ELF-MEDIATED MODAL METAPHORS OF 'INCLUSION', 'EXCLUSION' AND 'SECLUSION' IN AN ONLINE DISCUSSION ON COVID-19 FAKE NEWS
A case study in cross-cultural Cognitive Linguistics

MARIA GRAZIA GUIDO
UNIVERSITY OF SALENTO

Abstract – This paper introduces a case study in cross-cultural Cognitive Linguistics focused on the variable use of English modal verbs conveying new Covid-triggered experiential metaphors conceived by a focus group of multicultural participants in online discussion. The group was composed of Italians, Greeks and migrants from Nigeria, Morocco and Yemen, all non-native speakers of English – a language that they used as a 'lingua franca' (ELF) while participating in the intercultural interaction taking place in the computer-mediated dimension of a virtual university classroom. The case study intended to determine whether the group's pragmatic use of modals introducing novel metaphors actually diverged from habitual high/low-context schemata related to the multicultural participants' different native sociolinguistic communities. Schema divergence was assumed to be prompted by the particular 'emotion-raising' topic chosen for the case study – namely, the probable fake news on the causes of the Covid-19 pandemic, as they were conveyed by three journalistic texts submitted for discussion. More specifically, the case study explored the new cognitive metaphors of 'inclusion', 'exclusion', and 'seclusion' developed by the participants in relation to their social and psychological involvement with the topic – which eventually developed further to encompass the positive and negative consequences of pandemic, including the obligation to stay at home and communicate exclusively online, with the related issues of gender and ethnic discrimination, or rather empowerment. What stands out in this case study is that the more the participants were emotionally involved in such a topic, the more markedly their specific ELF variations emerged in the discussion. This is assumed to be due to the fact that the participants unconsciously perceived such ELF variations as more spontaneous and familiar for the immediate expression of their emotions and opinions, insofar as these variations have developed from the natural transfer of their native-language structures into the non-native English language they used. Indeed, precisely these ELF variations allowed the conveyance of the new metaphors for the expression of the participants' unprecedented experience of forced lockdown and online communication through the so-called 'metaverse' replacing reality. In such a virtual context, the participants in the online debate who were migrants from the high-context cultures of Nigeria, Morocco, and Yemen unexpectedly developed novel low-context epistemic metaphors of 'inclusion' triggered by their sense of a possible freedom from their native social constraints granted by remote communication mode without the use of video, which would conceal their ethnic and socio-cultural features. On the contrary, participants from the middle/high-context cultures of the Southern European countries of Italy and Greece showed a strengthening of the stereotypical high-context deontic metaphors imposing 'exclusion' and 'seclusion'.

Keywords: modal metaphors; high/low-context schemata; English as a Lingua Franca (ELF); online cross-cultural communication; Covid-19 fake news.

1. Research context

This paper reports on a descriptive case study in cross-cultural Cognitive Linguistics (Lakoff, Johnson 1999; Langacker 1991) concerned with the socio-culturally variable use of English modal verbs which emphasizes new Covid-triggered cognitive metaphors conceived by a focus group of international university students. The group was composed of Italians, Greeks, and migrants from Middle East and from Northern and Western Africa, all non-native

speakers of English that they used as a 'lingua franca' (ELF) (Guido 2008, 2018; Seidlhofer 2011) while participating in an academic situation of intercultural communication taking place in the online dimension of a virtual classroom. The study intended to determine whether the group's pragmatic use of modals introducing novel metaphors actually varied in relation to the role played by the participants' different background experiences and values (or *schemata* – Rumelhart 1980) in coping with the particular 'emotion-raising' topic chosen for the case study – namely, the probable fake news on the causes of the Covid-19 pandemic which had an often surprising psychological and social impact particularly on migrants' welfare and healthcare in the host European countries (Italy and Greece). Three journalistic texts submitted to the focus group for an ELF-mediated discussion and regarding the possible secret gain-of-function experiments conducted at the Wuhan Institute of Virology, led by the Chinese female top-virologist Dr. Shi Zhengli, represented the trigger for the newly-coined metaphors of 'seclusion', 'inclusion' and 'exclusion'. Hence, the online debate started from the probable fake news on the Covid-19 origin and then expanded to cover topics such as fake news on online communication, as well as on the related issues of gender and ethnic discrimination and empowerment, which acquire an unprecedented momentum precisely when the place of discussion is the so-called 'virtual metaverse' (Narula 2022).

2. Research rationale and hypothesis

The paper starts from the premise that it is necessary to move beyond texts themselves to the native rhetorical contexts that produced them, to be treated within the culture-specific conventions of the genres they belong to. In the case study in point, the texts under discussion were two popularizing scientific articles and a journalistic interview. When reports on a specialized topic produced within a native sociolinguistic community[1] are to be accounted for, it is assumed that the higher the involvement in the context of the topic on the part of receivers who are non-native speakers of the language of text production, the more they tend to transfer their native semantic norms of modal usage into their respective lingua franca variations that they use (ELF, in this case) to interpret such texts. In doing so, receivers (such as the participants in the present focus group) were assumed to transfer into their ELF variations not only features from their respective typologically-different native languages at the levels of clause structures, modality, idiomatic lexicon and metaphorical patterns, but also the pragmatic force of their own socio-cultural stances on the topic, triggered by their different schematic backgrounds.

At the basis of such an assumption, there is the notion that negative emotions developed with reference to a specific topic will activate in receivers' minds what is here defined as *high-context schemata*, whereas positive emotions will activate *low-context schemata*. Conventionally, the term "low-context" is associated with cultures whose communicative styles are characterized by direct, semantic-based denotative meanings conveyed by words independently from context, whereas the term "high-context" is related to indirect and context-bound pragmatic communication occurring within cultures with strong social values and shared connotative associations. The two notions of high and low-context cultures are associated with standardized characteristics of national communicative styles

---

[1] The expression 'sociolinguistic community' is here meant to define a group of speakers using the same native language and sharing functions of pragmatic significance based on their common cultural values (Gumperz 1971; Widdowson 1995, p. 166).

ELF-mediated modal metaphors of 'inclusion', 'exclusion' and 'seclusion' in an online discussion
on Covid-19 fake news: A case study in cross-cultural Cognitive Linguistics

227

(Hall 1976, 1977, 1985, 1990; Hofstede 1983). In this paper, such notions are re-interpreted in terms of schematic degrees of experiential and emotional involvement in a specific discourse topic achieved by groups of individuals belonging to particular socio-culturally marked contexts. The rationale is that the increasing Covid-triggered digitalization and dematerialization of both reality (turned into a virtual 'metaverse') and the physical bodies of people interacting online within virtual environments (Guido 2020, 2021) is strongly affecting and modifying (if not subverting) the established characteristics of the different socio-culturally marked contexts which determine the diverse social semiotics at the basis of different conceptualization of events. Consequently, such a pandemic-induced digitalization of reality has also an impact on the grammaticalization of events due to the new ways by which non-native participants interacting in intercultural communication come to conceptualize the unprecedented experiences of virtual events and then render them into the different ELF variations.

The implication justifying this rationale is that the grammar structures of ELF variations are not independent from the cognitive processes by which ELF-users conventionally grammaticalize into their respective native languages the logical perception and the experiential conceptualization of events in reality within the speech communities they belong to (Guido 2008; O'Halloran 2003; Sombre, Wermuth 2010). Indeed, ELF structures are precisely the result of their users' unconscious transfer (Faerch, Kasper 1987) of their native typological-syntactic (Greenberg 1973), semantic and pragmatic structures that give a linguacultural shape to their experience of events (Guido 2008, 2018). The hypothesis in this study is that the sudden imposition of online communication modes, with the intent of containing the spread of the pandemic, has challenged the pre-existing ways of making sense of contexts and events of reality by applying the established cognitive frames conventionally accepted within different sociolinguistic communities. In Western linguacultural contexts, for instance, this challenge is expected to affect the transitive grammaticalization of events organizing cognition into typologically predictable experiential relations that organize discourse in terms of cause-effect processes and sensorimotor orientation, to name just a couple of typological structures that shape the respective cognitive metaphors. In the case study in point, the challenge is expected to involve also the conventional attribution of low-context and high-context schemata to the participants in the online interaction who belong to specific native linguacultural contexts. This is supposed to be so on the basis of a preliminary observation in the course of pilot studies, as participants interacting online seem to feel relieved from conforming to the behavioural constraints conventionally dictated by their own respective native cultures once they access the new dimensions of the virtual context of the 'metaverse'. This entails that the multicultural participants in ELF-mediated online interactions – such as the participants in of the focus group of the present case study – are expected to develop fresh 'virtual-context schemata' as they try to adapt and mutually accommodate their different native typological and pragmalinguistic structures to the unusual contexts of digital intercultural communication, where parameters of cause-effect and spatial orientation, as well as of culture-bound social behaviour, may come to be subverted to the point of affecting the cognitive metaphors and pragmatic forms of discourse.

3. The case study

As this paper will illustrate, a deviation from the expected conventional attribution of high and low degrees of contextual involvement in the set topic (regarding the possible fake news about the causes of the Covid-19 pandemic) was identified in the participants in the online discussion. This group was composed of three Italian students (two females and a male), two Greek students (a male and a female) and four migrant students attending Italian and Greek universities coming from Nigeria (a male and a female), Morocco (a female), and Yemen (a female), all of them in their early-to-mid twenties. According to the taxonomy of high/low-context cultures by Hall (1990), Nigerian, Moroccan and Yemeni cultures are ranked among the highest-context ones insofar as the shared knowledge of the context within which communication occurs is given for granted and, thus, it is essential for the disambiguation and understanding of messages – that, just for this reason, are not expected to be explicitly stated. Also Italian and Greek cultures are conventionally ranked – like the cultures of other Southern-European countries – among the high-context cultures (Hall 1990), though less high than the cultures of non-Western countries of Africa, Asia, Middle East and Latin America. This seems to be due to the influence of Northern European countries and the United States that are ranked, instead, as low-context cultures, whose messages are characterized by an explicit and direct communication based on the actual meaning of words, rather than on the meaning of words to be inferred from specific socio-cultural contexts.

As illustrated in the case study reported below, data analysis showed that Italian and Greek participants in the focus group seemed to strengthen their position among the high-context cultures, whereas, surprisingly, the Moroccan, Nigerian and Yemeni migrant participants revealed a significant countertrend towards a low-context type of culture in contrast with the native high-context cultures they belong to. More precisely, data analysis showed a high-context schema involvement in the Italian and Greek participants' response to the topic under discussion, signalled by a higher frequency of deontic modals (principally "must"), pragmatically emphasizing 'social' obligation and necessity. These deontic modals occur precisely in relation to novel metaphors related to the Italian and Greek participants' recent distressing experience of 'seclusion' in their homes imposed by the lockdown measures introduced worldwide to contain the Covid pandemic, as well as to their personal feelings of 'exclusion' from normal social relations in person due to the pandemic, all of a sudden entirely replaced by virtual meetings on online platforms, thus blurring references to real place, space, time and cause-effect parameters. A low-context schema involvement in the topic was identified, instead, in the Nigerian, Moroccan and Yemeni migrant participants' responses to the set-topic, signalled by a frequent use of epistemic modals of possibility and deduction (i.e., "can", "could", "may") in relation to the freedom and the surprising sense of 'inclusion' offered to them by the new contexts of the online 'metaverse', opening unexpected possibilities of emancipation from the strict social rules regulating their native and host high-context cultures. These findings represented the starting point for the subsequent cross-cultural discussion on the discourse strategies developed by each participant in the focus group, within the online context of an ELF-mediated class debate, in order to cope dialogically with affective involvement in the topic under discussion.

Before proceeding to an in-depth examination of this high/low-context schema asymmetry between the participants of the focus group, a formulation of the theoretical grounds of the present study will be introduced to provide the scope and context for data interpretation.

4. Theoretical grounds

Although modal notions can be found in all languages, yet their appropriate usage is culture-bound, even culturally stereotyped and subjectively graded, principally dependent on: *(a)* different semantic nuances associated with specific cognitive ways of categorizing the world (Langacker 1987; Traugott 1989), and *(b)* different pragmatic implicatures and presuppositions accepted by a sociolinguistic community in association with specific situational contexts and discourse topics. This entails that non-native speakers of English automatically transfer their L1 modal frameworks to their respective ELF variations as they interact within contexts of intercultural communication (Kasper 1979; Schachter 1983).

An important role in this process of transfer seems to be played by the discourse topic. The more axiomatic and culturally presupposed the chosen discourse topic is within the native environment, the more it tends to induce a transfer of modal semantic usage and pragmatic uses from L1 to ELF. This is especially true with socio-culturally bound topics concerning, for example, notions of family, patriotism, religious and traditional beliefs, friendship etc. (Hinkel 1995). Yet, as will be noticed in this study, the very adoption of modality usage automatically entails the participants' endorsement of specific pragmatic stances, even if they are dealing with 'objective' scientific issues. Hence, non-native deviations from the accepted English standards of modality are in order. The process by which semantic modal usage comes to determine pragmatic degrees of modality use can be justified by adopting an experientialist perspective on modal metaphors.

In the field of Cognitive Linguistics, modality gradience is regarded as 'internally-driven', i.e., as stemming from a unique categorial prototype stored in the mind as a result of people's experience of external socio-physical force-dynamics (i.e. the experience of forces and barriers that naturally intervene in people's physical and social interaction with the environment and that come to develop as shared cognitive metaphors – Talmy 1988). This force-dynamic prototype is a cognitive/affective 'core meaning' from which both deontic and epistemic interpretations of modality can be derived by inference. This experientialist theory holds that, in codifying a given intentionality as 'illocutionary force' within a message, speakers who belong to the same native sociolinguistic communities unconsciously resort to a 'force-dynamic experience' that has become 'embodied' as a 'semantic schema' in their minds from interacting with familiar environments. In such a perspective, for instance, the native sociolinguistic community within which the Standard-English variety has developed is assumed to have grammaticalized its modal notions of possibility, obligation and volition symmetrically, by deriving them from the same physical force-dynamic experience of a 'barrier' to be forced (*will/shall*), to achieve potential (*may*) or complete (*can*) removal (at the basis of the epistemic metaphors of 'inclusion' – as 'access allowed'), or to be retained to restrict action (*must, have to, need, ought to, should*) (at the basis of the deontic metaphors of 'exclusion' – as 'access denied' – and 'seclusion' – as 'exit denied'). This experience would be at the semantic grounds of deontic social/moral restrictions as well as epistemic logical conclusions (Sweetser 1990: 53). Such a conceptualization process of the Standard-English modality could be applied, for instance, to the reanalysis of the way the native sociolinguistic community has grammaticalized its deontic modal semantics by distinguishing between social and moral obligation ("ought to" and "should", respectively) drawing from a socio-physical experience of 'barrier forcing'. According to Sweetser (1990), reasoning with modalities can be done only by using metaphorical projections of force images developed by speakers within their own native physical and socio-cultural environments: "Root [deontic] modal meanings are extended to the epistemic domain precisely because we generally use the

language of the external world to apply to the internal mental world, which is metaphorically structured as parallel to that external world" (Sweetser 1990, p. 50).

Indeed, the data from the present case study suggest that this process of deriving abstract semantic categories from socio-physical interactions, to put them again to pragmatic use in communicative contexts, seems to inform also the intercultural communication taking place online. The evidence is that the new virtual environments of the 'metaverse' – suddenly and entirely substituting the actual real contexts of interaction during and after the total lockdown imposed worldwide to contain the Covid pandemic – has undermined every consolidated experience. This has happened, on the one hand, with reference to the physical world, since communication has occurred through computer/smartphone screens, mainly in terms of cognitive metaphors of spatial orientation, as well as of event conceptualization reflected in the native typological clausal structures transferred into their ELF variations. On the other hand, consolidated experience has been subverted also with reference to the expected culture-bound systems of relationships at the basis of socially-accepted pragmalinguistic uses (Guido 2020). As the present case study will show, the focus group – composed of participants of different nationalities and socio-cultural experiences – explored epistemic possibilities, or felt deontically induced to reconvert real-world entities, events, and processes into novel embodied metaphors (which could be defined as 'cyber-embodied metaphors', reflecting speakers' new online experiences of interaction within virtual environments and with virtual participants) and, then, reconverted them again into fresh virtual-world phenomena.

What seems to be implied in this experientialist view of modality is a notion of modal verbs as grammaticalized emotional patterns to be referred back to sociopragmatic uses diachronically developed within a native sociolinguistic community (Collier *et al.* 1982). The meaning of emotion in this context has therefore a more comprehensive significance, encompassing all the human responses to the physical and social 'forces' experienced while interacting with the environment. On these premises, it is here claimed that within a totally unexplored virtual environment, such as the online 'metaverse', the very typological-semantic and pragmatic roots of modal verbs come to be experientially reconverted for the expression of the illocutionary intent within situations of intercultural communication, where cultural and linguistic differences play their role in determining divergences in the perception and interpretation of the same events.

On such grounds, one of the research questions posed in this study is: Is the non-native use of modal verbs solely justified by an automatic transfer of modal semantic forms from the participants' native languages to their ELF variations, or rather is this transfer consciously motivated by the emotional involvement of the non-native participants in the discourse topic they are dealing with? The implication of a topic-prompted motivation to native-language transfer would involve a view of modality which is not simply semantic, but culture-bound and pragmatic, used to express the perception of emotions through new metaphorical forms reflecting fresh online experiences of the environment and social relations. The corollary to this is that the non-native participants' application of their native forms of modality to ELF discourse contexts can be induced, on the one hand, by an unconscious semantic and pragmatic transfer from their native languages to ELF justified by their low-context schema involvement in the topic they are dealing with (i.e., an epistemic exploration of social and experiential possibilities within the new metaphorical space of the 'metaverse' in contrast to the high-context socio-cultural rules of the real life to be respected in their native environments). On the other hand, modality transfer from native languages to ELF can be motivated by the non-native participants' high-context schema involvement in the topic (i.e., a deontic resistance to possible new socio-

cultural and experiential scenarios introduced by online interactions that the participants activated by imposing pre-existing socio-cultural schemata shared within their native environments). This online-prompted application of native modality structures to ELF discourse is meant to determine the illocutionary force of the messages, as well as the new metaphorical ways by which the non-native participants in the interaction express them (Folman, Sarig 1990). Indeed, for non-native participants in an intercultural interaction, 'appropriating', 'owning' ELF means using it to convey their own multicultural stances on the topics they deal with – in other words, they attain the right 'to make their voices heard' even through the culture-bound semantic categorizations of the English-grammar code. This is what is essentially meant by 'non-native speakers' ELF authentication' (Guido 2008; Widdowson 1994). The notion of 'voice' as a socio-cultural and political 'identity construct' was introduced by Bakhtin (1981) and subsequently reinterpreted by the Post-Structuralist rhetoric as the expression of speakers' identity modalized through culturally-codified discourses (Cazden 1992; Thesen 1997). In the field of intercultural communication, the notion of voice as identity is viewed as subjectively and socio-culturally graded by non-native speakers (Zuengler 1989) as they transfer preferred native pragmalinguistic modal patterns of discourse into their ELF variations. In the context of intercultural communication, the notion of 'discourse authentication' by non-native speakers from different sociolinguistic communities, who take diverse cultural stances on the topic they deal with, depends on the degree of their own contextual involvement which would make them opt for an experiential use of modality in order to convey their own 'voices' – namely, the illocutionary force of their argumentation (Guido 2008). However, in the context of this study dealing with online intercultural communication, the participants' culture-specific 'voices' are expected not to necessarily conform to the high/low-context rules conventionally imposed upon them by their respective native socio-cultural contexts, as the 'screen' through which online communication occurs may induce them to unconsciously subvert their real-life references to social and environmental contexts which normally organize their respective culture-specific conceptualization and grammaticalization of reality.

5. Methodology

On these theoretical grounds, the objectives underlying the present case study aimed to:

a. demonstrate that deontic/epistemic gradience is largely topic- and culture-dependent – i.e., measured on the higher/lower-context degrees of schema-involvement in the topic by the participants from different sociolinguistic communities who, once entering the novel context of the online 'metaverse', may deviate from the expected high/low-context stances conventionally attributed to their respective native communities (Hall 1985; Hofstede 1983). Such a schema-involvement in the topic within the new virtual online context would determine the fresh metaphorical expressions of 'seclusion', 'inclusion' and 'exclusion', and also affect the ideational (cognitive) and interpersonal (communicative) (Halliday 1994) dimensions of their online interaction;

b. determine whether and how the native linguacultural context-schemata of the participants as non-native speakers of ELF taking part in the case study actually enter into the process of appropriating, authenticating the Standard English modality conventions and of applying them effectively to intercultural communication by developing specific semantic-metaphorical and pragmalinguistic strategies within the new online environment;

*L*ingue e
*L*inguaggi

c. explore how participants' native modal degrees of grammaticalization are pragmatically displaced into the structure of their respective ELF variations every time the degree of contextual and emotional involvement prompts them to assert their own viewpoint on the treated topic.

The substantiation of these objectives determined the procedural development of the case study, which was ethnographic in orientation with a special emphasis on the analysis of the participants' 'real-time' response to the set journalistic texts. A convenience sample of international university students represented the focus group of participants in the online intercultural communication and was composed of two Italian university students (one male and two females), two Greek university students (a male and a female), a female migrant student from Yemen and a female migrant student from Morocco (both attending the Greek university involved in the case study) and two migrant students from Nigeria (a male and a female) collaborating with research in the Italian university involved)[2], all in their early/mid twenties (Guido 2008, 2018). These participants were asked to read three articles on the possible origin of the Covid pandemic and comment on the probable fake news identified in them as they participated in an online discussion by using their respective ELF variations.

The case study specifically focused on the participants' socio-culturally variable use of English modal verbs underlying some newly-coined Covid-triggered cognitive metaphors. Observation of the participants' conversation revealed first of all that such metaphors reflected their different experiential schemata activated in response to the 'emotion-raising' topic regarding the possible fake news circulating on the origin of the pandemic that caused social and psychological distress to people in general, and in particular to migrants, who feared the worsening of the government's welfare and healthcare protection measures for immigrants and refugees in the host European countries. Furthermore, observation of the outcome of the focus group's conversation revealed the extent to which the new and prolonged online mode of interaction imposed to contain the Covid pandemic actually modified the participants' expected responses based on the conventional belonging to traditional taxonomies of higher/lower-context cultures (Hall 1985; Hofstede 1983). In fact, the new virtual contexts of online interaction revealed a high/low-context schema asymmetry between the two typologies of participants in the ELF-mediated intercultural communication. On the one hand, the Western (Italian and Greek) participants shared a high concern about the new online mode of communication as they suffered psychologically and socially from the lack of physical freedom imposed by the pandemic – reflected in their frequent metaphorical use of deontic modality. On the other hand, non-Western participants showed a low-context concern, which made them associate the new online context of the virtual 'metaverse' principally with its opportunities for free expression, not conditioned by social, gender, and racial prejudices (which is not so given for granted in both their real-life native and host contexts – reflected in their frequent metaphorical use of epistemic modality.

The prompt to such responses was represented by the three journalistic texts popularizing coronavirus research, which were proposed for an ELF-mediated discussion to the participants in the focus group. The probe into the emotional attitude of the participants towards the set topic paved the way to the cross-cultural analysis characterizing the case study, focused on the discourse strategies and novel metaphorical expressions that

---

[2] The Italian and the Greek universities involved in the case study are left unspecified due to the sensitive issues discussed by the participants in the debate, to whom alone the ownership of the opinions expressed is to be attributed.

participants achieved by 'modalizing' socio-cultural and emotional attitudes in order to convey personal views in relation to the topic, developed within the fresh online context of the 'metaverse'. In this process, the very notion of 'sociolinguistic community' of native members, characterized by conventionally-shared linguacultural repertoires (Tannen 1984, p. 194) came to be challenged, insofar as the new online dimension of intercultural communication subverted the expected prediction for a transfer of native verb modalization into ELF as the participants' unconscious rhetorical strategy to express their responses to the treated topic. In fact, interacting within the new virtual dimensions of the online context, the participants' respective native semantic and pragmatic references to the real life did not always apply, and thus they unconsciously felt free to start activating new metaphorical schemata connected with English modality.

6. Protocol analysis

The case study placed a strong emphasis on the participants' actual construction of ELF-mediated discourse in real time (Jones, Tetroe 1987), in order to get information about the rhetorical strategies and metaphorical choices that they employed while reacting to the set-texts under discussion. In particular, attention was focused on the participants as they were selecting modal uses in their development of rhetorical and metaphorical strategies. The ethnomethodological approach adopted to enquire into the participants' inner motivations for choosing such specific strategies in their debate on the set-texts was the think-aloud technique – i.e., the verbalization (and tape recording) of participants' conscious thought processes communicated to the other participants in the focus group on their first impact with the texts (Ericsson, Simon 1984; Faerch, Kasper 1987; Nisbett, Wilson 1977). Verbalizations were subsequently transcribed into protocols for analysis.

The first set-text regarded a popular scientific article focused on the probable undisclosed experiments defined as 'gain of function', in that they require the manipulation of viruses in order to make them gain further functions, such as an increase in virus transmissibility which would allow scientists to predict possible unknown infectious diseases and, thus, develop new vaccines to cope with the potential outbreak of a pandemic. 'Gain of function research' was in fact associated with the outbreak of the Covid-19 pandemic which was believed to be caused by a laboratory accident occurred at the Wuhan Institute of Virology in China, where such gain-of-function experiments on SARS coronaviruses were conducted under the direction of the female virologist Dr. Shi Zhengli. This unintentional – or, perhaps, maliciously intentional – accident fuelled a biased debate in the Western countries precisely against this Chinese scientist. To such a debate, the participants in the case study gave their contribution by focusing on possible aspects of her responsibility or, rather, of her discrimination on the basis of race, gender and even Western aesthetic parameters. This probable fake news on the Covid-19 origin represented the starting point for a debate that expanded to related topics such as the fake news on online communication, as well as on the related issues of gender and ethnic discrimination, but also empowerment, which came to be freshly re-experienced and reinterpreted within the novel contexts of the 'virtual metaverse'. All these topics of debate represented the trigger for the participants' development of the new metaphors of 'seclusion', 'inclusion' and 'exclusion' under analysis in the present case study.

The initial phase of the analysis focused on the participants' responses to the three set-texts on their first impact with them. At the same time, their voices were recorded as they were producing their genuine comments in ELF. The focus of this phase was on the

Lingue e Linguaggi

high/low-context schema strategies that they activated while authenticating the structures of the texts, giving pragmalinguistic justifications for their own interpretations. The case-study aim was precisely to access and identify the participants' cognitive-metaphorical expression of thought patterns of necessity, obligation, command, or possibility, evidentiality, etc. which may be specific to their own native languages, cultures, and socio-physical experience, or rather may be deviating from their respective linguacultural modal usage since they occurred within the novel structure of the virtual online context of interaction. Participants were therefore expected to make reference either to expected culture-specific real-world implications and inferences, or rather to their fresh modal metaphorical judgements on the topics conveyed through the set texts. The following protocol extracts reproduce the participants' 'think-aloud' comments in their respective ELF variations on a selection of extracts (reported in the protocols) drawn from the three set-texts, while they share them with the other participants in the online interaction.[3] Such comments represented the perlocutionary effects that the texts produced on them while reading them for the first time and exchange comments on them with the other participants. Analysis focused specifically on the participants' 'bottom-up processes' (Stanovich 1980), relying on the meanings they achieved from the linguistic organization of the texts, as well as on their 'top-down processes' (Stanovich 1980), relying on the participants' own high/low context schemata activated, in the online virtual environment, as soon as they came across unexpected deviations from their native socio-cultural and experiential schemata – on which they had since then relied upon in order to make sense of events of the real world.

In the protocol analysis reported below, participants in the focus group are marked with the following identification labels: *a)* "Italian female participant 1": IF1 (Alessia); *b)* "Italian female participant 2": IF2 (Stefania); *c)* Italian male participant 3": IM3 (Marco); *d)* "Greek female participant 4": GF4 (Despina); *e)* "Greek male participant 5": GM5 (Nikos); *f)* "Nigerian female participant 6": NF6 (Jamilah); *g)* "Nigerian male participant 7": NM7 (Ayo); *h)* "Moroccan female participant 8": MF8 (Najia); *i)* "Yemeni female participant 9": YF9 (Shirin).[4] What is reported below is the sequence of extracts from the three set texts,[5] followed by a Critical Discourse Analysis on the argumentative discourse construction (Faiclough 1995; O'Halloran 2003) and then by the participants' comments during the focus-group discussion.

6.1. Protocol analysis: Set Text 1

6.1.1. Extract 1 – Set Text 1

"Set Text 1" is a scientific article entitled *Gain of Function*, written by a US science popularizer, Derek Lowe, and published in the online issue of *Science* on the 26th of October 2021.

---

[3] Bracketed dots indicate pauses at various length – from one to three dots. Deviations from Standard English have been retained in transcription.

[4] The names of the participants are not their real ones, but the fictional names that the participants chose for themselves to keep their identities undisclosed.

[5] Links to the three set texts: Set Text 1: https://www.science.org/content/blog-post/gain-function; Set Text 2: https://www.newindianexpress.com/world/2020/may/02/chinas-missing-virologist-with-secrets-of-covid-19-origin-denies-defecting-to-west-2138364.html; Set Text 3: https://news.cgtn.com/news/2020-08-28/Talking-to-China-s-Bat-Woman--TkBrO09wEo/index.html.

ELF-mediated modal metaphors of 'inclusion', 'exclusion' and 'seclusion' in an online discussion
on Covid-19 fake news: A case study in cross-cultural Cognitive Linguistics

235

> Ever since the advent of SARS-CoV-2 in Wuhan, there have been questions about coronavirus work conducted at the Wuhan Institute of Virology. My own view hasn't really changed since the last time I wrote about that particular issue: I think a natural origin for the current virus is *very* much more likely than it being some sort of engineering construct (in fact, I don't give that latter possibility any real credibility at all). But what that doesn't rule out is the general lab-leak hypothesis, because someone could have been studying the wild-type virus and made a careless mistake as well. Clarity in this area is totally lacking, and while I hope the new investigative team […] can figure some things out, I doubt if that will happen. The Chinese authorities have (so far) shown no interest at all in really cooperating with such an inquiry. They must realize that this just brings on more suspicion, but they have clearly decided that that is better than many of the alternatives.

6.1.2. Critical Discourse Analysis

The point of view of the U.S. author of Text 1 represents the typical stance of his low-context culture, looking for an unambiguous and straightforward communication based on the actual meaning of words in a message that are not marked by specific context-bound connotations – as it is instead typical of high-context cultures (such as the Chinese one) where the meaning of messages is covert and, thus, to be achieved within a specific socio-cultural context. And yet, behind such a low-context style, it is possible to perceive a covert high-context biased viewpoint on the topic.

Since Extract 1, the author's argumentation has been textually constructed on a conventional "Argument is War" cognitive metaphor (Lakoff, Johnson 1980) based on an interplay of 'contention, concession, and defense moves' by which he tries to achieve a logical sense from the ambiguous behaviour of Chinese virologists and authorities. The extract starts with an existential process conveyed by the syntagm "there have been" introducing an agentless passive that is rendered not as a 'process' by means of a verb form (such as "to question"), but as a 'fact', by resorting to the corresponding verb nominalization: "questions", enquiring into the "coronavirus work" at the Wuhan Institute of Virology. Also the human agency in charge of such a "work" is omitted, since it is only implied by the use of the past participle "conducted" as an elided form of agentless passive. The author's 'contention moves', however, are always introduced through declarative clauses and phrases stated in the first-person ("My own view"; "I think"; "I don't give any real credibility"; "I hope", "I doubt"), by which the author continuously highlights his view on the lack of clarity in the Chinese lab-experiments. Initially, the author seems to concede that the origin of Covid does not derive from an "engineering construct" devised by the Wuhan virologists. In stating this, he uses epistemic adverbial and adjectival edges ("my own view hasn't <u>really</u> changed"; "I think a natural origin for the current virus is <u>*very*</u> [italicized emphasis] much more <u>likely</u> than it being <u>some sort of</u> engineering construct"; "<u>any real</u> credibility <u>at all</u>"). Then, the adversative "But" suddenly conveys a change in the direction of the author's thought by introducing his contention for a possible "general lab-leak hypothesis". The subsequent 'concession move' this time regards again the accidental "careless mistake" – caused by an unspecified agent ("someone") – suggested by the epistemic modal "could". Yet, the ensuing statement is formulated as an objective "fact" through the use of the present simple of the verb "to be", which represents a serious attack against the ambiguous behaviour of the Chinese authorities and virologists who, however, are not thematized in any grammatical, logical and psychological subject position within the clause (Halliday 1994). In fact, the clausal subject in a thematic collocation is represented by the abstract medium – i.e., "Clarity" – denied by the negative connotation of the non-finite verb phrase marked by an adverbial booster: "is totally lacking". Though the author seems to allow a new – and almost

indefinite – epistemic concession by 'hoping' for a "new investigative team" that "can figure some things out", then he soon denies such a possibility: "I doubt if that will happen". The modal "will" conveys a double implication: a deontic determination – disapproved by the author (Guido 2004) – not to be clear about the nature of the Wuhan experiments, as well as an epistemic belief that "clarity in this area" has never been expected to represent an option.

Finally, the author enacts his 'defense move' by directly attacking "The Chinese authorities" collocated in a psychological, logical and grammatical subject position within an active clause, thus foregrounding the authorities' responsibility (mitigated by the parenthetic "so far") as agents who "have (so far) shown no interest at all in really cooperating with such an enquiry". The epistemic "must" introducing a logical conclusion and judgment in the argumentation focuses on the authorities' realization that their ambiguous behaviour provokes "more suspicion", though the new adversative "but" grants another – and yet still critical – concession to a possible and, this time "clearly decided", favourable opportunity for their choice.

6.1.3. Participants' debate

Set Text 1, at this stage, represented a prompt for the participants in the discussion who were asked to reflect and comment – by using their own respective ELF variations – on the possible fake news conveyed through the textual organization of the article under analysis (by activating their own 'bottom-up processes'), and on the consequences of such an unexpected pandemic (by activating their own 'top-down processes').

> *IF1 (Alessia):* I think that the author is not giving fake news. I think (..) I think that China is (.) really hiding information about the virus (..) created in the lab (..) and then escaped from the lab.
> *GM5 (Nikos):* you mean (…) accidentally?
> *IF1 (Alessia):* yes
> *GM5 (Nikos):* because (..) I don't think that it was a mistake (.) I think that China is (…) is (.) spreading Covid in all the world (..) I mean (.) intentionally.
> *MF8 (Najia):* why you think this?
> *GM5 (Nikos):* because China has decided that it must to (…) impose its power in the world and (…) and pandemic is a (…) weapon of mass destruction (..) and control (..) because China must submit all humanity to its power.
> *MF8 (Najia):* but this a racist prejudice (…) a lot of people died of Covid in China.
> *NM7 (Ayo):* but also if U.S. and Europe say Chinese scientists bin make mistake (.) and the virus left the lab (..) and spread (.) I think (.) this a racist prejudice because (.) Chinese people are no American (.) or European and so (..) people must think here se [that] they are (.) no serious (.) true scientists.
> *IF2 (Stefania):* I think that China (..) decided that all people must be (…) must be imprisoned in their houses and can communicate only with computer or smartphone (…) we are prisoners (..) you understand? (..) China limit freedom (.) and relations to control people.
> *YF9 (Shirin):* well (..) I'm not sure this is a limitation. I feel more free to say what I like if I can speak through a computer screen (..) I mean (..) I can switch off the video and (..) and I'm not judged because I wear the Islamic headscarf (…) I'm not judged for my external appearance (.) for my modesty (.) because I don't want to follow Western fashion rules (..) so (..) people must focus on what I want to say.
> *IF1 (Alessia):* really? (..) I thought that the veil is symbol of the man's oppression for Islamic women (…) also the computer screen must be considered oppression (..) because we cannot be free to be near (.) I mean (.) physically near to other people.
> *MF8 (Najia):* I think I understand what Shirin means (..) and I agree with her (…) the computer screen can be like our headscarf (..) it cover women's physical aspect and (.) allow their free expression with nobody that can judge them for their look (..) I mean (.) women can be more powerful when they speak protected by a headscarf or by a computer screen.

> *NF6 (Jamilah):* yes (..) the screen can also cover the colour of the skin (…) I know (..) I can
> get more when I ask help online for social services (.) or health services (.) with no video that
> show I'm black.
> *GF4 (Despina):* but people on the other side of the screen know that you are Nigerian.
> *NF6 (Jamilah):* yes (.) but they can no see me (.) no see I'm black (..) you know? (..) I can be
> just a migrant like another (..) like a white migrant (..) you understand? (..) they no see me and
> can no think to the colour of my skin.
> *NM7 (Ayo):* if doctors, or lawyers see we are black (.) they give us just little assistance (..)
> better if they no see we are black (..) here people think se [that] virus come with African
> people and we spread the virus in Europe (..) but African people have strong health (..) desert
> (.) sea (.) prison torture bin no kill us (.) we are strong.

From the participants' debate triggered by Extract 1 from Set Text 1, a number of novel cognitive metaphors seems to emerge. On the one hand, Italian and Greek participants still keep activating their expected high-context schemata to make sense of the new computer-mediated social relations, as they converge on the conventional cognitive "Argument is War" metaphor introduced by the deontic modal metaphor of the gatekeeping 'physical barrier' – represented by the computer/smartphone screen – by which the Chinese totalitarian power covertly imposes an obligation ("must") to stay secluded at home, or denies permission ("cannot") to meet people in the flesh by only giving the permission ("can") to socialize online. Such deontic metaphor of 'seclusion' represents China as a deliberate antagonist of the free and democratic lifestyle of Western countries. Hence, GM5 states that China <u>must</u> impose its power to submit the whole humanity, so that – IF2 adds – all people <u>must</u> be imprisoned in their houses and <u>can</u> only communicate through a computer screen that, as IF1 remarks, <u>must</u> be considered as an oppression since people <u>cannot</u> be free to meet in the flesh. On the other hand, non-Western participants, represented by migrants from the high-context cultures of Nigeria, Morocco and Yemen, surprisingly find in the new online environment of the 'metaverse' a possibility for freeing themselves from the high-context schema constraints imposed by their native and host social contexts. This allows them to start activating in their minds the novel epistemic modal "Argument as Opportunity" metaphor – namely, an epistemic metaphor of 'inclusion' according to which the computer/smartphone screen represents no longer a limiting barrier, but a possible protection enhancing gender/race empowerment. YF9 remarks that she feels free to say what she likes if she <u>can</u> (epistemic possibility) speak through a computer screen by switching the video off and being judged not for her Islamic headscarf and her non-conformity to the Western aesthetic standards imposed upon women, but for what she says. To this MF8 adds that the computer screen <u>can</u> be like the Islamic headscarf, covering women's physical aspect and allowing their free expression and empowerment. Furthermore, NF6 remarks that a switched-off video <u>can</u> hide the migrants' skin colour thus allowing them to get more benefits from the social-service providers. NM7 upgrades this view by highlighting the connection between being black and receiving less assistance from medical doctors and legal advisors, since African people are perceived as a vehicle of virus spread, whereas – NM7 claims – they are strong and healthy, having overcome so many threatening obstacles (i.e., desert, sea, prison, and torture) – another racist prejudice as the previous one highlighted by NM7 himself when he pointed out that people are induced ("must") to conclude that Chinese virologists are not reliable scientists.

6.1.4. Extract 2 – Set Text 1

What follows is the Extract 2 from the same Text 1 under analysis.

Lingue e
Linguaggi

A particularly hot topic has been "gain-of-function" research, so let's try to define that a bit. GoF work attempts to modify a biological pathway in a cell line or an organism in order to enhance or broaden the scope of some particular process. In virology, it generally refers to work that would help to understand how a particular virus might be able to mutate in the future under different conditions. Under present circumstances, it particularly refers to seeing how a pathogen might be able to change in ways that would cause more harm. Viruses are constantly mutating, and GoF work is an attempt to see around the corner and anticipate what might come next – and how likely (or unlikely) that might be to happen in the real world.

6.1.5. Critical Discourse Analysis

This Extract 2 of the same Set Text 1 is only apparently just informative about the so-called Gain-of-Function" research. In fact, since the beginning, the author tries to directly involve his implied readers ("so let's try to define that a bit") with the probable covert purpose of manipulating their interpretation of the 'stated facts'. As such, it represents an instance of discourse of scientific popularization which contains in its very structure the typically English grammaticalization of pragmatic aspects, such as, on the one hand, the implication of the author's disappointment in the use of the deontic modal "would" repeated twice (rather than using the expected 'simple present' referring to a habitual process). The choice of introducing "would" (i.e., the GoF work in the field of virology "that would help to understand" how a virus can mutate), indeed, rather than simply implying the virologists' willingness to clarify their intentions, hints instead at their persistent behaviour in pursuing their intents by carrying out such a risky research, which annoys the author (Guido 2004). On the other hand, the author repeatedly uses "might" – namely, the epistemic modal verb of 'improbability' – an uncertainty marker determining discourse formality and entailing the author's psychological distancing from the aims of the GoF experiments. Furthermore, such experiments are referred to by means of very generic examples (i.e., "some particular process"; "generally"), epistemic edging ("likely or unlikely") and the popular metaphor of the "corner" ("GoF work is an attempt to see around the corner and anticipate what might come next"). This is a high-context cognitive metaphor still to be referred to the wider metaphor of the "Argument is War" in that the mutating virus is seen as a personification of the enemy ready to ambush and kill.

6.1.6. Critical Discourse Analysis

> *IM3 (Marco):* this is very dangerous experiments with the virus (..) I don't think they do them "to see around the corner" and understand what can happen in the future (..) I think that they (.) they create in secret weapons of mass destruction.
> *GM5 (Nikos):* exactly (..) their aim is not to save people but to destroy all of them.
> *GF4 (Despina):* this can happen also if the virus for a mistake go out the lab (..) but I also agree that this Covid is (..) is something that China wanted (.) wanted because (..) because it must repress humanity.
> *GM5 (Nikos):* yes yes I agree.
> *MF8 (Najia):* perhaps this may be a prevention measure to produce vaccines in time (..) before the pandemic break out.
> *GF4 (Despina):* but we must not trust China.

The participants' discussion, at this stage, focuses on the possible outcome of the risky GoF experiments in virology. One Italian and the two Greek participants still maintain their expected high-context schemata, typical of their native cultures of Southern-European countries. Such schemata are clearly asserted by GF4 through the iterated use of the deontic modal "must", stressing China's determination to subdue humankind by

exercising its control through the spread of the lethal virus. The conventional metaphor of the War is thus still retained in this Greek participant's argumentation, by identifying China as the enemy of humankind and the virus as the personification of its army – i.e., an animate agent determined to kill.

From the participant MF8, conventionally belonging to a high-context culture (Morocco), unexpectedly comes, instead, the low-context metaphor of the lab-virus as a 'rescuer', capable of strengthening people's immune system through the timely production of vaccines – as conveyed by the epistemic modal "may".

6.1.7. Extract 3 – Set Text 1

> I believe that this is very important work, but it's not to be undertaken lightly. In the most dangerous cases – which can also be the most important ones, at times – you may be working with a virus that could acquire (through your work) the ability to spread through the human population. Even further, you may be working with a virus that is *already* capable of doing that, and producing forms of it that are still more infectious or more easily able to avoid the human immune response. This sort of work calls for extremely stringent review and oversight, and it also needs the highest levels of lab safety and containment measures that biomedicine is capable of providing. Those controls apply to any lab that's handling the most dangerous pathogens. There are only a few dozen labs in the world that work at these levels, and very few of those are doing anything like gain-of-function. Some of them, for example, are strictly for diagnostic work. That link provides the less-than-reassuring news, though, that only about a quarter of those labs receive high scores overall for safety and security. And only a handful of countries categorize experiments like gain-of-function research as a separate thing that needs its own regulatory oversight. China does not, nor are the members of the International Experts Group on Biosafety and Biosecurity Regulators.

6.1.8. Critical Discourse Analysis

Extract 3 shows a complex argumentative structure. It starts with the author's first-person statement of endorsement on the GoF research ("I believe") by which he concedes "that this is very important work". Such an apparent unreserved approval is, however, soon downplayed with the introduction of the adversative "but" and the negative specifier "not" by which the author warns against the risk of 'undertaking' this type of research "lightly". In this way, he surreptitiously seems to imply that such a 'lightness' may in fact be ascribed to the Chinese GoF research. The next hypotactic sentence is indeed a very convoluted one, composed of a dominant clause alarmingly introducing the author's negative judgment on GoF, emphasized by a superlative adjectival booster in the phrase "the most dangerous cases". This dominant clause is then split into two separate parts by the incorporation of a dependent relative clause as a mitigating concessive statement of positive epistemic possibility ("which can also be the most important ones"). The second part of the dominant clause is then characterized by the author's direct involvement of his implied receivers through the use of the second-person address term "you" marking a quite informal tenor (Halliday 1994), followed by the epistemic modal verbs of probability "may" and "could". This may be regarded as a strategy of persuasion – if not of audience manipulation – aimed at casting the readers themselves in the role of scientists so as to give them the possibility (introduced by the epistemic modal "may") of experiencing firsthand how likely it is for scientists to make mistakes. This eventuality is made even more probable (as denoted by the epistemic modal "could") and dangerous when readers themselves, virtually experiencing the role of the GoF virologists (as explicitly stated by the parenthetic phrase "through your work") manipulate a virus to the point that it acquires "the ability to spread through the human population". The subsequent repeated epistemic

modal "may", once again preceded by the second-person pronoun "you" as the clausal subject, is then emphasized by the expression "even further", as well as by the italicized adverb "*already*", both alarmingly introducing the 'capability' of the virus to spread more and more, thus becoming "still more infectious" and "more easily able to avoid the human immune response". The series of adjectives in the superlative form and adverbial phrases with negative connotations that follow, together with non-finite verb phrases in the present participle, emphasize the worryingly growing situation of danger insinuated by the author. To be as clear as possible, the author activates, by using the deontic modal "need", the low-context schema that states the necessity for extreme safety and security measures to be adopted, which transcends any lab context in the world "handling the most dangerous pathogens". The frightening news – probably 'fake news' – that the author introduces, with the aim of alarming readers even more, regards the fact that very few of "those labs receive high scores overall for safety and security". Then, all of the sudden, he concludes his argumentation with the sharp revelation that "China does not" (receive high scores for lab safety and security), thus placing China in the responsible thematic position of logical, psychological and grammatical clausal subject, subsequently upgrading such a climax by signaling the highest state of danger in China as he adds that "nor are the members of the International Experts Group on Biosafety and Biosecurity Regulators".

6.1.9. Participants' debate

IF1 (Alessia): this is really (..) really worry (..) worrying (…) I really think that China decided that the world must end.

IF2 (Stefania): I already thought to this when Xylella (.) was created in the lab and killed all the (.) olive trees (.) and I think that it was created just to destroy nature (...) someone decided that the olive trees must die (.) maybe for economic reasons (.) competition between olive oil of different regions (.) and I'm so sad (.) when I see all these trees dead (..) like skeletons.

IM3 (Marco): genetic manipulation is destroying nature (.) you see how are big the fruits and (..) and the vegetables now? (..) enormous! And they have no (..) no taste.

IF1 (Alessia): and also animals! (..) chickens are big like my dog (.) they are full of hormones.

IM3 (Marco): this is for marketing reason (..) you know? (..) manipulated fruits must (..) to sell for a long time (..) they also treat it with (.) pesticids (.) but they destroy the health of people (.) of animals (.) and plants.

NM7 (Ayo): I think this a fake news (..) genetic manipulation for agriculture can really help solve the problem of people (.) hungry in poor countries (.) like Africa (..) can help produce more food (.) for all them (..) no expensive food.

MF8 (Najia): and of course genetic manipulation of a dangerous virus (.) like Covid (.) can help (.) develop new vaccines (.) low-cost vaccines (.) for all people in the world (.) to stop the pandemic.

GM5 (Nikos): a virus manipulated in the lab (..) when go out in the real world kill everybody (…) like food manipulated in the lab is (.) dangerous for the health.

GF4 (Despina): and also our relations are manipulated now that we must be online (..) yes (.) and if we can finally go out in the real world (.) we shall not know (.) no more (.) how (.) how we can have (..) normal real relations with other people (..) now I (.) don't really understand no more when I'm in the computer screen where is in or out (.) or (.) where is up and where is down.

GM5 (Nikos): yes, China uses the computer screen like a lab (..) a place for experiments because it must manipulate us (.) we always must fear infection and death and use the mask (.) so we cannot smile no more (..) I also have no more orientation (.) and don't know no more the sense of my life (.) if I live in the screen (.)

and I cannot imagine my future.

The participants, at this point, get to the heart of the debate and make what they think of the topic explicit. In particular, they make overt the extent to which they deviate from their conventionally expected positioning with respect to the taxonomy that goes from the highest point to the lowest point of the schema categorization of socio-cultural contexts (Hall 1985; Hofstede 1983). In fact, participants from Italy – who, as belonging to Southern-European countries, were assumed to take a medium/high-context collocation along the axis – once again show their high-context positioning when they let themselves be influenced so much by the author's alarming tone on the topic to the point that they expand the scope of the text argumentation to add their own schema associations with other parallel distressing topics. Such topic correlations are all marked by the use of deontic modals "must" (implying 'obligation') and "can" ('permission'), which are here seen to convey the novel high-context schema metaphor of 'exclusion'. Indeed, since the beginning of the exchange, a high-context schema metaphor of 'exclusion' introduced by the deontic modal "must" is identified in IF1's expansion of the author's shocking statement on the lack of lab safety and security in China to include the possible fake news about China's deliberate criminal decision to doom the world to destruction, 'excluding' people from the possibility of a harmless, safe life. This metaphor is taken up by the other Italian female participant, IF2, who extends it – again through the use of the deontic modal "must" – to encompass also the parallel topic of the Xylella, and insinuate the other possible fake news that a ruthless economic warfare ordered the creation of this special bacterium in the lab to destroy olive trees, 'excluding' them from the perspective of sprouting again and being an economic support for Southern Italy. The metaphor of 'exclusion' is even more expanded by the Italian IF2 and IF1 – still through the use of the deontic modal "must" – to encompass the parallel topic of the economic warfare imposing lab research on genetic manipulation of food (i.e., producing 'giant' fruit, vegetables, and meat animals) to make it last longer in the market, without any consideration for the harmful effects on people's health.

At this point, non-Western participants from Nigeria and Morocco take an unexpected low-context schema stance deviating from their expected native high-context schema one conventionally suspicious of scientific advances on genetic manipulation (mainly for religious reasons – Guido 2008). Their stance, indeed, is very different from that of the Southern-European participants from Italy and also Greece who, instead, in the course of the exchange, have upgraded their predictable medium/high-context schema stance to a definitely high-context one based on typical positions contrary to scientific advances on genetic manipulation, shared by a vast community of activists opposed to any attempt by science to adulterate the environment (possibly grounded on alarming fake news, rather than on irrefutable scientific evidence). In fact, the Nigerian participant NM7 intervenes in the debate to introduce a novel low-context schema metaphor of 'inclusion' by claiming that genetic manipulation in agriculture actually offers the possibility (marked by the epistemic modal "can") of solving the problem of hunger in poor countries, like Africa, through the mass production of low-cost food available to everybody. This schema metaphor of 'inclusion' is then expanded by the Moroccan participant MF8 who uses it – by employing the same epistemic modal verb denoting possibility ("can") – to encompass the promising benefits of genetic manipulation on a dangerous virus like Covid for the mass production of low-cost vaccines to immunize the entire population in order to impede the spread of the pandemic.

The Greek participants, then, introduce a new turn in the interpretation of the set text by developing the novel high-context schema metaphor of 'seclusion' triggered by

China's assumed determination – highlighted by the use of the deontic modal "must" – to manipulate and completely control the existence of humankind. GF4 is the first participant that mentions the new metaphor of 'seclusion' when she claims that people are forced to stay indoors in a state of confinement, deprived of freedom of physical movement and social relations in the flesh. Furthermore, she foresees (by using the deontic modal "shall") that if one day people were given the permission (signaled by the deontic modal "can") to leave the virtual online environment and, thus, their houses, then they shall no longer be able to establish not only actual social relationships, but even orientational relationships with the surrounding physical environment. GM5 extends even more this metaphor of the 'imposed seclusion' – as China's strategy of people manipulation by controlling them through the fear for infection and death (and the use of surgical masks denying the facial expression of emotions) – to include his inability to find the sense of his own life imprisoned in the virtual environment of a computer screen, and also to envisage his future life.

In sum, this debate so far has revealed how probable fake news spreads easily when people are obliged to live in a high-context state of extreme uncertainty and fear – which, in some cases, may turn into a low-context positive opportunity for changing old established high-context socio-cultural schemata, as in the case with non-Western participants in the discussion.

6.2. Protocol analysis: Set Text 2

"Set Text 2" is an article mixing and popularizing both scientific and political issues, entitled *China's missing virologist, with secrets of COVID-19 origin, denies defecting to West*. It was written by an author indicated only with the initials of his/her name (PTI), and published in the online Indian magazine *The New Indian Express* on the 2nd of May 2020, together with a picture of the Chinese virologist photographed while engaged in her work wearing her laboratory safety clothing.

6.2.1. Extract 4 – Set Text 2

> A leading Chinese virologist from the Wuhan Institute of Virology (WIV), whose mysterious disappearance sparked speculation about the deadly novel coronavirus emanating from the laboratory, has denied reports of her defection to West with the secrets about the COVID-19.
> Shi Zhengli, known as the "Bat Woman" for her passionate research about bats and the viruses associated with them, refuted rumours of her defection on her Chinese social media WeChat account, the state-run media.
> Denying "rumours" of "defecting to the West", Shi, reported to be the Director of the WIV, on her WeChat account wrote, "[…] No matter how difficult, it [defecting] shall never happen. We've done nothing wrong. With strong belief in science, we will see the day when the clouds disperse and the sun shines." […]
> On February 2, she said on her WeChat Moment that, "the 2019 novel coronavirus is a punishment by nature to humans' unsanitary lifestyles. I promise with my life that the virus has nothing to do with the lab," in a response to an article by Indian scientists implying the novel coronavirus possibly originated from the WIV, the report said.
> China is resisting mounting pressure from the U.S. and the leaders of many countries for an inquiry into the origin of the virus, which was initially stated to have emerged from a wet market in Wuhan selling live animals located close to WIV. […]
> Chinese Foreign Ministry spokesman Geng Shuang on Monday played down the calls for the probe, […] He said that "politicizing" the issue of the origin of the virus goes against the spirit of science. "It disrupts international cooperation and mutual trust and will not help with global cooperation to fight the virus," Geng said.

6.2.2. Critical Discourse Analysis

This extract is a typical example of biased argumentative text produced to discredit the Chinese virologist, as well as the Chinese government supporting her. The tone of the anonymous author's contention is quite acrimonious – which upholds the hypothesis that what the author claims is likely to be fake news.

The text begins with a complex hypotactic sentence structure, consisting of a dominant clause split into two parts by the insertion of a dependent clause. In the dominant clause, the author seems to neutrally report the news about the leading WIV virologist's denial of her "defection to West" with "the secrets about the Covid-19". Such a 'neutrality', however, is soon disproved in the dependent clause where the author surreptitiously introduces innuendos by means of the adjective "mysterious" mockingly associated to the virologist's "disappearance" and generating the 'flaming metaphor' of the "sparked speculation" about Covid (here defined as "the deadly novel coronavirus"). The negative connotation of the adverb "deadly" emphasizes the potentially lethal characteristics of this virus that is personified as an animate monstrous entity deliberately and stealthily "emanating" – like a threatening ectoplasm – from the Wuhan laboratories. The use of a non-finite verb form ("emanating") may suggest a reference to the lack of temporal limits on the virus's dangerous action, which is soon connected, in the subsequent hypotactic sentence, to the work of the Wuhan virologist whose name is mentioned here for the first time ("Shi Zhengli"). Indeed, her name is immediately associated with her derogatory nickname "Bat Woman" – apparently mentioned only in an incidental way within a dependent clause that splits the dominant one into two parts. Yet, this nickname is here reported only to belittle the virologist's research work, derisively defined by the author as "passionate" – an inappropriate adjective for her dedicated research on viruses which only by chance are carried by repellent animals, namely, the bats the virologist deals with.

The second part of the dominant clause in this sentence informs that the virologist used her own account on the Chinese "state-run" social media WeChat to claim that the defamatory rumors of her defection are false. The remark that WeChat is a "state-run media" is not casual, as the author may in fact allude to a joint mischievous connivance between the Chinese Government and the WIV virologist in keeping the virus research objectives secret.

In reporting the virologist's words in her WeChat account, the author, by using a dependent clause, seems to doubt, in a surreptitiously incidental way, the fact – reported by unmentioned others – that "Shi" (indicated without using professional or academic titles) is "the Director of the WIV". All this preliminary critical argumentation orchestrated by the author prefaces the virologist's fiery defense of her scientific and moral integrity in research work, reproduced verbatim through direct speech. She starts by claiming that defecting "shall never happen", using the deontic modal "shall" to connote a promise grounded on a sense of duty. The next disclaimer looks like an exasperated declaration of lack of guilt in carrying out scientific experiments with viruses, concluded with the poetic metaphor of her belief (conveyed by the epistemic modal "will") in the day when the "clouds" of the slanders on her research "disperse" and the "sun" of truth "shines".

Then, the virologist's noble and poetic soul seems to be suddenly dissolved in her next reported WeChat invective against "humans' unsanitary lifestyles" provoking nature's "punishment" by means of the novel coronavirus, representing the real cause of pandemic – thus fiercely denying – by means of an unpredicted oath on her own life – any

involvement of the WIV lab in the spread of the virus, as insinuated by a group of Indian scientists in their article.

In the last two paragraphs of this extract, the focus shifts from the WIV virologist to the Chinese Government that persists in "resisting", on the one hand, accusations from the U.S. and other states that the virus originated from the live animals sold at the Wuhan wet market close to the lab, and, on the other, their requests for an official probe into the actual origin of the virus. In this regard, the author avoids making personal comments and rather prefers to quote directly the words of the Chinese Foreign Ministry spokesman who denounces a 'politicization' of the search for the origin of the virus that not only goes "against the spirit of science", but also against "mutual trust" as it "disrupts international cooperation" in the fight against the virus.

6.2.3. Participants' debate

YF9 (Shirin): I think this is definitely fake news (..) I think the virologist didn't defect to the West (.) and she wasn't careless in her experiment with the virus (..) Western countries attack her only because she's Chinese (..) and because she is not white (.) and she's a woman scientist (.) so people mustn't trust her research (.) she's also insulted (.) she's called "Bat Woman" because she handle dirty bats in her experiments.

NM7 (Ayo): but the author of this article is Indian (.) no Western.

YF9 (Shirin): yes (.) the author is Indian (.) and India is always on the side of Western countries (..) India shall always be Western colony (.) never changed (..) I mean (.) they wish to be like Western people (..) always share their points of view.

NF6 (Jamilah): they no trust her because she's Chinese and woman (.) same like migrants: if you're black woman, people in Europe treat you bad (.) they no want you in their place (.) must send you back to your country (..) but if you're white woman (.) better blonde (.) they welcome you (.) and take care of you and your kids in their home.

GF4 (Despina): but look her photo (.) you see? It's not because she's Chinese (.) she's very (..) shabby (.) no make up (..) no smile (..) bags under eyes (..) no (.) this photo cannot be good for a social.

IF1 (Alessia): [she giggles] she must use photoshop (.) to (.) change her image (.) and make better.

IFP2 (Stefania): no no (.) you cannot say this (..) is body shaming.

IF1 (Alessia): why not? (.) I just say that she must do aesthetic operations before she post her photos on the socials *[she giggles]* (..) so people can like her more (..) can believe more what she does (..) I think you must be physically okay if you have (..) visibility (..) look the Italian virologist (..) A.V. [name omitted] for example (.) and the other (.) the cousin of [name omitted] (..) I don't remember the name (.) they are elegant (.) beautiful (.) and respected.

MF8 (Najia): to try at all costs to conform to aesthetic models that men impose on women can be very dangerous for Western women (..) also for their health with all that surgery (.) can be a trap (.) because people may not listen to what they want to say (..) they're not considered (.) credible.

NM7 (Ayo): I think this scientist say the truth (..) she look serious (.) and she swore on her life (.) that the virus has nothing to do with the lab (..) on her life (..) that can no be fake news.

GM5 (Nikos): I think that we must not trust a person that say the (.) curse that "the coronavirus is a punishment by nature to humans' unsanitary lifestyles" (.) she's against our free way of life (.) she consider it wrong (..) she's really against life in general (.) she thinks that nature must 'punish' human beings and take their life (.) she's mad for me.

IM3 (Marco): yes (.) I don't think it's fake news (.) the only fake news is that she defected to West (.) because in my opinion this virologist think exactly like the Chinese government (..) according to me (.) they are "politicizing" the origin of the virus (.) not the US (.) or the Western countries (.) as the (.) Chinese Foreign Ministry spokesman say (.) because they decided that (.) that they must destroy (.) with the Covid (.) destroy all humanity (..) I mean (.) all human beings that China cannot control (.) like those that don't want to stay in their house for the lockdown to avoid the virus.

NM7 (Ayo): in Italy doctors say African people (.) Chinese people (.) must stay home because they spread illness (..) so assistance na [is] difficult for us and our kids (..) African kids come

> left alone in school here (..) Italian kids no want be friend for them.

The complex sentence-structure of the text conveying contradicting views (namely, the author's apparently neutral – if not overtly supportive – but then covertly critical stances on the topic), prompts in the participants in the discussion the activation of divergent high/low-context schemata.

The Yemeni participant YF9 starts the exchange by adopting a low-context schema on the topic in contrast with the conventional high-context culture she belongs to. YF9 regards the author's argument as a fake news and supports, instead, the virologist's research by strongly intimating to trust her through the use of the deontic modal "must" that conveys an unexpected novel low-context schema metaphor of 'inclusion'. Indeed, YF9 attributes the attacks the virologist receives to her being Chinese, non-white, and a woman – thus contradicting the predictable belittling Islamic stance on women, in general, and on female scientists in particular. Such a disparaging stance instead is adopted by the United States (derogatorily referring to the virologist as "Bat Woman"), and by other Western countries traditionally regarded as low-context cultures. When the Nigerian participant NM7 points out that the author of the text is Indian, hence non-Western, YF9 has no qualms about directly attacking the Indian persistent colonial mentality aimed at an acculturation that, predictably (as suggested by the deontic modal "shall"), makes Western ways of thinking its own.

Immediately afterwards, the Nigerian participant NF6 employs the deontic modal "must" to introduce a novel low-context schema metaphor of 'exclusion' when she, too, attributes the lack of trust in the virologist to the fact that she is Chinese and a woman. NF6 then extends the metaphor of 'exclusion' to encompass the parallel case of black migrant women who, differently from white female ones who receive an immediate and benevolent welcome, are rejected by Western countries and are often repatriated.

The subsequent exchange apparently represents a sort of comic relief introduced by two Western female participants – i.e., the Greek GF4 and the Italian IF1 – but actually, once again, Italian and Greek participants in this discussion tend to rely on stereotyped high-context positions – as if they felt hidden and protected by the online communication mode and, as a consequence, deprived of any responsibility and therefore free to express offensive and antisocial opinions. In this particular case, the two female participants use deontic modals of 'denied permission' ("cannot") and 'requirement' ("must") in order to convey a high-context schema metaphor of 'exclusion', as well as the epistemic modal of 'possibility' ("can") to envisage a potential remedy. GF4 starts with the mean comment on the female virologist's scruffy look in the attached photo regarded as inappropriate for a social site. IF1 upgrades such a metaphor of 'exclusion' by adding a nasty remark on the Chinese female virologist's indispensable ("must") use of the digital programme Photoshop to retouch and enhance her photos posted on her online social site. At this point, the other Italian female participant, IF2, intervenes to warn IF1 that comments aimed at body shaming are not allowed ("cannot"). But IF1 challenges IF2 ("why not?") by using a light tone ("*she giggles*") apparently not to take what she is saying seriously. And yet, IF1's abuse to the physical appearance of the female virologist goes so far as to point out the absolute necessity ("must") for her to resort to cosmetic surgery before posting her photos online. This would give the virologist a chance to be physically more pleasant and professionally more credible. In support of this derogatory view, IF1 cites two Italian female virologists – very popular on the media – as an example of women's taking care of their look and, for this reason, being admired and respected.

The metaphor of 'inclusion' is reintroduced in the debate by the Moroccan female participant MF8 who warns Western women against the harms of cosmetic surgery based

*L*ingue e
*L*inguaggi

on male chauvinist aesthetic parameters that can turn out to be a trap for women who, as a result, may not be taken seriously in what they say. This non-Western participant's unexpected low-context schema metaphor of the possible "trap", 'excluding' women from the social domains (conveyed by the epistemic modals "can" and "may"), represents the opposite view of what for Western women is considered instead as a 'freedom' to enhance their physical appearance and gain more self-confidence so as to be more assertive in expressing their own ideas and, thus, strengthening their social 'inclusion'.

A further metaphor of 'inclusion' is conveyed by the Nigerian male participant NM7 who excludes the possibility of a fake news (by the ELF epistemic modal "can no be") insofar as he totally trusts the "modest and serious" virologist who swore on her life that the virus is unrelated to the WIV lab. This metaphor may be considered a low-context schema one insofar as it comes from a participant who belongs to a high-context culture that traditionally does not take women's oaths into any account.

The last two participants in the discussion are both male and from Southern-European countries. The Greek GM5 reintroduces a high-context schema metaphor of 'exclusion' as he asserts (by resorting to the deontic modal "must not") that it is necessary not to trust the virologist's words insofar as she has cast a curse on people's free lifestyle that she defines as "unsanitary" and for this reason it has become the target of the virus's "punishment". In the Italian GM5's view this is the evidence that the virologist is irrationally against life. In his reply, the Italian GM5 excludes any chance that the text is about fake news, with the exception of the news about her defection to West. By asserting this, GM5 provides his own interpretation of the Chinese Foreign Ministry spokesman who rejects any 'politicization' of the pandemic and hopes, instead, for "mutual trust" fostering a "global cooperation to fight the virus". GM5 assumes that the Ministry spokesman's claim is false insofar as the virologist's research is, on the contrary, an integral part of the political design of the Chinese Government that is determined (in GM5's view, conveyed by the deontic modal "must") to destroy humankind with the pandemic weapon – or at least to annihilate those people over whom China is unable to exercise its control (conveyed by the deontic modal "cannot"), by depriving them of their freedom and keeping them shut in their houses with the lockdown policy. By asserting this, GM5 introduces another high-context schema metaphor of 'seclusion' which denies any healthcare effort made by governments to avoid the spread of the pandemic. Finally, the Nigerian participant NM7 reinterprets the metaphor of 'seclusion' by associating it to one of 'exclusion' by reference to African and Chinese migrants in Italy who are considered as a vehicle of diseases and are excluded from the full access and use of health services, as well as from full school integration for their children.

6.3. Protocol analysis: Set Text 3

6.3.1. Extract 5 – Set Text 3

"Set Text 3" is an online interview to the Chinese virologist Shi Zhengli, head of the Wuhan Institute of Virology. The interview entitled *Talking to China's 'Bat Woman'* was conducted by the female Chinese journalist Liu Xin and published in the online issue of the Chinese CGTN News on the 28th of August 2020.

> Finally, I had the chance to sit down with China's "Bat Woman." That's the name they gave to Dr. Shi Zhengli, a virologist from the Wuhan Institute of Virology, who has been, together with her lab, at the center of theories surrounding the origin of the novel coronavirus. Because of her outstanding work with the SARS virus, she earned herself that nickname.

Yet, in the great chaos at the early stage of the COVID-19 pandemic, she came under speculation, insinuation, even downright personal attacks, first in China, later in the U.S. She kept a low profile, giving practically no interviews until months later. I had wanted to talk to her when I was in Wuhan in April.

As the weeks went by, accusations against her and her lab mounted. U.S. politicians, for instance, claimed there was "credible" or even a "significant" amount of evidence that the virus came from the Wuhan lab where she was the leading coronavirus expert. […] So when I finally had the chance to do a virtual interview with her, I was really intrigued. I could tell she was slightly shy at first. She was calm most of the time, but not when pressed about the allegation that the virus came from her lab, for instance.

"We can never prove something that doesn't exist. All these attacks on us from the U.S. are unfounded. We never had this novel coronavirus in our lab, let alone handled it. Before December 30, 2019, such a virus did not exist in our lab. There could not possibly have been a lab leak. So this kind of attack is invalid," Dr. Shi said. […] She said that her lab had been doing research for 15 years, and all their work had been published. […]

It makes sense to me. But will she be given the benefit of the doubt that she deserves? When U.S. politicians exalt "distrust but verify," do they know what it really means? When you distrust, there's no amount of verification that will help.

So what about the claims that the U.S. politicians have seen evidence that the virus came from the lab?

"There is no evidence for what they've said," Dr. Shi again raised her voice markedly. "They are lying. They are lying for political reasons," Dr. Shi said.

She felt like a different person from the shy and soft scientist I first perceived. […] Dr. Shi and her colleagues have apparently gone through the most difficult times. As the interview went on, she became more relaxed […] She told me now the lab is focused on research on COVID-19 vaccines. When asked about the lessons she's learned, she called for more cooperation and patience. […]

I choose to trust my eyes and ears. Do you?

6.3.2. Critical Discourse Analysis

This last abstract reporting an interview to the female virologist Shi Zhengli from the Wuhan Institute of Virology, conducted in China by a Chinese female interviewer, looks like an argumentative text tailored on purpose in an informal, light and interactive style typical of social networks to make Western countries accept the WIV virologist under attack (mainly in the U.S.) for her work with the coronavirus. The virologist is, since the beginning, respectfully referred to with her academic title, Dr. Shi. And yet, she is portrayed as some kind of famous heroine facing dangerous situations (having to do with lethal viruses found in repulsive animals, like bats) – defined, as it were, affectionately (rather than offensively, as intended by the U.S. commentators) with the cartoon nickname of "Bat Woman". The journalist emphasized how the famous virologist has always kept a modest low profile all the time, despite malicious insinuations and harsh personal attacks from the U.S. and other Western countries, which the journalist mentions incidentally, without, however, citing the reference sources (i.e., "'credible' or even 'significant' amount of evidence that the virus came from the Wuhan lab").

The report of the interview seems in fact a well-crafted text meant to dispel any doubt that what the virologist says is the truth, and not fake news. The virologist is described as a "calm" and a "slightly shy" woman – which "really intrigued" the journalist – but her disclaimer, reproduced in direct speech, against Western accusations of responsibility for the coronavirus leaking from her laboratory, reveals instead a heated person, exasperated by the constant attacks against her as a scientist and against her research work that, she claims, has always been available to everybody since it is all published.

What follows is a series of reflections by the journalist in a defense of the virologist which she openly admits ("it makes sense to me"), formulated in the form of questions that require readers to seriously ponder fake news allegations against the Chinese scientist. Such questions focus on: the necessary willingness (marked by the deontic modal "will") to give Dr. Shi the well-deserved benefit of the doubt; a critique of the U.S.'s ambiguous claim "distrust but verify" where verification is however biased against the declared distrust in the scientific procedures implemented in the WIV lab; the lack of evidence upon which U.S. politicians have grounded their claim that the virus originated from the WIV lab.

This last issue regarding the allegation that the virus leaked from the lab provokes Dr. Shi's furious reaction (she "raised her voice markedly") against what she considers as a political lie from the U.S. that has seriously affected her own life and the lives of her colleagues. The virologist regains her composure only when she begins to talk about her recent experiments with the virus to develop new Covid-19 vaccines – which require "more cooperation and patience".

The interview ends with the journalist's clever strategy of persuasion consisting of a direct address to her implied readers in the form of a question by which she asks them if they share the same trust that she claims to have developed on the evidence of what she has seen and heard during her interview with the virologist.

6.3.3. Participants' debate

GM5 (Nikos): No (.) I don't trust the journalist and I don't trust the virologist (..) they are two Chinese (..) this not an interview (.) this is (..) propaganda (.) that China wanted (.) to convince people (..) American people (.) and the world (.) that (.) that they say the (.) true (..) the objective is that we must believe them (.) but these are all fake news.

IF2 (Stefania): I agree (.) this interview is all about fake news (..) I think it's created for American people (.) to present the virologist like an American woman free to speak (..) before she was silent a long time (..) they said that (.) the Chinese government (..) decided that she must not speak with nobody (..) and also the journalist is not like the women journalists that we see in the Chinese TV (.) I mean (..) they have (.) no expression of the face (.) speak with (.) low voice (..) they seem they fear someone (..) this Chinese journalist on the contrary is like the American journalists (.) eh (.) direct (.) she seem free to say what she want (.) what she think (..) I think that Chinese government created this interview (..) just for American people (.) to show that Chinese people are like them (.) and they must trust Chinese people.

MF8 (Najia): I trust Dr Shi (.) absolutely (.) this Chinese journalist gave her voice (.) and she could speak (.) finally (..) I think that the journalist help American people to understand the truth (.) and for this she uses the American journalistic style (..) Dr. Shi was insulted as scientist and as person (..) but I believe her and I think that she's a very serious (.) very serious virologist (.) she make experiments with the coronavirus only because she want to develop vaccines to save human beings (.) not to destroy them.

The interview of the Chinese female journalist to the Chinese female virologist, conducted according to the typical lively style of an American women's magazine, raises suspicions in the Greek male participant GM5 who immediately defines it as political propaganda based on fake news by which China imposes on the Western world its own version on the origin of Covid-19 as if it were the truth. The aim, in GM5's view, is to manipulate readers and make them believe that the virologist is a political victim of the U.S.'s defamatory campaign against China, wrongly accused of spreading the virus. In asserting this, GM5 strengthens the high-context schema metaphor of 'exclusion'.

This metaphor is reiterated in the comments by the Italian female participant IF2, who is so confident that the interview conveys fake news to the point that she uses the simple aspect all the time, in association with both present and past tenses, to highlight

ELF-mediated modal metaphors of 'inclusion', 'exclusion' and 'seclusion' in an online discussion
on Covid-19 fake news: A case study in cross-cultural Cognitive Linguistics

249

that everything she states is factual and true. In this way she conforms to a high-context schema, shared by many Western cultures, according to which Chinese official interpretations of facts can be nothing but fake news (hence the metaphor of 'exclusion'). As an evidence of this, IF2 points out the fact that both the female journalist and virologist seem to be allowed to speak as if they were free to do so, despite the fact that in China there is no freedom of speech, and speaking in public is kept under the Government's control. This is clear from the body language of the Chinese TV-news speakers who look somewhat petrified and frightened, quite the opposite of the journalist and the virologist who, instead, speak freely and confidently throughout the online interview. For this reason IF2 concludes that this interview is politically orchestrated by the Chinese Government to manipulate its readers in order to induce them (signaled by the use of the deontic modal "must") to trust the virologist's defense.

The Moroccan female participant MF8, instead, firmly denies that the interview is about fake news and, therefore, she reiterates the low-context schema metaphor of 'inclusion' that she has always advocated throughout the discussion. She trusts the virologist (referred to by her academic title – i.e., Dr. Shi) and also the journalist who gives her the opportunity to express herself freely (emphasized by the use of the deontic modal "could"). The journalist's choice to use a typically lively Western style is, in MF8's view, a communication strategy to enhance the readers' understanding that Dr. Shi was unjustly insulted and unfairly defamed by the U.S.'s spreading of false news about her, whereas MF8 is convinced that the truth is that she is a serious scientist focused on developing vaccines against the coronavirus.

7. Conclusions: the role of ELF variations in the expression of new metaphors

This case study has analyzed non-native uses of English modality as they diverge from habitual high/low-context metaphorical schemata shared within different sociolinguistic communities which are here represented by a focus group of multicultural participants in an ELF-mediated online debate. More specifically, the case study has explored the new cognitive metaphors of 'inclusion', 'exclusion', and 'seclusion' developed by the participants in relation to their social and psychological involvement with the topic under discussion – namely, the probable fake news on the causes of the Covid-19 pandemic, conveyed by three journalistic texts submitted to the focus group. The discussion developed further to encompass the positive and negative consequences of pandemic, involving the obligation to stay at home and communicate exclusively online, with the related issues of gender and ethnic discrimination, or rather empowerment.

What stands out in this case study is that the more the participants were emotionally involved in such a topic, the more markedly their specific ELF variations emerged in the discussion. This can be explained by the fact that the topic triggered in the participants a top-down urgency to convey their emotional involvement during the online interaction, and this was possible by using their respective informal, everyday ELF variations resulting from the natural transfer of the participants' native-language structures into the non-native English language they used (Guido 2021). Hence, for instance, the typical syntactic and semantic structures of the Nigerian Pidgin English emerged in the ELF variation used by the Nigerian participants NF6 and NF7 – such as: the pre-verbal particle "bin" as a past-tense marker; the structure of the negative clause with the sole negative particle "no", rather than conforming to the Standard-English verb-phrase composed of the auxiliary verb and the negative specifier

"not"; the transfer of the relative pronoun "se" and of the copular verb "na" from their native Igbo language used instead of, respectively, "that" and "is"; as well as the transfer of ergative OVS structures transferred from Igbo, collocating abstract/inanimate objects in animate-subject position ("desert, sea, prison, torture no kill us"). The omission of the copular verb 'to be' and of the third-person singular suffix '-s' can be identified in the Moroccan participant MF8's ELF variation (e.g.: "this a racist prejudice"; "it cover women's physical aspect"), and a normalization of the structure of the comparative monosyllabic adjective can be found in the Yemeni participant YF9's ELF variation (e.g., "I feel more free"). Several deviations from the Standard-English norms can be identified in the Greek and Italian participants' ELF variations. In the Italian participants' ELF uses, deviations range from a lack of agreement between clausal subjects and singular/plural suffixation of verbs, to third-person singular suffix drop; inappropriate use of prepositions; and omission of auxiliaries and auxiliary inversion in formulating questions. These features can be identified also in the Greek participants' ELF uses, where in addition it is possible to notice a double negation in the clausal structure (e.g., GF4: "I don't really understand no more", and GM5: "we cannot smile no more"; "I also don't know no more").

Indeed, precisely these ELF variations allowed the conveyance of the new metaphors for the expression of the participants' unprecedented experience of forced lockdown and online communication through the so-called 'virtual metaverse' replacing reality. In this respect, the participants in the online debate who were migrants from the high-context cultures of Nigeria, Morocco, and Yemen (according to the conventional taxonomy by Hall 1990), unexpectedly developed novel low-context epistemic metaphors of 'inclusion' triggered by their sense of freedom from native social constraints offered by communication through a computer/smartphone screen concealing their ethnic and socio-cultural features. On the contrary, participants from the middle/high-context cultures of the Southern European countries of Italy and Greece (Hall 1990) showed a strengthening of the stereotypical high-context deontic metaphors of 'exclusion' and 'seclusion'.

Noticeably, the data collected and analyzed in this case study are still too limited to permit generalizations. Yet the case-study findings encourage further investigation aimed at verifying whether this novel type of computer/smartphone-mediated communication is subverting not only the consolidated culture-specific schemata by which participants in online cross-cultural interactions make sense of the experiential and social perception of reality dissolved in the virtual 'metaverse', but it is also undermining the very typological structures of the native languages which come to be transferred into the structures of the participants' respective ELF variations. Further research in this field, for instance, can be fruitfully applied to online communication where participants in the debate can be encouraged to conceive novel metaphorical schemata through which they may come to negotiate and acknowledge schemata from other communities' cultures.

Bionote: Maria Grazia Guido is Full Professor of English Linguistics and Translation at the University of Salento (Italy), where she is the Director of the Department of Humanities. She holds a PhD in English Applied Linguistics at the University of London Institute of Education. Her research interests are in cognitive-functional linguistics applied to ELF in intercultural communication, cognitive stylistics and specialized discourse analysis. Her monographs include: *English as a Lingua Franca in Migrants' Trauma Narratives* (Palgrave Macmillan), *English as a Lingua Franca in Cross-cultural Immigration Domains* (Peter Lang), *Mediating Cultures* (LED), *The Acting Translator* and *The Acting Interpreter* (Legas).

Author's address: mariagrazia.guido@unisalento.it

ELF-mediated modal metaphors of 'inclusion', 'exclusion' and 'seclusion' in an online discussion
on Covid-19 fake news: A case study in cross-cultural Cognitive Linguistics
251

References

Bakhtin M. 1981, *The Dialogic Imagination*, University of Texas Press, Austin.

Cazden C.B. 1992, *Vygotzky, Hymes and Bakhtin: From Word to Utterance and Voice*, in Cazden C.B. (ed.), *Whole Language Plus: Essays on Literacy in the United States and New Zealand*, Teachers College Press, New York, pp. 190-208.

Collier G., Kuiken D. and Enzle M. 1982, *The Role of Grammatical Qualification in the Expression and Perception of Emotion*, in "Journal of Psycholinguistic Research" 11, pp. 631-650.

Ericcson A.K. and Simon H.A. 1984, *Protocol Analysis: Verbal Reports as Data*, The MIT Press, Cambridge, Mass.

Faerch C. and Kasper G. 1987, *Perspectives on Language Transfer*, in "Applied Linguistics" 8, pp. 111-136.

Fairclough N. 1995, *Critical Discourse Analysis*, Addison Wesley, Boston.

Folman S. and Sarig G. 1990, *Intercultural Rhetorical Differences in Meaning Construction*, in "Communication and Cognition" 23 [1], pp. 45-92.

Greenberg J.H. 1973, *Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements*, in Greenberg J.H. (ed.), *Universals of Language*, The MIT Press, Cambridge, Mass., pp. 73-113.

Guido M.G. 2004, *Mediating Cultures: A Cognitive Approach to English Discourse for the Social Sciences*, LED, Milan.

Guido M.G. 2008, *English as a Lingua Franca in Cross-cultural Immigration Domains*, Peter Lang, Bern.

Guido M.G. 2018, *English as a Lingua Franca in Migrants' Trauma Narratives*, Palgrave Macmillan, London.

Guido M.G. 2020, *The Influence of Covid-19 Pandemic Emergency on the Economy Principle Applied to Nigerian Migrants' ELF-mediated Online Interactions*, in "Lingue e Linguaggi" 39, pp. 179-200.

Guido M.G. 2021, *Relexicalisation and Decategorialisation Processes in Migrants' ELF-Mediated Online Narratives in the Disembodied Time of the Covid-19 Pandemic*, in "Textus" 35, pp. 87-102.

Gumperz J.J. 1971, *Language in Social Groups*, Stanford University Press, Stanford.

Hall E.T. 1976, *How Cultures Collide*, in "Psychology Today" 10 [2], pp. 66-97.

Hall E.T. 1977, *Beyond Culture*, Anchor Press, Garden City, NY.

Hall E.T. 1985, *Hidden Differences: Studies in International Communication*, Gruner & Jahr, Hamburg.

Hall E.T. 1990, *Understanding Cultural Differences*, Intercultural Press, Yarmouth, ME.

Halliday M.A.K. 1994, *An Introduction to Functional Grammar*, Edward Arnold, London.

Hinkel E. 1995, *The Use of Modal Verbs as a Reflection of Cultural Values*, in "TESOL Quarterly" 29 [2], pp. 325-341.

Hofstede G. 1983, *National Cultures in Four Dimensions: A Research-Based Theory of Cultural Differences Among Nations*, in "International Studies of Management and Organization" 1 [2], pp. 46-74.

Jones S. and Tetroe J. 1987, *Composing in a Second Language*, in Matsuhashi A. (ed.), *Writing in Real Time*, Longman, New York, pp. 34-57.

Kasper G. 1979, *Communication Strategies: Modality Reduction*, in "Interlanguage Studies Bulletin" 4, pp. 266-283.

Lakoff G. and Johnson M. 1980, *Metaphors We Live By*, The University of Chicago Press, Chicago.

Lakoff G. and Johnson M. 1999, *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*, Basic Books, New York.

Langacker R.W. 1987, *Foundations of Cognitive Grammar, Volume I: Theoretical Prerequisites*, University of Stanford Press, Stanford.

Langacker R.W. 1991, *Foundations of Cognitive Grammar. Volume II: Descriptive Application*, Stanford University Press, Stanford.

Narula H. 2022, *Virtual Society: The Metaverse and the New Frontiers of Human Experience*, Random House, New York.

Nisbett R.E. and Wilson T.D. 1977, *Telling More than We Can Know: Verbal Reports on Mental Processes*, in "Psychological Review" 84, pp. 231-259.

O'Halloran K. 2003, *Critical Discourse Analysis and Language Cognition*, Edinburgh University Press, Edinburgh.

Rumelhart D.E. 1980, *Schemata: The Building Blocks of Cognition*, in Spiro R.J., Bruce B. and Brewer W. (eds.), *Theoretical Issues in Reading Comprehension: Perspectives from Cognitive Psychology, Linguistics, Artificial Intelligence and Education*, Erlbaum, Hillsdale, N.J., pp. 33-58.

Schachter J. 1983, *A New Account of Language Transfer*, in Gass S. and Selinker L. (eds.), *Language Transfer in Language Learning*, Newbury House, Rowley, Mass., pp.98-111.

Seidlhofer B. 2011, *Understanding English as a Lingua Franca*, Oxford University Press, Oxford.

Sombre P. and Wermuth C. (eds.) 2010, *Framing. From grammar to application*, John Benjamins, Amsterdam/Philadelphia.

Stanovich K.E. 1980, *Toward an interactive-compensatory model of individual differences in the development of reading fluency*, in "Reading Research Quarterly" 16, pp. 32-71.

Sweetser E.E. 1990, *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*, Cambridge University Press, Cambridge.

Talmy L. 1988, *Force Dynamics in Language and Cognition*, in "Cognitive Science" 2, pp. 49-100.

Thesen L. 1997, *Voices, Discourse and Transition: In Search of New Categories in EAP*, in "TESOL Quarterly" 31 [3], pp. 487-511.

Traugott E.C. 1989, *On the Rise of Epistemic Meanings in English: An Example of Subjectification and Semantic Change*, in "Language" 65, pp. 31-55.

Widdowson H.G. 1994, *The Ownership of English*, in "TESOL Quarterly" 28, pp. 377-389.

Widdowson H.G. 1995, *Discourse Analysis: A Critical View*, in "Language and Literature" 4 [3], pp. 157-172.

Zuengler J. 1989, *Identity and Interlanguage Development and Use*, in "Applied Linguistics" 10, pp. 80-96.