Linguistic Innovation in the Covid-19 Pandemic

Linguistic Innovation in the Covid-19 Pandemic

By

Elisa Mattiello

Cambridge
Scholars
Publishing

Linguistic Innovation in the Covid-19 Pandemic

By Elisa Mattiello

This book first published 2022

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN (10): 1-5275-8435-6
ISBN (13): 978-1-5275-8435-8

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

PREFACE

Language changes in many different ways. It evolves, it expands, but above all it renews, adapting to new realities and circumstances. The new reality of the Covid-19 pandemic has not been an exception. How has this global event affected the English language? Has the English lexicon been enriched with new words? Are the new words neologisms destined to become a permanent part of the English vocabulary? Or are they mere occasionalisms? These issues will be addressed in the present book, as an attempt to predict whether the effects of the pandemic on English lexis are short-term or long-term, and, on a general basis, to provide a model accommodating novel words and meanings that have emerged during the epidemic.

This book does not deal with the influence that social, political or economic changes have had on language use, at least not directly, but focuses on the major impact that the pandemic has had on vocabulary development. Historically, natural disasters, wars, and other major events have proved to impact on linguistic innovation massively. Analogously, the Covid-19 crisis has proved to be fertile ground for linguistic innovation. We have seen newly coined words being used across both social media and mainstream media, and other novel words cropping up every day to fill lexical gaps and describe the changing world. We have also seen old vocabulary used in a different adapted sense, or retrieved from a past epidemic and revived to serve current needs. We have seen conventionalised metaphors used to describe the Covid-19 crisis, to motivate people's efforts and encourage collective sacrifice.

Corpora of English gathering research, newspaper and magazine articles about Coronavirus can contribute to our understanding of how language is used to construct and communicate experiences of all matters relating to the virus. Social distancing and the absence of face-to-face interaction have affected communication and communicative means, while more and more emphasis has been placed on the lack of physical contact and isolation. But language is still what unites us across and over barriers. Hence, a study of the new words used in pandemic discourse and at a global level can help investigate and understand how language "has reacted" to the virus, and how it can be used by journalists, politicians, and heads of state not only to

share information, but also to offer citizens a glimmer of hope, and to reassure the entire community.

The idea of this study on neology applied to the pandemic lexis comes from the CLAVIER (Corpus and Language Variation in English Research) 2021 Conference *Exploring Words in the Digital Transformation: Tools and Approaches for the Study of Lexis and Phraseology in Evolving Discourse Domains*, held in Modena, Italy, in November 18-19, 2021. At this conference I presented my preliminary findings on the subject of Covid-19 lexis receiving many comments and interesting suggestions from colleagues and friends, to whom I owe my sincere gratitude.

I also wish to thank the members of the CLAVIER Board and especially the Director, Belinda Crawford Camiciottoli, as well as the conference organising committee of CLAVIER 2021 for suggesting exploring a topic connected with the interrelations between digital transformation, corpus linguistics, and lexical evolution.

I would like to dedicate this book to all those who have sacrificed *their lives* to give people back *their lives*: to the heroes who saved many people's lives, to the warriors who are still fighting against the virus, and to the victims whom we have lost in this battle against the invisible enemy.

List of Abbreviations

Am.E.	American English
CD	Cambridge Dictionary Online
CORD-19	COVID-19 Open Research Dataset
CVC-20	The Coronavirus Corpus
DIM	diminutive
DT	Dizionario Treccani
E.	English
ELF	English as a Lingua Franca
Fr.	French
G.	German
Gk.	Greek
It.	Italian
NOW	News on the Web Corpus
occ.	occurrence(s)
OED	Oxford English Dictionary
p.d.	personal definition
SL	Source Language
RHHR	Right-Hand Head Rule
RL	Recipient Language
UD	Urban Dictionary

CHAPTER ONE

INTRODUCTION

1.1. Introductory Remarks and Aims

> [G]reat social change brings great linguistic change, and that has never been truer than in this current global crisis. (Bernadette Paton, Executive Editor: New Words, OED Management, April 09, 2020)

When a collective and global phenomenon such as the Coronavirus 2019 outbreak occurs, different countries are involved in innovation at all levels: social, political, economic, but above all linguistic. As Algeo (1991, 1) observes, "[e]very aspect of the life of a people is reflected in the words they use to talk about themselves and the world around them. As their world changes—through invention, discovery, revolution, evolution, or personal transformation—so does their language.". Linguistic innovation either introduces new lexemes referring to novel concepts, ideas, or objects into the lexicon of a language, or may revive existing vocabulary with additional meaning or novel function. The word "neologism" is commonly used as an umbrella term to refer to such innovations, but often inappropriately applied to varied categories of linguistic novelties, including nonce words and occasionalisms, as well as neosemanticisms.

In order to be considered a proper neologism, a nonce word has to be "institutionalized", i.e. accepted by a speech community and recorded in lexicographic works (Brinton and Traugott 2005, 45). Hence, new words generally start their life as occasional creations, or even as hapax legomena (i.e. once-only attestations) of a text, and only after institutionalisation has occurred are they integrated into the lexical stock of a language. For instance, when the coronavirus disease was originally identified in China, in December 2019, the virus causing it was provisionally called *2019 novel coronavirus* (abbreviated as *2019-nCov*) and formally named *Severe Acute Respiratory Syndrome Coronavirus 2* (*SARS-CoV-2*) in March 2020. However, as it became pandemic, the institutionalised term *Covid-19* was

used and recognised worldwide (Haddad Haddad and Montero-Martínez 2020), as recorded in *The Times* (1), *The Guardian* (2), *The Independent* (3), and *The New York Times* (4):

(1) The World Health Organisation has given the new coronavirus an official name: **Covid-19**. (*The Times*, 12/02/20)
(2) **Covid-19** has spread around the planet, sending billions of people into lockdown as health services struggle to cope. (*The Guardian*, 19/08/20)
(3) **Covid-19** shares many of the same symptoms as the cold and flu but is far more deadly, health officials say. (*The Independent*, 31/10/20)
(4) Contact tracing is an essential component of our public health response to **Covid-19**, and we must begin it rapidly. (*The New York Times*, 05/05/20)

As recently stated in the Webinar "The language of Covid-19: Special OED update" (September 10, 2020), presented by Fiona McPherson, Patricia Stewart, and Kate Wild, the only true neologism recorded in the *Oxford English Dictionary* (henceforth, OED) is the medical term *Covid-19* (also spelt *COVID-19*), obtained from the shortening of *COronaVIrus Disease 2019*. This neologism has also rapidly become pervasive as a modifier in noun phrases and novel compounds with different degrees of lexicalisation (cf. "strict" vs. "loose compounds" in Scalise 1992, 180-181):

(5) "We found that an increase of only 1μg/m3 in PM2.5 [particles] is associated with a 15% increase in the **Covid-19 death rate**," the team concluded. (*The Guardian*, 07/04/20)
(6) a7 N95s are far more effective than surgical masks in protecting health care workers from **Covid-19 exposure**. (*The New York Times*, 06/06/20)
(7) New **Covid-19 clusters** across world spark fear of second wave. (*The Observer*, 27/06/20)
(8) Victoria eases coronavirus restrictions after recording zero new **Covid-19 cases**. (*The Guardian*, 27/02/21)

In other words, some lexical items, such as *exposure* or *case*, typically collocate with *Covid-19*.

However, linguistic innovation can also take place in semantic terms, when new meanings are added to well-recognised words. For instance, originally, in 1973, the term *lockdown* referred to "the confinement of prisoners to their cells for a long period of time", and later, in 1984, it was extended to "a state of isolation, containment, or restricted access, usually

instituted for security purposes" (OED).[1] Recently, *lockdown* has been revived and internationally used to refer to "the imposition of an isolation state as a public health measure against coronavirus". Hence, it can be considered both a neosemanticism in English and an Anglicism in most of the world's languages (Görlach 2002, 2003; Furiassi, Pulcini and Rodríguez González 2012). On the one hand, in present-day English *lockdown* has undergone a process of semantic specialisation referring to a precise condition:

(9) Italy passes 1m Covid cases as calls grow for national **lockdown**. (*The Guardian*, 11/11/20)

On the other hand, it has been borrowed by other (mainly European) languages, thus becoming a new loanword in Italian (cf. Nuovo Devoto-Oli 2021), Portuguese, or French (cf. Fr. *confinement*, Sp. *confinamiento*):

(10) Modelli di contenimento a confronto. Corea del sud e Giappone contro il "**lockdown**". ("Control models in comparison. South Korea and Japan against 'lockdown'", *Il Foglio*, 27/02/20)
(11) A prioridade continua ser salvar o maior número de vidas possível. E isso só poderá acontecer se o Brasil acelerar a vacinação e instituir, simultaneamente, '**lockdown**' como no Reino Unido ("A priority continues to be saving the greatest possible number of lives. And this will only be possible if Brazil accelerates its vaccination and simultaneously institutes a 'lockdown' as in the United Kingdom", *El País*, 25/02/21)
(12) Football—Solskjaer sur le **lockdown**: "Faisons de notre mieux pour continuer à montrer sur la route" ("Football—Solskjaer on lockdown: 'Let's do our best to keep the show on the road'", *Le Figaro*, 05/01/21)

This work investigates the entire spectrum of new words which are connected with the Covid-19 pandemic, ranging from attested neologisms to occasionalisms, from new lexemes to new meanings (see *Neologismen, Okkasionalismen*, and *Neosemantismen* in Chanpira 1966; Herberg 1988; Christofidou 1994; and Kinne 1996).

It offers a multifaceted all-inclusive model of lexical innovation, which can explain the recent developments of English vocabulary and accommodate its Covid-19 terminology. Because the Covid-19 epidemic has developed at such a rapid pace and some of the words associated with the epidemic

[1] All definitions provided are drawn from the online version of the OED, unless otherwise specified. The dates in square brackets indicate the first attestation in the OED.

are new while others are newly prominent in the language, lexicographers as well as lexicologists and linguists need a clear view of their relevance and status.

This work aims, first, to classify new or newly revived Covid-19-related vocabulary in morphological terms (Bauer 1983; Bauer, Lieber and Plag 2013), by differentiating between derived words, compounds, blends, abbreviations, and phrases. Second, it aims to distinguish words that are proper neologisms from nonce words and neosemanticisms. With these goals in mind, new words will be explored both in the OED and in the news context, and their collocations and frequencies will be investigated by using corpus linguistic tools.

A lexicographic exploration of the OED will first verify the attestation of Covid-19 vocabulary in the dictionary as actual neologisms or neosemanticisms. In addition, attestation in the *Urban Dictionary* (henceforth, UD) will show people's current awareness and recognition of such vocabulary, even when it is not properly institutionalised or lexicalised (see § 2.4.3 for institutionalisation and § 2.2 for lexicalisation).

Extracts from two British online newspapers, namely, *The Guardian* and *The Independent*, will illustrate the use of Covid-19 vocabulary and help contextualise and categorise it from a morphological perspective. Journalistic language, especially when addressing a wide audience of both experts and non-expert readers, is not only rich in specialised terms, but also in attention-grabbing new coinages, such as novel blends. Two instances of recent blends attested in British newspapers are *covidiot* (← *covid* + *idiot*, "someone who ignores the warnings regarding public health or safety", UD, 16/03/20) and *maskne* (← *facemask* + *acne*, "acne produced by wearing face masks", UD, 18/04/20).

Finally, a corpus linguistic analysis of Covid-19-related terminology in the *COVID-19 Open Research Dataset* (2020, henceforth, CORD-19) and *The Coronavirus Corpus* (2020-2021, henceforth, CVC-20) will show keywords, frequencies, and specific collocations characterising recent scientific discourse. The corpus linguistic tools available on Sketch Engine—namely, Wordlist, Keywords, and Word Sketch (Kilgarriff et al. 2014)—will offer frequency lists, allow terminology extraction (of both single-words and multi-word terms), and lastly show word combinations and collocations (Sinclair 1991). A corpus-assisted analysis of CVC-20 will allow us to verify word frequencies and levels of institutionalisation.

1.2. The Rationale behind This Book

The rationale behind this book is to provide a model for neology and new words in English, with special reference to Covid-19 vocabulary.

The term "neology", obtained from the combining forms *neo-* "new" and *-logy* "science", after French *néologie* [1730] and Italian *neologia* [*a*1800], commonly refers to the coinage of new words into a language or to the introduction of new senses for established words. However, as observed by Kinne (1996, 347), there are different types of new words going under the label of "lexical innovation" (G. *Lexikalische Innovation*). For instance, Kinne (1996, 343-347) distinguishes "occasionalism" from "neologism" (G. *Okkasionalismus* vs. *Neologismus*), and, within the latter category, he further differentiates "new lexeme" (G. *Neulexem*) from "new meaning" (G. *Neusemem*, *Neubedeutung*, or *Neosemantismus*).

The model of lexical innovation provided in this book wishes to be all-comprehensive and subsume the various subcategories of linguistic expansion phenomena. Hence, the book deals both with neologisms, i.e. words "which have lost their status as nonce formations but are still considered new by most members of a speech community" (Miller 2014, x; see also Fischer 1998 for "creative neologisms"), and with nonce formations, i.e. spontaneous new coinages created "for the nonce", i.e. on one specific occasion or in one specific text or writer's works (see James Murray's "nonce-word", s.v. *nonce*, OED).[2]

According to Miller (2014, x), "the formation of all words, no matter how ephemeral, must be investigated because of the light they shed on the status of the word formation processes themselves". For this reason, he includes "nonce formations" within the broader category of "neologisms", though admitting that it is customary to keep them distinct. By contrast, in the present book, neologism and nonce word will be considered as two different categories within the model: the former shows acceptability and use by the speech community, the latter shows the potentiality of the language and its expansion towards novel coinages and mechanisms of

[2] The term "nonce word" for a word that is used only once was coined by James Murray, editor of the *New English Dictionary on Historical Principles* (1884), which later, in 1989, became the *Oxford English Dictionary*. The Russian linguist Ernest Chanpira (1966) has defined an "occasionalism" in the context of literature as a new word that is created by a literary writer for a specific occasion, with a particular poetic aim in view, and which has little chance of being re-used or turn into a neologism (Christofidou 1994; Dressler and Tumfart 2017). In this work, I will use the terms "nonce word/formation" and "occasionalism" nearly interchangeably (more in § 2.4).

"lexicogenesis" (Miller 2014, x), a Greek term for "word origin" or "word creation".

It is also worth noting that words that are not new within a language can be new for a speech community borrowing and using them in a different language (cf. "Source Language (SL)" vs. "Recipient Language (RL)", Furiassi, Pulcini and Rodríguez González 2012). Hence, lexical innovation also includes loanwords whose source or donor language is English, i.e. Anglicisms which enter a RL vocabulary. In this book, Anglicisms borrowed by Italian speakers will be discussed as actual or potential neologisms. Borrowed neologisms show the spread of novel words outside a country's boundaries and their internationalisation.

In addition, the investigation of new words is necessarily connected to the study of the processes and mechanisms for their coining. Therefore, the book focuses not only on lexical innovation, but also on word-formation (Aronoff 1976; Bauer 1983; Plag 2003; Bauer, Lieber and Plag 2013) and word-creation (Ronneberger-Sibold 2010). In other terms, it is not only about the new words themselves, but also about the processes through which new words are coined. It discusses phenomena of core morphology, such as regular word-formation processes (derivation, compounding), but also creative mechanisms going under the label of "extra-grammatical morphology" (Mattiello 2013), such as clipping, blending, or acronym formation, since "[a]ll of these are crucial in novel word crafting" (Miller 2014, xi). As far as the interface between semantics and pragmatics is concerned, processes of semantic shift or semantic change will be examined in this book: namely, "generalization" vs. "specialization" (Paul 1880), semantic "narrowing" vs. "widening" (Bloomfield 1933; Ullmann 1957, 1962), and "metaphor(isation)" (Lakoff and Johnson 1980). These processes are indeed connected with the new uses of old words or the reinterpretations of existing vocabulary according to a different context, such as the recent scenario of the Coronavirus pandemic.

More specifically, the present book intends to study neology in the Covid-19 era. According to Thorne (2020), more than 1,000 new words—both non-specialised and technical terminology—have been created during the pandemic. Roig-Marín (2021, 193) has even used the term "coroneologisms" to refer to "the rise of many new lexical formations, mostly blends" during the Covid-19 pandemic.

By exploring communication about the Covid-19 crisis in the media and in corpora, this book examines the impact of the crisis on language development in terms of specialised medical terminology, but above all of novel words and phrases that are employed in the news to inform, give

advice, clarify concepts, and disseminate scientific knowledge to laymen and stakeholders.

The healthcare framework provides the ideal setting for the coinage of new words and the development of novel meanings, because of the need of scientists to refer to abstract concepts connected with discoveries and new illnesses, or to concrete objects related to medical equipment, vaccines, medicaments, and personal hygiene, such as face mask, gloves, hand washing, hand sanitizer, etc. As observed by Haddad Haddad and Montero-Martínez (2020, 2), "[m]edicine is one of the specialised domains in which neologisms are constantly generated due to the continuous scientific and technical advances in the field, as well as the appearance of new diseases and unknown phenomena". Indeed, neologisms commonly enter the language vocabulary to fill a terminological or conceptual gap (Schneider 2018, 2), as has happened with the outbreak of the new Coronavirus-19 epidemic.

In addition, Covid-19 discourse is generally characterised by a state of anxiety, scaremongering, alarm, and fear, which can be expressed by the use of metaphors and other rhetorical devices. Scholars have recently observed how Covid-19 terms are frequently connected with war, fighting, and the military world. Craig (2020, 1026-1027), for instance, has commented on the proliferation of phrases echoing military commands like *stay at home*, *shelter in place*, and mandates for *self-isolation*, or on the spread of "'Covid-ian' military metaphors", which valorise *front-line workers*, i.e. "those deemed 'essential' to the medical, economic, social, and of course, political establishment" (Craig 2020, 1027). Doctors, caregivers, nurses, and healthcare professionals have been described by journalists as *warriors* or even *heroes*, whose fight against and defeat of the virus are celebrated like a victory parade (*clap for carers*) (cf. Demjén and Semino 2017).

Besides conventionalised "War" and "Military" metaphors, the pandemic has been compared in the mass media to a natural disaster, such as a flood, earthquake, or tsunami, for its power to cause great harm, damage, suffering, and ultimately death. As Semino (2021, 50) has observed, "[t]he virus has been described, for example, as an 'enemy' to be 'beaten,' a 'tsunami' on health services and even as 'glitter' that 'gets everywhere'". In her analysis based on a large corpus of news articles in English, Semino (2021, 54) has also suggested that "'Fire' metaphors are particularly appropriate and versatile in communication about different aspects of the pandemic, including contagion and different public health measures aimed at reducing it". Since fire causes destruction by progressively increasing in

size and intensity, it is a suitable source domain for any phenomenon causing damage by "spreading" (Charteris-Black 2017).

As suggested by an Italian commentator, Paolo Costa, in a piece entitled "Non soldati, ma pompieri" ("Not soldiers, but fire-fighters"), the "Fire" domain can suitably describe the current situation of the pandemic, as well as encourage the prevention of future clusters or outbreaks (*focolai da spegnere* "outbreaks to extinguish", *giganteschi fronti di fuoco da arginare* "gigantic fronts of fire to control") (Costa 2020).

This book is not specifically about metaphors, i.e. semantic associations, in Covid-19 discourse, but it deals with the novel meanings that existing words can acquire in the context of the pandemic, including metaphorical meanings. It shows phenomena of reinterpretation, semantic specialisation, but also metaphorical extension, as when a word such as *frontliner*, originally referring to "a soldier fighting on the front line" is used to designate "an employee who provides a service regarded as vital within the community, such as a health-care worker". Another relevant example is the noun *stay-at-home* originally referring to "a person who stays at home, a person who avoids going abroad on military service", but recently extended to "a person who does not go out to work, esp. a parent engaged in the full-time care of children". Moreover, in the Covid-19 crisis, *stay-at-home* is specifically used as a modifier in the collocation *stay-at-home order* referring to "an executive order that directed all citizens to stay home except to go to an essential job or to shop for essential needs". These specific uses of Covid-19 terminology will be examined both in the news media and in English specialised corpora focused on the pandemic.

Drawing on the above considerations, it is now possible to formulate some research questions that will serve to guide this study:

1. How has the Covid-19 pandemic affected English vocabulary in terms of both new lexemes and novel senses?
2. How have new meanings modulated language in terms of metaphorisation, specialisation, and similar mechanisms of semantic change?
3. Which new words have a chance of entering and becoming a permanent part of the English lexicon? Which of them are destined to remain nonce words? Which of them are also recognised/used internationally?
4. What do keywords and recurrent collocations reveal about the impact of the pandemic on communication?

To address these questions, lexicographic search and close reading of press articles related to the pandemic will be combined with corpus-assisted investigation.

1.3. Outline of the Book

This book has the following layout. Chapter 2 introduces the background for linguistic innovation, with special attention to lexical and semantic change. It also deals with specific concepts related to linguistic development, such as lexicalisation and institutionalisation. The second part of the chapter is devoted to the description and classification of new words—i.e. including both neologisms *stricto sensu* and nonce words or occasionalisms, as well as neosemanticisms, with a critical overview of the relevant literature. The chapter provides a model for the categorisation of lexical innovation, in which newly coined or revived terms can be accommodated. It indeed discriminates between words that are actually new and those that are reused with a renewed meaning according to three online lexicographic works, namely the OED and the UD for English neologisms and nonce words, respectively, and the *Dizionario Treccani* (henceforth, DT) for new loans in Italian. In DT, a specific section—i.e., *Neologismi* "Neologisms"—collects the novel words found in the main Italian newspapers and magazines, yet not distinguishing between occasional creations and proper neologisms, but considering them all novel words of Italian. Since native speakers can contribute to this section by adding new terms, it shows how the Italian speech community perceives Anglicisms and considers them part of their vocabulary.

Chapter 3 analyses new English words from a morphological and semantic perspective. It examines the word-formation processes involved in obtaining new Covid-19 vocabulary and illustrates the novel uses of existing words or phrases. The excerpts provided as illustrative examples are drawn from two British newspapers, namely *The Independent* and *The Guardian*, as well as occasionally from the sister Sunday newspaper *The Observer*. The analysis provides an overview of the main morphological and semantic processes, including ordinary phenomena of word-formation (compounding and affixation), as well as extra-grammatical operations (mainly blends and other abbreviations), and also analogical formations, coined after series or single model words (see Mattiello 2017 for analogy in word-formation). The analysis similarly inspects phenomena of semantic change—namely, metaphor, specialisation, and amelioration/pejoration—at times even intermingling with the formation of complex words or phrases.

Chapter 4 focuses on the corpus linguistic analysis by exploring CORD-19 and CVC-20 in terms of frequencies, keywords, and common collocations. This chapter shows the usage of scientific terminology, especially of terms from virology and epidemiology, in the journals, articles, abstracts, and full-texts collected in the CORD-19 and CVC-20 corpora. The chapter discusses frequency lists and examines contexts where keywords are used in order to delineate the representative vocabulary of Covid-19 and to compare quantitative data. It stresses that, even when words are not new from a lexicographic viewpoint, they can be used in a different sense or context, adapting to the recently changed situation, or can increase in frequency. For instance, the term *face covering* was relatively uncommon before the Covid-19 pandemic, but has significantly increased in occurrence since April 2020 (McPherson, Stewart and Wild 2020; see high-frequency vocabulary in Table 4-1, § 4.1.1). This chapter also includes an analysis of collocations, which show the most common combinations related to the Covid-19 crisis, including common phrases and metaphorical expressions, as well as significant semantic areas. For instance, collocations such as *fight Covid-19* or *against Covid-19* show the importance of a collective action to defeat the virus, whereas words such as *threat*, *risk*, and *emergency*, all collocating with the new word *Covid-19*, belong to the area of danger, thus contributing to feed citizens' alarm and fears.

Lastly, Chapter 5 is devoted to final conclusions and suggestions for further studies. A final Glossary collects all the words and phrases related to the Covid-19 pandemic discussed in the book.

1.4. Data and Methodology

The data analysed in this book were taken from various web sources. The primary sources of the dataset were the online edition of the *Oxford English Dictionary* and in particular its latest additions since April 2020, "New words list April 2020", as well as Bernadette Paton's blog page "Social change and linguistic change: The language of Covid-19" (Paton 2021).[3]

The Webinar on "The language of Covid-19: Special OED update" (McPherson, Stewart and Wild 2020) reported to the global research community about the recent words and meanings added to the dictionary.

[3] At https://public.oed.com/updates/new-words-list-april-2020/ and https://public.oed.com/blog/the-language-of-covid-19/, respectively. Last accessed August 08, 2021.

Hence, it was the starting point for the collection of neologisms and neosemanticisms discussed in the second chapter of this book. In the Webinar, reference was also made to some nonce words which had not been included in the OED yet, but had occurred in the press describing the Covid-19 pandemic up to September 2020. Lexicographers claimed that these could be potential candidates for future additions.

Their recognition by native speakers of English was checked in the UD, a crowdsourced online dictionary for slang words and phrases, operating under the motto "Define your World". It records novel additions to everyday vocabulary, as new words are introduced, defined, and illustrated by the Internet community. Hence, novel words related to the pandemic are also recorded in the UD. These were some of the nonce formations analysed in Chapter 2 on the model of lexical innovation, including both recognised new words and occasional creations.

Lastly, the source for novel loanwords in Italian was the section *Neologismi* in the DT, which is weekly updated with new words and phrases, some of which are related to the Covid-19 crisis. Like many of the nonce formations found in the UD, the words or expressions included in the *Neologismi* section are suggested by Internet users—supposedly, native speakers of Italian. However, their relevance, attestation, and inclusion in the *Treccani* encyclopaedic collection is constantly scrutinised by expert lexicographers. Since the Coronavirus epidemic is a recent phenomenon, loanwords such as *lockdown* or *Covid-19* have not yet been included in most recognised Italian dictionaries preceding 2019, such as Sabatini-Coletti (2007) or GRADIT (2007). However, the latest edition of the Devoto-Oli dictionary (*Nuovo Devoto-Oli* 2021) comprises such updates, thus showing how the Italian language is evolving and expanding with neologisms of English origin.

In Chapter 3, the words constituting the dataset[4] were searched in three British newspapers, namely, *The Guardian*, *The Independent*, and *The Observer*. The webpages of these newspapers allow readers to search for specific words and to expand related contexts in articles where Covid-19 vocabulary is used. Moreover, *The Independent* also offers a glossary of Covid terms in the article "'Riding the 'ronacoaster': An A-Z of new terms we've learnt during the pandemic", published by Harry Cockburn in December 2020 (Cockburn 2020).[5]

[4] The dataset consists of 94 English words/phrases, which were investigated in corpora. They include different spelling variants (e.g., *frontliner* and *front-liner* display different frequencies in corpora), but exclude Anglicisms borrowed in Italian.
[5] At https://www.independent.co.uk/news/uk/home-news/coronavirus-glossary-covid-terms-dictionary-2020-b1766827.html. Last accessed August 22, 2021.

Other collections and glossaries of Covid-19 terms are found at *EnglishCLUB*, "Coronavirus COVID-19 vocabulary",[6] in Thorne (2020) "#CORONASPEAK—the language of Covid-19 goes viral",[7] and at the blog page *Cheapism*, "Pandemic phrases that have infected our vocabulary".[8]

For Anglicisms in Italian, the DT offers readers extracts taken from media discourse. However, these loanwords were also closely explored in the Italian news context, by examining *La Repubblica* and *Corriere della Sera*, in which the "health" or "Covid" sections are entirely devoted to articles related to the pandemic.

For the corpus-based analysis of Chapter 4, as already mentioned, the *COVID-19 Open Research Dataset* (CORD-19) and *The Coronavirus Corpus* (CVC-20) were used.

CORD-19 is a resource of over 400,000 scholarly articles, including over 150,000 with full text, about COVID-19, SARS-CoV-2, and related coronaviruses. This freely available database is provided to the medical and scientific research community to generate new insights in support of the ongoing fight against the Covid-19 infectious disease.

On Sketch Engine, CORD-19 can be queried by using a complete set of available tools. In order to explore Covid-19 vocabulary it is possible to generate word sketches (i.e. collocations categorised by grammatical relations), keywords (i.e. terminology extraction of one-word and multi-word units), word lists (lists of nouns, verbs, adjectives, etc. organised by frequency), and concordances (examples and combinations in context). On the basis of frequently used vocabulary in the Covid-19 pandemic, a set of keywords will be investigated in Chapter 4 in terms of specific concordances, in order to highlight possible metaphorical associations or identify areas of meaning which are covered by the pandemic.

Similarly, CVC-20 is designed to record the social, cultural, and economic impact of COVID-19 in 2020 and beyond (Mahlberg and Brookes 2021). The corpus was first released in May 2020 and shows what people are actually saying in online newspapers and magazines in 20 different English-speaking countries. In October 2021, when the corpus-assisted analysis was conducted, CVC-20 was about 1,201 million words in size, but it continues to grow by 3-4 million words each day.

CVC-20 will allow us to check the frequency of words and phrases collected since January 2020. It will also show collocates and patterns of

[6] At https://www.englishclub.com/vocabulary/coronavirus-covid19.php. Last accessed August 22, 2021.
[7] At https://language-and-innovation.com/2020/04/15/coronaspeak-part-2-the-language-of-covid-19-goes-viral/. Last accessed September 29, 2021.
[8] At https://blog.cheapism.com/coronavirus-phrases/. Last accessed August 08, 2021.

occurrence. In addition, since the corpus is related to other corpora of English (known as the "Brigham Young University (BYU) Corpora"), they collectively offer unparalleled insight into variation in English. For this reason, the words and phrases collected and analysed in CVC-20 will also be checked in a news corpus which is not topic-specific, i.e. the *News on the Web Corpus* (NOW).

The NOW corpus contains 13.7 billion words of data from web-based newspapers and magazines from 2010 to the present time (last accessed November 2021), growing by about 180-200 million words of data each month (from about 300,000 new articles), or about two billion words each year. A search in a general corpus such as NOW, not specifically containing articles on the pandemic, but inevitably containing Covid-related words, can help confirm the institutionalisation of the new words. If, on the one hand, this type of research can give unreliable results on neosemanticisms, as words in NOW may be used in their previous meanings, it can corroborate results obtained for neologisms and nonce words, allowing us to discriminate between the two (see § 2.4 for their distinction).

A lexicographic analysis of new Covid-19 vocabulary combined with a corpus-based analysis of the most frequent words and multi-word sequences can help scholarly researchers to study how language changes, extends, and develops to adapt to the linguistic needs of both a specific language community and the global speech community.

This book addresses both academic scholars, especially morphologists interested in word-formation and word-creation processes, and lexicographers concerned with novel additions to vocabulary and specialised terminology. Neology is especially relevant to the Covid-19 pandemic period, as novel words to refer to new concepts or to convey new meanings are necessary in this unprecedented phenomenon. Language is what unites people and peoples, especially in such a situation of social distancing and lack of physical contact.

CHAPTER TWO

THE BASICS OF LINGUISTIC INNOVATION

Et Verba Nova et Origines Exquirere
"To seek out new words and their origins"
(Algeo 1991, 2)

Linguistic innovation is a vast area of research, as it involves language change at various levels and is studied in several subfields of linguistics: namely, historical linguistics, sociolinguistics, and evolutionary linguistics. The various processes and mechanisms of language change, including lexicalisation, grammaticalisation, and lexical or semantic change, have been investigated and conceptualised in a variety of ways (see Hopper and Traugott 1993; Labov 1994; Brinton and Traugott 2005; Traugott and Trousdale 2010; Bybee 2015 *inter alia*). On the one hand, lexical change results in the dynamic expansion of the lexicon (Arndt-Lappe et al. 2018) by means of either the formation of new words or the adoption of novel meanings. On the other hand, semantic change includes processes such as specialisation, generalisation, or metaphor which modulate word meaning. Both lexical and semantic change ultimately result in neology, a word originating in theology, which is to be intended here either as the creation of new words (or multi-word lexical units) or as the use of established words in a novel sense.

Hitherto, the literature revolving around linguistic innovation and neology has not shown a univocal approach, as the same terms are used differently by different linguists and there is no model they all agree upon. Moreover, the diachronic evolution of lexical items has created problems in synchronic descriptions. This has led to a certain amount of confusion, and in particular to very confused terminology in these areas. This chapter first explores the theoretical background for linguistic innovation and language change (§ 2.1). Second, it focuses attention on lexical and semantic innovation, by introducing the key concept of lexicalisation (§ 2.2) and describing the main types of semantic change (§ 2.3). Finally, it critically discusses the core terms of neology used in the main scholarly works (§ 2.4) and accommodates such terms within a model of lexical

innovation which can be wide enough to include the vocabulary used at Coronavirus time (§ 2.5). The chapter is concluded with a section on the chances of neological survival (§ 2.6).

2.1. Theoretical background for linguistic innovation

Linguistic innovation involves an array of types of language change at all levels of linguistic structure, which have mainly been the object of the analysis of historical linguistics.

William Labov, in his masterpieces on the *Principles of Linguistic Change*, has considered both internal (1994) and social factors (2001) of language change. Based on the Theory of Language Change articulated by Weinreich, Labov and Herzog (1968), Labov's (1994, 2001) volumes are dedicated to the five empirical problems for a theory of language change, including: (1) constraints on change (i.e. set of possible changes and possible conditions for change), (2) mechanisms of change, (3) ways in which change is embedded within the linguistic system, (4) evaluation of change, and (5) actuation of the start of change. However, the domain of investigation is primarily sound change, scanty attention is paid to the interaction of phonology and morphology, and no attention is paid to lexical or semantic change. Labov's (2010) third volume focuses on cognitive and social factors, but similarly leaves the lexical domain out of the research interest.

In more recent times, Bybee (2015) has offered a guide to the various types of change, as well as to the mechanisms behind each type. By examining the general patterns of change at all levels of linguistic structure she has brought together the latest findings on the processes of sound change (i.e. assimilation, reduction, lenition, fortition, etc.), analogical change (i.e. proportional analysis, productivity, extension, morphological reanalysis), syntactic change (i.e. the creation and change of constructions), as well as lexical and semantic change. The nuclear chapters of her work also analyse the interplay between the various levels (e.g., the interaction of sound change with grammar), and identify shared or similar mechanisms existing, for example, between grammaticalisation and syntactic change or between grammaticalisation and semantic change (especially, specialisation, meaning change, metaphor).

Bybee's (2015) explanations are crucially centred around cognition, usage, and context, whose interplay in communication determines the directionality and causation of language change. In her work language is regarded as a complex adaptive system in which dynamic factors inherent in the speaker, listener, and context produce change. Moreover, by