

Verbal and visual metaphors of an unfolding crisis: Emerging styles of representation in British and Italian front page news at the onset of the Covid-19 pandemic

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Abstract This study examines verbal and visual metaphors representing coronavirus-related issues in news discourse at the onset of the Covid-19 pandemic. Although Covid-19 metaphors have been widely investigated both during and after the health crisis, few studies have focused on the early stages of the pandemic and on non-verbal modes of communication. To address this gap, we analyse a set of front pages from British and Italian broadsheet newspapers published between February 24 and March 1, 2020, drawing on Conceptual Metaphor Theory and multimodal metaphor studies. We first outline the annotation scheme and procedure used for this study. Through qualitative analysis, we then identify a set of visual and verbal metaphors that conceptualise the coronavirus and related issues as target concepts, classifying them by source concept and examining the interaction between verbal and visual elements. This leads us to identify some emerging styles of representation, which, we argue, would also impact public discourse in the following stages of the pandemic.

Keywords Coronavirus; Covid-19; multimodal discourse studies; metaphor; news discourse.

1. Introduction and background

In a world that is facing crisis upon crisis, the discursive representation of societal challenges has become a key area of enquiry for scholars engaged with Critical Discourse Analysis (henceforth CDA; see van Dijk 1997) – an approach to language-in-use analysis that seeks to unveil how power relations, identity issues and ideologies are conveyed through language. CDA was originally developed as a framework for the study of text per se and, to date, language continues to be the focus in most CDA-informed contributions. However, after the publication of Kress and Van Leeuwen's groundbreaking works on multimodality (Kress & van Leeuwen 1996; 2001), scholars have attempted to integrate other semiotic resources, or modes – particularly images – into the

framework, leading to the emergence of Multimodal (Critical) Discourse Analysis (MDA; see O'Halloran 2011). This new paradigm acknowledges that meaning-making often takes place through multiple semiotic resources working in a synergistic fashion, as the rise of new media in contemporary society has clearly shown.

One area of investigation where CDA and MDA intersect and express their full potential is metaphor. Metaphor studies also witnessed a paradigm shift - less recent but equally crucial - with the publication of Lakoff and Johnson's (1980) seminal work *Metaphors We Live By*, which challenged the traditional view of metaphor as a figure of speech with purely aesthetic functions. Within the newly emerging approach known as Conceptual Metaphor Theory (CMT), metaphors were redefined as figures of thought – i.e. the metaphors we use in language follow on from metaphorical connections in our conceptual system. Typically, metaphors draw elements from more concrete source domains (e.g. food, war, building) and project them onto more abstract and fuzzier target domains (e.g. idea, argument, theory), leading to linguistic realisations such as "half-baked ideas", "attack every weak point in one's argument" and "construct a theory" (see Lakoff & Johnson 1980: 46-47; 52-55). At the same time, text- and corpus-based studies began to unveil the pervasive presence of both linguistic and underlying conceptual metaphors across different text-types and language varieties. Along with the recognition of the cognitive dimension of metaphor and the way it works – setting up multiple connections between otherwise separate domains - came the awareness that different metaphors, or different linguistic realisations of the same metaphor, can be used to frame (Entman 1993) events in various ways. For instance, in the context of the Covid-19 pandemic, metaphor scholars discussed the societal consequences of public discourse metaphors that framed human action as a war against the virus, also comparing them with possible alternative mappings (Olza et al. 2021; Semino 2021; Musolff 2022). Metaphor thus becomes a strategic tool for event construal and argumentation, naturally drawing the interest of critical discourse analysts. In metaphor studies, an MDA perspective implies taking stock of visual metaphors and multimodal metaphors – those that emerge from the interaction of different co-occurring modes, typically visual and verbal (see Forceville 2009; Forceville & Urios-Aparisi (eds.) 2009). Visual metaphors have gained increasing attention since the 1990s (Hartel & Savolainen 2016), while multimodal metaphors – especially, but not exclusively, in newspapers and advertising – have been the focus of several programmatic studies over the past two decades (see, inter alia, El Refaie 2017; Hart 2017). However, the vast

majority of discourse- and corpus-based metaphor research currently remains centred on verbal metaphors alone.

Regarding Covid-19 metaphors specifically, these have been extensively investigated both during and after the health crisis, across various languages and cultural contexts – but, again, with a primary textual focus. Most authors employ corpus methodologies, working on collections of texts from different areas of public and institutional discourse (social media, news, press releases, official speeches) and discussing the linguistic and conceptual metaphors found therein (e.g. Abdo et al. 2021; Wicke & Bolognesi 2020; 2021 on social media discourse; Bagli 2021; Charteris-Black 2021; Garzone 2021; Luporini 2021; Komatsubara 2024 on news discourse; Castro Seixas 2020; Combei et al. 2022; Efeoğlu Özcan 2022 on political discourse). In contrast, a minority of studies focuses on visual and multimodal metaphors in the context of the Covid-19 pandemic; among them, Feng & Wu (2022) on Chinese public service advertisements; Younes & Altakhaineh (2022) on Covid-19 related memes; Abdel-Raheem (2021) and Zibin (2022) on cartoons; Feifei (2024) on news pictures. Additionally, studies concentrating on the first days of the pandemic in Europe and taking a comparative cross-linguistic and cross-cultural perspective are relatively few (see, e.g., Luporini 2021; Giorgis et al. 2023).

Against this background, in this contribution we aim to address some relevant, underexplored research areas. We do so by analysing two sets of front pages from British and Italian broadsheet newspapers published at the onset of the pandemic in Europe, through a three-layered approach that takes into account verbal, visual and multimodal metaphors. For our purposes, multimodal metaphors are those where the visual component (i.e. the image accompanying an article) interacts with the textual component (title, subtitle, image caption) in such a way that, together, they trigger one single unit of metaphorical meaning.

The research questions we address are as follows:

RQ1. What conceptual domains, and related sentiments/emotions, emerge as predominant in the metaphorical representation of the coronavirus disease, within the Italian and the British cultural contexts, during the early days of the pandemic?

RQ2. Is there evidence in our data of a set of clearly identifiable metaphorical themes, realised through different modes, that would later be reproposed, or that can be said to have had an impact throughout the health crisis?

We begin by outlining the annotation scheme and procedure used to identify metaphors in our dataset. We then present and discuss our main findings, also in a comparative perspective. Finally, in the concluding section, we summarise the contribution of this research in understanding the relevance of multimodal metaphors in the context of the Covid-19 pandemic.

2. Methodology

2.1 Data

Our data come from a larger corpus of front pages from the print editions of various Italian, British and American national and local newspapers published between February 24 and March 13, 2020. This timeframe encompasses the weeks following the first confirmed case of Covid-19 in Italy (February 21). Since Italy was the first European country to report a case of the new disease, that was also the moment "coronavirus entered Europe", as some global media outlets titled their articles. Consequently, concerns began to spread to other European countries and lockdown measures were soon implemented, with the WHO officially declaring Covid-19 a global pandemic shortly thereafter (March 11).

For this study, we analysed a sample of 68 front pages from 10 newspapers – 5 British and 5 Italian – and also focused on a narrower timeframe, February 24 to March 1, 2020, i.e. the week immediately following the first detected Italian case (Table 1).

British newspapers	Italian newspapers
The Daily Telegraph	Il Corriere della Sera
The Financial Times	Il Giornale
The Guardian	Il Sole 24 Ore
The Independent	La Repubblica
The Times	La Stampa
Tot. 33 front pages	Tot. 35 front pages

Table 1: Data sampled for the study

We argue that these newspapers are representative of the hard news genre in the UK and Italy, being among the most influential 'broadsheet' newspapers in their respective countries. Broadsheet newspapers provide more factual and indepth news coverage than magazines or 'tabloids', where news stories tend to be more sensationalised. The selected newspapers are also connected with a range of political orientations and, consequently, diverse readerships, ensuring a broad spectrum of perspectives on the pandemic and the measures initially implemented to contain it.

2.2 Annotation

The first stage in analysing the sample of newspapers was to annotate the front pages according to several criteria, including the presence of metaphors, both verbal and visual. With reference to verbal metaphors, the analysis was intentionally limited to headlines, subheadings and captions accompanying images. These textual segments were chosen due to their prominence on the front page and their capacity to engage a broader audience, including casual readers who may not delve into full articles.

For verbal metaphors specifically, the Metaphor Identification Procedure (MIP) developed by the Pragglejaz Group (2007) and the subsequent reelaboration proposed at Vrije Universiteit Amsterdam (MIPVU: Steen et al. 2010) were adopted as primary reference points. For metaphors and multimodality, our annotation scheme was informed by existing literature on the subject, particularly the work of Pérez Sobrino & Ford (2023), which provided hints into mitigating analyst bias in identifying and interpreting figurative language. Additionally, we drew on Zhang et al. (2021) and their MultiMET framework, which guided our approach to annotating metaphor across text and image. As a result, our scheme comprised 25 annotation variables organised into four sections, described below. For reasons of space, in Sections 3 and 4, we take into account and discuss a subset of the annotated elements – those that we deem especially relevant in order to answer the research questions presented in Section 1.

The annotation process was conducted collaboratively online using Labelbox (https://labelbox.com/). While numerous annotation tools that can easily handle text are currently available, Labelbox was chosen as a particularly robust and user-friendly tool for image annotation. Additionally, it offered several features that were deemed advantageous for the project's potential

future developments, such as managing sub-projects assigned to different annotators and computing both annotation time and inter-rater consensus.

The first step in the analysis involved defining an *area of interest* (AOI) – i.e. a polygonal area including coronavirus-related content, visual and/or verbal – within each front page.

- 1) For the AOI, two general features were annotated:
 - a) article type (main article or other);
 - b) dominant mode (text-dominant, image-dominant, balanced).
- 2) Headings, subheadings and image captions were then identified by bounding boxes as *textual areas*. For these, the dataset included information about:
 - a) text type (headline, subheading, caption);
 - b) presence of metaphor:
 - i) source and target domains;
 - ii) sentiment (positive, negative, neutral);
 - iii) emotion, based on Plutchik's (1991) classification (fear, anger, trust, sadness, disgust, surprise, anticipation, joy).
- 3) Relevant images were also defined through bounding boxes, where the following image-related aspects were annotated:
 - a) closeness (focus or landscape perspective);
 - b) angle (bottom-up, top-down, eye-level point of view);
 - c) cultural context (presence or absence of clearly identifiable socio-cultural traits);
 - d) presence of metaphor:
 - i) source and target domains;
 - ii) sentiment (positive, negative, neutral);
 - iii) emotion (fear, anger, trust, sadness, disgust, surprise, anticipation, joy).
- 4) Finally, within each image, the main participant was identified through a polygonal area and tagged according to the following categories:
 - a) type (e.g. unspecified individual, police officer, animal, object etc.);
 - b) direction of gaze;
 - c) gesture;
 - d) posture;
 - e) role in the event portrayed in the image (active or passive);

f) process, based on Halliday & Matthiessen's (2004) classification (material, mental, relational, verbal, behavioural).¹

Regarding metaphor identification, considering the diverse academic backgrounds of the annotators (more on which below), several preparatory discussion meetings were held before the annotation process began. The analysis was carried out in multiple rounds. In the first round, Annotator 1 (Pannitto) analysed the entire dataset, including both British and Italian front pages. The second round served as an intermediate benchmarking step. For this purpose, a sub-project was created on Labelbox, comprising 14 front pages (7) Italian and 7 British, approximately 20% of the dataset). Annotators 2 and 3 (Luporini and Combei) were responsible for this round, working on the British and the Italian data, respectively. At the end of the second round, discrepancies emerged: Annotators 2 and 3, who have more specific expertise in cognitive metaphor studies, identified more metaphors than Annotator 1, whose stronger background is in NLP and construction grammar. This prompted a follow-up meeting, during which problematic cases were discussed. Finally, the third round of annotation involved again Annotators 2 and 3, who, this time, worked on the full versions of their respective datasets (33 British front pages and 35 Italian front pages), applying the clarified criteria resulting from discussion with Annotator 1. The final results of this process are discussed in the following sections. Figure 1 below provides an example of an annotated front page, from the first round of annotation (the presence of metaphor in the visual mode was re-considered in the third round). One AOI is identified, containing Covidrelated content (article and image). The title is annotated as metaphorical and, within the image, two participants are analysed.

¹ Details on our annotation scheme are available at: https://anonymous.4open.science/r/verbal-visual-metaphors-0F35 [last access on 11/12/2024]. The research data are available here: Luporini, Antonella, Claudia Roberta Combei, & Ludovica Pannitto (2024). *Verbal and visual metaphors of an unfolding crisis – Dataset*. Open Science Framework. https://doi.org/10.17605/OSF.IO/CYQVS [last access on 11/12/2024].



Figure 1: Example of a front page (*Financial Times*, 20-02-2020) annotated with the introduced protocol, from the first annotation round

A thorough discussion of inter-rater issues emerging from our analysis falls beyond the scope of this paper. However, some relevant aspects are worth mentioning in concluding this section. Firstly, our analysis confirms the challenges inherent in identifying visual metaphors: 'reading images' often involves a degree of subjectivity that goes beyond that of textual analysis. At the same time, agreeing on what constitutes a verbal metaphor proved equally challenging, despite the availability of standardised procedures and guidelines. One key area of inter-annotator divergence concerned the notion of a lexical unit's basic meaning. According to both MIP and MIPVU – albeit with partially differing sub-criteria – a word or expression is marked as metaphorical if it has a more basic meaning (more concrete, precise, or 'embodied') in other contexts than in the one under analysis. Significant discussion within our team was needed for conventional expressions such as English "contain the virus", or Italian "scuotere i mercati" ("shaking the markets"), said of the virus. Some annotators would consider the meaning of these and other equally conventional expressions, in the given context, as effectively basic, or would treat them as 'dead' metaphors, due to their widespread use and consequent polysemy, especially in news discourse. Furthermore, the verb "contain" could be said to

retain a concrete, physical sense when referring to the virus. After discussion, both the examples provided above were marked as metaphorical, but a sidenote was made about their controversial analysis. It is plausible that analysts who are also metaphor scholars may exhibit a heightened sensitivity to metaphors in text compared to other scholars or, crucially, to the general reader. Such a tendency would have significant consequences within a CDA perspective, which seeks to extend its impact beyond academia by enhancing public awareness of how language constructs 'reality'. This highlights the importance of interdisciplinary collaboration, involving scholars with expertise beyond metaphor studies who can provide alternative perspectives and act as a control. Additionally, engaging with non-academic informants in controlled experimental settings is crucial – a direction we intend to pursue in future research.

3. Findings and discussion

3.1 British data

Using the annotation scheme outlined in Section 2.2, the annotators applied multiple layers of analysis to the AOIs identified within each set of front pages, considering both general and metaphor-specific aspects. Table 2 presents introductory quantitative data referring to the British dataset. Within this dataset, not all front pages contain AOIs. Indeed, in the week under scrutiny, 3 front pages were entirely dedicated to Weinstein's legal proceedings, which resonated greatly within the cultural contexts of both the United States and the United Kingdom in 2020; no mention was found here of the national or international health situation. Therefore, the total number of identified AOIs in this dataset was (= 30). Furthermore, while all the identified AOIs contain coronavirus-related text in the form of a title or subtitle to an article, only a subset of AOIs (n = 18) was found to also include an image related to the virus or the spreading disease.

1. ARTICLE TYPE

Q. Does the identified AOI correspond to the main front page article?

• Yes: 25/30 (83.3%)

• No: 5/30 (16.7%)

2. TEXT-IMAGE RELATION

Q. Does the AOI include a coronavirus-related image along with coronavirus-related text?

Yes: 18/30 (60%)No: 12/30 (40%)

3. IMAGE CULTURAL CONTEXT

Q. Does the coronavirus-related image evoke a clearly identifiable cultural context?

• Yes: 15/18 (83.3%)

• No: 3/18 (16.7%)

4. METAPHOR IN TEXT

Q. Does the text in the AOI contain at least one instance of verbal metaphor?

• Yes: 24/30 (80%)

• No: 6/30 (20%)

5. METAPHOR IN IMAGE

Q. Does the image in the AOI contain at least one instance of visual metaphor?

• Yes: 7/18 (38.9%)

• No: 11/18 (61.1%)

Table 2: British dataset – overall quantitative results

A few general observations can be made based on the quantitative data from Table 2. Firstly, the prominence of coronavirus as a thematic focus already emerges from British front pages in the week under scrutiny. The data in point (1) show that coronavirus-related content, when included, predominantly features in the main article: the most eye-catching item on the front page, characterised by a prominent position in the layout structure, larger headlines, and other distinctive features that may vary between news outlets (Bateman et al. 2007). At the same time, the presence of images is not as striking as we had expected: 12 out of 30 AOIs (40%) feature coronavirus-related textual content without an accompanying image (see point 2). Even more interestingly, 11 of these 12 cases correspond to main articles, from front pages that show different patterns of prominence. Specifically, these front pages (from different news outlets) exhibit a clash between the textual focus (coronavirus) and the visual focus, as the most visually striking image is actually connected to other news stories. Notably, however, point (3) indicates that, when coronavirus-related images do appear, they mostly evoke an immediately recognisable cultural

context, essentially the Italian or the Chinese/Asian ones. This, as we shall see below, is a key point, showing a tendency towards a culturally and contextually stereotyped representation of the pandemic that would affect public perception at the onset, and would also have an impact on the subsequent stages of the crisis. Finally, regarding the presence of metaphor, the data in (3) and (4) point to the fact that metaphors emerged from analysis as largely more present in the verbal than in the visual mode. This breakdown may follow on from the fact that the textual segments selected for analysis, particularly headlines and subheadings, are traditional loci for metaphorical expression; at the same time, it may be due to the greater challenge of identifying metaphors in the visual mode, which was reported by all the annotators involved.

We now turn to findings from more in-depth qualitative analysis, illustrated in Figures 2 and 3, which visually map the source concepts underpinning the metaphorical representation of the virus, the disease, and related events, in the verbal and visual modes.

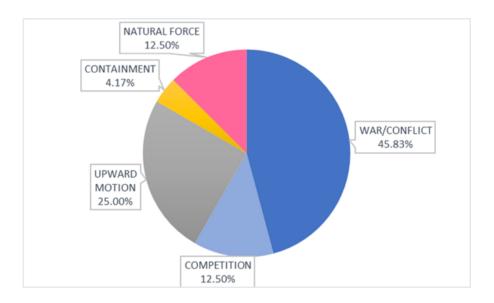


Figure 2: Source domains in verbal metaphors – British front pages

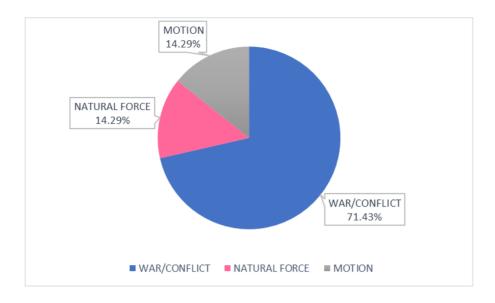


Figure 3: Source domains in visual metaphors – British front pages

The percentage values in the figures were calculated based on the number of AOIs including verbal metaphors (n = 24) and visual metaphors (n = 7), as detailed in Table 2. It should be noted that, in most cases, the metaphors found in the data are based on a single source domain. In the rare instances where overlapping source domains were observed, the figures show the domain deemed primary in the representation.

The figures clearly show that the domain of war/conflict emerges as predominant in the analysis: it appears in 11 out of 24 AOIs with verbal metaphor, i.e. 45.83%, and in 5 out of 7 AOIs with visual metaphor, i.e. 71.43%. This finding is in line with numerous other studies showing the widespread use of war metaphors at the beginning of the pandemic (e.g. Wicke & Bolognesi 2020; Luporini 2021; Semino 2021), and is contextually relevant, considering the repercussions of the war frame on the public perception of the situation and the counter-measures adopted (see Section 1). The verbal mode, with its larger baseline, shows more variation than the visual mode in terms of source domains. However, from a multimodal perspective, it is interesting to zoom in on the area where the verbal and the visual overlap and possibly interact. Firstly, there is almost complete overlap between the AOIs with visual metaphors and those with verbal metaphors: 6 of the 7 AOIs including a visual metaphor were also annotated as containing a verbal metaphor; in just one case (*Daily Telegraph*, 29-02-2020) the AOI includes a visual metaphor, but not a

verbal one.² Furthermore, within these 6 AOIs, the verbal and the visual mode were found to interact and mutually reinforce each other, thus illustrating cases of multimodal metaphor. Details are provided in Table 3.

Sou (Ne	rce wspaper, date)	Verbal metaphor	Visual metaphor	Source domain and multimodal metaphor explanation
1.	The Independent 24-02-2020	Italy <i>fights</i> to <i>contain</i> virus (headline)	towards a person wearing a traditional	(+ CONTAINMENT) Image reinforcing idea of a fighting nation; masked policeman's gesture also evokes the
2.	The Financial Times 24-02-2020	Italy locks down 10 towns as fears rise for global coronavirus spread (headline) Economic worry grows (subheading)	down). A person wearing a traditional mask but no face mask, alongside a security staff member wearing a surgical mask, both standing and looking sideways	MOTION (+ MORE IS UP) Through posture and gaze, the participants are portrayed as if they were watching someone or something coming, aligning with the notion of the virus as a visibly moving object

² For reasons of space, our discussion below focuses on the cases of multimodal (verbal + visual) metaphor. Nonetheless, for the sake of completeness, we note here that this visual metaphor portrays a massive coronavirus looming over a portion of planet Earth, triggering the metaphorical mapping CORONAVIRUS IS AN ALIEN INVADER. This is graphically reinforced by the disproportionate size of the virus, conveying strength and power. In terms of sentiment and emotion analysis, this representation evokes a negative sentiment/fear, aligning with most other metaphor-laden images, as we shall see below.

	arce ewspaper, date)	Verbal metaphor	Visual metaphor	Source domain and multimodal metaphor explanation
3.	The Times 28-02-2020	Top sports events under threat from coronavirus (headline)	Focus (eye-level). A chest-up image of a Chinese woman in a hospital room, wearing a surgical mask and gazing directly at the camera with a look of defeat	The setting and gaze of the woman in the image fit in with the idea of being a survivor
4.	The Guardian 29-02-2020	Red Cross to help NHS tackle virus outbreak (headline) 'To hell and back' How I survived coronavirus (superimposed text)	Asian facial traits, wearing a surgical mask, gazing directly	(+ JOURNEY) The man in the image,
5.	The Financial Times 29-02-2020	week since 2008 crisis (headline) The potential political <i>fallout</i> of a global pandemic. <i>Virus</i> -	facial traits in profile, wearing a face mask (symbolising safety), against a background	NATURAL FORCE (+ WILD ANIMAL) The illustration of an explosion or firework is in line with the semantic field activated by <i>fuel</i> and <i>fallout</i> in the text

Sou (Ne	rce wspaper, date)	Verbal metaphor	Visual metaphor	Source domain and multimodal metaphor explanation
6.	The Sunday Times 01-03-2020	Coronavirus South Africa scrambles (headline)	down). Two huge papier mâché masks (an aggressive-looking	WAR/CONFLICT Both text and image evoke the idea of conflict, though of a different kind

Table 3: Multimodal metaphors in British front pages

With reference to the presence of war metaphors, we would stress how multimodal metaphors making use of WAR/CONFLICT as a source domain may have had a greater impact than verbal metaphors alone in terms of framing and public resonance, due to the combination of different modes and the presence of images recalling dystopian narratives – a point to which we come back below. Also, in terms of sentiment and emotion analysis, the metaphors in Table 3 were predominantly classified as enacting a negative sentiment and triggering fear and/or sadness, with the notable exception of (6), from The Sunday Times. This instance stands out as the only case where the relationship between the visual and the verbal components is one of contrast, rather than mutual reinforcement. Although text and image are unrelated content-wise (headline about South Africa, image from a parade in Düsseldorf), their spatial proximity and predominant position within the front page compel readers to process them together. As a result, the multimodal metaphor here shifts into an instance of multimodal irony. Specifically, the irony emerges from the stark contrast between the headline - triggering fear and a negative sentiment through the idea of an entire nation metaphorically scrambling due to the violence of coronavirus – and the image below it, which shows a *staged* confrontation in an entertainment context, eliciting joy and a positive sentiment. This image also

contrasts sharply with the pictures from the Venice carnival that appeared in *The Independent* and *The Financial Times* a few days earlier (Table 3, rows 1-2). Here, the same kind of otherwise joyful context is overshadowed by the presence of security and police officers wearing face masks, creating a striking visual opposition to masks used for disguise. The grey, cloudy skies in the background also contribute to amplifying the sense of fear and anguish conveyed by the images. The ironic and, perhaps, ultimately optimistic outlook visually and verbally construed in *The Sunday Times* appears to be a one-off. What emerges instead, even within the small group of multimodal metaphors found in the British data, are recurring patterns of representation of a completely different nature. These patterns, we argue in retrospect, had a key role in the representation of the pandemic in institutional and media discourse in the early days, ultimately impacting interpretation by the general public at a crucial stage in the unfolding crisis.

Firstly, there is a noticeable preference for images that are culturally charged and even stereotyped (the Venice carnival; individuals with distinctly Asian traits) – a trend already observed across the broader set of coronavirusrelated images, including non-metaphorical ones (see Table 2). This preference must be contextualised within the specific stage of the Covid-19 timeline under analysis: a moment when specific countries were spotlighted as the first cases of the new disease emerged within their borders. Nevertheless, we argue that this highly culture-specific representation found at the onset of the pandemic especially, though not exclusively, in connection with war metaphors illustrates how early multimodal representations foregrounded the divisive potential of the virus, instead of other possible positive aspects, such as international collaboration, or a common endeavour. This pattern is, in our view, a case of early metaphorical framing with large-scale consequences. Other forms of divisiveness would soon emerge: from the race for vaccines and disparities between wealthier and poorer nations, to the 'me vs. you' logic underlying anti-vax and other kinds of pandemic discourse, ultimately leading to what we may call pandemic anti-language (cf. Halliday 1978).

An equally important recurring theme in our dataset revolves around face masks, which emerge as having a distinctive symbolic force. On the one hand, masks were consistently portrayed from the outset as weapons that fighters and survivors could wield (within WAR/CONFLICT scenarios: Table 3, rows 1, 3 and 4) or even, hyperbolically, as objects capable of granting their wearers 'superpowers', such as protection from a nuclear explosion (within NATURAL FORCE scenarios: Table 3, row 5). This style of representation framed face masks

in a specific way from the start and likely paved the way for subsequent reelaborations of masks as markers of identity - e.g. dividing individuals into those who complied with public health measures and those who resisted them. The photographs from the Venice Carnival – significantly, the first to appear in our dataset chronologically - are noteworthy in this respect, as they visually establish a dichotomy between individuals with and without face masks, clearly differentiated by their different roles (public officials and laypeople) and different positions within the frame. On the other hand, our data show that masks acquired a metonymic value from the beginning, as objects metonymically standing for the whole: the whole person, defined by the very act of wearing a mask, and the whole context, characterised by a permeating sense of danger and need for protection (on the mask as a metonymy of the pandemic, see also Charteris-Black 2021: 225 ff.) Last but not least, certain multimodal metaphors centred on images of face masks (particularly those based on WAR/CONFLICT and MOTION within the dataset: Table 3, rows 1-4) carried the potential to evoke strong intertextual and intermedial connections with dystopian narratives, from Poe's The Masque of the Red Death, to Matheson's I am Legend and Katz's Cassandra Crossing. This would also become a defining narrative within the pandemic, taken up by social media users and even within certain forms of public discourse.3

3.2 Italian data

Building on the approach used to report the quantitative analysis of the British data in Section 3.1, the descriptive statistics presented in Table 4 refer to the Italian dataset.

1. ARTICLE TYPE

Q. Does the identified AOI correspond to the main front page article?

Yes: 19/35 (54.3%)No: 16/35 (45.7%)

³ A brief survey related to this hypothesis was conducted on Mentimeter by one of the authors during a seminar on the project, involving a group of 10 PhD candidates with a background in modern language studies. When asked about possible connections evoked by these images, all the participants mentioned at least one famously dystopian book, film, or TV series, including McCarthy's *The Road*, Orwell's *1984* and Gilliam's *12 Monkeys*, in addition to those mentioned above.

2. TEXT-IMAGE RELATION

Q. Does the AOI include a coronavirus-related image along with coronavirus-related text?

• Yes: 18/35 (51.4%)

• No: 17/35 (48.6%)

3. IMAGE CULTURAL CONTEXT

Q. Does the coronavirus-related image evoke a clearly identifiable cultural context?

• Yes: 13/17 (76.5%)

• No: 4/17 (23.5%)

4. METAPHOR IN TEXT

Q. Does the text in the AOI contain at least one instance of verbal metaphor?

• Yes: 19/35 (54.3%)

• No: 16/35 (45.7%)

5. METAPHOR IN IMAGE

Q. Does the image in the AOI contain at least one instance of visual metaphor?

• Yes: 3/17 (17.6%)

• No: 14/17 (82.4%)

Table 4: Italian dataset – overall quantitative results

The results reveal several differences when compared to the British dataset. One important difference concerns the prominence given to Covid-19 as a topic in the Italian newspapers published during the week immediately following the first detected Italian case. While in the British dataset a substantial majority of AOIs correspond to the main front page article, the Italian dataset shows a much lower percentage (54.3%), suggesting that Italian newspapers were less likely to foreground coronavirus as the central theme, opting, thus for a more diversified editorial focus.

Another difference regards the integration of text and images: in the Italian dataset, 51.4% of the AOIs include a coronavirus-related image alongside text, slightly below the data reported in Table 2 for the British newspapers. Even though the difference is not significant, the higher proportion of AOIs without images in the Italian dataset (48.6%) suggests that the editors preferred to rely more on textual elements to communicate Covid-19 information. This finding is reinforced by the fact that visual metaphors are much less frequent in the Italian dataset, appearing in only 17.6% of the cases taken into consideration.

This discrepancy may be interpreted as a cultural divergence between the two datasets: in fact, Italian newspapers seem to favour more factual images over symbolic visual representations. The tendency to anchor images in identifiable cultural contexts is clear in both British and Italian newspapers, but the Italian dataset includes a wider variety of specific references, such as the Bridge of Sighs in Venice, the subway in Milan, Italian public figures, armed forces, football, and iconic national symbols (e.g. the Italian flag). Although references to China are present in the Italian dataset (e.g. Chinese workers in factories), the prevalence of images connected to the Italian territory suggests a more localised (and culturally embedded) journalistic approach to representing the pandemic.

Verbal metaphors are present on the Italian front pages (54.3%), but they occur less frequently compared to the British data. The choice of Italian journalists to adopt a more literal reporting style during the first week of the pandemic might have been deliberate, as a response to a moment of crisis (or shock), when the gravity of (unexpected) events calls for clarity and directness over figurative expressions.

Moving on, Figures 4 and 5 show the types of source domains for verbal (n = 19) and visual metaphors (n = 3) in the Italian dataset. On the front pages of the Italian newspapers, the verbal metaphors show a slightly different distribution of source domains. In fact, interestingly, MOTION/ENGINES emerges as the most prevalent domain, accounting for 31.58% of the metaphors. While WAR/CONFLICT is still present in the Italian verbal metaphors, it is less frequent compared to the British dataset, appearing in 26.32% of the cases annotated. The other three source domains for the verbal metaphors in the Italian dataset are MEDICINE/PHARMACY (15.79%), NATURAL FORCE/HAZARD (15.79%), and SPORTS/GAMES (10.53%). This more balanced distribution of source domains may reflect a broader range of framings for the pandemic in the Italian media, with less reliance on military/conflict-related language (e.g. battlefield) and a greater emphasis on dynamic concepts (e.g. football, athletics), technical language (e.g. engines, vehicles), and scientific aspects (e.g. antidotes).

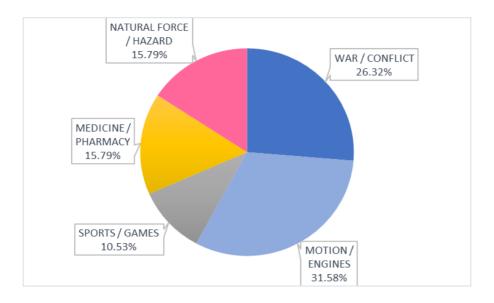


Figure 4: Source domains in verbal metaphors – Italian front pages

As for the visual metaphors, the Italian dataset includes only 3 examples, with WAR/CONFLICT, MOTION/ENGINES, and NATURAL FORCE/HAZARD, each occurring once (33.33%).

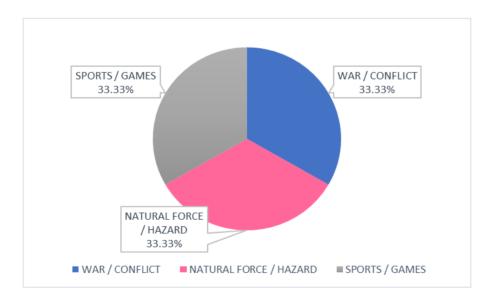


Figure 5: Source domains in visual metaphors – Italian front pages

Such a limited baseline makes a direct comparison with the British visual metaphors challenging, but what could be said is that the WAR/CONFLICT source – the most frequent among the British visual metaphors – plays a less dominant role in the Italian data. At the same time, this is consistent with the observations from Table 4, namely that the smaller number of visual metaphors

in the Italian dataset (3 compared to 7 in the British dataset) indicates that Italian front pages generally placed less emphasis on visual symbolism. From a multimodal perspective, the Italian data displays the same degree of overlap between verbal and visual metaphors found in the British dataset; in fact, all 3 visual metaphors co-occur with verbal metaphors (even though there are multiple source domains), indicating that the two modes are integrated to create multimodal metaphorical representations.

Table 5 provides an overview of the 3 multimodal metaphors found in the Italian front pages.

Source (Newspaper, date)	Verbal metaphor	Visual metaphor	Source domain and multimodal metaphor explanation
1. Il Sole 24 Ore 24-02-2020	Il virus globale scuote i mercati (En: Global virus shakes markets) (headline) Fuga verso approdi sicuri (En: Escape to safe harbours) (subheading)	dressed in protective equipment; the walls of the factory show a pattern of black and	•

Sou (Ne	rce wspaper, date)	Verbal metaphor	Visual metaphor	Source domain and multimodal metaphor explanation
2.	La Stampa 28-02-2020	Virus, scoppia la guerra fra scienziati (En: Virus, war breaks out among scientists) (headline) La salute impone un patto – Impatto devastante (En: Health imposes a pact – Devastating impact) (subheading)	Focus (eye-level). A soldier on the empty Bridge of Sighs in Venice, wearing an FFP3 mask	
3.	Corriere della Sera 01-03-2020	Milano <i>è forte</i> e <i>ripartirà</i> (En: Milan is strong at will take off again) (subheading, quote)	Landscape (top-down). A drawing of a footballer kicking a coronavirus-shaped ball	SPORTS/GAMES MOTION/ENGINES The verbal metaphor and the image of a footballer kicking away the virus (instead of a ball) convey a message of postponement and resilience; there is also an attempt to downplay the severity of the situation

Table 5: Multimodal metaphors in Italian front pages

The 3 multimodal metaphors in the Italian dataset displayed in Table 5 are different in nature, and each offers a specific conceptual framing of the

pandemic. The first multimodal metaphor displays the image of a Chinese factory worker, equipped with personal protective equipment (FFP3 mask and glasses), set against the factory walls painted in black and yellow stripes – a pattern that is commonly associated with danger and hazard warnings. This visual metaphor is combined with the verbal metaphor in the article of a global virus shaking markets, likening the impact of the pandemic to that of an earthquake – thus, a disrupting natural hazard. The subheading suggests moving to safer harbours. Overall, the sentiment is negative, and the emotions conveyed are fear, surprise, and anticipation.

The second multimodal metaphor contains the image of a soldier standing alone on the typically crowded Bridge of Sighs in Venice, which creates a dystopian contrast and a feeling of surprise given the usual throngs of tourists, especially during the Venice Carnival (the onset of the pandemic coincides with this festivity). The visual metaphor complements the WAR/CONFLICT metaphors in the text, implying that the virus is a threat and positioning Italy in a battle against the threat. The presence of the soldier, wearing an FFP3 mask and a uniform, may be interpreted as a symbol of defence and protection. The sentiment conveyed here is primarily negative, transmitting emotions of fear and negative surprise.

Finally, the third multimodal metaphor shows a cartoon of a footballer kicking away a virus-shaped ball, which, together with the subheading, lightens the tone of the article and conveys both activity postponement and resilience. In fact, the sentiment here is largely positive, evoking emotions of trust, anticipation, and optimism. The use of SPORTS/GAMES metaphors is found only on the Italian front pages, while the British dataset contains more 'serious' WAR/CONFLICT metaphors, as discussed in Section 3.1. This difference in framing could be culture-dependent: Italian newspapers may have opted for a less anxiety-inducing portrayal of the onset of the pandemic.

4. Conclusion

This study explored verbal and visual metaphor usage in the representation of Covid-19 across British and Italian newspaper front pages at the onset of the pandemic. The data were multimodally annotated by the three authors of this paper using a complex annotation scheme on Labelbox.

The results of our analyses reveal that metaphors are present on the front pages of both British and Italian newspapers, but their distribution differs in

both modes. British newspapers favour WAR/CONFLICT metaphors, a finding that is in line with the broader global trends reported in the literature during the early stages of the pandemic (see, *inter alia*, Chapman & Miller 2020; Hanne 2022). In addition to WAR/CONFLICT metaphors, the Italian newspapers displayed a more varied use of source domains, such as MOTION/ENGINES (the most frequent), SPORTS/GAMES, and MEDICINE/PHARMACY. Italian newspapers also displayed a greater integration of cultural and national symbols as part of the visual metaphors. In both datasets, instances of multimodal metaphor tended to amplify emotional and symbolic resonance: British newspapers often emphasised themes that transmitted fear and urgency, whereas Italian newspapers, while also addressing fear and surprise, incorporated in some cases elements of optimism and resilience. In both datasets, several important emerging styles of representation were found, linked to the highly culturespecific nature of images, the symbolic and metonymic value of masks and (especially in the British dataset) the presence of traits that are capable of evoking dystopian narratives.

These emerging styles of metaphor usage had an effect on the development of the institutional framing of the pandemic, its representation in the media ecosystem, and its interpretation by the general public. As the crisis unfolded, initial WAR/CONFLICT metaphors persisted but were gradually supplemented by other frames, such as those that converged towards the idea of endurance and recovery, but also those that evoked concerns over state control, restrictions, and vaccine scepticism (see, *inter alia*, Combei & Luporini 2021; Gök & Kara 2022).

Our study presents several limitations that need to be acknowledged at this point. Firstly, we decided to focus on a relatively short period, namely the early days of the pandemic in Europe. This decision, as stated in the Introduction, was motivated by the intention to address what we consider a relatively underexplored area of research. However, in order to gain a thorough understanding of how framing mechanisms in the British and Italian media changed over time, other projects devoted to examining the evolution of metaphor usage throughout the entire two-year duration of the pandemic would be needed. Secondly, our data is limited to metaphors in two languages, English and Italian. Expanding the analysis to include additional languages would provide more precise representations of the cross-linguistic and cross-cultural variations in Covid-19 metaphor usage. Furthermore, this study highlights the inherent challenges and subjectivity involved in metaphor identification, particularly in relation to the visual dimension and to

conventional metaphoric expressions. These discrepancies in annotator interpretations suggest that interdisciplinary collaboration is needed in order to enhance methodological rigour.

All in all, the findings of our exploratory research indicate that metaphors (verbal, visual and multimodal) had a relevant role in shaping public understanding of the Covid-19 crisis. We believe that an investigation of this discursive device is needed in order to evaluate the effect of the news on public perception of global crises.

Author contributions This article is the result of close and continuous collaboration among the three authors, who are equally responsible for its contents. Exclusively for the purposes of Italian academia, Antonella Luporini wrote Sections 1 and 3.1; Claudia Roberta Combei wrote Sections 3.2 and 4; Ludovica Pannitto wrote Section 2.

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References

Abdel-Raheem, Ahmed. 2021. "Where Covid metaphors come from: Reconsidering context and modality in metaphor". *Social Semiotics* 33(5), 971–1010.

Abdo, Muhammad S., Ali S. Alghonaim, & Bacem A. Essam. 2021. "Public perception of COVID-19's global health crisis on Twitter until 14 weeks after the outbreak". *Digital Scholarship in the Humanities* 36(3), 509–524.

Bagli, Marco. 2021. "The conceptualization of heroes during Covid-19 pandemic". *Rassegna Italiana di Linguistica Applicata* 53(1/2), 67–90.

Bateman, John, Judy L. Delin, & Renate Henschel. 2007. "Mapping the multimodal genres of traditional and electronic newspapers". In Terry D. Royce & Wendy L. Bowcher (eds.), *New Directions in the Analysis of Multimodal Discourse*, 147–172. Mahwah: Lawrence Erlbaum.

Castro Eunice. 2020. "War metaphors Seixas, in political communication on Covid-19". Frontiers Sociology in https://www.frontiersin.org/journals/sociology/articles/10.3389/fsoc.2020.583680/full [last access on 11/12/2024].

Chapman, Connor M. & DeMond S. Miller. 2020. "From metaphor to militarized response: The social implications of 'we are at war with COVID-19' – crisis, disasters,

and pandemics yet to come". *International Journal of Sociology and Social Policy* 40(9/10), 1107–1124.

Charteris-Black, Jonathan. 2021. *Metaphors of Coronavirus*. Basingstoke: Palgrave Macmillan.

Combei, Claudia R. & Antonella Luporini. 2021. "Sentiment and emotion analysis meet appraisal: A corpus study of tweets related to the COVID-19 pandemic". *Rassegna Italiana di Linguistica Applicata* 53(1/2), 115–136.

Combei, Claudia R., Antonella Luporini, Ana Pano Alamán, & Monica Turci. 2022. "In guerra contro il virus invasore. Un'analisi critica delle metafore sul COVID-19 nel discorso politico istituzionale". In Sabrina Fusari, Barbara Ivancic, & Caterina Mauri (eds.), *Diversità e inclusione. Quando le parole sono importanti*, 207–225. Milano: Meltemi.

Efeoğlu Özcan, Esranur. 2022. "Pull the weeds out or perish: Using pandemic metaphors to strengthen in-group solidarity in Turkish political discourse". *Metaphor and Symbol* 37(2), 171–184.

El Refaie, Elisabeth. 2017. "Analysing metaphors in multimodal texts". In Elena Semino & Zsófia Demjén (eds.), *The Routledge Handbook of Metaphor and Language*, 148–162. London: Routledge.

Entman, Robert M. 1993. "Framing: Toward clarification of a fractured paradigm". *Journal of Communication* 43(4), 51–58.

Feifei, Fu. 2024. "Analyzing metaphor patterns in COVID-19 news pictures: A critical study in China". *PLOS ONE* 19(2). https://doi.org/10.1371/journal.pone.0297336 [last access on 11/12/2024].

Feng, Debing & Xiangxiang Wu. 2022. "Coronavirus, demons, and war: Visual and multimodal metaphor in Chinese public service advertisements". *Sage Open* 12(1). https://journals.sagepub.com/doi/10.1177/21582440221078855 [last access on 11/12/2024].

Forceville, Charles J. 2009. "Non-verbal and multimodal metaphor in a cognitivist framework: Agendas for research". In Charles J. Forceville & Eduardo Urios-Aparisi (eds.), *Multimodal Metaphor*, 19–42. Berlin: Mouton de Gruyter.

Forceville, Charles J. & Eduardo Urios-Aparisi (eds.). 2009. *Multimodal Metaphor*. Berlin: Mouton de Gruyter.

Garzone, Giuliana E. 2021. "Re-thinking metaphors in Covid-19 communication". *Lingue e Linguaggi* 44, 159–181.

Giorgis, Paola, Olena Semenets, & Bilyana Todorova. 2023. "We are at war': The military rhetoric of COVID-19 in cross-cultural perspective of discourses". *Frontiers in Artificial Intelligence* 6. https://www.frontiersin.org/journals/artificial-intelligence/articles/10.3389/frai.2023.978096/full?id_mc=311815677 [last access on 11/12/2024].

Gök, Ayşe & Ahmet Kara. 2022. "Individuals' conceptions of COVID-19 pandemic through metaphor analysis". *Current Psychology* 41, 449–458.

Halliday, Michael A.K. 1978. Language as Social Semiotic: The Social Interpretation of Language and Meaning. London: Arnold.

Halliday, Michael A.K. & Christian M.I.M. Matthiessen. 2004. *An Introduction to Functional Grammar*, third edition. London: Arnold.

Hanne, Michael. 2022. "How we escape capture by the 'war' metaphor for Covid-19". *Metaphor and Symbol* 37(2), 88–100.

Hart, Christopher. 2017. "Metaphor and intertextuality in media framings of the (1984-1985) British Miners' Strike: A multimodal analysis". *Discourse & Communication* 11(1), 3–30.

Hartel, Jenna & Reijo Savolainen. 2016. "Pictorial metaphors for information". *Journal of Documentation* 72(5), 794–812.

Komatsubara, Tetsuta. 2024. "Framing and metaphor in media discourse. Multi-layered metaphorical framings of the COVID-19 pandemic in newspaper articles". In Chris Shei & James Schnell (eds.), *The Routledge Handbook of Language and Mind Engineering*, 274–292. London: Routledge.

Kress, Gunther & Theo van Leeuwen. 1996. *Reading Images: The Grammar of Visual Design*. London: Routledge.

Kress, Gunther & Theo van Leeuwen. 2001. Multimodal Discourse: The Modes and Media of Contemporary Communication. London: Arnold.

Lakoff, George & Mark Johnson. 1980. Metaphors We Live By. Chicago: University of Chicago Press.

Luporini, Antonella. 2021. "Metaphor, nominalization, Appraisal: Analyzing coronavirus-related headlines and subheadings in *China Daily* and *The Wall Street Journal*". *GEMA Online Journal of Language Studies* 21(1), 253–273.

Musolff, Andreas. 2022. "War against Covid-19': Is the pandemic management as war metaphor helpful or hurtful?". In Andreas Musolff, Ruth Breeze, Kayo Kondo, & Sara Vilar-Lluch (eds.), *Pandemic and Crisis Discourse*, 307–320. London: Bloomsbury.

O'Halloran, Kay L. 2011. "Multimodal discourse analysis". In Ken Hyland & Brian Paltridge (eds.), *The Continuum Companion to Discourse Analysis*, 120–137. London/New York: Continuum.

Olza, Inés, Veronika Koller, Iraide Ibarretxe-Antuñano, Paula Pérez-Sobrino, & Elena Semino. 2021. "The #ReframeCovid initiative". *Metaphor and the Social World* 11(1), 98–120.

Pérez Sobrino, Paula & Samantha Ford. 2023. "What counts as a multimodal metaphor and metonymy? Evolution of inter-rater reliability across rounds of annotation". *Language and Cognition* 15(4), 786–814.

Plutchik, Robert. 1991. The Emotions. Lanham: University Press of America.

Pragglejaz Group. 2007. "MIP: A method for identifying metaphorically used words in discourse". *Metaphor and Symbol* 22(1), 1–39.

Semino, Elena. 2021. "'Not soldiers but fire-fighters' – Metaphors and Covid-19". *Health Communication* 36(1), 50–58.

Steen, Gerard J., Aletta G. Dorst, J. Berenike Herrmann, Anna Kaal, Tina Krennmayr, & Trijntje Pasma. 2010. *A Method for Linguistic Metaphor Identification*. *From MIP to MIPVU*. Amsterdam: Benjamins.

van Dijk, Teun A. 1997. "Aims of Critical Discourse Analysis". *Japanese Discourse* 1, 17–27.

Wicke, Philipp & Marianna M. Bolognesi. 2020. "Framing COVID-19: How we conceptualize and discuss the pandemic on Twitter". *PLOS ONE* 15(9). https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0240010 [last access on 11/12/2024].

Wicke, Philipp & Marianna M. Bolognesi. 2021. "Covid-19 discourse on Twitter: How the topics, sentiments, subjectivity, and figurative frames changed over time". *Frontiers in Communication* 6. https://www.frontiersin.org/journals/communication/articles/10.3389/fcomm.2021.651997/full [last access on 11/12/2024].

Younes, Afakh S. & Abdel R.M. Altakhaineh. 2022. "Metaphors and metonymies used in memes to depict COVID-19 in Jordanian social media websites". *Ampersand* 9. https://www.sciencedirect.com/science/article/pii/S2215039022000066 [last access on 11/12/2024].

Zhang, Dongyu, Minghao Zhang, Heting Zhang, Liang Yang, & Hongfei Lin. 2021. "MultiMET: A multimodal dataset for metaphor understanding". In Chengqing Zong, Fei Xia, Wenjie Li, & Roberto Navigli (eds.), *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing*, volume 1: Long, 3214–3225. ACL Anthology, Association for Computational Linguistics. https://doi.org/10.18653/v1/2021.acl-long.249 [last access on 29/01/2025].

Zibin, Aseel. 2022. "Monomodal and multimodal metaphors in editorial cartoons on the coronavirus by Jordanian cartoonists". *Linguistics Vanguard* 8(1), 383–398.