, such changes will not cease to be considered analogical as they still expand a pattern of morphological relationships.

According to Hock (1991, p. 173), proportional analogy will be more successful if it generalizes more productive morphological patterns[2], even though the concept of productivity itself is open to discussion. What seems to be preponderant is that from the moment a pattern becomes more productive, "[...] it is more likely to be generalized by four-part-analogy than other, less productive categories" (Hock 1991, p. 173).

The term analogical extension often arises associated with proportional analogy, and this association often generates confusion as Fertig (2013, p. 48) warns. For instance, McMahon (1994, p. 71) describes the formation of the regular plural in English in *-s* as a case of analogical extension. The clarification of both concepts depends on the more or less broad perspective that is adopted, and in broader perspectives 'proportional analogy 'and 'analogical extension' are synonymous notions. However, the definition of extension most conveyed in the literature is the diffusion of a paradigmatic distinction (morphological or morphophonological) to other items or contexts where it did not exist (cf. Campbell 1998, p. 94; McMahon 1994, p. 70, e.o.). Another example that fits into the extension is the proportional model that concerns the verb *dive*, in dialectal varieties: the regular morpheme of simple past -ed of strong verbs, as *talk: talked*, was extended to that verb, becoming *dive: dived* (Campbell 1998, p. 94).

Leveling eliminates or reduces morphophonological alternations (generated by phonetic change) within a paradigm (Hock 1991, p. 168; Campbell 1998, p. 92, e.o.). What is eliminated are morphonological alternations—in the radical (*stem*) or at the level of other morphemes—which are apparently not preponderant in terms of marking differences in meaning or form (Hock 1991, p. 183; Hock and Joseph 1996, p. 155). One of the most cited examples of leveling is the change that affected the Latin noun *honor*. Some noun paradigms alternated between intervocalic /s/ and /r/ in inflectional forms and this alternation was eliminated through leveling (4) (Albright 2005):

(4)	Before leveling	After leveling
Nom. Sg	[hono:**s**]	[hono**r**]
Gen. Sg	[hono:ris]	[hono:ris]
Acc. Sg	[hono:rem]	[hono:rem]

Regardless of the perspective adopted, what is important to emphasize is that leveling involves paradigms and extension involves patterns. In any analogical (proportional) change, a distinction is eliminated (leveled) and, at the same time, a pattern is extended (Fertig 2013, p. 48, e.o.). With leveling, what is eliminated are morphophonological alternations—in the radical (*stem*) or at the level of other morphemes—which are not preponderant in terms of marking differences in meaning or form (Hock 1991, p. 183; Hock and Joseph 1996, p. 155).

Analogy, either as a mechanism or as a cause of linguistic change, and arguably as a cognitive capacity, is important to understand diachronic phenomena, as several authors have shown (Hock 1991; Hock and Joseph 1996; Fertig 2013; Fisher 2008). The view in linguistic studies, inherited (unreasonably) perhaps from the neogrammarian position (relevance of phonetic change), of analogy as a vague and poorly defined concept, has

been revised to recognize a need for a better understanding of what analogy really is and its relevance to diachronic research. The studies initiated by the works of Kuryłowicz (Kuryłowicz [1945] 1995) and Mańczak (1958), who sought to describe some systematicity and restrictions on the action of analogy, show that persistency on this path—of relating analogy to perspectives that favor the surface structure of forms as an object of analysis (such as the concept of abduction, in the generative literature, or theories about the iconicity of language)—will only help to better understand the role of analogy in linguistic change (McMahon 1994, p. 96).

3. Pragmatics of Forms of Treatment

In general terms, Portuguese inherited the *tu* and *vos* forms of the late Latin politeness system (Cintra 1986; Faraco 1996, et al. ii). Latin had two pronouns for the second discursive person: *tu* for the singular, regardless of the type of relationship between the participants, and *vos* for the plural. However, the fragmentation of the Roman Empire into two parts (eastern and western) led to a restructuring of the Latin courtesy system (Marcotulio 2014; Lara Bermejo 2018, et al. ii). This fragmentation had pragmatic consequences, since the Empire became represented by two emperors, with *vós* being used to refer to a single interlocutor with courteous value as a result of this division.

The Medieval System

During the medieval period, the pronoun *tu* was used in the context of intimacy or from superior to inferior, marking devaluation and showing 'derogatory' value (Cintra 1986, p. 68), and this use has remained practically stable in the context of familiarity until contemporary times. *Vós* was used by an interlocutor in situations requiring greater courtesy, for example, when speaking to the king or some element of the nobility, in other asymmetrical relationships (i.e., from children to parents), but also between husband and wife, or even between brothers (Cintra 1986; Marcotulio 2014). Table 1 below illustrates the forms used during the Middle Ages:

Table 1. Pronominal system of medieval treatment in Portuguese (Lara Bermejo and Guilherme 2018).

	T	V
Singular	Tu	Vós
Plural	Vós	Vós

This scenario changed when nominal forms were introduced into Portuguese society: language reflected these social changes from the 14th century onwards, adopting forms such as (among others) *vossa mercê* ('your mercy'), which is an item that would later grammaticalize to the current pronoun *você*. The already grammaticalized form has been in use since the 17th century and remained as a form of courtesy until the 19th century (Faraco 1996). In the fifteenth century, nominal forms were already preferred, and in the 16th century, *vós* lost its position until it became archaic in the 18th century (Cintra 1986; Faraco 1996). However, it was mainly in the 16th century that Portuguese underwent profound changes in the treatment paradigm (Bechara 1991; Faraco 1996), possibly mirroring the social changes experienced in the country. The introduction of nominal forms required a restructuring of the treatment system with pragmatic and grammatical consequences since *you* refers to the second discursive person, but occurs, nonetheless, with the morphology of third person singular or third person plural, thus making these innovations complex from a grammatical point of view. In general, the pronominal system of Portuguese treatment between the 16th and 18th centuries is summarized in the following Table 2:

Table 2. Portuguese pronominal treatment system between the 16th and 18th centuries.

	T	**V**
Singular	Tu	A vossa mercê > você
Plural	Vós	As vossas mercês > vocês

For the disappearance of *vós*, as an address form for a singular interlocutor, the literature points to the 18th century as a chronological milestone (Cintra 1986; Faraco 1996). However, its fall began to take shape in the 16th century, when its use expanded to the lower social classes, and then began to be used in less formal contexts. This pronoun "then gains an archaic and somewhat ridiculous taste from the speech of old or provincial people" (Cintra 1986, p. 30). *Vós* persisted only in certain Northern dialects for a plural interlocutor without deferential value in very ceremonial situations or in religious contexts (Cintra 1986; Faraco 1996, et al. ii).

The current pronominal and nominal treatment system is completely distinct from that of the old period described above, as can be seen in Table 3 below.

Table 3. Pronominal and nominal treatment system in contemporary Portuguese, adapted from Cintra (1986).

	Singular	**Plural**
Formal treatment	O senhor/A senhora	Os senhores/As senhoras
Non intimate	Você	Vocês
Informal treatment	Tu	Vocês

Regarding the pronoun *tu* and the verbal inflection of 2sg in the context of the treatment system (and in the scope of person–number marking), the literature is equally scarce. It is even sparser regarding the innovations analyzed here with the same few being mentioned without further development. Notwithstanding this scenario, some authors briefly refer to the innovative form, namely Leite de Vasconcellos (1911); Williams (1994); and Piel ([1944] 1989), and argue that non-standard cases as *fostes* are the result of an analogy with the morpheme *-s* existing in the 2sg of the remaining verb tenses and moods, except in the simple past indicative and in the affirmative imperative paradigm.

The stability of *tu* throughout history, in the contexts of intimacy and familiarity, although these contexts have been expanded, especially in the 20th century (for example, between parents and children (Bacelar 2020, p. 2709), probably justifies that the research work has focused on other aspects of the complex treatment system in Portuguese[3]. However, the morphological innovations studied here and the scarcity of research on them highlight the gap that is found in research on this topic.

4. Methodology and *corpus*

As mentioned in the introduction, data were collected from *corpora* of private Portuguese letters written between the 16th and 20th century (Guilherme 2021). The *corpora* in question are the *PS—Post Scriptum—Digital Archive of the Ordinary Writing in Portugal and Spain in the Modern Era* (henceforth *PS*) and the *Fly—Forgotten Letters*, *1900s* (henceforth *Fly*)[4]. Considering the scope of this study, private letters were used as the main source of the data for various reasons. First, they were used because of their communicative context: these documents are the natural setting for the emergence of second-person usages (Jucker and Taavitsainen 2002, p. 9). Moreover, they follow, to a certain extent, a more formulaic discourse; however, the body of the letters "allows more freedom to the writer" (Jucker and Taavitsainen 2002, p. 9), and these letters are written records very close to orality. Therefore, they are valuable sources for studies in diachrony (Marquilhas 2015, p. 222).

Regarding Portuguese documentation, *Post Scriptum* has a little more than 2000 letters, resulting in a total of 992,878 words in Portuguese. Concerning the number of letters *per*

century, see Table 4, which shows the chronological distribution of the letters[5] that are available online.

Table 4. Distribution of private letters *per* century.

Century	# Letters
16	245
17	547
18	758
19 (up to 1833)	665

It is necessary to highlight and clarify some limitations in this *corpus*. First, it is evident that the amount of documentation is not equitable; the 16th century has fewer documents when compared, for example, with the 18th or 19th centuries. Second, the documentation from the 19th century is limited to the year 1833. Most of these documents were collected from numerous court cases in two types of courts: ecclesiastical courts and a civil court called the Casa da Suplicação[6]. The ecclesiastical courts belonged to the Portuguese Inquisition, which was in force in the territory between 1532 and 1821. The private documents were filed in legal proceedings, either in inquisitorial proceedings or in proceedings of the Casa da Suplicação[7], because they were seized from the defendants, thus serving as evidence of an alleged crime or some heresy. However, these letters both contained truly fraudulent content (e.g., letters of extortion) or only represent writing that bears witness to the daily life of ordinary people: "[P]eople who were writing on a criminal impulse, as is the case of extortions (...) or were just elaborating on everyday matters." (Marquilhas 2015, p. 223). In fact, the existence of these letters in these judicial proceedings is the result of pure luck: "[S]ome randomness was indeed involved in specific letters finding their way into the courts' archives while others did not" (Marquilhas 2015, p. 223). This randomness clearly causes difficulty in locating documents, notoriously for the 16th century (Vaamonde 2018, p. 147).

The documents of the 19th century are essentially more numerous for two reasons: the population was larger than the 16th-century population and the illiteracy rate was lower, resulting from the educational reforms initiated by the Marquis of Pombal (Marquilhas 2015, p. 226). Finally, the documentation only extends until 1833 because this was the last year of operation of the Casa da Suplicação.

The *corpus Fly—Forgotten Letters—Years 1900–1974*[8] results from the collection, transcription, and editing of 2000 private letters that represent very specific contexts: war, prison, exile, and emigration, mainly because they were contexts that favored communication by letter. The documents come from public and private archives. The total number of words is around 700,000, and the letters are written by 572 different authors, most of whom are men (78%), although women were the most common recipients of the correspondence. Most of the letters are of private content, addressed to relatives, friends, and boyfriends, among others, while a minority (140) are of a more formal nature.

Various types of private relationships between correspondents were selected, and the results obtained are shown in Table 5:

The private relationship most often portrayed is that between friends (81; 27%), followed by letters from a husband to his wife (57, 19%), and letters exchanged between siblings (46, 15%). The category 'other' refers to cases where it was not possible to determine the nature of the relationship between participants, for instance, in cases of extortion or in a few cases of a more institutional relationship between interlocutors that escape the sphere of family or friendship.

Table 5. Relationship between the participants of the private correspondence.

Relationship between Participants	# Letters	%
Friends	81	27%
Husband > wife	57	19%
Siblings	46	15%
Lovers	29	10%
Wife > husband	20	7%
Uncle > nephew	15	5%
Father > son	13	4%
Mother > son/daughter	13	4%
Other	12	4%
Cousins	6	2%
Brother/Sister-in-law	4	1%
Son/daughter> father	2	1%
Nephew > uncle	0	0%
Total	0	0%

Bearing in mind that the main objective of this research is to understand the development of a specific morphological change—the innovative forms of 2sg as *fostes*, *dissestes*, *fizestes*, etc.—through a necessary discussion of the concept of analogy in language change, it was fundamental to extract all verbal forms ending in *-ste* and *-stes* (2sg and 2pl, simple paste indicative). As mentioned in the introduction, it became relevant to observe the development of the 2pl of the simple past indicative and understand what effect such development might have had in the change in question, if any. For the sample to be as balanced as possible, and considering that some authors wrote several letters, one letter per author was randomly selected. Then, a database and metadata were populated using *FileMaker* software.

5. The Innovative Morpheme *-stes*—Description and Discussion

592[9] examples of verbal forms of the 2sg and 2pl of the simple past (indicative) were extracted, which corresponds to **298** epistolary documents, that is, **298** different authors, as showed in Table 6:

Table 6. Documents used for the study per century.

Century	# Letters
16th	36
17th	28
18th	24
19th	47
20th	163
TOTAL	298

5.1. Second Person Singular (2sg) forms of Simple Past Indicative: Canonical Morpheme -ste

Regarding the 2sg forms of the simple past indicative, that is, forms with the canonical morpheme *-ste*, there were **276** occurrences in the **298** private correspondence:

(5)   "(. . .) triste mosa nüqua **tu₂ₛ₉** naseras **estiveste₂ₚₛ** pa morer."
        'sad girl **you₂ₛ₉** will never be born you **were₂ₛ₉** to die'
        [letter from Jerónima dos Anjos to her sister, Catarina de Paiva, 17th century, PS]

These occurrences are distributed chronologically as indicated below in Table 7 and graph 1, respectively:

Table 7. 2sg forms of simple paste (indicative) (canonical morpheme *-ste*).

2nd Simple Past Indicative *-ste*	Occurences	%
16th	5	2%
17th	8	3%
18th	11	4%
19th	22	8%
20th	229	83%
TOTAL	276	100%

With regard to these forms, it appears that their use has increased as time has advanced, which is not unexpected given the historical evolution of forms of treatment (see Section 3), that is, familiar treatment through verbal, pronoun, and second-person nominal forms of the singular became more frequent from the 19th century and then became practically stabilized in the 20th century. As such, the number of occurrences of 2sg forms of the simple past (indicative) rises from the 19th century, but it is in the documentation of the 20th century that we observe an exponential increase—83% of 2sg forms of the simple past (indicative) are found in the twentieth century.

5.2. Second Person Plural (2pl) Forms of Simple Past Indicative

As for the 2pl forms of the simple past indicative, **185** occurrences, shown in Table 8, like the example in (5), were recorded from the documentation analyzed.

(6)   "Bem **sabeis₂ₚₗ** que me **deixastes₂ₚₗ** em casa de meu pai."
        '**You₂ₚₗ** well **know₂ₚₗ** that you have **left₂ₚₗ** me in my father's house' [letter from Vicência Jorge to her friend, Jerónimo Monteiro, 16th century, PS]

Table 8. Second person plural forms of simple past (indicative) (canonical morpheme *-stes*).

2nd Simple Past Indicative *-stes*	Occurences	%
16th	108	58%
17th	50	27%
18th	14	8%
19th	11	6%
20th	1	1%
TOTAL	185	100%

These occurrences are distributed chronologically as follows (Table 8):

In relation to these forms, the results are also not surprising, in that it is to be expected that the use of 2pl forms will decrease, especially from the 18th century, taking into account the historical development of the verbal and pronominal paradigm of 2pl in standard modern Portuguese.

5.3. Morphological Innovation: Second Person Singular Forms of the Simple Past (Indicative)—The Morpheme -stes

Regarding the verbal forms that are the main object of this study, that is, 2sg forms of the simple past (indicative) with the innovative morpheme –*stes*, for person–number marking, **131** cases were registered, as exemplified in the innovative form *mandastes* in (7):

(7)   "eu qua resebi huma carta **tua**$_{2sg}$ cesta feira da comana pasada eu tomei bem atenção no que **mandastes**$_{2sg}$ dizer."
         'I have received **your**$_{2sg}$ letter Friday, last week, a I've paid much attention to what you **send**$_{2sg}$ me' [letter of Francisco Henriques, taylor, to his wife, Inácia de Jesus, 18th century, PS]

Table 9 and Figure 1 illustrate the distribution of these forms over the different centuries:

Table 9. Number of morphological innovation occurrences (morpheme *-stes*) *per* century.

| Morphological Innovation *-stes*	Occurences	%
16th	0	0%
17th	0	0%
18th	10	8%
19th	38	29%
20th	83	63%
TOTAL	131	100%
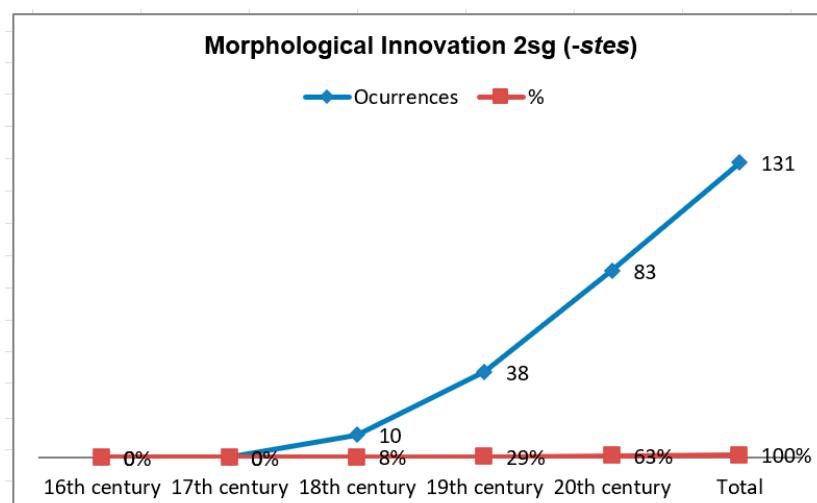
Figure 1. Distribution of occurrences of morphological innovation.

It is clearly observable that the use of these forms has increased considerably in the 20th century, with 63% of cases concentrated in this period. However, these data show that it is not a recent innovation, since these constructions are observable starting from the 18th century, and in the transition from the 18th century to the 19th century, the rise from 8% to 29% of cases is also significant.

5.4. Second Person Usage throughout the Centuries

When comparing all the tokens from 2sg of the simple past (indicative), singular and plural, the growth of 2sg is notorious, with the innovative or the canonical morpheme, as shown in Table 10 and Figure 2.

Table 10. Number of tokens of 2sg simple past (indicative) throughout the centuries.

Century	2sg *-ste*	2sg *-stes*	2pl *-stes*
16th	5	0	108
17th	8	0	50
18th	11	10	14
19th	22	38	11
20th	229	83	1
Subtotal	275	131	184
TOTAL		406	184
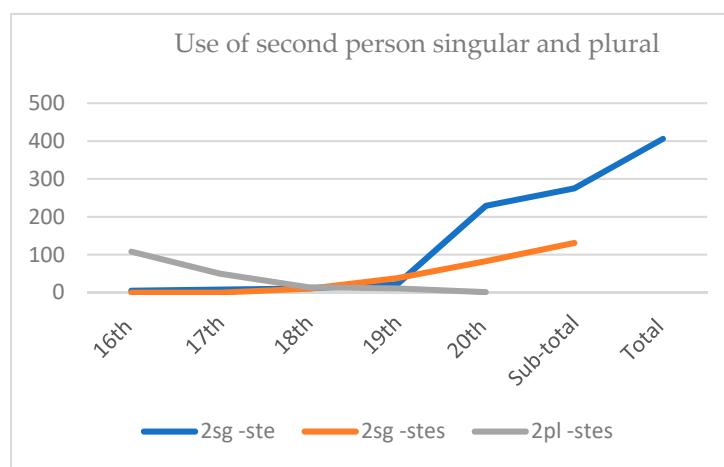
Figure 2. Use of 2sg and 2pl throughout the centuries.

As can be seen, the usage of 2sg, with the innovative or with the canonical morpheme, has been greater than the use 2pl, except in the 16th and 17th centuries. From the 18th century, it is observable that there was a growth of 2sg, which was followed by the decrease in 2pl. These data meet, in general terms, what is described in the literature concerning the use of second person in Portuguese for the treatment system. However, we observe a usage of *vós* to a singular recipient beyond the 18th century.

5.5. Variation between the Canonical Morpheme (-ste) and Innovative Morpheme (-stes) in the Person–Number Marking of the Second Person Singular

Regarding cases of variation between the use of the regular morpheme *–ste* and the innovative morpheme *-stes*, **25** cases were reported, identical to the example in (8), where the same author uses *fizeste* (canonical form) and *deixastes* (innovative form):

(8) Já **fizeste**$_{2sg}$ contas com **teus**$_{2sg}$ pais? Durmo mal, passo a vida à procura das coisas que nunca sei onde estão, pois não há forma de fixar os lugares em que as **deixastes**$_{sg}$.
'Have you **settle**$_{2sg}$ accounts with **your**$_{2sg}$ parents? I sleep badly, I always looking for things that I never know where they are, because I can't remember the places where **you**$_{2sg}$ **left**$_{2sg\text{-}stes}$ them'
[letter from a husband to his wife, 20th century, Fly]

The distribution of these cases is shown in Table 11 and Figure 3 below:

Table 11. Number of occurrences of variation between the morpheme *-ste~-stes*.

Variation between -ste/stes (2sg)	Ocurrences	%
16th	0	0
17th	0	0
18th	1	4%
19th	2	8%
20th	22	88%
TOTAL	25	100%
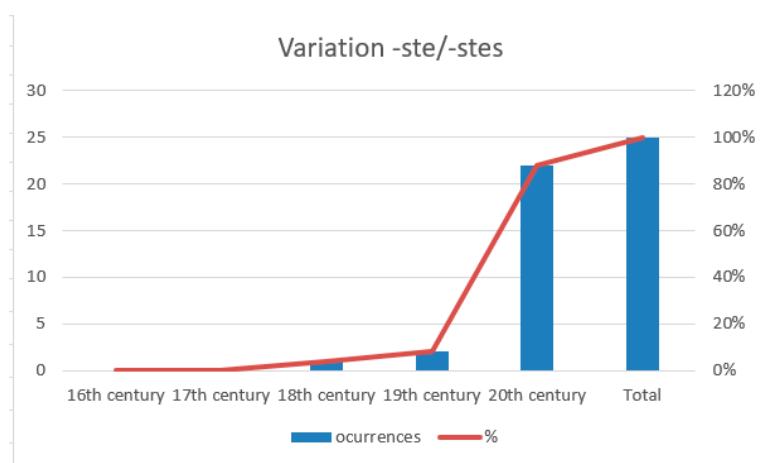
Figure 3. Variation between morpheme *-ste~-stes* over the centuries.

Most of the examples clearly relate to the 20th century, with **22** occurrences (88%), while there were only two cases in the nineteenth century (8%) and one case in the eighteenth century (4%).

5.6. Variation between Second Person Singular and Second Person Plural

The data also attest 11 clear cases of variation between the use of 2sg and 2pl, as illustrated in (9):

(9)　　O portador desta é hũomem de setuvele Manoel Rodrigues cazado em Matosynhos **olhay**$_{2pl}$ se **Podes**$_{2sg}$ falar com ele.
'The carrier of this letters is a man from Setúbal called Manuel Rodrigues married in Matosinhos **see**$_{2pl}$ if you **can**$_{2sg}$ talk to him' [letter from Bartolomeu da Costa to his wife, Madalena Francisca, fishmonger, 17th century, PS].

In (9), the verbal form *olhay* is the imperative of 2pl, whereas *podes* corresponds to the simple present of the 2sg, here used to convey the request initiated with the imperative *olhay* ('please look'). Nevertheless, in this document and others, this usage of the second person is a clear case of alternation between 2sg and 2pl.

5.7. Other Phenomena Associated with the Use of Second Person

If the data in Section 5.6. attest for clear cases of variation between 2sg and 2pl, some ambiguous forms were found, in cases of 2pl. In Portuguese, the 2pl forms were affected with a specific morphophonological change. This change is the loss of the suffix *-d* (*-de/-des*) present in all 2pl forms, except in the simple past indicative (*-stes*). This loss was registered mainly in intervocalic contexts (*amades > amais*, 'love', simple present, 2pl) and it was preserved in non-intervocalic cases, namely in inflected infinitive and subjunctive future. However, the deletion of *d-* caused an increment of variation of forms with or without *d-*, even in non-intervocalic contexts, as, for instance, in cases of inflected infinitive (*dizerdes*

> *dizeres*, 'to say', 2pl). Middle and Classical Portuguese exhibit great variation between forms. The period of this study points precisely to variation (9) between forms with *-d* and without *-d* (*fazeres/fazerdes*) in contexts where *-d* is preceded by a vibrant (Said Ali [1921] 2001; Brocardo 2006; Brocardo and Lopes 2016). Consequently, forms of 2pl without *d-*, in subjunctive future in inflected infinitive, are syncretic with 2sg—*tu fazeres* ('you to do'). Therefore, it is not possible to ascertain if verbal forms such as *saveres*, in (10), are really 2pl or 2sg:

(10)   "**Vos$_{2pl}$** quero avizar de tudo para **saveres$_{2sg/2pl?}$** o que se passa."
'I want to let **you$_{2pl}$** know about everything for you **to know$_{inflected\ infinitive\ 2sg/2pl?}$**
what's going on' [letter form Helena Costa, to her husband, Francisco Rodrigues, 1654, PS].

The tendency to delete *d-* in these contexts did not generalize, probably to maintain the pragmatic difference between 2pl and 2sg, particularly in a time where 2pl forms were used to address a single interlocutor.

Data also attested cases of ambiguity, generated by a possible clash of the 2pl morpheme in contexts that will later generalize in diphthong, for example, *foses* (11) (*fosses* instead of *fosseis*). Again, the possible clash of 2pl morpheme generates syncretism between 2sg and 2pl ('*tu fosses~vós fosses*', 'if you were', second person imperfect subjunctive); therefore, it is also not possible to determine if in (10) the verbal form refers to a 2sg or 2pl:

(11)   "[A]Conselhando**vos$_{2pl}$** q **foses$_{2pl/2sg?}$** judeu como eu era (. . .)".
'I would advise **you$_{2pl}$** to **be$_{2pl/2sg?}$** jew as I was.' [letter from Diogo da Horta, merchant, to his brother, Fernão da Horta, merchant, 16th century, PS]

5.8. Summary of the Main Findings in the Private Letters

(i)   The frequency of 2pl verb forms of the simple past (indicative) decreases as we progress chronologically and, conversely, the frequency of 2sg verb forms of the simple past (indicative) increases.

(ii)   Naturally, and considering point (i), the frequency of pronominal forms of 2pl and the 2pl morphology decreases over time, while the frequency of pronominal forms and morphology of 2sg increases.

(iii)   The innovative morpheme *-stes* for the marking of person–number of the 2sg of the simple past (indicative) is evident, albeit incipiently, from the 18th century, increases during the 19th century, and it is then in the 20th century that most cases are concentrated.

(iv)   Several complex phenomena related to the use of second person verb forms were located and described. These are cases of ambiguity between 2pl and 2sg generated by a possible deletion in non-intervocalic *-d* and by possible realizations of a clash. Other cases are related to alternations of use between 2sg and 2pl or some evidence of competition between forms of 2sg and 2pl, but the number of examples is small (11). All these cases represent different types of results in which factors of different levels, grammatical and pragmatic, are interrelated.

(v)   In the set of cases of variation, the one in which there was a greater number of examples (25 cases) is related to the person–number marking of the 2sg of the simple past (indicative), in which alternation between the canonical morpheme *-ste* and the innovative morpheme *-stes* is displayed.

(vi)   The innovative morpheme *-stes* for 2sg person–number marking was in documents written by authors from or residing in all parts of the territory, including in 2pl maintenance areas (see Discussion).

(vii)   Observable maintenance of *vós* and the 2pl for an interlocutor beyond the 18th century, even if this use has decreased over the centuries.

(viii) Diachronically stable and persistent use of *tu* for the axis of informality, whose use increases and stabilizes from the 19th century.

(ix) Preference for verbal inflection, both 2sg and 2pl, and less use of explicit subject pronouns, *tu* and *vós.* This preference can be explained in pragmatic terms since the singular pronominal forms are more 'marked' because they individualize the interlocutor, while communicative interaction mediated through verbal inflection is, in languages of null subject, considered as a more neutral and courteous strategy.

6. Discussion

Several research questions were presented, namely: (i) how old is the phenomenon? (ii) what kind of analogical change—extension or leveling (resulting in syncretism) is at the root of these innovations? (iii) hence, and following (ii) what influence did the disappearance of *vós* and the morphology of the 2pl in standard Portuguese have on this change? (iv) will these innovations spread through the speakers in such a way that might be considered a change in the language? The following discussion of the findings will try to answer these research questions.

The morphological innovations of the '*fostes tu*' type are analogical-type innovations, based on Fertig (2013). This author proposes revised definitions of some concepts, namely the notions of **analogical innovation and analogical change,** which were adopted in this work, following Guilherme (2021). As indicated in Section 2, **analogical innovation** emerges when an analogical formation—i.e., a form resulting from analogy that is produced by speakers from an existing standard in the language—deviates from the ordinary pattern of use. **Analogical change** refers to an analogical innovation that is adopted by a significant portion of the speakers in a community (Fertig 2013, p. 12). The innovations of the '*fostes tu*' type correspond to analogical innovation, in the sense of Fertig (2013), since they diverge from the morphological pattern for the marking of person and number of the second person singular of the simple past (indicative), whose historical morpheme marker for the grammatical category person–number is -*ste*. However, and also in the light of Fertig (2013), it is questionable that these innovative forms will correspond to an analogical change. It is an observable variation between the canonical and the innovative forms, but an effective change in language means the adoption of a form by a considerable portion of speakers (Fertig 2013). According to Villava and Mateus (2006, p. 72), the conditions are met for this change to take place, that is, when they are implemented by a large number of speakers. Although these innovative forms are heard more often[10], even in people with some level of education (as Piel [1944] 1989 has already noted), it seems difficult to indicate whether or not a more permanent change will emerge. '*Tu fostes*, *tu fizestes*...' are considered 'wrong' forms in standard Portuguese and are therefore assessed negatively. The personal letters from which the data were obtained are mostly written by speakers with a low level of education, who therefore did not receive a formal education, which, as it is well known, is marked by normative pressure. Thus, the negative judgment associated with these forms and normative teaching may contain this change.

As stated, it should also be discussed whether or not this is a case of analogical extension or leveling (in the latter case, leading to syncretism). As leveling is generally understood as a process that eliminates or reduces morphophonological alternations in the radical within a paradigm, alternations resulting from phonetic change, are, therefore, motivated by phonological or morphophonological aspects (Hock 1991, p. 171). Fertig (2013) supports this definition, arguing that leveling only eliminates (totally or partially) the alternations in the radical of an inflectional or derivational paradigm, and innovations of the '*fostes tu*' type affected the inflectional suffix, not the radical. In other words, analogical extension acts in very well-defined contexts, that is, at the level of a morphological pattern and leveling at the level of the paradigm. Hock (1991) admits the possibility of changes by leveling that reach inflectional affixes, like in the case of person-marking affixes, because they had stopped fulfilling their function, as happened in English. In most analogical changes, it is possible to determine, with some degree of clarity, whether they result from leveling or from analogical extension (Hock 1991, p. 179).

6.1. 'Fostes tu'—Morphological and Pragmatic Motivations for Analogical Extension

Regarding the date of these innovations, it is possible to affirm that this is an old phenomenon, because, as indicated in the data, they can be attested to from the 18th century onwards. Although at this time they are still relatively less significant innovations, whose frequency of occurrence later increases, especially from the 19th century, and then grows exponentially in the 20th century.

Another factor that points to the antiquity of the phenomenon is related to the geographic distribution of these innovations, since, as explained, they are present throughout the Portuguese linguistic area. All the verb forms are examples of the innovative morpheme of 2sg, *-stes*.

(12) "Meu Amado e querido espozo mto e mto Do meu Coracão (...)huma **tua**$_{2sg}$ resebi (...). Dise que não tinha avizo no navio do tal home mas contudo que o dava do dinheir que me **mandastes**$_{2sg}$."
'My dear and beloved husband from all my heart (...) I've received a letter from **you**$_{2sg}$ (...) he said that there was no sign from that man on the ship yet he would give me the money **you**$_{2sg}$ **have**$_{2sg}$ sent me'
[letter from Margarida Rosa, Lisbon (mid centre dialects), to her husband, 1791, PS]

(13) Resevi as **tuas**$_{2sg}$ notisias que mto estimei (...)tenhoos mto goardados so pa os dias que me **mandastes**$_{2sg}$ dizer.
'I have received **your**$_{2sg}$ news for which I have really appreciated (...) I have it (medicines) kept only for those days **you**$_{2sg}$ **have**$_{2sg}$ told me (...).
[letter from Maria, from Viana (northern dialects) to her lover, 1760–1769, PS]

(14) Snr eu tenho huma denuncia (...) a **Seo**$_{3sg}$ Respeito (...) **Vmce he**$_{3sg}$ máo homem e q **he**$_{3sg}$ jácobino [...] e q **és**$_{2sg}$ de máo Sangue e ate **metestes**$_{2sg}$ hum dezortor num Capitullo [...].
'Sir, I have a complaint concerning **you**$_{3sg}$ (...) 'Your mercy **is**$_{3sg}$ a bad man and **you are**$_{3sg}$ a jacobine (...) and you$_{2sg}$ are bad blood and you$_{2sg}$ even **received**$_{2sg}$ a deserter (...).'
[letter from António Maria Vidal, robber, to Manuel Vaz Lampreia, farmer, from Beja (south interior dialects), 1821, PS]

Examples (12)–(14) attest the existence of the innovative morpheme *-stes* in all parts of the Portuguese territory, including in areas where the use of *vós*, as an address form for a plural interlocutor, remains (12). Example (14) also shows variation between the third sg pronominal and verbal forms (*Vossa Mercê*,' Your Mercy', *he*, 'is') and 2sg verb forms (*és*, 'you are'; *metestes*, 'you received').

As mentioned in the introduction, the morphological innovations of the '*fostes tu*' type are often treated as a case of analogy with the morpheme of person-marking *-s* present in the remaining second person of the singular. However, the literature that addresses this phenomenon does not deepen our understanding of this topic, failing to discuss in more detail which subtype of analogical change it represents (cf. Piel [1944] 1989; Williams 1994).

The main data, taken from the private letters, reinforces the hypothesis that it is a morphological change by analogical extension. Analogical extension, also often called proportional analogy, expands an existing pattern in the language to forms that did not previously follow it. That is, one of the motivations for the analogy is the existence, from the outset, of productive and frequent patterns (Fertig 2013; Hock 1991). In other words, the analogical extension will be more successful if it enlarges a more frequent and productive pattern (Hock 1991, p. 173). When observing the diachrony of *tu* and the verbal morphology of 2sg, we verified that these forms were always persistent, productive, and stable, both in morphological and pragmatic terms. In the development from Latin to the different Romance languages, including Portuguese, verbal infection did not undergo major changes (Maiden 2011, p. 156; Brocardo 2014, p. 76) apart from French, for example. That is, the morpheme *-s* for the marking of person–number in the second person singular persisted through the transition from Latin to Portuguese, with the exception of the 2sg of the simple past (indicative), which also inherited the morpheme *-ste* from Latin. Although historically we find this persistence for the 2sg person–number marking—the morpheme *-s* for the

remaining verb tenses, and the morpheme *-ste* for the simple-past (indicative)—the 2sg person–number marking of the simple past appears to be opaquer. This opacity is reflected in the different morphological analyses that it raises: some authors analyze the morpheme *-ste* as an amalgam of time–mood–tense and person–number (Villalva 2003, p. 936), others see it as a person–number morpheme (Câmara Júnior 1979; Mateus 1991), and still others understand the 2sg as having a person–number morpheme present, but with zero marking for the time–mood–tense (Mota 2020). It should also be recalled that (Siewierska 2004, p. 38) indicated that this type of morpheme, which condenses several grammatical functions, is the most complex to analyze. It was the irregular nature, of less transparent character for the speakers, of the morpheme *-ste*, which was decisive in triggering the emergence of innovations of the '*fostes tu*' type.

Pragmatically, *tu* has always been a productive and stable form. As was described in the history of the system of treatment in Portuguese (Section 3), in the axis of informality and familiarity, we always find *tu* and the verbal morphology of 2sg. Nevertheless, it was necessary to consider the hypothesis of the influence of *vós* and the 2pl on the analogical innovation studied here. We know that *tu and vós* competed, but only for pragmatic reasons, because as the data show, *vós* was also used in the context of informality since in personal letters we find this treatment for an interlocutor. However, although *vós* and *tu*, and the respective verbal inflection, were competitors for the same discursive contexts, *vós* and the 2pl verb forms did not establish themselves as informal treatment strategies. The stability of *tu* has won. Moreover, diachronically, the greatest competitions took place between forms that mark formality, that is, between *vossa mercê/você* ('your mercy' and similar) and *vós*, and in the plural paradigm, between *vós* and *vossas mercês/vocês*.

Along with these qualities of persistence, stability, and productivity that we find related to *tu* and the verbal morphology of 2sg, and relevant characteristics to serve as an analogical model to be expanded to other forms, it is observable that the frequency of the innovative forms increased in the 19th century and grew significantly in the 20th century. This development coincided with the obsolescence of *vós* in the standard language. We know that the treatment by *vós* and the 2pl for the singular disappears from the 18th century onwards (Cintra 1986), and the main data analyzed are in line with what is described in the literature: in personal letters, the use of *vós* and the 2pl is predominant in the 16th and 17th centuries, but begins to decline from the 18th century, and in the 19th century, we find only two authors who use this treatment for a singular recipient. If we return to Table 8 and Figure 2, the data exhibit precisely this drop of usage of 2pl to a singular recipient in the context of familiarity, for which these documents are a rich testimony.

So, the fall of *vós* from the standard Portuguese, on the one hand, and the increase in the frequency of the use of *tu* and the inflection of the 2sg to the axis of informality, especially from the 20th century, on the other hand, means that *vós* and the 2pl are no longer able to serve as an analogical model, thus strengthening the analogical pattern of the *-s* for the remaining second person singular cases and causing it to be extended.

Another aspect that seems to favor the hypothesis that this morphological change is the result of an analogical expansion, and not a consequence of leveling resulting in syncretism between the 2sg and the 2pl of the simple past (indicative), is related to the cases of variation found. It would be expected that, at a time when *tu and vós* were competing for the same contexts of use, we would find forms in competition or eventually some non-canonical agreements, such as '*vós fizeste*'. However, in the 592 examples analyzed, we found only 83 occurrences of alternations in the private letters, corresponding to 14% of all the material studied. Among these 83 cases, only 27 correspond to evidence of possible alternation between 2sg and 2pl inflection, namely: 14 cases of ambiguity in 2pl forms (11), another eight occurrences of forms whose reading is ambiguous, and only five cases of clear variation between 2sg and 2pl uses (12). It should be noted that the examples we have identified as ambiguous reading, as mentioned above, may not represent examples of forms in competition. The other 25 cases of variation raised correspond to alternation between the uses of the 2sg of the simple past (indicative) with the canonical morpheme

-ste and with the innovative morpheme *-stes*, evidencing variation in the marking of the 2sg of the simple past (indicative). This type of variation, as found in (15), registered the most examples, 25 cases. In the following example, the author varies between the canonical morpheme, *fizeste*, with the innovative one, *fizestes*, *fostes*.

(15)   Eu ja **te**$_\text{2sg}$ estou muito obrigado pelo favor que me **fizeste**$_\text{2sg}$ **(…)** que me has de pagar quanto me **fizestes**$_\text{2sg}$ porque **fostes**$_\text{2sg}$ a cauza da minha perdecão [...].
'I am really thankful for the favour **you**$_\text{2sg}$ **have made**$_\text{2sg}$ me (…) you shall pay everything **you have done**$_\text{2sg}$ to me because you are$_\text{2sg}$ the cause of my lost (…).'
[menace letter from João Machado to Francisco Ribeiro, Guimarães, 1818, PS].

In view of the above and of the diachronic data, the innovative morpheme *-stes* for 2sg person–number marking seems to result from an analogical extension, and not from leveling, considering the characteristics involved in leveling. We have seen that a productive and frequent pattern will be more likely to extend to other items. The 2sg paradigm, in Portuguese, has always been characterized by its stability, productivity, and frequency, especially since the 19th century. Finally, analogical extension tends to result in morphological changes and leveling in morphophonological changes (Hock 1991, p. 171). The phenomenon analyzed here clearly fits into a morphological change by analogical extension. There are also less transparent changes in which it is not possible to determine whether we are faced with an extension or a leveling, and, as Hock (1991, p. 179) observes, these processes do often cooperate. The disappearance of *vós* may have played a role in this morphological change in the sense that its tendency towards obsolescence will have paved the way for analogical extension by reducing the likelihood of convergence between grammatically and pragmatically distinct forms.

The Galician and Spanish Cases

Another supporting argument favoring analogical extension could be taken from the Galician and Spanish languages. In Galician, the innovative morpheme *-ches/-stes* to mark 2sg simple past (indicative) (*cantaches*) can be traced since the nineteenth century, and its diffusion is advancing rapidly. The innovative form is, in fact, the variant found in oral standard Galician (Paz Ramón 2013, pp. 356, 364). These innovative forms live at the same time with the fully preserved 2pl morpheme for simple past (indicative) (*cantastes*), pointing to the fact that the extension of *-s* is independent from preserving or not preserving 2pl. The same scenario is found in Spanish and is similar to what happens in Portuguese, and following Lapesa (2000, p. 470) "(…) no faltan otros ejemplos [*hicisistes*, *dijistes*] en la literatura moderna, pero el uso los condena". This seems not to be the case in Galicia, as this change has been socially 'accepted' by the speakers.

6.2. 'Fostes tu'—A Proposal for Analogical Extension

I have argued that the morphological change under analysis, the morpheme *-stes* as a person–number marker of the 2sg of the simple past (indicative), results from an analogical extension process. As indicated in Section 2 of this paper, analogical extension is often described in the form of a proportional scheme, which is recalled (a) as:

(a)   a: a′
        b: x = b′

However, the case of analogical extension discussed here can hardly be translated into a proportional equation as in (a), or, at least, it does not appear to be possible to establish a linear relationship by means of a proportional equation (in the terms referred to in Hock (1991, p. 172)) that somehow formalizes the change that occurred. For the equation to operate, it is necessary to have a base, or pivot, from which other forms of the paradigm are formed. Bases are usually described as the 'basic' forms of the paradigm. The forms considered 'basic' are often indicated as the least marked, i.e., those which contain less information and have less affixes to the paradigm (Hock 1991). However, there is truly no consensus on what makes one less marked (Fertig 2013, p. 117; Albright 2005). There is, however, some agreement among scholars about the singular as being the least

marked for the category of number, the present for the category of time, and the indicative for the category of mood (Albright 2005; Fertig 2013). In other words, the third person singular of the present indicative is generally accepted as being the most basic (Bybee 1985; Albright 2005). In natural languages, following Siewierska (2004) and Cysouw (2001), the third person singular is the one that most often presents a zero morpheme, that is, it does not convey much grammatical information. Of course, much will depend on the theoretical framework with which one works. However, although there is also no consensus on whether the most marked is the first person or the third of the singular, the least marked and most polite form, in pragmatic terms, is also the third person singular. Other researchers note that a basic form has nothing to do with being or not being more marked, but is related to the frequency of tokens. And, often, these phenomena can converge, resulting in the basic form being the least marked, containing less affixes, and being the most frequent (Albright 2005).

For the morphological change under study and considering, then, that third person is the basic form of the paradigm from which the analogical extension operates, when we formalize the change through the proportional equation, we obtain an agrammatical form, where in (b) is an example for the first conjugation paradigm and for the second conjugation paradigm:

(b)

Third person singular—First conjugation	Second person singular—Second conjugation
ama ('he/she loves')	amas ('you love')
amava ('he/she loved/would love')	amavas ('you loved/would love')
amará ('he/she will love')	amarás ('you will love')
amou ('he/she loved')	*amouste (s)('you loved')
Third person singular—Second conjugation	Second person singular—Second conjugation
come ('he/she loves')	comes ('you love')
comia ('he/she loved/would love')	Comias ('you loved/would love')
comerá ('he/she will love')	comerás ('you will love')
comeu ('he/she loved')	*comeuste (s) ('you loved')

In morphological terms, particularly with regard to person–number marking, third person singular is characterized by the absence of a person–number morpheme, that is, it carries a ⌀ morpheme, while -*s* is the person–number mark of all second person forms of all tenses, with the exception of simple past (indicative)[11], which is, precisely, -*ste*. Thus, taking into account the person–number marking morphology of 3sg and 2sg, we propose that the abstract proportional rule below can better interpret this analogical extension:

(c)   3sg: -⌀ $_{PN}$
        2sg: x'= -s $_{PN}$

The equation in (c) gives an account of the pattern of relationship between forms for the marking of person–number in Portuguese, that is, if ⌀ marks the 3sg then -*s* marks the 2sg. This will be the pattern of relationship that speakers identify in their grammar and therefore, by association, extend the -*s*, an unequivocal mark of the 2sg, to the only morpheme that does not present this regularity—the -*ste* morpheme. Apparently, the speakers, in the case of second person, favor the marking of person–number for the singular (cf. Rodrigues 2004, p. 18).

Although it is proposed in the equation in (c), it is necessary to take into account what Fertig (2013) observed regarding the concept of "proportional", namely, that a change is still "proportional" even if it does not fit the quadripartite model and, once again, the discussion around this concept is closely related to the theory with which it works and with a more or less comprehensive view of analogy[12]. However, these changes remain analogical because it is observable that a pattern of morphological relationship was expanded to forms that did not previously have it.

In (c), it is suggested a formalization that accounts for the morphological change under study—the person–number marking of the second person singular of the simple past (indicative). However, it is also worthwhile to ponder the preservation areas of *vós* and the 2pl and where is possible to find *vós fizestes* and *tu fizestes*[13], and to consider if these

syncretic forms result from the sub-process of leveling. However, there are indications that, also in these areas, the form *tu fizestes* results from the process of analogical extension already described. Although *vós + -stes* and *tu + -stes* have been registered, the cases are scarce and there is no competition between them in the treatment system. Nonetheless, the occurrences of *vós* and the 2pl are mainly for the plural and it is precisely within the plural that more examples of variation have been found, showing that *vós* and the 2pl compete with *vocês* and the 3pl (as mentioned above). There is also evidence that the subsystem of treatment and verbal inflection that we find in the areas of preservation of *vós* is changing, as already described by Aguiar and Paiva (2017)[14]. That is, for these subsystems, it is not clear that the analogical model comes from *tu*, or that it is the point of origin for the cases of syncretism between the 2sg and the 2pl. More typically, syncretic forms derive from phonetic change rather than morphological change, and leveling often involves the elimination of allomorphic forms in the radical (Hock 1991; Fertig 2013).

7. Concluding Remarks

This paper presented a case of morphological change in Portuguese that has received little attention in the literature. The documents studied, private letters written by very illiterate authors, present a multiplicity of phenomena associated with the innovations under discussion as the type of '*tu fostes*', emphasizing, on the one hand, the richness of the diachronic data that can be found in the particular epistolography, and on the other, demonstrating the scientific relevance of these innovations as an object of study, which are configured as "transgressors" of the norm (cf. Peres and Móia 1995). This paper attempted to contribute to the development of research in historical morphology. This was done by discussing the concept of analogy and its adequacy as an explanatory mechanism for change, looking at a phenomenon that has been scarcely studied. In addition, the research on this innovative morpheme (*-stes*) had also to focus on historical pragmatics, showing that a cooperation between historical morphology and historical pragmatics is possible and enriching. This study also attempted to show the relevance of studying private epistolary texts as rich linguistic testimonies of past languages diachronies, as they were written by people with poor education, making the writing of the letters very close to orality.

The data also support the hypothesis that this morphological change results from the analogical extension of the characterizing morpheme of the second person singular. This extension was favored by pragmatic and morphological conditions: the opacity of the morpheme *-ste*, the frequency and productivity of the person–number marking pattern of the second singular people, the pragmatic stability of *tu* for the informal context and the fall of *vós and* the verbal morphology of the second person plural created the necessary conditions for the occurrence of the diachronic analogical process. Innovations are most prominent from the 19th century onwards. In centuries prior to the 18th century, the coexistence of *tu* and *vós* for an interlocutor, within familiarity, possibly did not allow, for pragmatic reasons, the performance of analogy. At the time when *vós* was used in that discursive context, the distinction between second verbal persons through the morphemes *-ste* (2ps) and *-stes* (2pl) was pragmatically relevant.

The proportional equation, in the terms in which it is typically described, fails to adequately represent this analogical extension. The equation suggested here captures, in a more abstract way, the analogical model that served for analogical innovations such as '*fostes tu*'. Above all, it will illustrate more clearly the relationships between inflection patterns and the association that speakers perform mentally. An analogical change occurs when a significant number of speakers adopt the innovation (Fertig 2013); however, as previously indicated, there are several factors, namely, the negative perception of these forms and formal education, which may block the diffusion of these forms.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Conflicts of Interest: The authors declare no conflict of interest.

Abbreviations

2sg   second person singular
2pl   second person plural
3sg   third person singular
3pl   third person plural

Notes

[1]   These definitions are the researcher's own translations. In addition to these definitions, the author also presents another one that he calls 'associative interference', defined as: 'The influence of one form on phonetics over another with which it is (or appears to be) grammatically or semantically related (Fertig 2013, p. 12)'. It does not appear in the list of definitions presented in the text because we believe it is not preponderant for the construction of the theoretical framework of this dissertation.

[2]   Plural formation with *-s* of English names or regular past tense formation *-ed* (in modern English) are examples of more productive patterns. However, the unpredictable nature of the occurrence of the analogy is observed, for example, in several English names that were not regularized to the regular pattern (*-s*) in the plural, and remained as irregular with regard to the formation of the plural as is the case with *foot-feet* and ox-*oxen*. These words seem to resist regularization, with an exception being the production, especially by children, of the most frequent form of plural, when they produce, for example, * *foots*.

[3]   It should be noted that the investigation related to the pronoun *você* in Portuguese has been more productive, probably due to the multifaceted and complex character in socio-discursive terms.

[4]   These projects of collecting and digitalizing private letters were carried out by the Linguistics Centre of the University of Lisbon (CLUL). The archive are available in http://teitok.clul.ul.pt/postscriptum/index.php (accessed on 1 November 2023) and http://fly.clul.ul.pt/index.php (accessed on 2 November 2023).

[5]   More letters were located, but many were discarded in order to maintain a more homogeneous set (cf. Vaamonde 2018, pp. 147, 156).

[6]   *Casa da Suplicação* is, in general terms, equivalent to what is currently the Court of Appeal.

[7]   See Marquilhas (2015) for more details on the nature and size of these processes.

[8]   Available at http://fly.clul.ul.pt/ (accessed on 2 November 2023).

[9]   The *Post-Scriptum corpus* has 993,274 words in Portuguese and *Fly has* about 700,000. The occurrence of 592 forms of 2SG and 2PL of the PPS is also justified by the textual genre in question and, probably, by the condition of the authors: they are short private letters, written in everyday life that do not generate very narrative or complex texts, and are written mostly by authors with low or no schooling.

[10]   Based on empirical/impressionistic evidence.

[11]   In the imperative mode, 2sg affirmative is also marked with Ø.

[12]   Not all changes will fit linearly into a proportional and harmonious equation, since linguistic change is governed diferent principles than those in mathematics: "Not all cases considered proportional analogy can be easily represented in this proportional formula, and some cases not normally thought to be proportional analogical change can be fitted into such a formula." (Campbell 1998, p. 91).

[13]   Based on research in the *Cordial-Sin corpus*, a corpus for dialectal syntax in Portuguese.

[14]   In a recent study on the behaviour of *vocês*/3pl and *vós*/2pl in Braga, a conservation area for *vós* and the 2pl for a plural interlocutor, Aguiar and Paiva (2017) observe that the explicit use of *vocês* prevails over that of overt *vós*, mainly in the subject function, however, and taking into account exclusively verbal uses, there is a prevalence of 2pl forms, for the same syntactic function. The authors also point out that the sum of the occurrences of explicit *vocês* with 3pl null subject forms indicates a growing use of the latter, pointing to an ongoing change in this area (Aguiar and Paiva 2017).

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