The (im)morality of disease names: COVID-19

Elwys De Stefani

Die gelehrte medizin liebt es neue benennungen einzuführen, welche die alten volksthümlichen, unverständlich gewordenen namen verdrängen, und den begriff jeder krankheit geradezu ausdrücken sollen.

(Pictet 1856:321¹)

Abstract: This article offers a literature review of studies on disease names carried out by dialectologists and onomasticians. The analytical part focuses on the COVID-19 pandemic and discusses the names used for the pathogen (SARS-CoV-2) and the related disease (COVID-19). It homes in on a variety of names used in English for the virus (e.g. Novel Coronavirus, Wuhan virus, 2019-nCoV) and for the disease (e.g. China flu, Chinese flu). It shows that toponymic names reflect a common pattern of naming pathogens and diseases. By analysing two excerpts in which Donald J. Trump uses such names, the article shows how these can be used in divisive and derogatory ways, for political purposes.

Keywords: nosonyms, pathogonyms, ideology, politics, interactional onomastics

¹ 'Scholarly medicine loves to introduce new designations, which replace the old, popular names that have become incomprehensible, and which are supposed to express the concept of each disease directly.'

Elwys De Stefani (KU Leuven). The (im)morality of disease names: COVID-19.

1. Introduction

Diseases and ailments are a universal experience of human existence. Their description and naming are closely related to the ways in which 'disease' (as opposed to 'health') is conceptualised. Hippocrates (5th-4th centuries BC) was one of the first physicians to describe diseases on the basis of clinical observation and a specific conceptualization of the human body, i.e. humoral theory, which introduced a revolutionary way of explaining why humans get ill (Jouanna 2012). Rather than relying on philosophical or religious considerations, Hippocrates sought to find the causes of disease in an imbalance of the four body humours (blood, yellow bile, black bile and phlegm), thereby influencing the way in which diseases and their treatment were perceived throughout the Middle Ages and beyond. Names given to diseases inevitably reflect aetiological models, as is evident, for example, in the case of *melancholy*, from Greek μελαγχολία 'black bile', first attested between 430 and 410 BC (Flashar 1966:21) and used for conditions of extreme sadness and gloom, attributed to an excess of black bile. The name also circulated in epic poetry in the Middle Ages, but was abandoned in the course of the 19th century in favour of other designations, such as depression.

As this example shows, by naming a health condition, physicians not only establish a conventional name to refer to 'that' disease, they also identify the condition on the basis of its semiosis and symptomology and hint at its possible aetiology. In other words, naming constructs a condition as a 'disease', while at the same time opening up the possibility of identifying other instances of the 'same' disease. Laypeople face a similar problem: they have available a set of names which they apply to health conditions that they experience or witness, but which from a medical point of view may be categorized differently. For instance, individuals may speak of *flu* to describe illnesses which from a medical perspective are distinct (such as conditions caused by the influenza virus vs a common cold, which is caused by a plethora of other viruses). Hence, by calling a specific symptomatology *the flu*, speakers categorize the condition as an instance of 'that' disease. These examples show, on the one hand, that names for

the 'same' disease may vary. On the other hand, they demonstrate that disease names may convey the speakers' beliefs, ideas etc. with regard to the aetiology of the ailment. Moreover, and especially in the case of infectious diseases, names often contain toponymic or ethnic elements (the Spanish flu, Ebola virus disease etc.). These names are sometimes regarded as morally questionable, as they are said to establish a direct link between a disease and a geographical area or a people, which may lead to stigmatization.

This article reflects on the relationship between names and diseases by analysing naming patterns observed in connection with the COVID-19 pandemic that hit the globe in 2020. It examines both the names assigned to the virus causing the infection, and those used for the ensuing disease. It offers an overview of studies on disease names carried out in linguistics (Section 2), especially in dialectology (2.1) and onomastics (2.2). It describes the emergence of medical disease terminology (Section 3) and its relevance to the practical work of physicians. The analytical part discusses the way in which the name COVID-19 was bestowed on the virus by the Director General of the World Health Organization (WHO) (Section 4), and then presents the different names assigned to the virus in the first descriptions of it (4.1). Finally, the article focuses on the ideological uses of these names (Section 5). It proposes an analysis, informed by conversation analysis, of the ways in which Donald J. Trump used some of these names in a press conference and during a political rally (5.1). The article extends recent research on the use of COVID-19 and other related names in newspaper headlines (Prieto-Ramos et al. 2020). However, rather than assuming that disease names constructed with toponymic elements are intrinsically stigmatizing, it shows how their derogatory use emerges interactionally. The moral implications of such usage can be exploited to construct an opposition between a morally superior group of peers and a morally inferior group of opponents, which, in certain contexts, may serve a political agenda. The article thus contributes to an analysis of names from a discursive and interactional

perspective. It exemplifies the procedures of interactional onomastics (De Stefani 2016) and describes the (im)morality of name usage.²

2. Names of diseases in linguistics

Linguists have addressed names of diseases (or nosonyms; from Greek νόσος 'disease') mainly from two perspectives, one more historical and dialectological, the other more theoretical and preoccupied with the onymic status of names. In the course of the 19th century and in accordance with philological ideals, researchers examined names of diseases from an etymological perspective. This line of research almost exclusively studied ordinary names of diseases (flu, gout, plague), with the aim of providing an etymological explanation and describing the ways in which diseases were conceptualized, in terms of aetiology, in pre-scientific times. This approach partly overlaps with studies carried out by dialectologists, lexicologists, and literary scholars interested in examining the vernacularization of medical treatises written in Arabic, Greek and Latin and rendered in languages and varieties of medieval Europe (Crossgrove 2000). The main interest of these studies lay in describing the foundation of medical terminology in modern languages – with respect to the names not only of diseases, but also of parts of the body, organs, surgery etc. (see Goyens 2013 and Goyens & Dévière 2007).

Onomasticians have embraced a different perspective, focusing on the one hand on the status of disease names (as common or proper nouns), and on the other hand on comparative analyses of ordinary disease names and medical terminology (e.g. *shingles* vs *herpes zoster*). Names of pathogens (or *pathogonyms*, from Greek $\pi \acute{\alpha}\theta \circ \zeta$ 'suffering' and γένεσις 'genesis'), however, have so far not attracted linguists' interest.

² Acknowledgments: I wish to thank two anonymous reviewers and the editors for their comments on a previous version of this article.

2.1 Etymology and dialectology

In the heyday of Indo-European studies, Pictet (1856) offered a comparative study of names of mental and skin diseases, as well as of common symptoms such as fever and cough, in a variety of Indo-European languages. By examining the etymological motivation behind ordinary disease names, the author aimed to describe a 'prehistoric nosology' ('vorhistorische nosologie', p. 322), while at the same time offering insights into how individuals accounted for the emergence of diseases and their causes. Many authors underscored that disease names were often rooted in people's beliefs in malefic and demonic powers, thought to transmit diseases through spells. Similar motivations were identified in dialectological studies, for instance by Jaberg (1951), who described names of common diseases of the fingers in Germanic, Romance and Slavic varieties from an onomasiological perspective. A supposedly malefic motivation does indeed appear in a variety of names, such as German Hexenschuss ('witch's shot') and Swedish trollskott ('troll's shot') for lumbago, and is also reflected in Lessiak's (1911) extensive etymological analysis of the German disease name Gicht ('gout'), which is related to Old German jehan ('to say, speak, avow'), with the disease believed to be inflicted by bewitchment. These examples show that popular disease names were often morally charged: speakers would identify putative agents (witches, trolls) as guilty of causing diseases.

Lessiak (1911), whose declared objective was 'to make etymologists aware of the very neglected domain of disease names' [die etymologen aufmerksam zu machen auf das sehr vernachlässigte gebiet der krankheitsnamen] (p. 181), referred in his article to an original 1899 publication by the German physician Max Höfler. In his preface to the *Deutsches Krankheitsnamen-Buch*, Höfler mentioned that having worked in both Upper Bavaria and northern Germany, he had noticed that his patients would use a variety of different names to describe their ailments (p. III). To remedy possible problems of communication between patients and physicians, Höfler offered a comprehensive dictionary of disease names (both of humans and of animals) totalling more than 900 pages, which remains an important reference

to this day for anyone interested in the topic. It also testifies to the variety of disease names in everyday language, contrasting with medical terminology, which tends to reduce the profusion of names, for both diseases and pathogens.

In the second half of the 20th century, names of diseases were analysed from a variety of angles. Weimann (1953), for instance, examined the names used by an influential physician of the 16th century, Paracelsus. Working with the methods of linguistic geography, Hoffmann (1956) proposed an overview of names of diseases in varieties of German. Finally, Baumer (1962) wrote one of the first comprehensive lexicological studies of disease names carried out on a Romance langue, in his case Romansh.

2.2 Onomastics

From an onomastic point of view, nosonyms pose a set of challenging problems, both with respect to whether they should be seen as common or proper nouns, and with regard to their referential scope. Formally, many disease names show features of common nouns. For instance, some are used with a determiner (the flu) or are compound words (lockjaw, headache). Other names display characteristics of proper names, such as, in English and other languages, capitalization (Lyme disease, Down syndrome), or are derived from proper names (Parkinson's disease, Isaacs' syndrome). However, not many studies have addressed the status of disease names. Van Langendonck (2007:245–246) is one of the few authors to have offered a functional analysis of nosonyms. With respect to Dutch, he observed that 'names of diseases that are new, exotic and/or are to be taken seriously appear to be treated as genuine proper names; they are capitalized as well [..., whereas] ordinary diseases are not capitalized' (p. 245). He also maintained that some names of diseases tend to appear in apposition (e.g. Dutch de ziekte Ebola 'the Ebola disease'), which he regarded as contributing to their status as proper names, whereas others are not used in apposition (*de ziekte griep 'the flu disease'), which is why he treated them as common nouns. Drawing on this insight, Van Langendonck & Van de Velde (2016) concluded that it 'seems that words for ordinary or older diseases are rarely construed as names, but that new and exotic terms for illnesses can be given name status more easily' (p. 37). While these considerations were based on introspection rather than empirically attested data, Van Langendonck's theory possibly resonates with the intuition of many ordinary speakers and onomasticians. For instance, Bauer (1996) excluded from the category of proper names those names of diseases that he called 'native formations',3 as well as compositionally transparent names, such as German Lungenentzündung ('pneumonia', literally 'lung inflammation'), Blutvergiftung ('blood poisoning') and others. He regarded names that cannot be pluralized and that are used without a determiner as more likely assignable to the category of proper names, and mentioned such cases as Migräne ('migraine'), Mumps, Ziegenpeter (both 'mumps'), and Staupe ('distemper'), but described them as 'appellatives that at most give the impression that they are proper names' [Appellative, die allenfalls den Anschein erwecken, Eigennamen zu sein] (Bauer 1996:1619). Interestingly, he regarded medical terminology in a similar fashion, since he took scientific names such as Meningitis ('meningitis') to be equivalent to commonly used names (Hirnhautentzündung, literally 'inflammation of the cerebral membrane'). Clearly, Bauer's (1996) take on disease names differs in many ways from Van Langendonck's (2007) understanding and classification. To my knowledge, a comprehensive account of nosonyms and pathogonyms from an onomastic perspective is still lacking (but see Debru & Sabbah 1998 on names of diseases in Greek and Latin antiquity). Having observed that disease names are absent in many overviews of onomastics (such as Nübling 2012), one must assume that the topic has hitherto been of only marginal interest to onomastic scholars.

³ 'Auch Krankheitsnamen sind, wenn es sich um muttersprachliche Bildungen handelt, keine Eigennamen' (Bauer 1996:1619).

3. Medical terminology

Medical terminology has been of central importance to physicians' understanding of their art ever since antiquity: Galen (2nd century AD) was one of the first physicians to propose a classification of disease names, which he split up into eight categories, encompassing names that refer (a) to the affected part of the body, (b) to the main symptom, (c) to both the affected part of the body and the symptom, (d) to the likely cause of the disease, (e) to a resemblance with an external object, (f) neither to the affected part of the body nor to the cause, (g) to the names of those who first cured the disease, or (h) to the names of those who first suffered from the disease (Skoda 1988:81–83).

In modern times, the first Nomenclature of Diseases, authored by the Royal College of Physicians of London, was published in 1869. The medical relevance of this publication is evident from, among other things, the way in which the different disease names were organized. The work structured the names in a taxonomic (basically anatomical) way, by listing them in sections ranging from general diseases (pp. 5-28), affecting the whole body, to local diseases (pp. 29–174), affecting parts of the body (e.g. diseases of the eye, diseases of the digestive system), as well as poisons, injuries, human parasites etc. In other words, the practical need not only to uniformly name diseases, but also to classify them was visible in the structure of the book. Especially since the Enlightenment, several studies have been dedicated to the classification of diseases (see Moriyama et al. 2011). For linguists, it may be of interest to observe that *The Nomenclature* of Diseases provided the names of the conditions in five languages: Latin, English, French, German and Italian.

Ever since then, scientists have highlighted the relevance of using a potentially universally agreed nomenclature. In a note published in *The Lancet*, an anonymous author claimed that '[m]ultiplicity of names for one and the same disease must lead to confusion' and specified that '[t]he name of a disease should connote its etiology, its general or local site, its characteristic symptoms and physical signs, and the pathological effects which it produces in organs and tissues'

(Anon. 1918:332). It is remarkable that this list of bases for naming is fairly similar to Galen's classification of disease names mentioned earlier. However, as the anonymous author also wrote, it appears that adopting a nomenclature that applies these rules will not always be possible, for example because the aetiology may remain unknown.

Modern medical names and taxonomies are published and regularly updated by the WHO, in agreement with its member states. The *International Statistical Classification of Diseases and Related Health Problems* is currently available in its 11th revision (*ICD-11*), which should be adopted by member states on 1 January 2022. For mental disorders, the American Psychiatric Association has since 1952 published the *Diagnostic and Statistical Manual of Mental Disorders*, which is currently available in its fifth edition (*DSM-5*), and which is largely compatible with the terminology that ICD-11 proposes for mental afflictions.

For medical professionals, naming a condition or a pathogen is of fundamental importance for its classification. A name constitutes a condition as a 'disease', as a 'syndrome' etc., and this may be consequential in many ways. This is shown in the following section, where I examine how the nosonym *COVID-19* and the pathogonym *SARS-CoV-2* were institutionally established as the official names of the related disease – while various other names were used at the same time by institutions and the media.

4. COVID-19

On 11 February 2020, during a press conference held in Geneva, WHO director general Tedros Adhanom Ghebreyesus announced the name that the WHO had just assigned to the 'novel coronavirus'. These were his words:

Excerpt 1 (WHO press conference, Geneva; 04:55–05:24; WHO 2020a)⁴

```
01 DIR now, (.) to coronavirus. (0.4) .h \underline{\text{first}} of all, (0.6) we now  
02 have (0.2) a \underline{\text{name}} (0.8) for the \underline{\text{disease}}. (1.6) a::nd (.) it is  
03 covid, (0.5) \underline{\text{nine}}teen. (0.3) and \overline{\text{I}} will spell it. (0.6) cee:: (.)  
04 o:: vee:: (.) i: dee:, (0.6) hyphen (0.3) one nine. (1.1) co:,  
05 (0.3) cee o, (.) stands for \underline{\text{corona}} as you know, (0.5) vee i,  
06 (0.4) stands for virus (.) d for disease. so covid.
```

This short communication had a huge impact on the way we now speak and write about the disease. It is framed as an information delivery regarding 'coronavirus' (1. 01), for which a group not further specified ('we'; 1. 01) has found a 'name' (1. 02). That name is introduced with a copular construction ('it is'; 1. 02) and then occurs as 'covid, (0.5) nineteen.' (1. 03). The director general accomplishes (at least) two consequential actions here: he first announces that the language material he is about to produce should be categorized as a 'name' (1. 02), and he then produces that name in a prosodically segmented fashion as two units, i.e. 'covid,' (articulated with a continuing intonation) and 'nineteen.'. He thereby offers a sample of how the name is to be pronounced. Subsequently, he provides an illustration of how the name should be used in writing, by reference to graphemic (C - O - V - I - D; 11.03-04), punctuational ('hyphen'; 1.04) and numerical ('one nine.') units. Finally, he provides the motivation for this name choice, explaining that CO 'stands for corona' (1.05), VI for 'virus' (1.06), and D for 'disease.' (1.06). The numerical part of the name, which refers to the year the virus was first observed, is not explained, however.

Media all over the world immediately picked up this name and used it in their coverage, mainly in the forms *COVID-19* and *Covid-19*. Clearly, the director general's announcement has been interpreted as an 'initial baptism' (Kripke 1972) of a newly observed condition, while at the same time establishing that condition as a new disease (rather than as a syndrome etc.), more specifically as a viral disease. While name bestowal is assumed to be a fundamental act of naming in many

⁴ All the excerpts have been transcribed following the conversation analytic conventions established by Jefferson (2004).

onomastic theories (see Coates 2006), we observe here how this is achieved in an institutional setting. Importantly, the excerpt shows that the category 'name' is of emic relevance, as it is used by the director general himself (1. 02). With this announcement, the director general overrules a situation report published on 30 January 2020, i.e. two weeks before the press conference from which the above excerpt is taken. In that report, the WHO recommended 'that the interim name of the disease [...] should be "2019-nCoV acute respiratory disease" (where "n" is for novel and "CoV" for coronavirus)' (WHO 2020b). Of course, the wording interim name categorizes 2019-nCoV acute respiratory disease as a name with a limited 'lifespan'. It also shows that in this institutional setting, 'naming' a new disease cannot be reduced to a single act of bestowal. Rather, it is a procedural undertaking that involves interactions between different individuals and institutions. However, while still in the process of finding a 'definitively' acceptable name, individuals and institutions need to be able to refer to 'that' disease for practical reasons. '2019-nCoV acute respiratory disease' meets that need, but does so with resources that are complex and in contradiction of the WHO's own guidelines on naming new infectious diseases (WHO 2015), which recommend that '[n]ames should be short [...] and easy to pronounce' – in different languages, one might add.

At the same press conference, the director general explained the importance of having a unique name for the disease in the following words:

Excerpt 2 (WHO press conference, Geneva; 06:02–06:20; WHO 2020a)

```
01 DIR \underline{\text{having}} (.) a name (0.2) matters, (0.4) to \underline{\text{pre}}vent the use of other names, (0.5) that can be (.) \underline{\text{inaccurate}}, (0.4) o:r (.) 03 \underline{\text{stigmatizing}}, (0.8) .h it \underline{\text{also}} gives us, (0.4) a standard format, (0.3) to use, (0.3) for any future (.) coronavirus 05 (0.4) outbreaks.
```

Here, the director general mentions several reasons for 'having (.) a name'. A name establishes uniqueness, thereby reducing the number of ('preventing') other names; it provides an accurate reference to 'that' specific disease; it avoids possibly 'stigmatizing.' names; and

it offers a 'standard format,' for the description of future outbreaks caused by the same pathogen.

From a linguistic perspective, one could condense these explanations by observing that the name establishes monoreferentiality, avoids any connotations, and is precise and semantically transparent. These are the three dimensions that are often regarded as paramount for scientific nomenclature (Goyens 2013:43). While these conditions appear to be fulfilled for the name *COVID-19*, which is now the widely accepted name of the pandemic, it is more than questionable whether coming up with a name to be used in institutional settings 'prevents' the emergence of other names, which may be used in other settings or for specific purposes. Also, I argue that what counts as a 'stigmatizing' and therefore morally debatable name is generally not related to specific characteristics of the name, but rather to the way in which individuals and communities use and/or perceive specific names.

4.1 The discovery of the virus and first naming attempts

Before the name COVID-19 was introduced by the WHO director general, the condition was generally referred to using the name of the pathogen that was believed to cause it. In a statement entitled 'Novel Coronavirus – China', released on 12 January 2020, the WHO (2020c) wrote about the disease outbreak observed in Wuhan: 'The cluster was initially reported on 31 December 2019 [...]. The Chinese authorities identified a new type of coronavirus (novel coronavirus, nCoV), which was isolated on 7 January 2020'. This, however, was not the first time the compound name Novel Coronavirus had been used. In fact, it had appeared as early as 2003, in both scientific and press articles in several languages, such as English (novel coronavirus; Falsey & Walsh 2003), French (nouveau coronavirus; Benkimoun 2003), and German (neuartiges Coronavirus; Henn 2003). At that time, it was used to refer to the pathogen that was later confirmed to be responsible for the SARS outbreak observed in multiple countries in 2003. The nosonym SARS was coined only a few weeks earlier. On 11 February 2003 the WHO reported an outbreak of 'acute respiratory syndrome' in China (WHO 2003a), and on 12 March 2003 another report described cases of 'severe, acute respiratory syndrome of unknown origin' in Hong Kong and Vietnam (WHO 2003b), while the wording Severe Acute Respiratory Syndrome (SARS) was used in a report published on 16 March 2003 (WHO 2003c), and the label SARS-CoV (SARS Coronavirus) was subsequently used as a pathogonym (Rota et al. 2003). Because the pathogen causing COVID-19 is phylogenetically related to SARS-CoV, it has recently been named SARS-CoV-2 by the International Committee on Taxonomy of Viruses, replacing the label 2019-nCoV (standing for '2019 Novel Coronavirus') previously used (Chen 2020; WHO 2020d).

Clearly, the label *Novel Coronavirus* does not serve the purpose of taxonomic classification. Its use is indexical, and it seems to refer to a virus that is identified as belonging to a specific family (in this case *Coronaviridae*), but whose specific taxonomic position has not yet been determined. In other words, while the *Novel Coronavirus* identified in 2003 is a different pathogen from the *Novel Coronavirus* that the media talked about in 2020, the same label is used. By calling a pathogen *Novel Coronavirus*, the infectious agent is thus constituted as 'new' and as 'so far unknown', but at the same time as 'in need of more research'. It is only once a name is announced (see Excerpt 1) that the pathogen becomes a distinctive entity assigned a specific position in the taxonomy of viral species.⁵

When having to decide on scientific names for pathogens and diseases, expert groups rely on different rationales. Because the names of pathogens and diseases serve dissimilar practical purposes, pathogonyms are not necessarily related to the names of the diseases they cause (Gorbalenya et al. 2020:537). In the case of pathogens, the name is based on the genomic features of the microorganism and is intended to convey its taxonomic classification. For diseases, accord-

⁵ Incidentally, the first attested use of the name *Coronavirus* dates back to 1968 and is found in a short report published in *Nature*, where the electron microscopic appearance of the newly identified virus was described as 'recalling the solar corona' (Almeida et al. 1968). Hence, the name is derived from an astronomical term. The word *corona* (from Greek κορώνη 'garland') was used in antiquity for specific celestial phenomena.

ing to current guidelines, names should be chosen in such a way as 'to minimize unnecessary negative impact of disease names on trade, travel, tourism or animal welfare, and avoid causing offence to any cultural, social, national, regional, professional or ethnic groups' (WHO 2015:1). Those responsible for naming diseases are therefore advised to avoid, in nosonyms, references to geographical locations, populations and (industrial) occupations, as well as names of persons, animals and foods. Based on a quantitative assessment, Prieto-Ramos et al. (2020) examined the extent to which the WHO naming guidelines were respected in newspaper headlines on COVID-19 that appeared in January and February 2020, labelling as 'inappropriate' any uses not in line with those guidelines. In the following section I show that the (in)appropriateness of a name lies in the eye of the beholder. Stigma is not a property of names per se, but rather is established interactionally.

5. Disease names and the 'others'

Researchers have identified several coronavirus species that are pathogenic to humans, two of which have been assigned names relating to the place of the first observed outbreaks, i.e. the New Haven coronavirus (Esper et al. 2005) and the Middle East respiratory syndrome coronavirus (MERS-CoV), the latter being the name approved by the International Committee on Taxonomy of Viruses and the WHO (de Groot et al. 2013). It thus appears that naming a pathogen after the site of its outbreaks has until recently been a common practice. And indeed, the official WHO list of pandemics and epidemic diseases (WHO 2020b) mentions a plethora of names referring to geographical areas, e.g. Crimean-Congo haemorrhagic fever (first used as Crimean haemorrhagic fever-Congo virus by Casals et al. 1970), Lassa fever (named after an outbreak in Lassa, a Nigerian municipality), Marburg virus disease (formerly called Marburg haemorrhagic fever, named after an outbreak in a laboratory in the German city of Marburg), Nipah virus infection (according to Lee et al. 1999 named after the Malaysian village of Kampung Sungei Nipah,

which suffered a major outbreak in the 1990s), and, of course, Ebola virus disease, named after a river in the Democratic Republic of the Congo, where an important outbreak was observed in 1976. Toponyms are also used in more well-known names of diseases and pathogens, such as Lyme disease (Lyme, Connecticut) and the Coxsackie virus (Coxsackie, New York) (Abel 2014). It should thus not come as a surprise that initial reports of the outbreak in Wuhan (China) named the pathogen with reference to the toponym, i.e. Wuhan virus (Phillips, Mallapaty & Cyranoski 2020). This is in line with a a decades-long tradition of naming (infectious) diseases after the place of their first, or first significant, outbreak. However, simultaneously, a variety of other names began to be used in the media, such as (New) China virus (BBC 2020a), China coronavirus (BBC 2020b) and Chinese virus (Courthouse News Service 2020); see Prieto-Ramos et al. 2020. These forms, which all stem from January 2020, can hardly be described as proper names. They appear, at this stage, to be more like descriptive labels informing readers, by economically selected means as is typically the case with headlines, of the main topic of the related articles. Also, at that time, no official name had been established for the newly observed illness, and a first draft of the related pathogen's genome had just been published on 11 January 2020 (Zhang 2020) and was identified as Wuhan-Hu-1 (i.e. Wuhan-Human-1 coronavirus). Another name for the virus that appeared in the literature was Wuhan seafood market pneumonia virus (Santoni & Vergni 2020), but this name was later abandoned after scientists had excluded any association of the disease with seafood.

It is understandable that scientists and journalists alike chose to refer to Wuhan when talking about the new disease and virus: reports had identified an illness of unknown aetiology and there was a practical need to label the condition and the related pathogen. Names such as *Wuhan virus* and *Wuhan flu* (Coughlin 2020) appear to have served two purposes. On the one hand, they managed to refer succinctly to an individualized referent (i.e. 'that' specific virus, and 'that' specific flu) by reference to the city that suffered the first major outbreak. On the other hand, they made it possible to present the related referents as

different entities with respect to the popular and scientific taxonomy of diseases – as also reflected in the label *Novel Coronavirus*. Indeed, the name *Wuhan virus* suggests some sort of uniqueness (as it relates to a specific outbreak that has taken place in that municipality), and is therefore in line with other names of diseases and pathogens that include names of cities in their names (*Lyme disease*, *Coxsackie virus* etc.). The same does not seem to apply to the labels *China virus*, *China flu* and *Chinese virus*. Indeed, in contemporary medical nomenclature it is rare for names of larger areas, such as countries, and related adjectives to be used (*Middle East respiratory syndrome coronavirus* and *Crimean–Congo haemorrhagic fever* being among the few examples).

However, the use of adjectives relating to a nation or an ethnic group in nosonyms has been a well-known naming pattern across the centuries. An emblematic example is the variety of names given to syphilis, a disease reportedly first observed in Naples during the French invasion that pitted Charles VIII of France against the Holy Roman Empire (1494–98). The disease was called mal francese 'the French evil' in Italian, morbus gallicus in Latin and the Frenchman in English, while in French it was called le mal napolitain 'the Neapolitan evil' (Abel 2018). Höfler (1899:721-724) lists a variety of names for syphilis that have one thing in common: they all refer to a geographical area (or an ethnic community) that relates the disease to 'others' – names like Franzosenseuche (German) 'the French plague' and Spaansche pokken (Dutch) 'Spanish pox', among many others. Another example is of course the influenza pandemic known as the Spanish flu, which claimed millions of victims between 1918 and 1920. Although the area of the first outbreaks has not been identified with certainty, it seems clear that it was not Spain. So why was the illness called the Spanish flu? The pandemic started in spring 1918, when World War I was still in progress. However, the media would not report its spread, presumably because such reports would have depicted the populations concerned as 'weak'. Spain, however, had chosen to remain neutral during the conflict, and the Spanish newspapers did not face such censorship. Hence, reports about the pandemic were circulated by the press in that country, and when the news broke that King Alfonso XIII of Spain had contracted the disease, the flu pandemic was more firmly associated with the label *Spanish* (Vasold 2009).⁶

As these examples show, the use of toponyms (either as nouns or as adjectival derivatives) in designations of diseases is a long-established practice, and the reasons for it seem to be twofold. Such names may relate to the area in which the first cases or important outbreaks of the disease were reportedly observed (or, in line with Galen, to the community of individuals who first suffered from it), but they have also been used to hold 'others' accountable for the existence and spread of disease. This Janus-faced feature of toponymic nosonyms and pathogonyms is at the centre of current discussions about the appropriateness of names such as Wuhan virus and China/Chinese virus/flu in recent media coverage, especially since ethnicity and nationality are traits of individuals that have been used recurrently in stigmatizing ways (Goffman 1963:4). A significant number of incidents of prejudice and xenophobia are reported to have occurred both within China, directed against inhabitants of Wuhan, and outside the country, against individuals assumed to be of Asian origin (see Wikipedia 2020). Many journalists have connected such xenophobic incidents to the use of these names (e.g. Aratani 2020), and debates have emerged about whether Wuhan virus and China/Chinese virus/flu were racist names per se, implying that using other names (i.e. with no toponymic or ethnic component) might have led to fewer incidents.

In the light of the discussion in the preceding paragraphs, it appears that the above-mentioned names are not intrinsically racist; they could indeed be used and heard as purely descriptive labels (as with so many other nosonyms and pathogonyms). However, evidence shows that *Wuhan virus*, *China/Chinese virus/flu* and other designa-

⁶ However, older uses of terms equivalent to *Spanish flu* are also attested. Höfler (1899:470) reports that an influenza epidemic observed in Germany and northern Europe in 1580 was called *spanischer Pip(s)* 'Spanish cold', because it was believed to have been imported by Spanish soldiers.

tions are actually *used* in morally charged ways that construct oppositions between communities.

5.1 Divide et impera

In this section I show how onymic designations such as *China/Chinese virus/flu* are constructed as morally and ideologically charged terms. I analyse two short excerpts stemming from institutional settings, a press conference and a political rally, both involving the former US President Donald J. Trump, whose use of *China/Chinese virus/flu* had met with criticism. On the one hand, the analysis shows how interactants orient to the potentially racist import of these names. On the other hand, it unpicks how such names are used in ways that are not only derogatory, but also a means of constructing opposing parties in a political debate.

During a press conference held at the White House on 18 March 2020, ABC correspondent Cecilia Vega (VEG) asked Donald J. Trump (TRU) why he kept speaking of the 'Chinese virus' (l. 01):

Excerpt 3 (Press conference, The White House, 18 March 2020; 23:14–24:03; NBC News 2020)

```
okay. (.) why do you keep calling this the Chinese virus.
        there ar:e reports of dozens of incidents of bi- bias against
        Chinese-Americans in this country, .hh your own a:ide secretary
        Azar says he does not use this term, he says ethnicity does not
        cause the virus, (0.5) why do you keep using this.
        [a lot of people say it's racist.
07 TRU [cause it comes from China.
08
09 TRU it's not racist at all no, (.) >not at all.< (0.3)
10
        it comes from (0.3) China.
11
        (0.5)
12 TRU that's why. (0.3) comes from China. (.)
13
       I [wanna be accurate. ]
14 VEG
         [you have no concerns] about
       Chinese-[Americans in this coun]try [( )] the aides behind&
1.5
16 TRU
               [yeah please joh:n] [please]
17 VEG &you [are y]ou [comfortable with this term?]
18 TRU
             [uh:: ] [I have- uh great- ] I have great love
      uh (0.4) for: all of the people (.) from our country but,
20
21
22
23
        .hh uh::m (.) as you know China (.) tried to say (0.4)
        at one point, (0.5) maybe they stopped now, (0.5) that it was
        caused by (.) American soldiers. (0.5) that can't happen.
        (0.3) it's not gonna happen. (.) not as long as I'm president.
2.4
        (0.3) uh: it comes from China.
```

At 1. 01, the reporter utters what is formally describable as a question, and recognizable as such from the very beginning ('why'; l. 01). However, she does not stop her turn once the question is grammatically complete. In what follows (11. 02–05), she appears to account for the question she has just asked by evoking episodes which she manifestly relates to this specific name, such as 'dozens of incidents of bi- bias against Chinese-Americans' (11. 02-03), and by referring to Trump's 'a:ide secretary Azar' who reportedly does not use 'this term' since 'ethnicity does not cause the virus,' (11. 03-05). The way in which Vega accounts for her question is interesting not only because of the link she establishes between the use of the name Chinese virus and incidents of prejudice against what she represents as a community, i.e. Chinese-Americans. She also depicts the component Chinese as relating to 'ethnicity' (l. 04) – rather than, for instance, to geography. In other words, she treats Chinese virus as referring to 'the virus of the Chinese people', rather than, say, to 'the virus that was first observed in China'. By accounting for her question in this way, Vega shows that with her turn she is not 'just' asking a question, she is actually criticizing Trump's use of the name China virus. This is also visible in the turn expansion she utters at 1.06, when she adds that 'a lot of people say it's racist.' – where the accusation of being 'racist' is presented as coming from 'a lot of people'. In overlap, Trump provides an answer ('cause it comes from China.'; 1. 07) that promotes an understanding of the component Chinese as relating to the country, rather than to the people. He then rejects the categorization of the name as 'racist' (1. 09), after which he repeats his answer: 'it comes from (0.3) China.' (1. 10). The formatting of this turn-constructional unit (TCU) (Sacks, Schegloff & Jefferson 1974) is remarkably different from its first version at 1. 07: indeed, Trump allows a 0.3-second pause to occur after 'it comes from'. This enables him to highlight the subsequent constituent 'China.', which is furthermore prosodically marked on the first syllable. By segmenting his turn in this way, he emphasises 'China.' as the 'reason' behind his naming practice. He subsequently accounts for his answer by saying 'I wanna be accurate.' (1. 13). While this turn is not taken up by Vega, who overlaps with a follow-up question on

'concerns about Chinese-Americans in this country' (11. 14–15), it is presented as a legitimate reason for choosing the label Chinese virus. 'Accuracy' can normatively be expected to be appreciated, certainly in institutional settings, but claims of accuracy have also been shown to be involved in ethnic stereotyping (Whitehead 2018). Trump's claim that Chinese virus is an 'accurate' (1. 13) name for COVID-19 is not challenged. Indeed, if, as Trump claims, Chinese has to be heard as 'coming from China,', then this assertion may not be factually wrong – although, given the timeline of the outbreaks referred to in Section 4, using a country name such as *China*, rather than the name of a city, in this case Wuhan, could have been treated as 'not sufficiently accurate'. However, in response to Vega's follow-up question (after an attempt to address another journalist; l. 16), Trump discloses a very different reason why he holds 'China' responsible for his way of naming the virus. By saying that 'China (.) tried to say [...] that it was caused by (.) American soldiers.' (11. 20-22), he assigns human agency to 'China' ('tried to say'), thereby using the proper name not as a merely geographical term, but with reference to not overtly mentioned (political) agents. By reporting that 'China' had allegedly attributed the virus to 'American soldiers', he depicts the name Chinese virus as a sort of response to what he displays as a claim that 'can't happen' (1. 22). What was, at first sight, presented as a mere geographical reference to the country that suffered the first COVID-19 outbreaks is now recognizable as a name intended to blame China, not only for being the country the virus 'comes from' (l. 12), but also for having claimed, allegedly, that 'American soldiers' had 'caused' (l. 22) it. This explanation, possibly motivated by geopolitical considerations, fosters a perception of 'Chinese virus' as a derogatory term, here directed at Chinese officials.

By using *Chinese virus* – in obvious opposition to the name *COVID-19* recommended by the WHO – Trump suggests the legitimacy of this alternative name. Consequently, individuals using *Chinese virus* can be seen as supporting Trump's ideas and politics. This is particularly visible in the subsequent excerpt. It is taken from a rally organized on 23 June 2020 in Phoenix, Arizona, for about 3,000 students. It

was held three days after another rally (20 June in Tulsa, Oklahoma), at which Trump had used the names *Chinese virus* for *COVID-19* and *Kung flu* for the disease. The excerpt starts after Trump has talked about the wall his administration is building on the border with Mexico. He has just mentioned that the Mexican town south of San Diego is 'heavily infected with COVID' (not transcribed), and now addresses a question to the audience about whether anybody has seen his speech in Tulsa (1.01):

Excerpt 4 (Trump rally, Phoenix, AZ, 23 June 2020; 34:07–35:14; Global News 2020)

```
01 TRU
       did anybody see my speech the other night on Saturday night?
       [*cheering-----5.5*]
        [yeah. (1.1) so. (1.2) what I said the other night] there's
       never been anything where they have so many names I could give
        you::: nineteen or twenty names: "for that" right?
0.5
06
        (0.5)
07 TRU it's got a:ll different names. wu:ha::n, (.) .hhh
08 AUD ((chuckling-1.6))
09 TRU go- wuha:n's::- w
09 TRU go- wuha:n's::- w'z catching o:n, .hh
10 AU1 ((shouts name2))
11 TRU coronavirus:: right?
12 AU2 kung flu::
13 AU3 KUNG FLU::
14 AUD ((multiple voices hearable))
15 TRU kung flu: yeah,
16 AUD [*cheering-9.1-->
17 TRU [(0.9) (°°) (0.4) (°yeah°) (1.3) <u>kung</u> flu. (3.3) covid (0.3)
18 covid ninetee:n] covid.
19 AUD
20 (0.5)
21 TRU I say what's the ninetee:n covid nineteen some people can't
       explain what the nineteen. give me the ke-
23 AUD ((chuckling))
24 TRU covid nineteen I said that's an odd name.
25 AU4 (wuha:n)
26 TRU I could give you (a) many many names.
2.7
28 TRU ((click)) (.) some people call it the Chinese flu:, the
29
       China flu,
30
        (0.9)
31 TRU right? (0.2) they call it the (0.4) \mathrm{Chi}\underline{\mathrm{na}} (.) as opposed to
32
       Chi- [the China, (2.0) I've never seen anything like it.]
33 AUD
        [*cheering-3.9-----*]
33 TRU (.) but here's the story. (1.0) we: (0.3) are going to be
34
       stronger, (.) than ever before [and it's gonna be soon.
35 AUD
                                       [*cheering-->>
```

At 1. 02, the audience (AUD) responds with a loud cheer, which is heard not only as a positive response ('yeah.'; 1. 03), but also as an

appraisal of the speech he held on the occasion referred to. In his subsequent turn, Trump relates what he said at his earlier rally about COVID-19, namely that 'they have so many names ... ofor thato' (ll. 04–05). He assigns the multiplicity of names to entities or individuals who are not further specified ('they'; 1. 04). He then mentions one of the names 'they have,' namely 'wu:ha::n,' (1. 07), after which he momentarily halts his turn, giving the audience the opportunity to respond. As 1. 08 shows, a faint chuckling can be heard from the audience as a response. At 1. 09 Trump utters the same name for the second time, claiming that 'wuha:n's::- w'z catching o:n,' and again leaving an opportunity for the audience to respond. One member of the audience (AU1) appears to shout a name at this point (1. 10), thereby displaying co-participation in Trump's listing of alternative names for COVID-19. Trump mentions 'coronavirus::' as the next name, which is followed by the tag 'right?' (l. 11). Significantly, at this point members of the audience (AU2) respond with another name, 'kung flu::' (1. 12), which someone (AU3) shouts out (l. 13). Trump ratifies this name at 1. 15 with the words 'kung flu: yeah,'. What follows is extended and loud cheering from the audience (l. 16). Clearly, they are participating not only in establishing a list of names, but also in approving the use of one or other of them: whereas 'wu:ha::n,' (1. 07) was met with chuckling, 'coronavirus:.' (1.11) was replaced by the audience with 'kung flu::' (11. 12–15), which was then cheered at length.

Trump further extends his list of names while the cheering continues, mentioning again 'kung flu.', 'covid', and 'covid nineteen' (ll. 17–18). Again, these latter names do not meet with a particular response from the audience, as the pause at l. 20 shows. At ll. 21 to 24 Trump represents *COVID-19* not only as a somewhat difficult name ('some people can't explain what the nineteen.'; ll. 21–22), but also as 'an odd name.' (l. 24), thereby calling into question its legitimacy. He then introduces two more names, 'the Chinese flu:, the China flu,' (ll. 28–29), again relating this use to 'some people'. On this occasion, too, Trump offers the audience the opportunity to respond. He suspends his turn, as the continuing intonation on 'flu,' (l. 29) shows, but receives no response from the audience (l. 30). Trump then creates

a second opportunity for a response, first with a tag ('right?'; 1. 31), and then by stating again 'they call it the (0.4) China'. Note how he allows a short pause to occur before pronouncing 'China', which he utters with emphasis on the last syllable. He then expands his turn with the words 'as opposed to Chi- the China,' (Il. 31–32) and now finally receives a loud cheer as an audience response (1. 33).

In this excerpt there is a strong orientation, both from the audience and from Trump, towards treating names such as Kung flu and China flu as 'cheerable' names, whereas names such as Coronavirus and COVID(-19) are met with less involvement. Clearly, in their interaction, Trump and his audience are not just determining which name(s) should be used, they are also establishing and displaying their complicity, their having the same views on the matter. That this short episode serves other purposes than just 'talking about names for COVID-19' is visible in the turn at 11. 33-34, which Trump formats as a sort of upshot of his previous talk ('but here's the story. (1.0)'; 1. 33), although it appears to be only loosely connected to talk about COVID-19. His words 'we: (0.3) are going to be stronger, (.) than ever before' (11. 33–34) can be heard in many ways, given that the basis for comparison of 'stronger' is not mentioned, but they clearly exhibit the political dimension of his talk. Hence, choosing to speak of the *China* virus etc. serves Trump's political agenda in different ways. It allows him to blame 'China' for the spread of the disease (thereby possibly downplaying his own responsibility for how the United States has dealt with the pandemic); it enables him to set names which in his view are 'accurate' (see Excerpt 3) against names that are 'odd' (1. 24); and it allows him to use that onymic opposition to foster a number of dichotomies such as 'they' (1. 04) and 'China' (1. 31) vs 'we' (1. 33), which may also be heard with reference to the opposition between the two main political parties in the US. Perhaps one of the most striking

⁷ Given the sequential position in which this turn occurs, the most obvious candidates for the comparison are (stronger than) the virus or China. However, since this talk was produced as part of a political rally, it is not unlikely that it can also be heard as relating to Trump's political opponents, i.e. representatives of the Democratic Party.

aspects of this excerpt is that, throughout it, Trump ascribes the use of 'so many names' (l. 03) for COVID-19 to others, namely, 'they' (l. 04) or 'some people' (l. 28), while at the same time exploiting that very multiplicity of names for his own political purposes.

6. Conclusion

In this article I have examined the naming patterns observed in connection with infectious diseases and their pathogens. The study has provided an overview of the literature on nosonyms and pathogonyms, which is still scarce (Section 2). In the medical domain, naming has been shown to be linked to considerations of classification, especially in the case of pathogens, which are organized in taxonomies (Section 3). In the case of COVID-19, name bestowal was found to have occurred in successive steps (Section 4), rather than in a 'single act' as is often described in the onomastic literature. I have shown that toponyms and derived forms of them are frequently used in the names both of diseases and of pathogens, and that in many cases they refer to the place in which important outbreaks were observed (Section 5). In line with this tradition, the virus responsible for the COVID-19 pandemic was initially named with reference to the city of Wuhan in China (Section 4). In many languages and countries worldwide, names such as Wuhan flu, China flu and Chinese flu have also been used, and have met with disapproval because they have been felt to be racist. While it appears difficult to affirm that a name is 'racist' per se, my analysis of how Donald J. Trump has used these names in interviews and rallies has shown the divisive drift of that usage (5.1). How patients deal with (new) diseases has been the subject of sociological studies, for example on how HIV and AIDS led to grassroots activism, which allowed patients 'to make politics out of retroviruses' (Latour 2005:23, n. 118). In this article, another way 'to make politics out of' a virus, this time a coronavirus, has been reported. By examining the ways in which nosonyms and pathogonyms are used, promoted, contested etc., I have shown that names themselves can be the locus of political debate. As such, they become a vector for creating and sustaining both inclusive and adverse groups in such a way as to engender a variety of opposing (albeit not overtly named) aggregations. The (im)morality of disease names resides precisely in the fact that ordinary and institutional agents can use them in ways that go beyond the merely referential designation of 'that' disease. In this respect, it is striking that the WHO still uses numerous names of diseases and pathogens that contain toponymic references, in blatant contradiction of the 2015 naming guidelines. While those guidelines recommend the avoidance of 'stigmatizing' names (in medical literature), this article has shown how ordinary stigma can be reintroduced by a morally and ideologically charged use of alternative names.

This article has demonstrated the benefit of analysing empirical data – stemming from newspaper articles, but also from institutional settings of interaction. It offers an illustration of how detailed analysis of interactional data can lead to new insights into the use of proper names, thereby contributing to the field of interactional onomastics.

References

Abel, Ernest Lawrence. 2014. A note on psychological disorders named after cities. *Names: A Journal of Onomastics* 62(3). 177–182.

Abel, Ernest Lawrence. 2018. Syphilis: The history of an eponym. *Names: A Journal of Onomastics* 66(2). 96–102.

Almeida, June D. et al. 1968. Coronaviruses. *Nature* 220 (16 November 1968). 650.

Anon. 1918. The names of diseases. The Lancet 192(4958). 332-333.

Aratani, Lauren. 2020. 'Coughing while Asian': Living in fear as racism feeds off coronavirus panic. https://www.theguardian.com/world/2020/mar/24/coronavirus-us-asian-americans-racism (accessed 13 August 2020).

Bauer, Gerhard. 1996. Übergangsformen zwischen Eigennamen und Gattungsnamen. In Eichler, Ernst, Hilty, Gerold, Löffler, Heinrich, Steger, Hugo & Zgusta, Ladislav (eds.), *Namenforschung/Name Studies/Les noms propres, Vol. 2*, 1616–1626. Berlin/New York: Walter de Gruyter.

Baumer, Iso. 1962. Rätoromanische Krankheitsnamen. Bern: Francke.

BBC. 2020a. New China virus: Warning against cover-up as number of cases jumps, 21 January 2020. https://www.bbc.com/news/world-asia-china-51185836 (accessed 13 August 2020).

- BBC. 2020b. China coronavirus: Death toll rises as disease spreads, 25 January 2020. https://www.bbc.com/news/world-asia-china-51185836) (accessed 13 August 2020).
- Benkimoun. Paul. 2003. La piste du coronavirus se con-2003. https://www.lemonde. firme. Le Monde. April fr/planete/article/2003/04/01/la-piste-du-coronavirusse-confirme 315074 3244.html (accessed 13 August 2020).
- Casals, Jordi, Henderson, Brian E., Hoogstraal, Harry, Johnson, Karl M. & Shelokov Alexis. 1970. A review of Soviet viral hemorrhagic fevers, 1969. *Journal of Infectious Diseases* 122(5). 437–453.
- Chen, Jieliang. 2020. Pathogenity and transmissibility of 2019-nCoV: A quick overview and comparison with other emerging viruses. *Microbes and Infection* 22(2). 69–71.
- Coates, Richard. 2006. Properhood. Language 82. 356–382.
- Coughlin, Con. 2020. China cannot escape the blame for 'Wuhan flu'. *The Telegraph*, 25 March 2020. https://www.telegraph.co.uk/news/2020/03/25/china-cannot-escape-blame-wuhan-flu/ (accessed 13 August 2020).
- Courthouse News Service. 2020. Chinese virus continues to spread; first case found in US, 22 January 2020. https://www.courthousenews.com/chinese-virus-continues-to-spread-first-case-in-us/ (accessed 13 August 2020).
- Crossgrove, William. 2000. The vernacularization of science, medicine, and technology in late medieval Europe: Broadening our perspectives. *Early Science and Medicine* 5(1). 47–63.
- Debru, Armelle & Sabbah, Guy (eds.). 1998. *Nommer la maladie: Recherches sur le lexique gréco-latin de la pathologie*. Saint-Etienne: Publications de l'Université de Saint-Etienne.
- de Groot, Raoul J. et al. 2013. Middle East Respiratory Syndrome Coronavirus (MERS-CoV): Announcement of the Coronavirus Study Group. *Journal of Virology* 87(14). 7790–7792.
- De Stefani, Elwys. 2016. Names and discourse. In Hough, Carole (ed.), *The Oxford handbook of names and naming*, 52–66. Oxford: Oxford University Press.
- Esper, Frank, Weibel, Carla, Ferguson, David, Landry Marie L. & Kahn, Jeffrey S. 2005. Evidence of a novel human coronavirus that is associated with respiratory tract disease in infants and young children. *Journal of Infectious Diseases* 191(4). 492–498.
- Falsey, Ann R. & Walsh, Edward E. 2003. Commentary: Novel coronavirus and severe acute respiratory syndrome. *The Lancet* 361(9366). 1312–1313.

- Flashar, Hellmut. 1966. *Melancholie und Melancholiker in den medizinischen Theorien der Antike*. Berlin: Walter de Gruyter.
- Global News. 2020. Trump addresses crowd of young Americans at Arizona rally [23 June 2020]. https://www.youtube.com/watch?v=m9fQZV-17H9M (accessed 5 January 2021).
- Goffman, Erving. 1963. *Stigma: Notes on the management of spoiled identity.* Englewood Cliffs, NJ: Prentice-Hall.
- Gorbalenya, Alexander E. et al. (2020), The species 'Severe acute respiratory syndrome-related coronavirus': Classifying 2019-nCoV and naming it SARS-CoV-2. *Nature Microbiology* 5. 536–544.
- Goyens, Michèle. 2013. Le sort des néologismes dans la langue des sciences au Moyen Âge: Une question de morphologie? *Neologica* 7. 41–56.
- Goyens, Michèle & Dévière, Elisabeth. 2007. Le développement du vocabulaire médical en latin et moyen français dans les traductions médiévales des Problemata d'Aristote. In Galderisi, Claudio & Pignatelli, Cinzia (eds.), *The Medieval Translator: La traduction vers le moyen français*. 259–281. Turnhout: Brepols.
- Henn, Susanne. 2003. SARS im Fokus. Deutsche Welle, 16 April 2003. https://p.dw. com/p/3Tyz (accessed 13 August 2020).
- Hoffmann, Walter. 1956. Schmerz, Pein und Weh: Studien zur Wortgeographie deutschmundartlicher Krankheitsnamen. Giessen: Wilhelm Schmitz.
- Höfler, Max. 1899. *Deutsches Krankheitsnamen-Buch*. München: Piloty & Loehle.
- Jaberg, Karl. 1951. Krankheitsnamen: Metaphorik und Dämonie. *Schweizerisches Archiv für Volkskunde* 47(77). 77–113.
- Jefferson, Gail. 2004. Glossary of transcript symbols with an introduction. In Lerner, Gene H. (ed.), *Conversation analysis: Studies from the first generation*, 14–31. Amsterdam/Philadelphia: John Benjamins.
- Jouanna, Jacques. 2012. *Greek medicine from Hippocrates to Galen*. Leiden/Boston: Brill.
- Kripke, Saul A. 1972. Naming and necessity. In Davidson, Donald & Harman, Gilbert (eds.), *Semantics of natural language*, 253–355. Dordrecht/Boston: D. Reidel.
- Latour, Bruno. 2005. *Reassembling the social: An introduction to actor-net-work-theory*. Oxford: Oxford University Press.
- Lee Kim-En et al. 1999. The neurological manifestations of Nipah virus encephalitis, a novel paramyxovirus. *Annals of Neurology* 46(3). 428–432.

- Lessiak, Primus. 1911. Gicht: Ein beitrag zur kunde deutscher krankheitsnamen. Zeitschrift für deutsches Altertum und deutsche Literatur 53(2). 101–182.
- Moriyama, Iwao M., Loy, Ruth M. & Robb-Smith, Alastair H. T. 2011. *History of the Statistical Classification of Diseases and Causes of Death*. Hyattsville MD: National Center for Health Statistics.
- NBC News. 2020. Trump, White House Coronavirus Task Force hold news conference [18 March 2020]. https://www.youtube.com/watch?v=Zh-NOuDYKkzM (accessed 5 January 2021).
- Nübling, Damaris. 2012. *Namen: Eine Einführung in die Onomastik*. Tübingen: Francke.
- Phillips, Nicky, Mallaparty, Smriti & Cyranoski David. 2020. How quickly does the Wuhan virus spread? *Nature*. DOI: https://doi.org/10.1038/d41586-020-00146-w (accessed 13 August 2020).
- Pictet, Adolphe. 1856. Die alten krankheitsnamen bei den Indogermanen. Zeitschrift für vergleichende Sprachforschung auf dem Gebiete des Deutschen, Griechischen und Lateinischen 5(5). 321–354.
- Prieto-Ramos, Fernando, Pei, Jiamin & Cheng, Le. 2020. Institutional and news media denominations of COVID-19 and its causative virus: Between naming policies and naming politics. *Discourse & Communication* 14(6). 635–652.
- Rota, Paul A. et al. 2003. Characterization of novel coronavirus associated with severe acute respiratory syndrome. *Science* 300(5624). 1394–1399.
- Royal College of Physicians of London. 1869. *The nomenclature of diseases*. London: W. J. & S. Golburn.
- Sacks, Harvey, Schegloff, Emanuel A. & Jefferson, Gail. 1974. A simplest systematics for the organization of turn-taking for conversation. *Language* 50(4). 696–735.
- Santoni, Daniele & Vergni, Davide. 2020. In the search of potential epitopes for Wuhan seafood market pneumonia virus using high order nullomers. *Journal of Immunological Methods* 481–482: Article 112787.
- Skoda, Françoise. 1988. Médecine ancienne et métaphore: Le vocabulaire de l'anatomie et de la pathologie en grec ancien. Leuven/Paris: Peeters-Selaf.
- Van Langendonck, Willy. 2007. *Theory and typology of proper names*. Berlin/New York: Mouton de Gruyter.
- Van Langendonck, Willy & Van de Velde, M. 2016. Names and grammar. In Hough, Carole (ed.), *The Oxford handbook of names and naming*, 17–38. Oxford: Oxford University Press.
- Vasold, Manfred. 2009. Die Spanische Grippe: Die Seuche und der Erste Weltkrieg. Darmstadt: Primus Verlag.

- Weimann, Karl-Heinz. 1953. Mundart und Neuschöpfung in den Krankheitsnamen des Paracelsus. *Zeitschrift für Mundartforschung* 21(2). 65–82.
- Whitehead, Kevin A. 2018. Managing the moral accountability of stereotyping. *Journal of Language and Social Psychology* 37(3). 288–309.
- WHO. 2003a. Acute respiratory syndrome in China, 11 February 2003. https://www.who.int/csr/don/2003_02_11/en/ (accessed 13 August 2020).
- WHO. 2003b. Acute respiratory syndrome in Hong Kong Special Administrative Region of China/Viet Nam, 12 March 2003. https://www.who.int/csr/don/2003 03 12/en/ (accessed 13 August 2020).
- WHO. 2003c. Severe Acute Respiratory Syndrome (SARS) multi-country outbreak Update, 16 March 2003. https://www.who.int/csr/don/2003 03 16/en/ (accessed 13 August 2020).
- WHO. 2015. World Health Organization best practices for the naming of new human infectious diseases. https://www.who.int/topics/infectious_diseases/naming-new-diseases/en/ (accessed 13 August 2020).
- WHO. 2020a. Coronavirus outbreak: WHO update (11 February 2020). https://www.youtube.com/watch?v=hd2QoYt5Fcw (accessed 5 January 2021).
- WHO. 2020 b. Emergencies: Pandemic, epidemic diseases. https://www.who.int/emergencies/diseases/en/ (accessed 13 August 2020).
- WHO. 2020c. Novel Coronavirus China, 12 January 2020. https://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en/ (accessed 13 August 2020).
- WHO. 2020d. *Novel Coronavirus (2019-nCoV): situation report, 10*, 30 January 2020. https://apps.who.int/iris/handle/10665/330775 (accessed 13 August 2020).
- Wikipedia. 2020. List of incidents of xenophobia and racism related to the COVID-19 pandemic. https://en.wikipedia.org/wiki/List_of_incidents_of_xenophobia_and_racism_related_to_the_COVID-19_pandemic#cite_note-:42-16 (accessed 13 August 2020).
- Zhang, Yong-Zhen. 2020, *Novel 2019 coronavirus genome*. https://virological.org/t/novel-2019-coronavirus-genome/319) (accessed 13 August 2020).