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The neologisms of the COVID-19 pandemic in European Portuguese: From media to dictionary

1 Introduction

Humanity has already been confronted with pandemics in the past, such as the Spanish Flu (1918), the Asian Flu (1957), AIDS (1981), H1N1 (2009), Ebola (2014), and Zika Virus (2015), just to name a few. COVID-19 (2020), however, has had a stronger impact on the lives of people around the world, so that communication about new treatments, new care, new concerns, new behaviours was necessary and, whenever a discovery of this social and clinical reality happened new words and/or neological expressions emerged at an extremely fast pace, “simultaneously a manifestation of language evolution and the evolution of knowledge” (Lino 2019: 10).

While adjusting to the COVID-19 pandemic, people around the world started to talk about the “new normal” way of life, and they conveyed feelings and thoughts on the topic through social networks and traditional communication channels resorting to a set of specific linguistic strategies, such as metaphors and neologisms.

The vocabulary in different domains and in everyday speech was expanded to accommodate a complex social, cultural, and professional phenomenon of changes. Therefore, this new life gave birth to a new language – the “coronaspeak”.

According to Thorne (2020), the “coronaspeak” has three stages: first, it emerged in the way medical aspects were communicated in everyday language; secondly, it occurred when speakers verbalized the experiences they had undergone and “invented their own terms”; finally, this “new” way of speaking emerged in the government and authorities’ jargon, to ensure that the new rules and policies were understood, and that population adopted socially responsible behaviours.

In this paper, we will focus on the second stage, because we intend to take stock of how speakers communicate and verbalize this new way of living, particularly on social networks, for example. Alongside, we are interested in the context in which the neologism – be it a new word, a new meaning, or a new use – emerged, is used,

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and understood, through the observation of the occurrence of the new word(s) either on social networks or through dissemination texts (press) to confront it with the ones that Portuguese digital dictionaries have attested so far. Different criteria regarding the insertion of new units, the inclusion date, and the lexicographic description of the entries in the dictionaries will be debated.

2 Neology: theoretical and methodological core issues

Historically, neologisms have been the target of prejudice and stigmatization when confronted with the standard language (Boulanger 2010). Although speakers usually recognize the units of their language that may be considered as new, the concept of “neologism” is debatable. Back in 1976, Rey wondered whether “neologism” is a concept or simply a pseudo-concept, arguing that “there is obviously no neologism per se, but in relation to a set of arbitrarily defined uses” (1976: 17). For this linguist, the concept of neologism is methodological and pragmatic.

Given the complexity of the concepts of neology (the process) and neologisms (the product), experts have divergent opinions about this topic. Therefore, this phenomenon has been examined from different angles over time, such as the studies carried out by Guilbert (1975), Rey (1976), Alves (1990), Cabré, Freixa and Solé (2002), Pruvost and Sablayrolles (2003), or Boulanger (2010). More recently, we highlight the works of Alves and Maroneze (2018), Jesus (2018), and Rio-Torto’s (2020) analysis of the lexical renovation in Brazilian and European Portuguese.

According to Alves and Maroneze (2018: 9), the challenge in defining neologism resides in the concept of novelty: “New word regarding what or whom?” When we speak about novelty, a new concept arises in the scope of lexical innovation: the “novelty feeling”, a criterion of psychological nature, that Guilbert (1975: 31) associates with neologisms to express the way speakers may experience the designation of new concepts. On the other hand, Guerrero Ramos (2017) and Lino (2019) defend that the “neological feeling” is crucial to identify and delimit a neologism, despite its fluctuating character (Sablayrolles 2006).

Pruvost and Sablayrolles (2003) consider neologisation as a natural process, which depends on several factors, such as age, the speakers’ experience, and the dynamic of different periods, as it is the case of the global pandemic of COVID-19. Following Correia and Lemos (2005), we understand neology as (i) the natural ability to renew the lexicon of a language by creating and incorporating new units; and (ii) the study (observation, collection, description, and analysis) of neologisms that occur in linguistic systems.

Neologisms start by appearing in the speech, and may eventually become fixed in the language, thus losing their neologism status. As Guilbert puts it: “the repetition of

the act of creation establishes the individual neologism in the lexicon society; creation is confirmed by a certain usage. The created term is then lexicalised and, at the same time, loses its neologism quality¹ to become a socially established word” (1975: 49). Hence, all the words were once neologisms, as Jean-Claude Boulanger and Bernard Quemada defend (Sablayrolles 2016).

Some authors also mention the distinction between occasionalisms and neologisms (Dal and Namer 2016, Bueno Ruiz 2020) based on the stability function of a unit in a linguistic system and its permanence time (Dressler 1981). While an occasionalism would be temporary and ephemeral, without dictionary attestation, a neologism, from a diachronic point of view, is a unit that can be included into a dictionary at a given moment, and thus become part of the common lexicon of a language losing its neologic status.

The entry into the linguistic system, made official by the registration in the language dictionary, of permanent and stable formations, resulting from a system need, mainly of denominative character, coincides with the moment when those units cease to be neologisms, according to Correia (1998). In this sense, Guerrero Ramos (2017: 1399) claims that a unit is neological if it does not appear in the dictionary, therefore “the dictionary remains an effective means of measuring neology”. On the other hand, media plays an important role in the identification of neologisms as a vehicle for the dissemination of the standard language and is considered a reference model that can condition or encourage the use of certain linguistic trends (Freitas, Ramilo, Arim 2010) or, as Pruvost and Sablayrolles (2003: 9) state: “Press chronicles, more or less selective institutions and dictionaries also play their regulatory role to evaluate, channel, define, suggest, sometimes officially impose an adaptation or substitutes for the neologisms resulting from the daily turmoil”.

Given the sophistication of neologisms, experts have come forward with many proposals to categorize neological units. Sablayrolles (1997) addresses this issue, presenting 12 types of neologisms typologies alongside formation processes. Despite the numerous existing typologies, Jesus (2018: 54) concludes that “in general, it is possible to synthesize the formation processes in three fundamental types: formal, semantic and loan processes”,² and advocates the importance of considering “pragmatic and discursive factors as inherent to any neological unit and, consequently, to any typologisation proposal”.

1 In the original text: “qualité de néologisme”.

2 Formal neologisms are creations based on processes of derivation, composition, formation by acronyms, reduction of words or even in the creation of innovative roots (Boulanger 1979). In this group, Rey (1976) includes some borrowings, along with ex nihilo creations, morphological units, initialisms, and acronyms. When a new meaning is given to a form that already exists in the language, the neologism is semantic and can be described by different types of novelty: total or partial (Rey 1976). When the neological units derive from the adoption of a foreign unit, they are known as borrowed neologisms.

3 Neology in Portugal in a nutshell

In Portugal, neologism studies began in the 1980s, at NOVA CLUNL ('Linguistics Research Centre of NOVA University of Lisbon'), with the *Observatoire du Français Contemporain de Lisbonne* ('Observatory of Contemporary French in Lisbon'), under the supervision of Teresa Lino. Neologisms were collected and processed as computerized data in the *Base de Neologismos do Português Contemporâneo* ('Contemporary Portuguese Neologisms Base') (Lino 1988, 2003). Later, the *Observatório do Português Contemporâneo* ('Contemporary Portuguese Observatory') was founded with the aim of creating a bank of Portuguese neologisms, with the same methodological principles as the French observatory, followed then by the *Observatório de Neologia e de Terminologia em Língua Portuguesa – Neoporterm* ('Observatory of Neology and Terminology in Portuguese Language'). In 2004, the *Observatório de Neologia – ONP* ('Neology Observatory') was created by Margarita Correia at ILTEC (currently CELGA-ILTEC, 'Center for the Study of General and Applied Linguistics'), as a part of the observatories' network of the *Neologia das Línguas Românicas – NEORom* ('Neology of Romance Languages'), a project coordinated by Teresa Cabré (Correia *et al.* 2006).

Despite several advances in the neology work in Portugal, both projects (at NOVA CLUNL and CELGA-ILTEC) are on standby.

4 European Portuguese dictionaries

The different evolution stages traversed by dictionaries over time contemplate "an attitude towards language(s) and a reflection on language(s) itself (themselves): the dictionary has been a cultural object ever since it was created and has strived to define the lexical corpus of a language with a descriptive, didactic, and sometimes normalizing perspective", as Lino (2018: 609) clarifies. The dictionary has an extremely important social role in the preparation of an individual for society. It is an example of balance between the correct use of language and its variation, whether dialectal or orthographic and a guarantor of lexical reliability, without which no norm or rule survives.

In Portugal, there is no normative language policy, nor an institution with legal competence to determine the linguistic norm, despite the existence of the Academia das Ciências de Lisboa ('Lisbon Academy of Sciences'), which provides the Portuguese government with consultancy in linguistic and scientific matters of national interest. Consequently, there are no normative dictionaries, unlike what happens, for example, in Spain, where one can find several scientific academies (Real Academia Española, 'Royal Spanish Academy'; Institut de Estudis Catalanes, 'Institute of Catalan Studies'; Real Academia Gallega, 'Galician Royal Academy'; Euskaltzaindia,

‘Royal Academy of the Basque Language’) with legal powers to determine the norm of languages, and normative dictionaries are available to the public.

The European Portuguese dictionaries only have a descriptive status and, in some cases, a status of reference dictionaries, which allows the regulation of linguistic products despite not having legal competence to establish the standard. However, the speakers acknowledge Portuguese dictionaries as reliable sources of the intended correct uses of the language (Correia 2009).

Usually, paper-based dictionaries have an introduction, a preface and/or a user’s guide, where questions regarding objectives, methodology, macro and microstructure, the insertion of new lexical units, number of entries, among others may be addressed. The kind of lexicographic information shared with users, as well as the extension of it, depends on the dictionary’s scope. Regarding the new entries, and since a unit ceases to be neological once it is attested in a dictionary, Correia (1998) strongly disagrees with the inclusion of the label “neol.,” often used in the microstructure of paper-based dictionaries to indicate the most recent units, defending that it is “theoretically more correct, to choose the date of the first attestation of the registered unit” (idem: 62). The *Dicionário do Português Atual Houaiss* – DPAH (2011, ‘Houaiss Dictionary of the Portuguese Current Language’) includes both the dates of the entries and the label “neol.”

The Portuguese online dictionaries: *Dicionário Infopédia da Língua Portuguesa* (DILP, ‘Portuguese Language Infopedia Dictionary’) and *Dicionário Priberam da Língua Portuguesa* (DPLP, ‘Priberam Dictionary of the Portuguese Language’) do not explicitly mention the objectives of the works, the methodology used, or details about how the insertion of new lexical units is done, nor whether there is a temporal register associated with new entries. However, the DPLP provides more lexicographic information (e.g., number of entries) and has a detailed user guide³ when compared with the DILP.

Unlike what happens with paper-based dictionaries, where the different editions serve as a timestamp to identify diachronic changes, it is difficult to verify aspects such as the insertion date of a neologism, or the introduction of new meaning through reformulation or adaptation of definitions in the Portuguese e-dictionaries, given that the lexicographic criteria governing the insertion of units are unclear.

Therefore, in order to find out when a new unit is included in the Portuguese digital dictionaries, we have to perform a diachronic analysis of their entries. Taking COVID-19 as an example, we have evidence from both dictionaries of the introduction of at least one new related word between December 2020 and April 2021.

In 2020, there were two units associated with the new pandemic in the DILP (Figure 1).

³ Available on: <https://dicionario.priberam.org/consultar.aspx>.

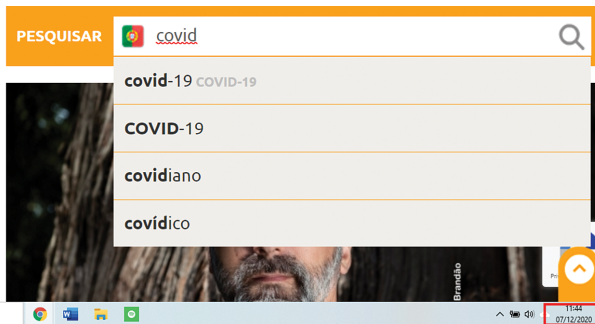


Figure 1: Entries associated with COVID-19 in the DILP on 07/12/2020. Source: DILP.

In 2021, *covidário* comes up as a new unit in the DILP (Figure 2).



Figure 2: Entries associated with COVID-19 in the DILP on 09/04/2021. Source: DILP.

In 2020, *covidário* was already an entry of the DPLP, as we can observe in Figure 3.



Figure 3: Entries associated with COVID-19 in the DPLP on 07/12/2020. Source: DPLP.

In 2021, the DPLP has added *covid-drive* to its lemma list (Figure 4).

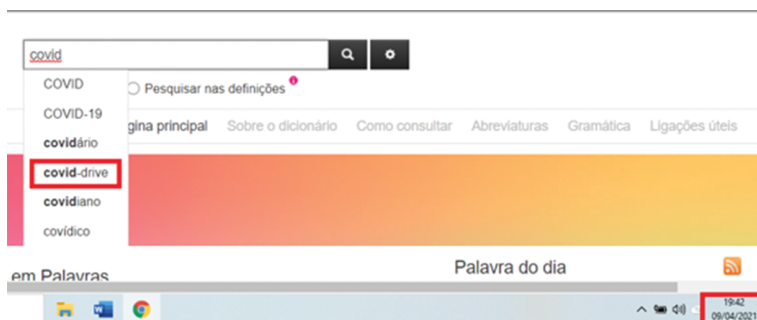


Figure 4: Entries associated with COVID-19 in the DPLP on 09/04/2021. Source: DPLP.

From the observation of the two dictionaries, at first glance, we could say that the DPLP seems to have different criteria from the DILP, allowing a faster insertion of new units: the entry *covidário* was already in the DPLP when the DILP included it in its lemma list.

Despite these constraints, the DILP and DPLP are two digital reference works for the contemporary Portuguese language and, therefore, a reliable source of comparison between the units attested in the dictionaries and the neological units registered in media and social networks, since dictionaries also use them as part of their corpora.

4.1 *Dicionário Infopédia da Língua Portuguesa* – DILP

The DILP has both a paper-based and a digital version, the latter one is incorporated in the *Infopédia* website: www.infopedia.pt/.

In the *Infopédia* page, we have access to many linguistic resources: monolingual dictionaries,⁴ bilingual dictionaries,⁵ a multimedia encyclopedia, a Portuguese orthographic vocabulary, a spell converter, translation and spelling games, trivia: “rare words, expensive words”, language doubts, and the “word of the year”, allowing users to send comments or suggestions about any resource.

⁴ Eleven Portuguese language dictionaries: Portuguese language dictionaries with and without spelling agreement, Portuguese sign language dictionary, dictionary of Portuguese verbs, dictionary of acronyms and abbreviations, toponymy dictionary, dictionary of proper names (anthroponymy), dictionary of medical terms, dictionary of Latin phrases and foreign expressions, basic illustrated dictionary, dictionary of Portuguese for foreigners.

⁵ Nine bilingual dictionaries: Chinese, Dutch, English, French, German, Greek, Italian, Spanish, Tetum, and two verb dictionaries of English and French.

The DILP does not provide any official information about the total number of entries, however, the corresponding paper version – *Dicionário Moderno da Língua Portuguesa* (2008, ‘Modern Dictionary of the Portuguese Language’), belonging to the publishing house Porto Editora, records “32,500 entries, phrases and idioms, providing more than 2,700 examples and 66,500 definitions”⁶ and, in an announcement regarding the launch of the digital version of the dictionary in 2007, the publishing house informed that the DILP had more than 240,000 definitions available,⁷ so we know that at the time the DILP’s lemma list had fewer entries than its paper-based counterpart. The Porto Editora commercializes a higher number of paper-based dictionaries (including more thematic/technical dictionaries) and other products (grammar books and handbooks) than the ones available on the Infopédia website.

The microstructure of the DILP comprises phonetic transcription, syllabic division, etymology, grammatical information, usage marks (e.g. colloquial, regionalism, taboo, slang, other linguistic varieties of Portuguese, etc.), synonyms, antonyms, related words and anagrams, foreign words, idioms, some examples or expressions to illustrate contexts. The entries are also attached to information in sign language and references to articles from other dictionaries or its encyclopedia. In the *Dicionário de Português para Estrangeiros – DPE* (2020, ‘Dictionary of Portuguese for Foreigners’), users can also listen to the words’ pronunciation.

Despite the omission of the total number of the DILP lemmas, as regular users, we have the perception of an increase of available lemmas, justified by the creation of new dictionaries in recent years, like the DPE. The Infopédia enables access to lots of linguistic information through numerous resources. Besides that, it is user-friendly and has an inviting image.

4.2 *Dicionário Priberam da Língua Portuguesa – DPLP*

The DPLP only has an online version, available through Priberam website: <https://dicionario.priberam.org/>, along with other resources, like FLiP⁸ and LegiX.⁹

In the Priberam webpage, we have access to several linguistic resources: translation assistants (English, French, Spanish); verb conjugator (European/Brazilian Portuguese and Spanish); spelling agreement converter; syntactic and spell checker

⁶ <<https://www.portoeditora.pt/produtos/ficha/dicionario-moderno-da-lingua-portuguesa/200124>>; last access: August 5, 2021.

⁷ <<https://www.portoeditora.pt/noticias/dicionario-da-lingua-portuguesa-gratuito-na-internet/759>>; last access: August 8, 2021.

⁸ Several linguistic resources for the Portuguese language: <https://www.flip.pt/>, last access: August 8, 2021.

⁹ Portuguese legal databases, chosen by the largest law firms operating in Portugal.

(European/Brazilian Portuguese and Spanish); grammar; vocabulary, with two distinct lexical bases for European Portuguese and Brazilian Portuguese.

The DPLP is a lexicographic product that resulted from the paper dictionary *Novo Dicionário Lello da Língua Portuguesa* (1996–1999, ‘New Lello Dictionary of the Portuguese Language’). It contains 133,000 entries, “including phrases and phraseologies, whose lemma list comprises the general vocabulary and the most common terms of the main scientific and technical areas”,¹⁰ according to the introduction of the dictionary on its webpage.

The dictionary allows users to customize it according to the desired Portuguese variety: European or Brazilian standards, and one can also choose to use the spelling agreement (‘acordo ortográfico’) version or not,¹¹ depending on specific needs.

After setting the preferences, the DPLP offers users options of autocomplete search and spell check, and the entries include information about the morphological analysis, search (cross-reference) in the definitions, verb conjugator, related words, translation assistants, similar and nearby words (or neighbouring words), the occurrence of the unit in other entries, as well as the real use of the word in blogs, media, and Twitter. It also contains data concerning etymology and pronunciation cues, grammar information, usage marks (e.g., colloquial, informal, regionalism, slang, other linguistic varieties of Portuguese, etc.), synonyms and antonyms, anagrams, foreign words, idioms, contexts, between others.

Having a quick look at the pros and cons of Priberam, all the information displayed in the DPLP is free, except for lexicographic resources associated with FLiP. It is a user-friendly resource, and there is a tutorial that guides us along the different sections and types of searches that the dictionary enables. If we are seeking informal uses of language and contexts of words, the DPLP is a good choice, since it shows us the word in examples taken from blogs, media, and Twitter, and allows the user to have more up-to-date information regarding contexts of informal uses of language, specifically slang, when compared to the DILP.

10 <<https://dicionario.priberam.org/sobre.aspx>>; last access: August 5, 2021.

11 The “new” spelling agreement (also known as *spelling agreement of 1990*) is mandatory in Portugal, Brazil, Cape Verde, São Tomé and Príncipe, but still under discussion in Angola and Mozambique. As for Guinea-Bissau, Equatorial Guinea and East-Timor, the governments’ priority is that the population speak the official language (Portuguese), and with education/linguistic policies to implement the Portuguese language in the country comes the spelling agreement (if communities have access to student books, grammars, and other linguistic resources from countries where the spelling agreement is applicable, or through teachers from those countries).

5 Methodology

In this work, we intend to: (i) verify which lexical units emerged relating to the COVID-19 period in the media and social networks, and from these units which ones were included into a dictionary at a given moment; and (ii) observe which lexical units were attested by the dictionaries in a very short period to meet the users' needs.

The neologisms candidates were extracted from media (newspapers *Público* and *Expresso*) and social networks (such as Facebook and Twitter) in a period comprised between December 2019 – considered as the beginning of the pandemic, and July 2021.

Considering Sablayrolles statement that “a word enters a dictionary because it is no longer neological” and “a word is neological because it is not in the dictionary” (2006: 141), we have selected the two digital dictionaries of European Portuguese mentioned above – DILP and DPLP, to confirm if the extracted units are neologisms or not.

These dictionaries were chosen for the following reasons: they (i) are freely available (despite being owned by two publishing houses: Porto Editora and Priberam), (ii) possess a considerable lemma list, (iii) are representative of the lexicon of European Portuguese, (iv) are targeted to the Portuguese and lusophone audience.

5.1 Criteria for the selection of neologisms candidates

The process of identifying and collecting neologisms candidates was carried out in two stages, manual and semi-manual, and was based on four criteria: diachronic, psychological, systematic instability, and lexicographic (Cabré 1993), which helped us to delimit the units considered as neologisms candidates.

Following Cabré (1993), a unit is neological if it has appeared recently (diachronic criterion). On the other hand, as Guilbert (1975) declares, a unit is felt as new at a given moment by the speakers of a particular linguistic community compared to the language stage immediately before (psychological criterion), whether it is a new orthographic entity, a new meaning, or an update of meaning. This criterion, dubbed as “novelty characteristic”, is responsible for the immediate delimitation of a candidate.

Cabré (1993) refers to the formal instability of the neologism as relevant to its classification, a unit will be considered neological if, cumulatively, it shows signs of morphological, phonetic, or spelling instability. Different spellings and graphic markings, hesitation concerning grammatical gender or pronunciation, for example, reveals insecurity towards the use or existence of specific units in the language.

Finally, we follow the lexicographic criterion, in which the candidate unit will be neological if it is not yet registered in a language dictionary, either at the level of the entry or meaning. The inclusion of the unit into a dictionary at a given moment reveals that it has lost its neological nature.

5.2 Selection of neologisms candidates

Once the criteria were defined, we have started collecting candidates. As mentioned above, since the Portuguese neology observatories are on standby, the solution was to endeavour a manual or semi-manual selection. Although time-consuming, it was considered indispensable, and only so could we successfully identify cases of semantic and formal neology (Correia & Lemos 2005).

First, whenever a unit “felt” to be neological was found, it was introduced in the candidate list with the information considered relevant in the candidate form, as shown in Table 1:

Table 1: Candidates related to *álcool* and *gel*.

candidate	N.o	context	source	date
<i>álcool-gel</i> (<i>alcohol-gel</i>)	0038	A distância das mesas, a separação dos irmãos nos recreios, as setas no chão, os frascos de álcool-gel e até o ecrã da televisão com os números da covid-19 aparecem desenhados.	Newspaper Expresso	2020/09/29
<i>álcool gel</i> (<i>alcohol gel</i>)	0032	Metro e autocarros cheios de regras e de lugares vazios, viajantes mascarados cobertos de respeito, fiscais de poucas multas e de muita pedagogia, ou máquinas automáticas com chocolates, pastilhas elásticas, máscaras, luvas e álcool gel . Eis o retrato dos transportes públicos do Porto, onde um autocarro seguia sem passageiros para Sonhos.	Newspaper Expresso	2020/03/19
<i>álcool em gel</i> (<i>alcohol in gel</i>)	0019	A LMVH proprietária da Louis Vuitton, começou a produzir e a distribuir gratuitamente álcool em gel , em França. A iniciativa procura responder ao risco de falta de desinfetantes, em todo o país, para proteger a população da propagação do novo coronavírus.	Newspaper Público	2020/03/19
<i>gel desinfe(c)tante</i> (<i>disinfectant gel</i>)	0006	Os receios face ao vírus quadruplicaram as vendas de Fevereiro de sabão e gel desinfectante , incluindo aqueles com base de álcool, face ao ano passado, segundo os dados mostrados pela gigante do retalho Lotte Mart.	Newspaper Público	2020/03/04

From the final extraction, we have obtained a list of candidates, of different typologies and formation processes: *álcool-gel* (‘alcohol-gel’), *ano pandémico* (‘pandemic year’), *antigo normal* (‘old normal’), *antimáscaras* (‘antimasks’), *bolhas domésticas* (‘domestic bubbles’), *centro de vacinação* (‘vaccination center’), *comportamentos de risco* (‘risk behaviours’), *confinamento* (‘lockdown’), *desconfinamento* (‘lifting

lockdown'), *drone pandêmico* ('pandemic drone'), *escola virtual* ('virtual school'), *estado de emergência* ('emergency state'), *fase de mitigação* ('mitigation phase'), *fraudemia* ('fraudemia'), *geração pandemia* ('pandemic generation'), *hidroxicloroquina* ('hydroxychloroquine'), *imunidade de grupo* ('group immunity'), *janelas do confinamento* ('lockdown windows'), *kit de diagnóstico* ('diagnostic kit'), *língua covid* ('covid language'), *mapa pandêmico* ('pandemic map'), *negacionista* ('negationist'), *plano nacional de testagem* ('national testing plan'), *quarentena* ('quarantine'), *recém-vacinados* ('newly vaccinated'), *supercontagadores* ('super contagious'), *testes sorológicos* ('serological tests'), *uberização* ('uberization'), *vacinódromo* ('vaccinedrome'), *zaragatoa* ('swab').

Subsequently, candidates were lemmatized to facilitate their registration and allow a more efficient analysis. For reasons of space and scope, we will only discuss the results derived from the selected units: *coronavírus*, *COVID-19*, *pandemia* and the prefix *tele-*. These units were chosen due to the simple identification of the candidate, and their associations with the disease, such as different units related to the designation of the disease (*coronavírus*, *COVID-19*), units used as a metonym for a specific disease (*pandemia*), and a prefix unit (*tele-*) associated with performing certain tasks in the so-called "new normal" or "post-pandemic scenario".

6 Analysis

In this section, we are going to dwell on the lexicographic representation of four units related to the pandemic. The selection was based on the most generic units analyzed when the subject is the COVID-19 pandemic (*coronavírus*, *COVID-19*, *pandemia*). Additionally, the particular interest in understanding the impact of COVID-19 on people's lives in the technological age justifies our choice of the prefix *tele-* as a potential promoter of neologisms.

Initially, we confirmed whether the four selected units were included in the lemma list of the DILP and DPLP. Subsequently, we observed the microstructure of the entries, namely the content of the definitions and the type of words related to the units under study in both dictionaries (5.1.). In the final stage of our research, we present the neologisms candidates collected from different sources and discuss their formation processes (5.2.).

6.1 Lexicographic description of the units: *coronavírus*, *COVID-19*, *pandemia*, and the prefix *tele-*

We will set our attention to the four selected examples, compare their definitions in the DILP and DPLP and discuss the approach to the same units in both dictionaries.

After commenting on the definition of the units under study, a comparative analysis of the microstructure of both dictionaries was carried out as a result of two types of search processes. First, we have performed a search in the lookup window of each dictionary, where a set of words starting with the same characters (e.g. “coronav”) is displayed (Figure 5).



Figure 5: Example of a search result with the initial characters of coronavirus in the lemma list of the DILP (left) and DPLP (right).

Then, we have observed the related words within each dictionary entry under study (Figure 6).

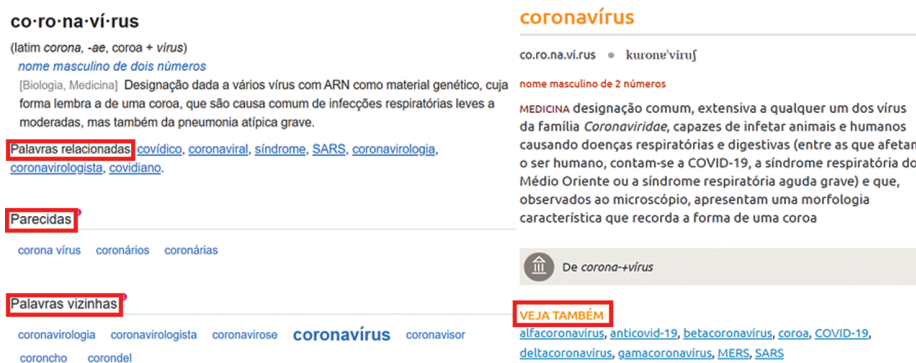


Figure 6: Example of the entry and respective suggestions of other words in the DILP (left) and DPLP (right).

The lookup window of the DILP displays other words in alphabetical order (up to 10 results), and the page of the entry allows users to see a set of related words (‘veja também’, “see also”). In the DPLP, the lookup window suggests other words in alphabetical order (up to 6 results), while on the page of the entry, we have related words (‘palavras relacionadas’), similar words (‘parecidas’), nearby/neighbouring words (‘palavras vizinhas’).

In a preliminary analysis, we have checked the suggestions in the lookup window and compared them with the related words for each of the four entries in both dictionaries between April and July 2021. During the analysis, we have discarded words that are not semantically related or, for the sake of length, words that show up

simultaneously in the two types of searches or if they occur with other units under analysis simply because the lemma occurs within the definition of another entry (as in the DPLP section “this word in the dictionary”). Ultimately, this diachronic analysis has not retrieved significant differences in the referred period, so we will only present a summary (*cf.* Tables 2–5) for each unit with a summary of our findings.

6.1.1 coronavírus

The lemma *coronavírus* is included in both dictionaries, and their definitions include data about etymology, gender (it is a masculine noun, with no graphic variation nor gender instability), number (singular and plural), and it is associated with the domains of medicine and biology (Figure 7).

coronavírus

co.ro.na.ví.rus • kurona'víruʃ

nome masculino de 2 números

MEDICINA designação comum, extensiva a qualquer um dos vírus da família *Coronaviridae*, capazes de infetar animais e humanos causando doenças respiratórias e digestivas (entre as que afetam o ser humano, contam-se a COVID-19, a síndrome respiratória do Médio Oriente ou a síndrome respiratória aguda grave) e que, observados ao microscópio, apresentam uma morfologia característica que recorda a forma de uma coroa

De *corona*-+*vírus*

coronavírus

coronavírus | n. m. 2 n.ºm.

co·ro·na·ví·rus

(latim *corona*, -ae, *coroa* + *vírus*)

nome masculino de dois números

[Biologia, Medicina] Designação dada a vários vírus com ARN como material genético, cuja forma lembra a de uma coroa, que são causa comum de infeções respiratórias leves a moderadas, mas também da pneumonia atípica grave.

Figure 7: The entry of the lemma *coronavírus* in the DILP¹² (left) and DPLP¹³ (right).

The definition of *coronavírus* in both dictionaries stresses the following characteristics of the lemma: (i) it is a common designation of a certain family of viruses; (ii) the virus causes a set of symptoms; (iii) it has the shape of a crown (“coroa”, “corona” in Latin).

Additionally, the DILP includes encyclopedic information in the definitory text, naming different types of *coronavírus*: COVID-19, MERS-CoV (acronym of Middle East respiratory syndrome coronavirus, or in Portuguese: “síndrome respiratória do Médio

¹² DILP definition: ‘common designation, extended to any of the viruses of the *Coronaviridae* family, capable of infecting animals and humans, causing respiratory and digestive diseases (among those that affect humans, there are COVID-19, the Middle East respiratory syndrome or the severe acute respiratory syndrome) and which, when viewed under a microscope, have a characteristic morphology reminiscent of the shape of a crown.’

¹³ DPLP definition: ‘Designation given to several viruses with RNA as a genetic material, whose shape resembles a crown, which are a common cause of mild to moderate respiratory infections, but also of severe atypical pneumonia.’

Oriente”) and SARS (acronym of Severe Acute Respiratory Syndrome, in Portuguese: “síndrome respiratória aguda grave”). The fact that this definition includes the recent coronavirus disease (COVID-19), suggests a reformulation or an update of the definition to accommodate a new concept.

Let us have a look at the data retrieved from both dictionaries (Table 2) regarding the related and nearby/neighbouring words (*cf.* Figure 7):

Table 2: Data retrieved from the DILP and DPLP regarding *coronavirus* related and nearby words.

14 units retrieved from <i>coronavírus</i>	DILP	DPLP
<i>alfacoronavírus</i>	✓	✓
<i>betacoronavírus</i>	✓	✓
<i>coroa</i>	✓	✓
<i>corona</i>	✓	✓
<i>coronafobia</i>	✓	X
<i>coronafóbico</i>	✓	X
<i>coronaviral</i>	✓	✓
<i>coronavirologia</i>	X	✓
<i>coronavirologista</i>	X	✓
<i>coronavirose</i>	X	✓
<i>coronavírus</i>	✓	✓
<i>coronavisor</i>	X	✓
<i>deltacoronavírus</i>	✓	✓
<i>gamacoronavírus</i>	✓	✓
Total of results	10	12

From the comparison of the units retrieved from *coronavírus* in both dictionaries, one can remark that the DPLP seems to have more *coronavírus* related entries than the DILP. On the other hand, the DPLP includes units that have no definition available – *coronavirose* (‘canine and feline coronavirus’) and *coronavisor* (possibly referring to a face shield for corona, even though we are using often “viseira” to designate the same device), so if we were to consider words with definitions, we can say that the DPLP and DILP are even.

Finally, we observe that *coronavirose*, *coronavisor*, *coronavirologia* (‘coronavirology’) and *coronavirologista* (‘coronavirologist’), as well as *coronafobia* (‘coronaphobia’) and *coronafóbico* (‘coronaphobic’), show traces of instability concerning their fixation as entries in both dictionaries. Therefore, we believe that these units are losing their neologism status as they are experiencing a process of being included into a dictionary at a given moment.

6.1.2 COVID-19

The DILP displays in a single entry *COVID-19* and *covid-19*. On the other hand, the DPLP attests two entries for the same concept: *COVID* and *COVID-19*, however, the latter has no definition attached and users are informed that *COVID-19* is not in the dictionary and are invited to suggest the “inclusion of the searched word in the dictionary”. Until very recently, the lemma *COVID-19* had a definition in the DPLP, now it appears solely in the entry of *COVID* as a reduction and synonym of *COVID-19*, alongside the observation that it can also be spelt in small caps: *covid*.

COVID-19, covid-19

kovid dʌzə'nɔv(ə)

nome feminino

MEDICINA doença respiratória causada por um coronavírus (SARS-CoV-2), apresenta sintomatologia variável, desde casos assintomáticos ou formas de intensidade ligeira (cujos sintomas podem incluir febre, tosse, fadiga ou dores musculares) até situações graves (sobretudo em idosos ou pessoas com problemas de saúde preexistentes), que podem evoluir para cenários de pneumonia, falência de múltiplos órgãos e eventual morte; (inicialmente identificada na China, em 2019, atingiu estatuto de pandemia em 2020)



Do inglês *Corona virus disease 2019*, «doença de coronavírus 2019», (ano em que foi identificado o primeiro surto da doença)

COVID

COVID | n. f.

COVID

(redução de *COVID-19*)

nome feminino

[[Informal] [Medicina] Doença infecciosa respiratória, causada pelo coronavírus SARS-CoV-2, cujos sintomas podem incluir febre, tosse, dificuldades respiratórias e cansaço, e que, em alguns casos, pode progredir para pneumonia ou falha respiratória. = COVID-19

Nota: Também se escreve com minúsculas (*covid*). É também usado como substantivo masculino.

Figure 8: The entry of the lemma *COVID-19* in the DILP¹⁴ (left) and DPLP¹⁵ (right).

Looking at both definitions, we notice that the two dictionaries favour the female gender, despite a note in the DPLP regarding the possibility of the occurrence of the masculine gender, a tendency also observed in other Latin languages. Besides gender instability, this lemma presents spelling variants concerning the use of uppercase or lowercase, uppercase being the preferred form in both dictionaries. The lemma is categorized as a noun, and it derives from an English acronym, a piece of information disregarded in the DPLP since the lemma etymology is absent. It is associated with the domain of medicine, yet the entry *COVID* in the DPLP adds that this shorter form of *COVID-19* is also informal.

These definitions emphasize the following characteristics about the lemma: (i) the year of the outbreak (only in the DILP, as there was an update on the lemma

14 DIPL definition: ‘respiratory disease caused by a coronavirus (SARS-CoV-2), which presents variable symptoms, from asymptomatic cases or forms of mild intensity (whose symptoms may include fever, cough, fatigue or muscle pain) to severe situations (especially in the elderly or people with pre-existing health problems), which can evolve into scenarios of pneumonia, multiple organ failure and eventual death; (initially identified in China in 2019, it has reached the pandemic status in 2020).’.

15 DPLP definition: ‘An infectious respiratory disease caused by the SARS-CoV-2 coronavirus whose symptoms may include fever, cough, breathing difficulties, and tiredness, and which in some cases may progress to pneumonia or respiratory failure.’.

definition in the DPLP); (ii) the type of illness: a respiratory (infectious, in the definitory text of the DPLP) disease, with symptoms (mild to severe); (iii) the seriousness of the illness: respiratory failure (in the DPLP), eventual death (in the DILP); (iv) the cause of the disease: SARS-CoV-2 coronavirus; (v) the origin of the disease (China) and its status (pandemic status in 2020), only in the DILP.

Concerning the lexicographic representation of *SARS-CoV-2*, we verify that, while the *SARS* lemma is included in a dictionary at a given moment, the specific version of coronavirus – *SARS-CoV-2* is not, despite being included in the definitory text of both dictionaries. The fact that *SARS-CoV-2* is a medical term, with an acronymic basis, more complex in terms of structure and, even, verbalization in European Portuguese, may explain the preference for the form *COVID-19* or, simply, *COVID* in current language dictionaries. When we look up *SARS-CoV-2* in the *Dicionário de Termos Médicos* ('Dictionary of Medical Terms'), the search panel cross-references us immediately to *COVID-19*, the definition in which the term is used. On the other hand, when we look up *SARS-CoV* in the same dictionary, no results are returned, but if we check the entry of *SARS*, we realize that *SARS-CoV* is part of its definition. Thus, there is a lack of standardization in the search results that are returned by the dictionary to its users.

As for data regarding the related and nearby/neighbouring words (*cf.* Figure 8), we have identified eight units in both dictionaries (Table 3):

Table 3: Data retrieved from the DILP and DPLP regarding *COVID-19* related and nearby words.

8 units retrieved from <i>COVID-19</i>	DILP	DPLP
<i>anticovid</i>	X	✓
<i>anticovid-19</i>	✓	X
<i>COVID</i>	X	✓
<i>COVID-19</i>	✓	X
<i>covidário</i>	✓	✓
<i>covidiano</i>	✓	✓
<i>covídico</i>	✓	✓
<i>covid-drive</i>	X	✓
Total of results	5	6

The results show that the lexicographers of the DILP and DPLP took different decisions about the treatment of the equivalent units: the DILP includes the entry + a specific element (number): *COVID-19*, *anticovid-19*, while the DPLP presents the same units without that specific element. Also here, the DPLP exhibits slightly higher results than the DILP.

Despite being treated as synonyms in the DILP and DPLP, *covidiano* ('covidian') and *covidico* ('covidic')¹⁶ may present different semantic values in dictionaries and social networks. In fact, in social networks, *covidiano* shows up in contexts where the lemma is the result of a phonological game related to the nearby Portuguese unit *quotidiano* ('daily'). As for *covid-drive*, one can say that the lemma is losing its novelty characteristic since it is already part of the lemma list of one of the two dictionaries.

6.1.3 pandemia

The lemma *pandemia* is part of the DILP's and DPLP's lemma list, and the entries display information about etymology, gender (it is a feminine noun, showing no graphic variation or gender instability), and it is associated with the domain of medicine in DILP (Figure 9).

Figure 9: The entry of the lemma *pandemia* in the DILP¹⁷ (left) and DPLP¹⁸ (right).

The definitions of the *pandemia* lemma highlight the following characteristics: (i) it is an outbreak (DPLP) of an (infectious) disease, (ii) it spreads worldwide, (iii) and affects a high number of people (iv) simultaneously.

The unit *pandemia* entered the Portuguese language in 1873 (DPAH) and occurs 73 times in the CETEMPúblico corpus (data from 1991–1998).¹⁹ All the occurrences are associated with the HIV pandemic, the 1993 Cholera pandemic, and the 1918 Spanish flu pandemic. Comparing our research with these data, one may conclude that *pandemia*

¹⁶ Even though Google retrieves 154,000 and 10,300 occurrences of *covidian* and *covidic* (in 15/08/2021), these lemmas are absent from the main online dictionaries of English (*Cambridge, Collins, Dictionary.com, Macmillan, Merriam-Webster, Oxford*).

¹⁷ DILP definition: 'Infectious disease that spreads worldwide; disease that attacks a large number of people in a large number of countries at the same time.'

¹⁸ DPLP definition 'Outbreak of a disease with a very wide and simultaneous international geographic distribution.'

¹⁹ <<https://www.linguateca.pt/CETEMPUBLICO/>>; last access: August 1, 2021.

is used as a synonym of SARS-CoV-2 (found in 2002), such as *coronavírus*, or *COVID-19*. On the contrary, despite being discovered in 1965, the lemma *coronavírus* is absent of the DPAH and CETEMPúblico.

One interesting remark concerning related and nearby/neighbouring words of *pandemia* is that they differ in the dictionaries under study: in the DILP *pandemia* is associated with coronavirus, COVID-19, and outbreak (*surto*), while the DPLP connects it to a calamity (*calamidade*), but also fatigue (*fadiga*) or tiredness (*cansaço*) and covidic (*covídico*). Once again, the DPLP presents a few more entries related to *pandemia* than the DILP (Table 4):

Table 4: Data retrieved from the DILP and DPLP regarding *pandemic* related and nearby words.

13 units retrieved from <i>pandemia</i>	DILP	DPLP
<i>calamidade</i>	X	✓
<i>cansaço</i>	X	✓
<i>coronavírus</i>	✓	X
<i>COVID-19</i>	✓	X
<i>covídico</i>	X	✓
<i>endemia</i>	✓	X
<i>epidemia</i>	✓	X
<i>fadiga</i>	X	✓
<i>pandemia</i>	✓	✓
<i>pandémico</i>	✓	✓
<i>pandemiologia</i>	X	✓
<i>pandemiológico</i>	X	✓
<i>surto</i>	✓	X
Total of results	7	8

The units retrieved from *coronavirus* – *pandemiologia* (‘pandemiology’) and *pandemiológico* (‘pandemiological’), are not found in the DILP, however, the DPLP integrates these units in its lemma list, similarly to what happened with the coronavirus related words with the same suffixes (*coronavirologia* and *coronavirologista*). Additionally, our research showed that even though *pandemiologia* is not included in the DILP, *endemiologia* (‘endemiology’) is attested in that dictionary. Given the instability of the insertion of these units in the dictionaries, they can also be considered as cases of units losing their neologism status.

6.1.4 tele-

Both dictionaries mention that the prefix *tele-* is a compositional element associated with the concept of *distance*, however, only the DPLP makes explicit that this prefix can also be used as a truncated element of *television* (Figure 10).

Similarly, Cunha and Cintra (1984) attested these two homonymous compositional elements in the context of the prefix *tele-*, both related to distance and television. Since the lemma *teledisco* (music video) is included in both dictionaries and the information regarding its etymology indicates that *tele-* is a truncation of *television* (*tele[visão]+disco*), one can remark that the definition of this prefix is incomplete in the DILP.



Figure 10: The entry of the lemma regarding the prefix *-tele-* in the DILP²⁰ (left) and DPLP²¹ (right).

When it comes to the nearby/neighbouring and related words, the DPLP is much more prolific than the DILP (Table 5):

Table 5: Data retrieved from the DILP and DPLP regarding *tele-* related and nearby words.

14 units retrieved from COVID-19	DILP	DPLP
<i>longe</i>	✓	X
<i>teleadministração</i>	X	✓
<i>telealarme</i>	X	✓
<i>telealuno</i>	X	✓
<i>teleautografia</i>	X	✓
<i>teleautógrafo</i>	X	✓
<i>telecêntrico</i>	X	✓
<i>tecomandar</i>	X	✓
<i>teledifundir</i>	X	✓
<i>teledinâmico</i>	X	✓
<i>teledirigir</i>	X	✓
<i>teleguair</i>	X	✓
<i>televsual</i>	X	✓
<i>telex</i>	X	✓
Total of results	1	13

While the DILP only associates the unit *longe* ('far') to the prefix *tele-*, the DPLP relates it to units that convey the concepts of distance (*teleadministração*, 'teleadministration'; *telealarme*, 'telealarm'; *telealuno*, 'telestudent'; *teleautografia*, 'telauthography'; *teleautógrafo*, 'telautograph'; *telecêntrico*, 'telecentric'; *telecomandar/teleguiar*, 'to operate (something) by remote control; to remote-control'; *teledinâmico*, 'teledynamic'; *teledirigir*, 'to control from a long distance'; *telex*) and television (*teledifundir*, 'to broadcast by television'; *televisual*; and *telealuno*, that can also occur in the context of the television) following its definition.

In short, we can conclude that most units related to the chosen examples are included in the lemma list of the DILP and DPLP. As for the few units that only show up in one of the dictionaries, we may infer that undisclosed lexicographic reasons are underlying these decisions, simultaneously demonstrating traces of variability and instability in their being included into a dictionary at a given moment, probably connected with the loss of neologicity.

6.2 Neological creativity

In this section, we will discuss the cases of neologisms collected from various sources, such as media (newspapers, magazines) and social networks (Facebook, Twitter), as well as their typology, given that "the press and the media, in general, are an important gateway not only for common neologisms but also, and even more so, for specialized neologisms" (Guerrero Ramos 2017: 1399).

6.2.1 *coronavírus*

Graphic variation concerning *coronavírus* and not pointed out in the e-dictionaries was identified in several sources: *Coronavírus*, *corona virus* or the reduction *corona*, *Corona*. The lemma *corona* is also attested in the DPLP as a synonym of *coronavírus*, used informally. Although *coronavírus* is not understood as a full synonym of *COVID-19*, *novo coronavírus* (new coronavirus) was assumed to be synonymous in some contexts.

Regarding the processes of neological formation, we have identified several cases of neologisms candidates created through means of prefixation, suffixation, compounding, importation of loanwords, as well as syntagmation, as shown below:

- (i) prefixation: *pré-corona* ('pre-corona'), *pré-coronavírus* ('pre-coronavirus'), *pós-coronavírus* ('post-coronavirus'), *anti-corona* ('anti-corona');

²⁰ DILP definition "element of word formation that expresses the idea from far, far, at a distance".

²¹ DPLP definition "1. Expresses the notion of distance (e.g., telecommuting). 2. Expresses the notion of television (e.g., music video)".

- (ii) suffixation: *coronado/a* (*corona+ado/a*, ‘with corona’, ‘coronated’; *corona+lixado/a*, ‘angry because of corona’), *coronafobia* (‘coronafobia’), *coronafóbico* (‘coronafobic’);
- (iii) compounding: *alfacoronavírus* (‘alfacoronavirus’); *betacoronavírus* (‘betacoronavirus’); *deltacoronavírus* (‘deltacoronavirus’); *gamacoronavírus* (‘gamacoronavirus’); *corona bônus* (‘corona bonus’); *coronaditadura* (‘corona dictatorship’), *corona-histeria* (‘corona hysteria’), *coronatroika*, *coronavirose* (‘canine coronavirus’), *coronavisor* (‘face shields against corona’), *coronaviral* (‘coronaviral’), *coronavirologia* (‘coronavirology’), *coronavirologista* (‘coronavirologist’), *troikavírus* (troika+virus);
- (iv) syntagmation (phrasal noun constructions):
- noun+adjective (corona): *nação corona* (‘corona-nation’), *imposto corona* (‘corona tax’), *geração corona* (‘corona generation’), *presidência corona* (‘corona presidency’);
 - noun+preposition (*de*)+(article)+noun (corona): *feira do coronavírus* (‘coronavirus party’), *festas do corona* (‘corona parties’), *tempos de corona* (‘corona times’);
- (v) loanwords: *Corona bonds*, *corona bonds*, *coronabonds*, *corona-jihad*, *corona room*, *corona-app*, *corona party*, *corona free*, *coronababies*, *Darth Corona*.

Corona and *coronavírus* are the base of units formed by prefixation, although the base *coronavírus* seems less productive in our corpus. On the other hand, *corona* is categorized both as a noun and an adjective, and it can present two genders: masculine (*o coronavírus*, given the gender of *vírus* in Portuguese) or feminine (when adjective of a feminine noun: *a corona geração*). Graphic variation stands out in the loanwords.

6.2.2 COVID-19

COVID-19 is lexicalized as a noun in the European Portuguese dictionaries, as speakers lose awareness of its acronymic origin. In addition to the variation mentioned in the dictionaries (*COVID-19*, *covid-19* and *COVID*, *covid*), other cases of graphic variation were found: *Covid-19*, *CÓVID-19*, *Covid*.

Given the challenges facing the identification of the formation process of some units, in some cases concurrently associated with more than a single process, we have assigned the neologisms to the most obvious word-formation process and have followed the suggestions of the glossary *A covid-19 na língua* (‘The Covid-19 in the language’, Ciberdúvidas da Língua Portuguesa, 2020).²² Prefixation, suffixation,

²² <<https://ciberduvidas.iscte-iul.pt/artigos/rubricas/idioma/covid-19-na-lingua/4059>>; last access: August 16, 2021.

initialisms, blending, syntagmation, and loanwords were the most productive among our analysis:

- (i) prefixation: *anticovid-19* ('anti-covid-19'), *eurocovid* ('euro-covid'), *pós-covid* ('post-covid'), *pós-covidologia* ('post-covidology'), *pré-covid* ('pre-covid');
- (ii) suffixation: *covidade* (COVID-19 dissemination among sportsmen), *covidário* (place in a health establishment intended for the care and treatment of patients with suspected or confirmed infection by COVID-19), *covidês* (COVID+-ês, 'COVID-19 language'), *covidiano*, *covideiro* (a person who does not deny the existence of a pandemic), *covídico* ('covidic');
- (iii) compounding: *covidarte* (COVID+arte, 'covidart');
- (iv) blending: *covidar* (COVID+convidar e/ou conversar, 'to invite and/or chat'), *covidar-se* (COVID+infetar-se ou convidar-se, 'become infected or invite oneself'), *covidário* (COVID+diário, 'covidary'), *covidivórcios* (COVID+divórcios, 'covidivorces'), *covidizer*, *covidizerque* (COVID+que ouvi dizer (que), 'that I heard (that)');
- (v) initialisms: *a.C.* (*antes da COVID-19*, 'before COVID-19'), *d.C.* (*depois da COVID-19*, 'after COVID-19');
- (vi) syntagmation:
 - noun+adjective (covid): *cães covid* ('covid dogs'), *enfermaria covid* ('covid infirmary'), *fado covid* ('covid fado'), *língua covid* ('covid tongue'), *multa covid* ('covid fine');
 - noun+preposition (de)+noun (covid): *pandemia de covid-19* ('COVID-19 pandemic'), *surto de covid-19* ('COVID-19 outbreak'), *vítima de covid-19* ('COVID-19 victim');
 - noun+preposition (de)+article+noun (covid): *ditadura da covid-19* ('COVID-19 dictatorship'), *transmissão do covid* ('covid transmission');
 - noun+preposition (de)+noun+preposition (de)+article+noun (covid): *taxa de transmissão da covid-19* ('covid-19 transmission rate');
 - noun+preposition+article+noun (covid): *vacina contra a covid-19* ('vaccine against the covid-19');
- (vii) loanwords: *covidiota* ('covidiot'), *long Covid*, *StayAway Covid*.

The neologisms associated with *COVID-19* also show a high rate of graphic variation. As in *coronavírus*, it can either occur as a noun and an adjective and can present two genders, even though the masculine gender is not considered standard given that the unit is assigned with the gender of *disease*, *a doença* (a feminine gender unit in Portuguese).

6.2.3 Pandemia

Pandemic was the source of many cases of lexical creativity. These neologisms were created mostly through processes of prefixation, suffixation, parasynthesis, blending, and syntagmation, as follows:

- (i) prefixation: *antipandémico* ('antipandemic'), *pós-pandemia* ('post-pandemic'), *pré-pandemia* ('pre-pandemic');
- (ii) suffixation: *pandémico* (adjective: 'pandemic');
- (iii) blending: *fraudemia* (*fraude+pandemia*, 'fraudemic'), *infodemia* (*informação+pandemia*, 'infodemic'), *pãodemia* (*pão+pandemia*, 'breademic');
- (iv) parasynthesis: *antipandémico* ('antipandemic'), *pós-pandémico* ('post-pandemic'), *infodémico* (adjective: 'infodemic');
- (v) syntagmation:
 - noun+adjective (*pandemia*): *pandemia covid-19* ('covid-19 pandemic'), *geração pandemia* ('generation pandemic');
 - noun+preposition (*de*)+noun: *pandemia de covid-19* ('covid-19 pandemic'), *diário de pandemia* ('pandemic diary'), *tempo(s) de pandemia* ('pandemic time(s)');
 - noun+preposition+article+noun: *combate à pandemia* ('fight the pandemic'), *batalha contra a pandemia* ('battle against the pandemic'), *pico da pandemia* ('pandemic peak'), *propagação da pandemia* ('pandemic spread'), *pandemia da desinformação* ('pandemic misinformation'), *pandemia da pobreza* ('pandemic poverty'), *contenção da pandemia* ('pandemic containment');
 - noun+preposition+article+adjective+noun: *pandemia do novo coronavírus* ('new coronavirus pandemic');
 - verb+(article)+noun: *controlar (a) pandemia*, *gerir a pandemia* ('to control/manage the pandemic');
 - verb+preposition+article+noun: *lutar contra a pandemia* ('fight against the pandemic').
- (vi) loanwords: *pand-emmys* (by blending of *pandemic+emmys*).

Contrary to the previous units, graphic variation and gender instability is not characteristic of *pandemic* related neologisms, but similarly, it has been used as a noun and an adjective to form phrasal noun constructions.

6.2.4 Tele-

It seems that the prefix *tele-* was related only with distance during a given time, and later, with the advent of the television, the prefix lexical productivity also became associated with this device. However, with the COVID-19 pandemic, the creation of new units with the semantic value of "distance" took on a prominent role, highlighting society need for social distancing. It is the case of *teletrabalho* ('teleworking',

‘telecommuting’), considered by some as a luxury; *burguesia do teletrabalho* (‘teleworking bourgeoisie’), regarding the highest-paid people; *telemedicina* (‘telemedicine’), specially conceived to remote patients; *telejulgamento* (‘telecourt’) or virtual trials; *telescola* (‘teleschool’), or *telensino* (‘teleteaching’), the official designation adopted in Madeira Island. The lexical creativity associated with remote learning is not new. Specifically created for students (*telealunos*, ‘telestudents’) who lived in isolated locations or were unable to enroll in a school due to lack of vacancies, the *telescola* operated in Portugal between 1965 and 2003. With the arrival of the pandemic, this teaching concept was reactivated and the television programme “Study at home” was created. Consequently, an adjustment in the definition of these units was necessary, given that the *telestudents* can attend lessons not only by means of the television (the only medium available in the past) but also through various devices connected to the Internet.

Neologisms regarding leisure or social activities, like *telepraxe* (‘telehazing’), have also emerged in this context of physical distance, and performing tasks remotely through the Internet originated new units, such as *teleconsulta* (‘teleappointment’), *telemanutenção* (‘telemaintenance’), *teleconsultoria* (‘teleconsulting’). The government institutions had to adjust to this new concept of distance, starting to exercise it through *teleadministração* (‘teleadministration’) to (try to) maintain a *teledemocracia* (‘teledemocracy’) state. While teleworking, one can still *teledizer mal dos colegas* (‘telespeak ill of co-workers’) over an online meeting, and if experiencing problems with electronic devices purchased at *Worten*, this Portuguese store can *tele-resolver* (‘telesolve’) clients’ technical issues over the phone.

7 Conclusions

Individuals and institutions, such as national language academies, are responsible for the creation of neologisms, whether in the current language or scientific and technical settings. The COVID-19 outbreak encouraged lexical creativity, facilitating communication regarding individual and social perceptions towards the new life experiences boosted by the pandemic.

Most of the selected units (*coronavírus*, *COVID-19*, *pandemia*, *tele-*) and nearby/neighbouring words are attested in the European Portuguese e-dictionaries (DILP, DPLP). The units that only appear in one of the works demonstrate the variability of the lexicographic criteria of the dictionaries. We have identified entries, considered pertinent enough to integrate the dictionaries lemma list, that are waiting for the inclusion of definitions (DPLP) or entries that cross-referenced users to other entries where the searched unit occurs (DILP). These situations are a novelty in the lexicographic setting, given that they would never happen in paper-based dictionaries. Another interesting aspect for reflection is that even while conducting our research, we

have detected a few changes in the lemma list (*cf.* Figures 1–4) and definitory text of some of the units under study. The attestation of new units in a preliminary phase (in the lemma list or the entry microstructure only including the grammatical category, and the information that the definition will be added soon), may be explained by the lexicographers' will to respond to society's linguistic needs, with sufficient efficiency and speed, typical of digital resources that require constant updates. However, diachronic research would be needed to confirm if the lexicographic description of the entries will be completed (DPLP) or if units occurring in attested entries but not yet included in a dictionary at a given moment will be added (DILP).

As a rule, the Portuguese digital dictionaries do not mention the date of the first occurrence or insertion of the lemmas, nonetheless, the date may occasionally appear within their definitions, as in the case of units concerning particular diseases (*COVID-19*, *cf.* Figure 8). On the other hand, if one needs to monitor the insertion of new units or the reformulation/adaptation of definitions in these dictionaries, virtually the only methodology at our reach is restricted to taking screenshots of the lookup window and of the entries microstructure to observe the lexicographic representation of certain units at a given time. The analysis of the lexicographic representation of the selected units and nearby/neighbouring words led us to the conclusion that no objective or obvious criteria are underlying the insertion of new units in the European Portuguese e-dictionaries, contrary to what happens in the Brazilian Portuguese (digital) dictionaries, like the *Dicionário Caldas Aulete* ('Caldas Aulete Dictionary'), where entries may be labelled as "new", "original" or "updated" entry.

Moving on to the neologisms candidates, it was not an easy task to classify the units according to their formation processes as the literature confirms. On the other hand, pragmatic and discursive aspects highlighted by Jesus (2018) proved to be crucial in the identification of neological units present in the media and social networks.

Our preliminary findings show that *coronavírus* is regarded as a synonym of SARS-CoV-2. Like in other languages, this unit was the object of some graphic instability (*corona*, *corona vírus*); it is frequently mentioned as a new type of coronavirus (*novo coronavírus*); it is used as the first element of compound words (*coronaditadura*, *corona-histeria*, *coronatroika*), also found in the context of loanwords (*corona-bond*, *corona room*, *corona-app*); the use of prefixes as a time marker (*pre-*, *post-*) occurs often (*pré-coronavírus*, *pós-coronavírus*), while suffixes like *-phobia*, *-phobic* convey the fear of the pandemic (*coronafobia*, *coronafóbico*).

As *coronavírus*, *COVID-19* is regularly used as a synonym of SARS-CoV-2. Similarly, we have observed several processes of variation, such as graphic variation (*COVID-19*, *Covid-19*, *covid*) and gender assignment (*a/o covid*). Phonological neologisms, related to wordplays or puns, have been found mainly in the social networks: *covidizer* ('que ouvi dizer', 'that I heard'), *covidiano* ('quotidiano', 'daily'), *covidar* ('convidar', 'to invite') or the reflexive *covidar-se* (*COVID+infetar-se*, 'become infected'). The initialisms *a.C.* and *d.C.* (*antes/depois da COVID-19*) are associated with

an era, being equivalents to before/after Christ (*antes/depois de Cristo*). The phonological adaptation of loanwords resulted in neologisms as *covidiota*. Prefixation (*anti-*, *euro-*, *pre-*, *post-*) and suffixation (*-ade*, *-ário*, *-eiro*, *-ês*, *-iano*, *-ico*) processes were also highly productive.

Pandemia is frequently associated with prefixes (*pre-*, *post-*) to delimit a period, and other units related to the military semantic field (*combate à pandemia*, ‘fighting the pandemic’; *lutar contra a pandemia*, ‘to fight against the pandemic’; *batalha contra a pandemia*, ‘battle against the pandemic’), showing that war metaphors concerning the COVID-19 pandemic also occurs in Portuguese. Phonological neologisms regarding wordplays or puns are frequent as well: *fraudemia* (‘fraudemic’), *infodemia* (‘infodemic’), *pãodemia* (‘breademic’, a recipe whose designation conveys the idea of the homemade bread trend during the pandemic).

Phrasal noun constructions stood out in all the neologism candidates under study. The unit categorized as a noun (*coronavírus*, *COVID-19*, *pandemia*) emerged simultaneously as an adjective: noun+adjective (*geração corona/pandemia*, *língua covid*). Additionally, the structure noun+preposition+noun (*tempos de corona/pandemia*, *pandemia/surto/vítima de covid-19*) was often recurrent, admitting alternative structures with articles, and other prepositions.

The prefix *tele-* conveys the idea of distance and forms words related to the use of telephones or television. However, in this new context, we observed that *tele-* expressed generally not only the concept of distance but also physical absence from the workplace or other events. The physical distance imposed by the pandemic was extended to the online world (internet and other telecommunication means), therefore, *tele-* is not necessarily related to television as before when speaking about *teletrabalho* (‘teleworking’), *telescola* (‘teleschool’), or *telepraxe* (‘telehazing’).

We believe that this research demonstrates the vitality of lexical neology processes from our synchronic lexicographic material in the domain of *COVID-19* in a specific period (December 2019–July 2021). Additionally to contributing to the neology field, this work will also result in the collection of detailed synchronic lexicographic material from the European Portuguese variety. Only the future will tell whether the creative linguistic phenomenon that emerged from the pandemic will persist in the Portuguese language (namely the loss of the neologism status of particular units while being incorporated in the current language lexicon) or whether it will be a source of occasionalisms circumscribed in time and space while the COVID-19 outbreak lasts.

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