From danger to destination: Changes in the language of endemic disease during the COVID-19 pandemic

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Abstract

At the beginning of 2022 the word "endemic" became a buzzword, especially in the United Kingdom and the United States, and a kernel for the formation of novel social representations of the COVID-19 pandemic. The word normally refers to a disease which is continuously present, whose incidence is relatively stable and is maintained at a baseline level in any given locality. Over time "endemic" migrated from scientific discourse into political discourse, where it was mainly used to argue that the pandemic was over and people now had to learn to "live with" the virus. In this article, we examine the emerging meanings, images and social representations of the term "endemic" in English-language news between 1 March 2020 and 18 January 2022. We observe a change over time, from the representation of "endemic" as something dangerous and to be avoided to something desirable and to be aspired to. This shift was facilitated by anchoring COVID-19, especially its variant Omicron, to "just the flu" and by objectifying it through metaphors depicting a path or journey to normality. However, the new language of hope and aspiration did not go entirely unchallenged. Our analysis suggests that two competing polemic social representations emerged: one of endemicity as hope and aspiration and the other focusing on misguided optimism. We discuss these findings in the context of emerging polarisations in beliefs about the pandemic, politics and disease management.

Introduction

By January 2022, the world had been living through the COVID-19 pandemic for two years. During that time, citizens had to adapt their behaviour to a new way of living and had to learn many new words and concepts to navigate a new world (Zinn 2021). For instance, at the beginning of the pandemic, citizens had to learn about social distancing amid its evolving meanings and representations (Nerlich and Jaspal 2021). Later, after vaccines had been developed, they had to learn about boosters and variants. By the beginning of 2022, people were told to learn to live with the virus. In this context a new word rose to prominence: "endemic". In scientific discourse, "endemic" refers to a disease which is continuously present, whose incidence is relatively stable and is maintained at a baseline level in any given locality (Kalra *et al*, 2015). However, during the pandemic, the meaning of "endemic" escaped its scientific boundaries and the word became a buzzword (see Gallagher, 2022; Zimmer, 2022) as well as a focal point of debates about how the pandemic and associated restrictions might end.

Buzzwords are words which attract attention and gain traction for a period of time. They help claim authority, facilitate action, and displace responsibility for difficult decisions. As linguistic units with poorly defined or fuzzy meanings, buzzwords operate as slogans and perform a mobilising function. They highlight matters of concern, build consensus around these matters, and bring people together by outlining inspiring goals and agendas (see Bensaude-Vincent 2014). It is important to scrutinise such buzzwords, as they impact on policies and behaviour and thus on the course of a pandemic. As the linguist Ben Zimmer pointed out (in relation to the United States): 'From coast to coast, state officials have begun rolling out new policies for confronting Covid-19, and those policies hinge on a crucial word: "endemic"' (Zimmer 2022). Buzzwords can be regarded as kernels or at least indicators of emerging social representations, that is, systems of values and ideas, beliefs and practices, metaphors

and 'commonplaces' (Black, 1962) -- all of which began to shift and strain during the pandemic.

In recent public discourse the term "endemic" has been used with different meanings and has become highly contested, with some scientists, such as Aris Katzourakis (2022), observing that the term "endemic" has become the 'most misused of the pandemic', while others, such as Ellie Murray, stress that 'the word is so "muddy and misused" that it's "really hard to pin down why someone is using it wrong"' (quoted in Stern and Wu 2022). As a historian of medicine has pointed out, 'the evolutionary trajectory of COVID-19 does not at this time suggest a clear path towards endemicity, and epidemiologists and evolutionary biologists warn against impulsively applying this notion to the disease' (Steere-Williams 2022). This demonstrates that, as a relatively new term, "endemic" has quickly become imbued with polemic social representations. There is no real consensus about its meaning.

This article focuses on the emergence, use and elaboration of social representations of the term "endemic" in the mainstream print media during the early phase of the pandemic in the spring of 2021 and in the later phase of the pandemic in the winter of 2021/2022. It provides an overview of the scientific, political and social representations of endemicity and, through the lens of social representations theory an analysis of changes in the language of endemic disease in reporting on COVID-19 in two major UK newspaper outlets, *MailOnline* and *The Guardian.* The article contributes to a growing body of work scrutinising the politics of language and representation of COVID-19 (see, for one of many examples, Döring and Nerlich, eds. 2022). Words matter and need to be scrutinised in times of crisis.

The meaning of "endemic": From the lexical to the political
The *Oxford English Dictionary* defines the adjective "endemic" as something that is '[c]onstantly or regularly found among a (specified) people, or in a (specified) country' and, in the context of disease, '[h]abitually prevalent in a certain country, and due to permanent local causes'.

The term "endemic" has to be considered in relation to two other words, namely: pandemic and epidemic, which have been more widely used and understood in discussions about COVID-19. While an epidemic refers to an outbreak of disease that spreads through one or more populations and a pandemic is a disease that has spread worldwide, an endemic disease is one that is constantly present in a group or geographic area. More specifically, '[w]hen a disease achieves "endemicity," like the common cold or influenza, it becomes a constant presence in a population, with fewer disruptions to everyday life, and follows a more seasonal pattern' (Zimmer 2022). Chickenpox, for example, is endemic in the UK, while malaria is endemic in Africa. Thus, as these examples indicate, an endemic disease can be relatively harmless, like the common cold, or deadly, like malaria (see Katzourakis 2022a).

Endemic also has to be considered in the context of disease management. Ellie Murray, one of many epidemic science communicators, has summarised briefly where endemic disease stands within various options of managing disease. It is possible to opt for local elimination of a disease, global eradication of a disease, complete extinction of a pathogen, or managing a continually occurring disease that has small to large surges, that is, an endemic disease (see Murray 2021). Elimination has become increasingly unviable, which makes pandemic management difficult in a situation when a disease has not yet become entirely endemic.

During the current pandemic, disease management options have been influenced by science, but also by politics, which is of course not new. In his historical

overview of the term, Steere-Williams (2022) notes that the framing of a disease as either endemic or epidemic has often been underpinned by a particular political and cultural agenda. As we shall see in our analysis, the term "endemic" has, throughout the pandemic so far, wavered between a scientific and a political meaning, with the political meaning becoming stronger in recent times, so much so that Murray noted: 'the idea of endemicity being tossed around is not based on a scientific construct but a political one' (Mateus 2022).

The rise and politicisation of "endemic" during the current pandemic
A Google Trends[1] analysis (Figure 1) conducted on 18 March 2022 demonstrates the significant public interest in the term "endemic". Globally, the term was most searched for at the beginning of the pandemic when there was much scientific uncertainty about the status of COVID-19, i.e., as a pandemic, epidemic or endemic disease. However, in the UK, user searches increased significantly in January 2022, when politicians began to talk about the UK leading the way in "living with the virus", a phrase that became inextricably entwined with the more scientific term "endemic".

Insert Figure 1 here

On 19 January 2022, the British Prime Minister Boris Johnson made a speech in the House of Commons announcing a 'long-term strategy for living with Covid-19' and said: 'As Covid becomes endemic we will need to replace legal requirements with advice and guidance urging people with the virus to be careful and considerate of others' (Johnson 2022), thus giving the word "endemic" political significance. All major restrictions (or protections) were subsequently lifted, including the wearing of facemasks, at least in England. This occurred in a context in which case numbers (between 90,000 and 100,000) and deaths (between 250 and 300) were still high.

Our examination of expert reactions to the "living with covid"/"covid becoming endemic" speech collated by the *Science Media Centre* (Science Media Centre, 2022) showed a mixed response. Sociologists, such as Simon Williams and Robert Dingwall, were the most optimistic, while most of the natural scientists and medical experts urged continued caution. Dingwall stated that '[t]his is a major step forward in assimilating Covid-19 to the set of ordinary respiratory infections that have co-evolved with humanity since before history began to be documented,' noting that '[t]hese announcements are not the end of the pandemic agenda but they do signal the end of the state of exception and elite panic.' Dingwall's view was echoed by a virologist, Julian Tang, who explained that '[e]arly on in the COVID-19 pandemic in 2020, many virologists already thought that SARS-COV-2 would eventually become endemic and seasonal – like the other seasonal respiratory coronaviruses. […] Whatever the decision on which restrictions to lift or retain, this is again just part of living with the virus as it becomes more endemic and seasonal.'

Conversely, a member of *Independent Sage*, and independent scientific advisory group for emergencies, Stephen Griffin, cautioned against over-optimism and provided his perspective on the term "endemic":

> There is a mistaken notion that the virus is somehow evolving to become less virulent, more transmissible, and this is being inaccurately lauded as endemicity by various parties. Endemic, sadly, does not mean benign, as sufferers of Malaria, TB, HIV, and Lassa fever might tell you. Variola (smallpox) and polio were endemic prior to eradication efforts. […] Endemicity happens once our immunity

as a population balances out the inherent ability of the virus to transmit, so prevalence remains at predictable levels…I challenge anyone to find an example of this in recent times.

All this demonstrates how endemic became politicised especially after its inclusion in the Prime Minister's speech on 19 January 2022, which in turn generated greater public interest in the meanings of the term. It is also clear that, as endemicity began to be debated, multiple and often competing social representations of the concept began to emerge. Public exposure to the multiple meanings and uses of "endemic" would plausibly undermine public understanding of the term itself, its relationship with COVID-19, and the broader implications for individual self-protective and preventive behaviour. More generally, this could weaken public trust in science which has been shown to be a pivotal antecedent of COVID-19 prevention and management, including vaccination uptake (Breakwell, Fino and Jaspal 2021; Chaudhuri 2022).

Social representations of "endemic"
Like so many other words, the word "endemic" was not in widespread use until the outbreak of COVID-19 in 2020. It crept into people's vocabulary gradually around February–March 2020, but became more widely used towards the end of 2021, especially in ministerial pronouncements, but also in response to these pronouncements, mainly disputing their validity – a contentious discourse that we shall study in the following.

We focus on the word "endemic" as a "buzzword" as defined by the historian of science Bernadette Bensaude-Vincent (2014), that is, as a slogan performing a mobilising function. We postulate that, in a socio-cultural sense, buzzwords are key components of changing social representations, especially important at the science-society interface. We draw upon social representations theory to study the emergence, use and elaboration of the term "endemic" in the media (Moscovici 1961).

The media constitute an important source of societal information concerning science, medicine and health (Briggs and Hallin 2016; Jaspal and Nerlich 2020a; Jaspal *et al.*, 2014). The media (such as newspapers, social media and television news) help transform scientific knowledge into "common sense" knowledge and enable people to think, talk and behave in relation to it. This is what Moscovici (1988) has referred to as social representations.

- First, science communicators use familiar and culturally accessible phenomena in order to communicate about COVID-19. This is referred to as *anchoring*. For instance, COVID-19 has been anchored to seasonal flu, which may create the erroneous impression that the two viruses, and ways of curbing them, are the same.
- Second, science communicators attempt to construct "tangible" images of the novel and abstract. This is referred to as *objectification.* The use of metaphors is one of the main ways of achieving objectification as they make something intangible tangible. People make sense of the new or unfamiliar, in our case the novel coronavirus, by seeing it through the lens of the old or familiar. This also shapes the ways we act on the world, including through government policies (Vallis and Inayatullah 2016). Metaphors have been employed abundantly throughout the pandemic (Nerlich 2022), from the conventional ones used to deal with disease, such as war and battle, but also through journey and landscape metaphors. In our case metaphors were used to shape the meaning of "endemic".

Once formed, social representations gain different levels of traction due to a number of factors, such as the social and political context in which they are being disseminated, who is disseminating them, how they are being disseminated and which other social representations already exist/ subsequently emerge and how they relate to them. Moscovici (1988) distinguished between hegemonic and polemic social representations. Hegemonic social representations are "uniform and coercive" and "prevail implicitly in all symbolic or affective practices", while polemic representations are those "generated in the course of social conflict, social controversy, and society as a whole does not share them" (p. 221). In the face of a novel term to categorise a novel coronavirus in the context of much social controversy, it is likely that those representations that emerge will be polemic. They are examined in this study.

We draw upon social representations theory because the theory enables us to understand how anchoring and objectification operate collectively to produce social representations. It integrates our focus on themes and metaphors in newspaper coverage. Furthermore, the theory's acknowledgement of the distinct levels of traction each social representation has is useful for exploring the potential impact for public understanding, attitudes and behaviour. After all, the nature and content of media reporting affect not only public understanding of COVID-19 but also people's responses to it. This is especially important at a time when governmental guidance is being withdrawn and people are enjoined to use their common sense and personal responsibility.

In this article, we explore the word "endemic" as a buzzword through the lens of social representations theory, focusing in particular on anchoring and objectification.

Method

The corpus

We undertook an analysis of mainstream media coverage in one tabloid and one broadsheet, the *MailOnline* and *The Guardian*. We selected these newspaper outlets because they were the two outlets to include most reference to endemicity, which was clear from the results of our search of All English Language News using the search terms "covid" AND "endemic" on the news database Nexis on a high similarity setting. Furthermore, we wished to include both a tabloid and broadsheet newspaper, preferably with distinct political orientations. Indeed, *The Guardian* is generally considered to be politically left-of-centre while *MailOnline* is regarded as right-of-centre. The search was carried out on 18 January 2022. We found that there were 17,329 news items on "covid" AND "endemic", with the *MailOnline* being the UK newspaper with the most coverage (articles *N*=467) on this topic and *The Guardian* coming second (*N*=396).

Our data generation strategy was predicated upon the peaks of public interest in the term "endemic". Therefore, based on the data we found on Google trends (see Figure 1), we selected two time periods for in-depth analysis: 1 March 2020 to 14 March 2020 and 18 December 2021 to 18 January 2022. This resulted in a final corpus of *N*=11 articles for the *MailOnline* for March 2020 and *N*=83 for December 2021/January 2022 and *N*=9 articles for *The Guardian* for March 2020 and *N*=43 for December 2021/January 2022.

A day after we conducted this search, British Prime Minister Boris Johnson used the word "endemic" in the House of Commons, which generated further discussion in the media. We therefore conducted an additional search focusing on the *MailOnline* and *The Guardian* for the period between 19 January and 25 January 2022, which resulted in an additional corpus of *N*=24 articles for the *MailOnline* and *N*=12 for *The Guardian*. These were added to the corpus as a third wave of articles.

We generated three corpora for a UK tabloid and a broadsheet for the beginning and the purported "end" of the pandemic and a larger corpus for the period during which there was heightened discussion of endemicity in the UK. (Both newspapers also reported on news about debates concerning "endemic" from Australia and the United States).

Analytic procedure
We analysed the corpora using a social constructionist variant of qualitative thematic analysis, which has been described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke 2006, 78). This approach enables the analyst to focus on what is "being done" with language, rather than the exclusive content of media reporting. This is consistent with Willig's (2008, 112) observation that the discursive themes that arise from the analysis "facilitate and limit, enable and constrain what can be said, by whom, where and when."

Both the headline and the main body of each article was subjected to thematic analysis. We read and re-read the articles to familiarise ourselves with the corpus. First, initial observations were made by each author which captured the essential qualities of each article, the units of meaning and dominant rhetorical techniques. Second, we discussed our respective initial codes, which included *inter alia* general tone, particular forms of language, comparisons, categorisations and emerging patterns in the data. During this stage, there was particular focus on the discursive processes of anchoring and objectification so that we could identify the construction and dissemination of particular social representations of "endemic". Third, the initial codes were collated into preliminary themes and subsequently arranged into a coherent structure that reflected the overall thematic analysis.

In addition to describing dominant themes in the corpus, we identified linguistic elements, especially metaphors, which performed the functions of anchoring and objectification. In the analysis below, we provide extracts from the articles that exemplify the superordinate themes. These extracts are representative of the broader themes described.

Analysis and findings
This analysis has three parts, first examining some very early uses of "endemic" in *MailOnline* and in *The Guardian*, then some of the latest ones, in two parts, before and after the 19th of January, the day that Boris Johnson used the term prominently in the House of Commons.

March 2020 – "endemic" emerges as an ambiguous concept
In the early days of the pandemic, concepts such as "epidemic", "pandemic" and "endemic" were still relatively flexible and the term "endemic" was largely unknown. In the context of the negatively connotated terms "pandemic" and "epidemic", "endemic" too was initially negatively connotated.

Endemic means "worst-case scenario"
MailOnline reported on 1 March: 'Emergency powers designed to restrict Covid-19 if it becomes endemic, due to be revealed this week, would only be "temporary", said Mr Hancock [then Health Secretary]. He added the NHS was ready to deal with further cases of coronavirus, with more than 5,000 emergency critical care beds available.' Here the pandemic 'spread' of the virus is equated with Covid becoming 'endemic', something that becomes even more clear when *The Guardian*, on 1 March, reported

Hancock as saying that the disease is: 'endemic around the world', conflating the concept with that of 'pandemic'. Here we see the anchoring of endemic to pandemic, thereby generalising the negative features of pandemic to this term. The worst-case scenario that was foreseen was for the disease to become globally endemic, an assessment that would be reversed at the beginning of 2022. At the beginning of 2020 this negative connotation prevailed, as Steven Poole, *The Guardian*'s observer of words, noted:

> Britain's health secretary, Matt Hancock, inspired his usual level of public confidence by saying that the virus would definitely become "endemic" in the UK: a gloomy prognosis, since an "endemic" disease ("within the people") is one that has taken up permanent residence in a population, such as chickenpox. Or perhaps he was confusing his words, since he also said Covid-19 was already "endemic" in other countries: it's certainly epidemic in China, but no one knows yet whether Covid-19 will become endemic, having been discovered only last December. One hopes this degree of pessimism is not endemic to the government.

This extract shows that the term "endemic" in its figurative meaning was also used, as an epithet, to criticise the government, which became more frequent at the beginning of the year 2022 when many discussions in newspapers focused on parties becoming 'endemic' at No. 10 Downing Street. Furthermore, both the quote from Hancock and from Poole show that scientific definitions of endemic were not unknown at the time and they did not inspire hope in the future. Like a pandemic, endemic meant something dangerous to be avoided.

Overall, early uses of the word "endemic" were negative and, thus, new negative social representation of epidemic was beginning to emerge at this stage. However, in later reporting, anchoring COVID-19 to the flu began to change the tone of the emerging social representation – from negative to positive. This laid the foundations for the emergence of competing polemic social representations.

Endemic means "like flu"
One of the earliest examples of anchoring COVID-19 to the flu can be found in the same article in *MailOnline* from 2 March, where Hancock speaks of inevitability. In a subsequent quote from Professor Jonathan Ball, a disease expert from the University of Nottingham, anchored COVID-19 to the flu quite early on:

> Professor Jonathan Ball of the University of Nottingham […] added: "This is a virus that frequently causes symptoms very similar to mild flu or a common cold, and it's easily transmitted from person to person." [...] "It has a high likelihood of becoming one of the many respiratory viruses that circulate around the globe, peaking in winter months infecting those who are susceptible."

The seasonal nature of COVID-19 continues to be debated by scientists today (e.g., Choi et al., 2021). This was a recurrent theme of anchoring in early reporting on the virus. The notion that COVID-19 is "just like the common cold" was also supported by infectious disease expert Professor John Oxford, from Queen Mary University in London, quoted on 2 March in *MailOnline*. Professor Paul Hunter of the University of East Anglia, a frequently interviewed expert, expressed a similar opinion quoted in *MailOnline* on 2 March: ''If the disease does become endemic - and I think it is quite

possible - then we would see new cases perhaps appearing each winter for the foreseeable future."'

One UK scientist, Paul Kellam, a Professor of Virus Genomics in the Department of Infectious Diseases at Imperial College London, told *The Guardian* on 13 March: "'But now it was a pandemic and likely to be an endemic infection, one that lingers in the population and could largely disappear, but will recur the following winter or year.'" Here, COVID-19 was being represented as endemic, in the sense of as disappearing but potentially re-appearing as a seasonal infection. The representations were mixed and inconsistent during this phase of reporting, evidencing a social representational field characterised by polemic representations.

However, there was also some opposition to such anchoring of COVID-19 to the (seasonal) flu, as exemplified by this quote from science writer Hannah Devlin in *The Guardian* on 3 March:

> Flu viruses are fundamentally different from coronaviruses in that they are constantly shuffling their genomes, which means they rapidly morph from one strain into another - that's why flu vaccines are needed annually. Coronaviruses tend to be genetically fairly stable and so scientists don't expect a sudden shift in the mortality rate of Covid-19. But the question of whether coronavirus will disappear, reappear in waves or simmer in the background as an endemic illness still remains to be answered.
>
> Viruses where transmission is strongly affected by temperature and humidity often come in waves and initially it was expected that Covid-19 might die down in the spring and possibly reappear next winter. But the geographic spread is already raising questions about this.

It can be seen that, in early coverage of endemicity, competing social representations of endemicity as a worst-case scenario and that of COVID-19 being as manageable as the flu had begun to emerge. There was little evidence of these representations being confined to particular newspaper outlets, which suggested that readers would be exposed to competing representations.

December - January 2021/22 – endemicity becomes an aspiration
During the year 2021 the British public was gradually introduced to the notion, indeed mantra, that citizens now had to "learn to live" with the coronavirus. On 14 June, for example, a month before so-called "freedom day" when many restrictions (protections) were lifted, Boris Johnson said in a press conference:

> And as we have always known and as the February roadmap explicitly predicted – this opening up has inevitably been accompanied by more infection and more hospitalisation. Because we must be clear that we cannot simply eliminate Covid – we must learn to live with it. And with every day that goes by we are better protected by the vaccines and we are better able to live with the disease. (Johnson 2021)

Although we are asked to "learn to live" with COVID-19, this process is anchored to the protection offered by vaccination and our ability, through experience, to live with the disease. Therefore, learning to live with COVID-19 is presented as relatively straight-forward and as something that we must and, crucially, can strive for.

At the end of June 2021 Matt Hancock was replaced by Sajid Javid as Health Secretary who, from the start, made clear that people had to learn to live with the virus. As reported widely, he said: 'No date we choose comes with zero-risk for Covid [...] We cannot eliminate it, instead we have to learn to live with it' (*Guardian*, 28 June, 2021). As we have seen in our section defining 'endemic', 'elimination' is one option when dealing with infectious disease, letting the disease become endemic is another. Both options are difficult but in different ways and have different consequences. Elimination might mean stronger (border) controls and fewer deaths; endemic might mean laxer (border) controls and more deaths.

On so-called "freedom day", 19 July, 2021 almost all COVID-19 restrictions in England were lifted (the other nations had different time-tables throughout). What one may call a second freedom day was announced on 29 January, 2022. In between these dates, people had to cope with the Delta variant, followed in November 2021 by the Omicron variant, which was highly transmissible but had apparently less severe impacts than Alpha and Delta, possibly because of high vaccination rates. In the months leading up to the second freedom day, the mantra of "living with the virus" was regularly repeated by Sajid Javid, the Health Secretary, as well as by the Education Secretary, Nadhim Zahawi. Zahawi, who repeatedly anchored the term "endemic" to the notion of "living with the virus", and is frequently quoted in the *MailOnline* and *The Guardian* as saying that the UK could be the "first major economy to demonstrate how to transition from pandemic to endemic" (*MailOnline* and *The Guardian*, 10 January, 2022).

The anchoring of relaxing restrictions to the notion of freedom served to construct this as a positive step, notwithstanding the risks which were often attenuated or dismissed. This example of anchoring contributed to the emerging social representation of endemicity as a hope, an aspiration, an ambition, an aim and an opportunity. The word "endemic" changed gradually from being negatively to being positively connotated. Being linked regularly to "living with" helped to familiarise the novel word "endemic", as "[i]diomatic phrases like 'living with something' get traction and rhetorical power because they are already a trope or a catchphrase" (Stokoe *et al*. 2022).

As we shall see below, this process of familiarisation happened in two ways: the main anchoring to (mild) flu stayed constant, while a cluster of metaphors (around paths and journeys) bolstered the supposed transition from pandemic to epidemic. Sometimes politicians and even statisticians went a step further and assumed that the endemic state had already been reached. For instance, Andrew Bridgen, Conservative MP for North West Leicestershire, said: 'Given it's now endemic, we should be stopping all restrictions, stopping all testing outside of hospitals, we don't need self-isolation any more.' (*Guardian*, 7 January, 2022) As Jenni Murray, quoted in the *MailOnline* said: 'It's time, surely, to abandon the word pandemic, accept the virus is now endemic and live with it, just as we do with flu.' (*MailOnline*, 19 January, 2022)

The main theme/anchor, namely that endemic means flu or seasonal, continues in this period and overlaps with other themes, such as that of manageability, harmlessness, the "new normal" and so on. All this crystallises the social representation of endemic as hope and aspiration.

Endemic means "manageable" like the flu

This theme of COVID-19 as an acceptable and manageable disease that one has to learn to live with has been advocated by Robert Dingwall (Dingwall 2020, 2022), a former member of NERVTAG (New and Emerging Respiratory Virus Threats Advisory

Group) from the start of the pandemic. Both he and Julian Tang, who was quoted at the beginning of this article (Science Media Centre, 2022), are mentioned in a personal story by Eve Simmons, Deputy Health Editor for *The Mail on Sunday*. She speaks of her experience of being infected with the Omicron variant, and asks:

> So what on earth was going on? With time on my hands - I wasn't ill, just a bit sniffly - I decided to ask the experts.
> And they said I am a perfect example of why, at this time when Covid is very much endemic - a common virus we have to live with [...]
> 'The Government guidance for testing is out of date,' says Dr Julian Tang, virologist at the University of Leicester. [...] 'We need to start treating Covid-19 like flu or any other respiratory virus,' says Professor Robert Dingwall, a sociologist from Nottingham Trent University and a former Government adviser." (*MailOnline*, 15 January, 2022)

If it is "just like the flu", COVID-19 is now also represented as relatively harmless. Again, this theme is explored through the lens of personal experience, this time through the eyes of Lord Frost, former Brexit negotiator, and the journalist Dan Wootton from the *Daily Mail*. The metaphor used, namely "Covid theatre", dismisses a number of public health measures adopted during the pandemic and ridicules them:

> Stop doing Covid theatre - vaccine passports, masks, stuff that doesn't work - and focus on stuff that does work. Stuff like ventilation, antivirals, proper hospital capacity - that's what we need to be focussing on.'
> He's [Lord Frost] right. And it's also time we change our language about Covid and a constant obsession with an illness that is minor for most and fast becoming endemic.
> I've had Omicron and people say things like, 'I'm so glad you got through it. 'What the hell? It was a pussycat - especially compared to the Wuhan strain which I had in March 2020 - nothing more than a common cold, irritating for a couple of days, but certainly not something for which I needed a jot of sympathy. (*MailOnline*, 14 January, 2022)

The objectification of COVID-19 restrictions as 'theatre' served to construct them as detached from reality, as ineffective, as unnecessary and even as obsessive. This in turn bolsters the social representation of endemicity as hope and aspiration, as a means of re-aligning ourselves with reality. Furthermore, personal stories of sniffles are linked to more scientific controversies about Omicron leading to less severe illness than other COVID-19 variants. One expert and government advisor, Mike Tildesley, made this point, again, linking COVID-19 to less severe illnesses such as the common cold: 'what happens is Covid becomes endemic and you have a less severe version. It's very similar to the common cold that we've lived with for many years' (*Guardian*, 8 January, 2022) A day later the *MailOnline* reports an American expert as saying: 'COVID will become 'endemic' like the flu'. Anchoring covid to the flu makes the less familiar (i.e., COVID-19) more familiar (i.e., the flu).

Endemic means "necessary" in order to get back to "normal"
Over time, 'endemic' was increasingly linked to 'flu', not, say, malaria. It came to be seen not only as relatively mild but also as inevitable, a type of discourse that some critics called "endemic fatalism" (Steere-Williams, 2022). This prepared the way for

arguing, very contentiously, that endemicity was actually necessary in order to increase population immunity:

> Queensland's chief health officer John Gerrard is up, making an interesting point about the "necessary" spread of the virus through the state. [...] Not only is the spread of this virus inevitable, it is necessary. In order for us to go from the pandemic phase to an endemic phase, the virus has to be widespread. We all have to have immunity. (*Guardian*, 23 December, 2021) (also quoted in the *MailOnline*)

This reminds us of ideas that were criticised by experts at the beginning of the pandemic, that one should let the virus spread and regard the virus as, in the sense, nature's vaccine.

Increasingly, both Omicron and endemicity are represented as ways to either return to the old normal or to emerging into a new normal. The *MailOnline* quotes a man saying on Christmas Eve: '"So here's hoping for a 2022 where COVID is endemic & we can start returning to the old normal. I for one miss seeing smiling faces."' (*MailOnline*, 24 December 2021). In the US too, there is talk about a new normal, again as reported in the *MailOnline*: 'Former Biden advisers on Thursday joined growing chorus suggesting pandemic strategy should be to learn to live with COVID virus as the "new normal"' (*MailOnline*, 6 January, 2021). A view echoed in the UK by 'Dr Clive Dix, chairman of taskforce from December 2020 until April, [who] called for return to "new normality"' (*MailOnline*, 8 January, 2021).

Some, such as a consultant respiratory physician, are even quoted as saying: '"Where we're at now in the phase of this pandemic is more it being an endemic disease ... So Covid's not going anywhere, it's part of the community."' (*Guardian*, 23 December, 2021)

Not only is the pandemic seen as bringing society back to a new normal, it is also conceptualised as being 'over', or at least on the way to getting to that stage. Being over and being normal are two sides of a coin. The theme is also directly linked to the themes of endemic meaning seasonal flu and being less severe - again, through the voice of Robert Dingwall being quoted in the *MailOnline*:

> Denmark health chief [Tyra Grove Krause] says Omicron is bringing about the END of the pandemic and 'we will have our normal lives back in two months' (*Mail Online*, 3 January, 2021)
> [...] scientists today leaped on the estimates, saying it was more proof that the worst days of the pandemic were over and that Britain needs to get back on the path to normality. Professor Robert Dingwall, a former JCVI member of and expert in sociology at Nottingham Trent University, told MailOnline it will be a few weeks until there are definitive Omicron fatality rates, but if they are consistent with the findings that it is less severe 'we should be asking whether we are justified in having any measures we would not bring for a bad flu season'. (*MailOnline*, 7 January, 2021)

Through the theme of seasonality and the metaphor "getting back on the path to normality", endemicity is also linked to the theme of 'hope':

> It is quite plausible to hope that the Omicron variant marks a decisive shift from the pandemic to the endemic stage of Covid - which is to say that it survives but

becomes part of the normal pattern of seasonal illness and mortality. (*Mail Online*, 25 December, 2021)

Thus, a combination of anchoring endemicity to the seasonal flu, to "the new normal" and personal aspirations to meet with loved ones once again (with which we could all identify) and of the objectification of endemicity as "getting back on the path" to all these positive outcomes served to consolidate the positive social representation of endemicity as hope and aspiration. Through this social representation, we arrive at a major theme that runs through the coverage of endemicity at the end of 2021 and the beginning of 2022, namely that of endemicity as a destination.

Endemic means reaching a destination at the end of a journey or path
The major theme of 'endemic' as destination, that is as best rather than worst case scenario, is conveyed through, indeed objectified by, a series of very positively connoted conceptual metaphors related to paths, journeys, and containers. Conceptual metaphors are deeply rooted ways of thinking of one thing, say relationships, in terms of another, say journeys, and guide the production of linguistic expressions, such as 'We have reached the end of the road' (see Lakoff and Johnson, 1980). In our case, the set of conceptual metaphors relating to paths, journeys and containers, found expression, for example, in the linguistic metaphor, indeed cliché, of a tunnel and finding light at the end of the tunnel, leading out of the darkness of the pandemic:

> UK's Covid cases fall 10% in a week to 142,224 while hospitalisations flatten out as businesses demand Boris releases an exit plan for living with the virus and even experts say the 'end is in sight' [...] Both the government and NHS leaders are increasingly confident that Omicron will not overwhelm services, and even experts today claimed that there was light at the end of the tunnel as ministers admitted Britain is on a path to 'living with' the virus. (*MailOnline*, 10 January)

The light metaphor also comes through in this quote from the *MailOnline* 'COVID becoming endemic as a result of Omicron has become a common theory among health experts and officials, and has served as a beacon of hope for the population suffering through the recent surge.' (*MailOnline*, 18 January 2022).

Some experts, such as Mike Tildesley, a modeller and government adviser, said: '"We're not quite there yet but possibly Omicron is the first ray of light there that suggests that may happen in the longer term. It is, of course, much more transmissible than Delta was, which is concerning, but much less severe."' Moving towards that light, we use a path and aim for destination: 'top experts today claimed that the end of the *Covid* crisis was "in sight" and ministers claimed Britain is on a path to 'living with' the virus.' (*MailOnline*, 10 January, 2022). Moving towards the light is a goal, somewhere where we 'want to be', as Tildesley says in the rest of his quote: '"Any variant that does emerge which is less severe, ultimately, in the longer term, is where we want to be."' (quoted both in *The Guardian* and the *MailOnline*) Where we want to arrive at is in a "good place", as Keith Willison, a chemical biologist at Imperial College London, expressed it: 'I think we are arriving at a good place where Covid is an endemic but controllable disease' (*MailOnline*, 21 December 2021). And, of course, we have to take that journey of transition step by step: 'Many observers see this [Omicron] as a major step towards *Covid*-19 becoming endemic rather than an epidemic.' (*Guardian*, 13 January, 2022)

But not only do we have to move forward on our journey to a better place, the pandemic has to do the same. As Tildesley said 'the data suggested the pandemic was 'turning around' following the Omicron wave, meaning ministers could start discussing what "living with" Covid would be like.' (*MailOnline*, 17 January, 2022) On our journey towards an endemic state, we walk along a path, but we also encounter and interact with objects on the way, such as houses (containers that we can enter and leave) and bridges that we can cross: 'Top doctor FINALLY admits Australians NEED to catch Covid to shut the door on the pandemic in remarkably blunt comment' (*MailOnline*, December 23, 2021). Another Australian expert points out: '"The good news is perhaps that the Omicron variant is going to provide a bridge from the pandemic to the endemic because early medical evidence is in showing that it's perhaps 75% less severe than the Delta variant."' (*Guardian*, 2 January, 2022)

At the beginning of January 2022, there is a message of caution though, exploiting the darker sides of the journey metaphor:

> But Heymann warned that we are not out of the woods. We should expect further resurgences of the virus, he said, adding that it is impossible to predict where or when new variants will emerge and how virulent and transmissible they will be. "We don't know what's in store for us," he said. "It could certainly be a bumpy road." (*Guardian*, 11 January, 2022)

Some, like the science writer Hannah Devlin, questioned the living with covid mantra and point outed that 'mapping out the path to normality does not have to equate to misguided optimism that we have already arrived at this destination', especially since 'this path would be critically dependent on factors such as the rate of waning of immunity and chosen policies on vaccination and surveillance' (*Guardian*, 9 January, 2022)

Increasingly, voices critical of framing the endemic as a good thing were being cited and heard:

> The pandemic has been awash with slogans, but in recent weeks, two have been repeated with increasing frequency: "Variants will evolve to be milder" and "Covid will become endemic". Yet experts warn that neither of these things can be taken for granted. (*Guardian*, 11 January, 2022)

Reacting against the steady stream of ministerial talk of endemicity meaning progress and pride in the UK, an article in the Guardian points out, quoting Griffin, a virologist who is part of Independent Sage, that endemic does not necessarily mean harmless, focussing on its scientific definition:

> What about the idea that Sars-CoV-2 could become endemic? Politicians tend to use this as a proxy for getting on with our lives and forgetting that Covid-19 exists. What endemic actually means is a disease that's consistently present, but where rates of infection are predictable and not spiralling out of control "Smallpox was endemic, polio is endemic, Lassa fever is endemic, and malaria is endemic," said Stephen Griffin, associate professor of virology at the University of Leeds. "Measles and mumps are endemic, but dependent on vaccination. Endemic does not mean that something loses its teeth at all." (*Guardian*, 11 January, 2022)

The objectification of endemic disease as a journey has two dimensions during this period of coverage. On the one hand, it is represented as the mechanism for accessing "the new normal", that is, as a hope and aspiration. On the other hand, it begins to be constructed as "misguided optimism, signalling possible danger. This highlights the existence of at least two polemic social representations, which competed in the final phase of coverage in our corpus.

Mid-January 2022: Endemic – a tale of two polemic social representations
As the second type of endemic discourse, in terms of endemic being an aspiration, began to spread, experts started to speak out against it. For example: Flu, indeed any virus, can be endemic, pandemic and epidemic. Therefore, claiming that COVID-19 is just like the flu does not necessarily mean that it is endemic. Experts also started to notice that the second discourse was indeed spreading and misleading people. 'Suddenly the word endemic is all over the media – perhaps it's replacing "herd immunity" and 'new normal' to put words to people's hopes that the pandemic will end soon.' (Katzourakis 2022b) Some people began to speak out against "endemic fatalism" (Steer-Williams 2022). Some even warned against a hidden discourse of "eugenics", that is a discourse that spoke out in favour of making deaths from COVID-19 acceptable in vulnerable groups (Hanley Cordozo 2022).

This shift in the landscape of discourse was also reflected to some extent in our mid-January sample, especially in *The Guardian*, after Boris Johnson announced in the House of Commons on 19 January: '"There will soon come a time when we can remove the legal requirement to self-isolate altogether - just as we don't place legal obligations on people to isolate if they have flu. [...] As Covid becomes endemic we will need to replace legal requirements with advice and guidance urging people with the virus to be careful and considerate of others."' (*MailOnline*, 19 January, 2022). This loosening of restrictions is, hence, in part, based on the assumption that endemic means flu: 'Johnson said he planned to remove the obligation to self-isolate when the regulations expire on 24 March [...]. This would mirror the approach to comparable endemic viruses such as the flu.' (*Guardian*, 19 January, 2022) The anchoring in flu was now firmly established. UK Ministers continued to talk about endemic being a way to return to normality and that means talking about endemicity.

> [Kwasi] Kwarteng [Business Secretary] said: "[...] I want to get back to a sense that, you know, that the pandemic is turning from a pandemic into an endemic. It's something we have to live with. And if we are going to live with it, I think the sooner we get back to the pre-Covid world the better in terms of workplace practices". (*Guardian*, 21 January, 2022)

Even Devi Sridhar, a Scottish virologist, well-known COVID-19 communicator and advocate of an elimination strategy, wrote a controversial article for *The Guardian* entitled "Now that science has defanged Covid, it's time to get on with our lives". However, despite this provocative headline metaphor likening covid to a tamed beast, the article is more nuanced and cautious:

> We will still need to monitor Covid-19 in public health, as we do other diseases. When people say it will be "endemic", that doesn't mean harmless. Endemic means that we accept a circulation of a disease because elimination or eradication is perceived as too difficult. Malaria, dengue and measles are endemic in certain parts of the world even though they are all serious diseases.

Malaria was endemic in the United States until the government decided to eliminate it. (*Guardian*, 19 January, 2002)

Increasingly, voices critical of a discourse framing endemicity in positive ways were being cited. Philip Ball, a science writer, goes back to the scientific definition of endemic and makes clear that this does not mean that endemicity should be seen as a goal we should be eager to reach.

There's much talk of the virus having become "endemic" – but that notion of a "persistent, low or moderate level of disease", generally in a specific geographical region, is a long way from the exponential rise, and now fall, that we have just seen nationwide. It's likely that it's where we'll end up eventually. But the eagerness to reach for the term now reflects an increasing sense that, one way or another, we will have to learn to live with the virus, as the health secretary, Sajid Javid, said last week. (*Guardian*, 24 January, 2022)

Even the *MailOnline* stressed that: 'NHS bosses said it is up to Mr Johnson when to impose and lift Covid rules but warned "Covid-19 has not magically disappeared"' (*MailOnline*, 19 January, 2022).

This period of coverage demonstrated that the social representational field of endemicity was characterised by at least two polemic social representations: one of hope and aspiration and the other focusing on misguided optimism. While the Prime Minister and government ministers sought to reiterate the polemic social representation of hope and aspiration, this was being actively challenged by the competing representation disseminated by some commentators concerning the misguidedness of viewing COVID-19 as endemic.

Discussion

At the beginning of the pandemic the word 'endemic' was still new. It was sometimes used by politicians in a vague way, almost synonymous to 'pandemic'. It had a negative connotation as it was used to signify 'a worst-case scenario', indeed a danger and a risk to avoid. Over time the meaning and the connotations of endemic shifted, as we have seen through our thematic analysis: themes changed from endemic being something to avoid to something being aspired to, indeed a desired destination, largely via its anchoring to the flu and the use of path and journey metaphors. The aspirational aspects of a new endemic discourse were conveyed through metaphors of paths and journeys. The buzzword "endemic" also became synonymous with the political slogan "living with covid" or "learning to live with the virus", a linkage that watered down any negative connotations. What was once seen as a threat (namely a disease becoming endemic), and is still seen as a threat by some, came to be represented as something relatively harmless and manageable, even necessary. The language of 'living with COVID-19' tends to normalise and familiarise the risks associated with the virus. This contrasts with earlier pandemic discourse highlighting risks and threats and challenging citizens to radically change their 'normal lives'. Yet, the social representation of endemicity as hope and aspiration cannot be said to have become entirely hegemonic since in the last phase of coverage it was being challenged by the competing social representation of endemicity as misguided optimism.

In reporting on climate change, for instance, there have been discernible differences between particular news outlets at different ends of the political continuum (e.g., see Atanasova and Koteyko 2020). However, differences between the tabloid and

the broadsheet in terms of how they framed "endemic" were not as pronounced in our corpus. Even *The Guardian*, which gave more space to voices criticising the endemic discourse touting hope, quoted an expert using the metaphor that Omicron was a "ray of light". There were, however, some slight differences in which sources they used and how they framed these sources.

On the whole, *MailOnline* and *The Guardian* quoted from similar expert sources (mainly virologists and epidemiologists). However, the *MailOnline* also used some sources that *The Guardian* did not, such as the sociologist Robert Dingwall and the controversial epidemiologist Carl Heneghan (see Yamey *et al*. 2021). *MailOnline* also framed some sources it quoted in derogatory ways. Stephen Reicher, a social psychologist and a member of *Independent Sage*, for example, was called a 'lockdown campaigner'. Norman Swan, an Australian expert countering some emerging narratives around "endemic", was called an "alarmist", a pejorative term well-known from discussions about climate change. Both newspapers reported on emerging discourses of endemicity as a return to normality and some counter-discourses, but some writers in *The Guardian* were explicitly sceptical of the latter discourse while some *MailOnline* writers were in favour of the former. In short, the political orientation of any particular outlet cannot account for the nature of social representations disseminated– readers were simultaneously exposed to distinct, often competing representations of the novel issue of endemicity.

In later reporting, we observed how the implications of endemicity were downplayed through the use of anchoring and objectification/metaphors, conceptualised as a return to normal, as inevitable, something one had to accept as a given, and even something to strive for. As an article in *The Guardian* pointed out: 'designating Covid as endemic is arguably a political question rather than a scientific one, and it speaks to how much disease and death national authorities and their citizens are willing to tolerate.' The issue, only rarely addressed in our corpus, has been well expressed in a recent article for *The Atlantic* by Jacob Stern and Katherine J. Wu: 'Endemic diseases, then, are the shades of suffering we've accepted as inevitable, no longer worth haggling down. The term is a resignation to the burden we're left with.' (Stern and Wu 2022).

Like the phrase "living with covid", "endemic" came to refer to and summarise 'increasingly polarised positions with regards to the pandemic: on the one hand, accept the virus and resist adaptations; on the other, adopt mitigations and adapt to a new normal. Since the same phrase is used by different parties with diverse stakes and interests, it is emblematic of the way pandemic discourse has dichotomized over the past two years' (Stokoe *et al*. 2022). This is also a key finding from our study. Use of the term endemic served many different purposes but had the effect of creating a complex social representational landscape in which the status of COVID-19 (as pandemic, epidemic or indeed endemic) was confused. With both scientists and politicians being quoted as using the term differently, with distinct metaphors and with sometimes competing conclusions, this laid the foundations for increased uncertainty and mistrust in those stakeholders who are leading the debate on COVID-19 and its future management.

Limitations and future directions

This study has several limitations which should be addressed in future research. First, our corpora, though examining a fairly wide timeframe, consisted of relatively small numbers of articles from only two newspaper outlets which were subjected to a social constructionist variant of qualitative thematic analysis. Other approaches would be

useful. For instance, quantitative corpus linguistics approaches that can analyse larger corpora from a broader range of outlets would be a beneficial next step to validate our findings. Second, this study focused exclusively on changes in the language of endemic disease. Future research into the language of other terms used in this debate, such as 'expert' focusing on who achieves this designation, how and with which effects for public understanding, would further enhance our understanding of changes in the language of COVID-19 including that of endemicity. Third, the actual impact of media representations for public understanding, attitudes and behaviour in relation to COVID-19 cannot be ascertained. It would be useful to examine correlations of these outcomes with, or perhaps the causal impact of, media representations in subsequent research.

Conclusions

It is important to note that the term "endemic" made its transition into social and political discourse for the first time in 2020 when the future of COVID-19 (that is, its potential aftermath) began to be considered and discussed. As a relatively novel term in society, but of course not in science, this constituted a "blank slate" awaiting images to populate it and transform it into a tangible reality that could be thought and talked about by people.

Overall, media reporting concerning endemicity was characterised by competing polemic social representations, with no single representation acquiring hegemonic status. In the early phase of media reporting, there were largely negative social representations of endemicity and term was used metaphorically to refer to the poor handling of the pandemic. These were subsequently replaced by more positive representations, highlighting the role of endemicity in gradually facilitating a "return to normal". This was achieved largely through the anchoring of endemic to the flu and by constructing COVID-19 (in the shape of the Omicron variant) as manageable and less severe than previous incarnations (for an assessment of this issue, see Nealon and Cowling 2022). In the final phase of reporting, the social representational landscape was characterised by competing polemic representations.

Yet, each of these representations possessed an action orientation – with that of hope and aspiration essentially instructing people to adapt to COVID-19 and simply to 'live with it' as they do with other manageable infectious diseases. This representation promoted aspiration, that is, something to achieve, accept and adopt. This was accomplished mainly through the use of journey metaphors as a form of objectification, a metaphorical journey where endemicity was no longer seen as a danger to be avoided but as a destination to be reached. Yet, in the later phase of reporting, these distinct social representations (positive vs. negative) began to compete in media outlets, potentially leading to confusion, uncertainty and mistrust about the term endemic and about pandemic policy.

Our study shows the key role that metaphors have played in constructing these competing representations and the potential ramifications for both political trust and trust in science and scientists which are known to be key determinants of positive and proactive engagement with disease management in the general population.

Patient and Public Involvement Statement

It was not appropriate or possible to involve patients or the public in the design, or conduct, or reporting, or dissemination plans of our research.
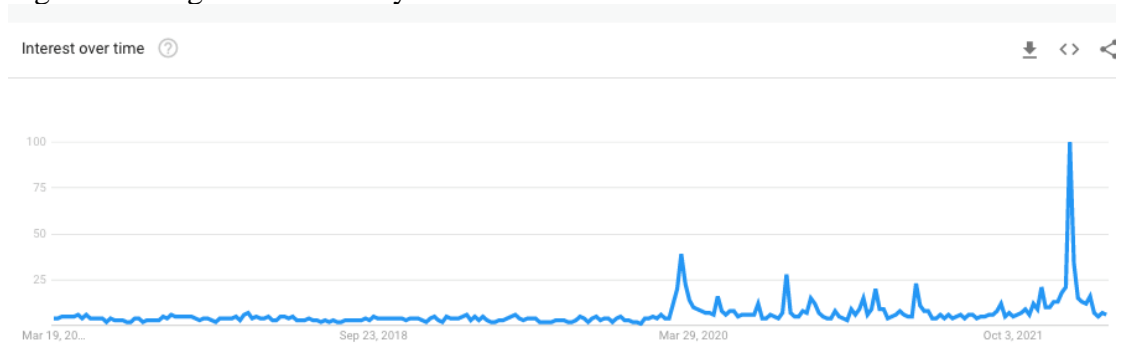
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Figure 1: Google Trends analysis conducted on 18 March 2022

Interest over time ⑦

100
75
50
25
Mar 19, 20...   Sep 23, 2018   Mar 29, 2020   Oct 3, 2021

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[1] Google Trends (https://trends.google.com/trends) is a website by Google that analyses the popularity of search queries on Google search engines across different regions and using different languages. Graphs are generated by the website to provide comparisons of the search volume of these terms over a specified time period.