

1 **Crisis Translation: Considering Language Needs in Multilingual**

2 **Disaster Settings**

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5 **Abstract**

6 **Purpose:** The purpose of this conceptual paper is to highlight the role that language
7 translation can play in disaster prevention and management and to make the case for
8 increased attention to language translation in crisis communication.

9 **Approach:** The article draws on literature relating to disaster management to suggest
10 that translation is a perennial issue in crisis communication.

11 **Findings:** Although communication with multicultural and multilinguistic communities
12 is seen as being in urgent need of attention, we find that the role of translation in
13 enabling this is underestimated, if not unrecognised.

14 **Value:** This article raises awareness of the need for urgent attention to be given by
15 scholars and practitioners to the role of translation in crisis communication.

16 **Keywords:** crisis communication; translation and interpreting; emergency response;
17 cross-cultural barriers; linguistic vulnerability

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23 **Introduction**

24 Much as the world is interconnected and globalized in terms of communication, the

25 breadth of social and economic impact of communication in multilingual, transborder as
26 well as national crises remains understudied (Federici, 2016). Long-lasting crises can
27 erupt within multicultural cities (e.g. the 2017 Grenfell Tower fire in London), a region
28 (the 2017 earthquake in Mexico), a nation (the 2011 Great East Japan earthquake, or the
29 2010 Haiti earthquake), or across borders between multiple countries (the 2004 Boxing
30 Day Tsunami across 18 countries in the Indian Ocean). Triggered by natural hazards, or
31 teleological motivations – human-driven disasters, including terrorism and conflict
32 (Glade and Alexander, 2016) – happen within multilingual and multicultural societies
33 (Cadwell, 2014; Cadwell and O’Brien, 2016; O’Brien and Cadwell, 2017). Increased
34 people displacement and economic migrations across the world causes major concerns
35 for migrants’ adaptability to disasters in their new contexts. Although displaced
36 populations can be resilient because of their past experiences (Guadagno *et al.*, 2017;
37 Khan and McNamara, 2017; MICIC, 2016), at the same time they can be exposed to
38 new vulnerabilities in their new environments with limited access to information
39 (Puthooppambal and Parente, 2018). Language plays a role in both cross-boundary
40 and local settings. Local crises in multilingual societies equally have implications for
41 temporary or long-term residents with limited proficiency in the local language – an
42 example: translations into 18 languages were needed after the Grenfell Tower fire.
43 Thus, from indigenous populations to (un)integrated migrants, to tourists or business
44 travellers, any crisis can cascade into multiple, diverse, and interrelated temporal,
45 cultural, linguistic and geographical dimensions (Pescaroli and Alexander, 2015).
46 Consequently, language translation is required.

47 Training for internationally-coordinated responses to crises (Howe *et al.*, 2013)
48 and collecting data from disasters (Mulder *et al.*, 2016) also happen in multilingual
49 environments, where the lingua franca (the English language of international

50 humanitarian institutions) is both a solution and part of the problem. Overreliance on
51 everybody's (degrees of) competence in English delays engaging with the 'perennial
52 issue' of crisis communication among international responders (Crowley and Chan,
53 2011, p. 24) and with crisis-affected communities (New Zealand Government, 2013).

54 In this article, we make the case for increased attention to language translation in
55 crisis communication. Translation is here intended as linguistic and cultural transfer
56 from one language into another, be it through oral, signing, written, or multimodal
57 channels. We show how, in spite of some progress, the literature that deals with the
58 multilingual nature of crisis situations is limited in fields where it should thrive, such as
59 in crisis communication and in translation studies. Despite the central role attributed to
60 efficient communication in disaster risk reduction (henceforth DRR), our current ability
61 to plan and deliver multilingual information in crises is in fact hindered by the focus on
62 language needs that is predominantly limited to considering, dealing, or resolving
63 language issues in the response phase. We propose a shift of focus towards considering
64 language translation as *part of* disaster prevention and management. Embedded in
65 debates on planning, preparedness, training, and mitigation, language translation aligns
66 with the recent call to consider communication of crucial and timely information in
67 crisis management as a human right (Greenwood *et al.*, 2017). Yet, as the cursory
68 evidence on how the multilingual communication issues are studied so far shows this
69 right goes currently unnoticed, or gets very limited attention, at best.

70 **What is Crisis Translation?**

71 Communication mediated by professional and ad-hoc linguists (be they translators or
72 interpreters) is a complex form of communication. Prior to explaining the proposed
73 conceptualisation of crisis translation, it is necessary to scope what is meant by
74 'translation' and 'crisis', as used in this article. We propose a broad conceptualisation of

75 crisis translation as a specific form of communication that overlaps with principles of
76 risk communication (CDC, 2008, 2014; Reynolds and Seeger, 2014) as much as with
77 principles of emergency planning and management (Alexander, 2002; 2016b).

78 Over the last decades, the recognition that any disruptive event has cascading effects
79 has become significant. As issues in multilingual communication exist before, during,
80 and after any emergency or disaster, an awareness of cascading effects over the long-
81 term and beyond the geographical location of the event is a *conditio sine qua non* to
82 consider definitions of crisis that account for the interconnectedness of the 21st-century
83 world. Pescaroli and Alexander's definition of 'cascading disasters' (2015), which
84 connects crisis as a threatening condition with disasters as triggering events of different
85 magnitude and duration, shapes our definition of crisis. In particular, Pescaroli and
86 Alexander (2015, p. 62) integrate and sharpen the UN Office for Disaster Risk
87 Reduction terminology by emphasizing 'that cascades are events that depend, to some
88 extent, on their context, and thus their diffusion is associated with enduring
89 vulnerabilities'. It is noteworthy, however, that the UN perceives language translation
90 as a matter of 'services'. For instance, the *Disaster Assessment and Coordination Field*
91 *Handbook* (UNDAC, 2018) in the workflow of its On-Site Operations Coordination
92 Centre for disaster management includes in one of its checklists for crisis
93 communication "procurement of translation/interpretation services" (UNDAC 2018, p.
94 17). This positive awareness of need clashes with the reality that such services may
95 exist professionally in very limited scope, translators and interpreters are not trained in
96 the many language pairs that may be required, and local languages, dialects, minority
97 languages, and low/no literacy communities are less served than lingua franca or
98 'international' languages. The lack of appropriate linguistic and cultural awareness in
99 crisis communication may lead to catastrophic consequences, which could be avoidable

100 and for this reason we position this lack within the ‘cascading disaster’ paradigm.
101 Problems of translation leading to inappropriate evacuations (e.g. Field, 2017) or
102 cultural presumptions leading to further infection in displaced and local populations in
103 the 2014 Ebola outbreak (e.g. Bastide, 2018) show that inadequate planning for
104 language translation provision leads to vulnerability.

105 The UN defines as vulnerabilities ‘the conditions determined by physical, social,
106 economic and environmental factors or processes which increase the susceptibility of an
107 individual, a community, assets or systems to the impacts of hazards.’¹ Vulnerabilities
108 also depend on cultural perceptions of risk and whether cultural backgrounds align with
109 the international (often Anglophone) concepts of preparedness and risk reduction (see
110 discussions in Blaikie *et al.*, 2004; Krüger *et al.*, 2015). Lack of integration, lack of
111 participation, lack of access to information represent vulnerabilities for Culturally and
112 Linguistically Diverse (CALD) communities. Translation would mitigate some of these
113 pre-existing vulnerabilities, but as Grin (2017, p. 156) puts it ‘[t]ranslation sometimes
114 evokes the image of a Cinderella confined to humble domestic chores while her elder
115 sisters, that is, communication strategies like “lingua franca” and second/foreign
116 language learning, enjoy all the attention and visibility’. The consequences of these are
117 highlighted in the recent IFRC *World Disasters Report 2018*:

118 Speakers of minority languages who are not fluent in the official national
119 language(s) are at a structural disadvantage in many countries. [...] However
120 linguistically diverse the affected population, humanitarian responses are usually
121 coordinated in international lingua francas and delivered in a narrow range of
122 national languages. (IFRC, 2018, p. 103)

123 As a result, language translation rarely, if ever, features among plans to increase
124 resilience but its absence increases the cascading effects of crises. Pescaroli and
125 Alexander’s definition of ‘cascading disasters’ (2015, pp. 64-65) underpins a notion of

126 'crisis' that persuades us that research into translation and its effects on communication
127 in crisis management is much needed. Poor or culturally inappropriate communication
128 undermines trust in responders and institutions. Failure to address effective
129 communication for CALD communities generates further social disruption, one of the
130 cascading effects. This, in turn, risks affecting and endangering respondents who may
131 deal with crisis-affected populations because their lack of understanding or their cultural
132 mindset make them appear as non-collaborative. Thus, crisis translation considers
133 language barriers in the context of multi-dimensional cascading effects that widen
134 existing vulnerabilities or engender new ones by means of miscommunication.

135 As mentioned earlier, 'translation' here refers to all modes, oral, written, signed,
136 and multimodal that could be used for communication in preparation and response, as
137 well as for recovery from a crisis. Hence, 'translation' includes the oral task of
138 'interpreting'. For those outside the academic and professional domain of translation,
139 debates about the different skills required from translators and interpreters are largely
140 unknown and 'translation' is the term used generally to mean the transfer of meaning
141 and cultural encodings from one language/cultural system to another regardless of the
142 channel of communication (e.g. the Harvard Humanitarian Initiative heading
143 'translation: the perennial hidden issue' concerns in fact a question of interpreting).
144 Moreover, an individual may act as a translator of written content in one instance and an
145 interpreter of oral content in another. This is especially the case in crisis situations. The
146 term 'translator' is usually reserved in academia and in the translation professions
147 (Gouadec, 2007) for those who are 'qualified' to act through training and/or experience.
148 However, in a crisis situation, a 'translator' might be any person who can mediate
149 between two or more language and culture systems, without specific training or
150 qualifications (Federici and Cadwell, 2018; O'Brien and Cadwell, 2017). A translator

151 might even be a young refugee (see Marlowe and Bogen, 2015; Melandri *et al.*, 2014).
152 This loose definition of a translator is not a comfortable one for those who work in the
153 translation professions or in the related academic discipline. Nonetheless, when people
154 are faced with a crisis, the luxury of a trained professional is often just that – an
155 unattainable luxury. We recognize that translation is carried out by many different
156 people in crisis situations; that it is sometimes oral, sometimes written, and sometimes
157 highly multimodal; that the translator is sometimes a trained professional and
158 sometimes not, sometimes an adult, sometimes a child, that translators do not just
159 transfer linguistic information, but also act, very importantly, as cultural mediators.
160 Take this state of affairs and add to it the lack of trained translators and interpreters who
161 are available to work in a crisis, the lack of funding for communication, never mind
162 translation, the urgency that is associated with core phases of crises (response and
163 recovery), and the potential power of volunteers, it is necessary to adopt a broad
164 definition of ‘translation’ and ‘translator’.

165 **Growing Recognition of the Need**

166 We do not wish to give the impression that translation is entirely overlooked in
167 commentaries or policies on crisis communication. At the Sendai implementation
168 conference in 2016, translation and interpreting were discussed in the context of
169 capacity building for disaster risk reduction (Aitsi-Selmi *et al.*, 2016). The GDACS
170 (Global Disaster Alert Coordination Systemⁱⁱ) guidelines for international exchange in
171 disasters mentions translators once, but they are listed in the company of the following
172 information exchange responsibilities of the affected country: ‘transport, fuel/lubricants,
173 translators, warehouses, maps, etc. The *Sphere Handbook* (2018: p. 71), under
174 commitment 6 on information sharing in humanitarian response, includes two explicit
175 communicative obligations: ‘Communicate clearly and avoid jargon and colloquialisms,

176 especially when other participants do not speak the same language. Provide interpreters
177 and translators if needed’.

178 Cadwell (2015) and Cadwell and O’Brien (2016) investigate the use and
179 potential of translation technology in crisis situations. Somewhat surprisingly, it was
180 found that industry-standard and commercial translation tools such as translation
181 memory, terminology databases, and machine translation (i.e. MT – fully automatic
182 translation) played an insignificant role for foreign nationals affected by the Great East
183 Japan Earthquake. Since then, the potential of translation technology to assist in crisis
184 situations has been growing (see O’Brien – forthcoming - for a discussion). Having
185 crisis terminology online is of course useful, but accessibility in times of crisis for all
186 the potential actors has not been critically appraised and ways of building and sharing
187 translation databases, for example, by and for volunteers goes largely unassessed, as
188 does the utility of such databases for the training of machine translation engines.

189 Initial strides for inclusion of translation technologies in response to crisis comes
190 from the NGO Translators without Borders (TWB). It has played a leading role in
191 having translation recognized and implemented as part of humanitarian aid in the past
192 number of years, including pioneering work to train crisis translators (O'Brien, 2016).
193 Their Words of Relief project aims to translate crisis messages into 15 world languages,
194 build a spider network of diaspora who can translate, and create a crowd-sourced
195 application that connects aid workers and data aggregators in an emergency. In addition,
196 TWB partnered with Microsoft to push forward crucial work in machine translation
197 (Crisis MT, see Lewis, 2010; Lewis *et al.*, 2011) and their operations office in Kenya
198 stimulated a first study on comprehension of translated information about Ebola among
199 Kenyans.

200 **Yet, Translation is Mostly Ignored**

201 In spite of these seedling developments, translation as a facilitator of crisis information
202 is mostly overlooked. In 2018, the ‘Multi-Hazard Early Warning System: A Checklist’
203 (WMO, 2018) shows how awareness about cultural and linguistic differences remains
204 very limited. Even though the checklist responds to the purpose of the Sendai
205 Framework for Disaster Risk Reduction 2015-2030 (UNISDR, 2015) so as to attain
206 ‘the substantial reduction of disaster risk and losses in lives, livelihoods and health and
207 in the economic, physical, social, cultural and environmental assets of persons,
208 businesses, communities, and countries,’ the checklist remarkably excludes language
209 obstacles to effective communication. Linguistic diversity is the status quo in most
210 countries world-wide. However, ‘language’ is often conflated with the concept of
211 ‘culture’ and the implicit assumption seems to be that if cultural diversity is noted,
212 translation will somehow happen; many international documents, including influential
213 documents such as this checklist, are redacted in one of the 7 official languages of the
214 UN, whilst 7,111 languages are currently in actual use (*Ethnologue*, 2019)¹. Yet
215 languages such as Hindi, the 4th largest for native speakers and 3rd largest for overall
216 number, are not included among the official languages. It is tempting to argue that
217 considerations about linguistic diversity recede before prestige and power of *lingua*
218 *francas*. Moreover, translation costs money, which may not abound in crisis response. It
219 also requires forward planning. For example, establishing a database of approved
220 translators and interpreters for specific language pairs, knowing their expertise, their
221 availability etc. As a result of these and possibly other factors, the fact that linguistic
222 diversity comes with translation needs in cross-boundary crises remains underestimated.

¹ Source: <https://www.ethnologue.com/guides/how-many-languages>, accessed: 26 June 2019.

223 It is unclear who has ownership of provision for effective communication in a
224 language that is understood by the recipients of crisis information. The document
225 dedicated to early-warning signals does not suggest that a specific responder (person or
226 institution) should deal with the logistical difficulties of accommodating language
227 differences when communicating risks with the purpose of mitigating its impact. CALD
228 communities and their needs are listed; they are included in checks for assessment of
229 ‘exposure, vulnerabilities, capacities, and risks’ (p.10) where the checklist includes a
230 box for ‘legislation and cultural norms assessed to identify gaps that may increase
231 vulnerability.’ Though cultural diversity is listed, it does not follow automatically that
232 language needs are either included or taken care of, as mentioned above. The focus,
233 rather, seems to be on cultural and behavioural norms, but not on language access.

234 Further, in the extensive body of literature on crisis or disaster management,
235 with its intrinsic terminological debates on what disaster management entails (Fischer,
236 2008; Haddow *et al.*, 2011; Thomas *et al.*, 2013; Wall and Chery, 2011; Waugh, 2007),
237 or in the charter of humanitarian response of The Sphere Project (2011; as seen some
238 more commitment appears in the 2018 edition), the common denominator appears to be
239 that multilingual communication issues are considered sporadically, and only recently
240 have they acquired limited visibility. In some of this literature, the strategic importance
241 of communication, or information as aid, is highlighted (Fischer, 2008; Isiolo, 2012;
242 Santos-Hernández and Hearn Morrow, 2013; Seeger, 2006; WHO, 2012). In
243 international and European protocols or roadmaps on crisis or emergency management,
244 recommendations on clear communication with crisis-affected communities form a core
245 element yet they do not mention translation (DG-ECHO, 2013; EC, 2014, 2017). A
246 recent institutional commitment from the United Nations High Commission for

247 Refugees has one formal commitment about access to information – to address
248 migration crises:

249 Therefore, we need to maintain continuous communication with communities,
250 using languages, formats, and media that are contextually appropriate and
251 accessible for all groups in a community, including children and persons with
252 disabilities. (UNHCR, 2018, p. 8)

253 It is, at best however, a general statement of principle.

254 The EU’s General Guidelines for Operational Priorities on Humanitarian Aid
255 signalled the importance of communicating transparently about disasters (EC, 2014) and
256 recently introduced an economic argument in favour of risk reduction and prevention
257 that applies to considering translation as a tool to better inform and educate for
258 prevention: ‘We know that investment in prevention saves lives and livelihoods; it
259 needs therefore efficient targeting to disaster risks’ (EC, 2017, section 2). These goals
260 sit alongside the rights-based notion that whatever the status of one’s spoken language
261 (Mowbray, 2017), information in a crisis is a fundamental human right (Greenwood *et*
262 *al.*, 2017; O’Brien *et al.*, 2018).

263 Some of these commentators have provided evidence of negative consequences
264 when crisis communication does not work, especially when communication is in a
265 second or third language for the crisis-affected communities, or in a language they do
266 not understand at all. The pivotal work, previously mentioned, Disaster Relief 2.0,
267 published by Harvard Humanitarian Initiative (Crowley and Chan, 2011), using the
268 Haiti Earthquake example, argues for increased cooperation and dialogue between
269 humanitarian agencies and the technical and linguistic volunteers spread around the
270 globe who help process the communication generated by the disaster-affected
271 communities. It also called for deeper interactions in future disasters between those

272 responding to and those experiencing a disaster; eight years on and this issue is still
273 relevant as it remains unaddressed (Cook *et al.*, 2016).

274 Moser-Mercer *et al.* (2014, p. 141) confirm this point: ‘Surprisingly, language
275 needs of large-scale humanitarian actions and deployments are rarely voiced, often
276 downplayed and at best indirectly stated.’ To provide additional concrete examples,
277 Haddow *et al.* (2011) in their *Introduction to Emergency Management*, list five critical
278 assumptions for a successful crisis communications strategy: (1) customer focus; (2)
279 leadership commitment; (3) the inclusion of communications and planning in
280 operations; (4) situational awareness; and (5) media partnership. The audience and
281 customers of crisis information are listed as the general public, victims, the business
282 community, media, elected officials, community officials and volunteer groups (i.e. a
283 diverse group). It cannot be assumed that all these people share equal competencies in
284 the same language, so translation is a necessity. Yet, nowhere is translation mentioned
285 in this volume.

286 The DG ECHO Disaster Risk Reduction Policy Document discusses the
287 importance of inclusive information and communication and mentions in particular that
288 information should be ‘accessible for all’ (DG-ECHO, 2013, p. 41). This document also
289 mentions strengthening resilience through timely exchange of information. However,
290 making information accessible by either simplifying it for those with limited proficiency
291 in a lingua franca, or translating it is only mentioned very briefly (‘briefing of
292 colleagues and translation in practice’).

293 In his discussion on lessons learned from previous disasters, Fischer (2008, p.
294 217) notes that

295 instructions for obtaining medical assistance and subsistence supplies as well as
296 instructions for an evacuation or a quarantine are more likely to be responded to if

297 they are frequently repeated, articulated clearly and with specificity. All too often
298 emergency personnel assume that because the information was disseminated, the
299 intended recipients have received it, understood it, and responded to it in the
300 desired fashion. Nothing could be further from the truth.

301 This statement reminds us that communicating one way is insufficient, but the author
302 fails to note that, for communication to be effective, it does not only have to meet the
303 requirements listed above, but should be delivered in a language that is comprehended
304 by those who need that communication. Retention, understanding, and desire for
305 information in specific modes or formats by affected populations are excluded from this
306 equation, with the risk of one-directional forms of communication (for an illustration,
307 see O'Brien and Cadwell, 2017).

308 In his 2006 article on best practices in crisis communication, Seeger lists ten
309 best practices on crisis communication generated from research literature. Due to space
310 constraints, we do not list them all here, but emphasize practice number (8), given its
311 significance for ethical crisis communication: communicate with compassion, concern,
312 and empathy. None of the 'best practices', not even (8), recognize the role of
313 multilingual communication through translation.

314 Access to compassionate speakers of one's language represented a powerful
315 resource for refugees caught in the aftermath of the 2010 and 2011 earthquakes in New
316 Zealand (Christchurch and Canterbury), but it was acknowledged that improvements in
317 communicating with culturally and linguistically diverse communities was required
318 (New Zealand Government, 2013). As a final example, even Santos Hernández and
319 Morrow (2013) who focus on language and literacy as factors in successful crisis
320 communication, acknowledge the importance of readability using typical measures such
321 as SMOG and Flesch-Kincaid, but fail to mention translation or interpreting. In
322 summary, there are ample examples of a considerable lacuna for the role and need for

323 translation in academic, governmental, and non-governmental discourse on crisis
324 communication.

325 **Crisis Translation and Emergency Planning**

326 We intend to demonstrate that in the context of DRR and crisis management alike,
327 additional focus on the language barrier would greatly contribute to community-led
328 initiatives to mitigate risks (Gaillard, 2010; Mercer *et al.*, 2012; Shaw, 2012; Tabatabaei
329 *et al.*, 2013). Language translation is a significant problem in the response phase of
330 disasters, as deploying language specialists in combinations that are difficult to predict
331 in advance is an expensive and logistically challenging task; as we mentioned
332 previously, interpreters and translators for the needed language combinations may not
333 be available, fully trained, or even exist. It is likely to remain an impossible task to
334 complete if the focus remains only on the response phase. In order to deploy interpreters
335 or provide information in languages that reach the affected communities, translators and
336 interpreters must be available. Professional translators are rare in many language
337 combinations, so bilingual staff of NGOs double up as translators and interpreters. This
338 role is frequently imposed on such staff, on top of their existing workload, and without
339 training or support. Also, translators and interpreters may even be affected themselves
340 by whatever crisis is ongoing.

341 Embedding translation into communication strategies within emergency
342 planning is part of the solution, like any other element that can be considered and
343 included in emergency plans as part of the ‘the process of preparing systematically for
344 future contingencies, including major incidents and disasters’ (Alexander, 2016b, p. 2).
345 This could involve pre-translated, pre-subtitled, pre-audio described materials in the
346 languages understood by the local communities to be part of early actions. To achieve
347 this, language translation needs to be part of pre-crisis emergency plans that will include

348 the development of resources to enable affected-communities to interact with disaster
349 managers and humanitarian organization. The ‘so-called “disaster cycle” refers to the
350 phases of resilience building, preparation, emergency response, recovery, and
351 reconstruction’ (Alexander, 2016b, p. 23). Our contention is that translation can play an
352 important role towards *preparedness*.

353 Including translation as a component in emergency planning would have
354 multiple benefits. With increased access to timely and accurate information in a
355 language that can be (better) understood, lives and well-being can be protected.
356 Moreover, the considerable economic costs of dealing with crises could be reduced. The
357 EU H2020 Work Programme noted that the environmental and socio-economic impact
358 of disasters and crime and terrorism on the population amounts to average annual losses
359 of roughly 25% of the global GDP and 5% of the Union's GDP, respectively. According
360 to the UNISDR, the 2013 central European floods alone resulted in losses of US\$18
361 billion. In the foreword to the World Atlas of Natural Disaster Risk (Shi and Kasperson,
362 2015), the then UN Special Representative of the Secretary General for Disaster Risk
363 Reduction, Mrs Margareta Wahlström, stated that economic losses as a result of
364 disasters continue to rise. It is estimated that in the past three years, losses due to
365 disasters have exceeded \$100 billion. In 2005, the UK Department for International
366 Development put forward a policy briefing document arguing that investment in risk
367 reduction is more cost-effective than just response actions when crises occur (White *et*
368 *al.* 2005). To shift from managing disaster to the proactive prevention of risk, with
369 possible reductions in the cost of disasters, multilingual communication needs to take its
370 proper place in the list that normally includes supplies, medicine, infrastructure and
371 technology.

372 Steps can be taken to incorporate translation into emergency planning. A logical
373 starting point is to ensure that it is a concrete and explicit part of emergency response
374 policy. The lack of reference to translation in policy or guideline documents is
375 unsurprising, given that there is not even agreement in policy documents on what core
376 terms such as vulnerability, capacity, and resilience mean. Gaillard (2010) discusses
377 how these core terms in DRR are often interpreted differently, depending on whether
378 the policy makers are active in the domain of climate change, development, or DRR. He
379 believes that huge efforts are required to close the gap between these domains as well as
380 between practitioners and scientists. Given conceptual differences at that level, it is not
381 hard to understand that translation hardly figures in policies relating to disasters and
382 crises. Expert terminology and the lack of preparedness in sourcing specialist translators
383 can be a deadly combination. An example of language needs from the local community
384 is given by Field (2017, p. 340) through her discussions with local groups. The failure
385 to evacuate appropriate regions before the landfall of Typhon Yolanda in the
386 Philippines partially rests on a lack of appropriate translation based on local cultural
387 needs: ‘while the two are scientifically different phenomena, it was acknowledged that
388 had the threat of the storm surge been likened to that of a tsunami (for a coastal
389 population hit by a wave, the impact would be similar), the coastal regions would have
390 seen higher evacuation rates, particularly due to familiarity with the 2004 Indian Ocean
391 tsunami and the more recent 2011 tsunami in Japan’.

392 There is an urgency to identify best practices and to provide new insights for, or
393 indeed create, recommendations for crisis translation policy for national, European, and
394 international agencies that regularly work across borders and across languages, with a
395 view to reversing inequalities across language communities and promoting fairness of
396 access to information. This approach will be especially important in the context of new

397 migration patterns and policy requirements for Europe. Crisis communication literature
398 emphasizes the difficulties when trying to communicate with those who are the most
399 vulnerable, e.g. the elderly, disabled, children, or those with low literacy levels. Dealing
400 adequately with these challenges must be within the scope of crisis translation into the
401 future, when, in many societies with migrant populations, first generation migrants will
402 represent large communities in the care homes and their linguistic skills may not meet
403 their communicative needs.

404 There is some evidence that high level, national policies (e.g. FEMA, 2016;
405 NHS, 2015; Cabinet Office, 2012) provide for language provision for limited-
406 proficiency speakers, but more empirical data on the ways in which translation is
407 understood in these policies is required (O'Brien *et al.*, 2018), not to mention how
408 policies are implemented.

409 Contending that crisis translation must be considered in relation to cascading
410 disasters, we opt for an activist approach. Viewing the definition from the point of view
411 of emergency planning, research into crisis translation needs to explore the roles of
412 language in all the phases of a disaster, including during the 'normal' phase in which
413 resilience is built up. Alexander (2016a, p. 14), discussing emergency planning, reminds
414 the reader that '[a] crisis is a sudden, intrusive interruption of normal conditions with
415 potentially adverse consequences. "Normality" is defined here as the average of
416 conditions over a protracted period in which things function acceptably'. If CALD
417 communities are being supported by intercultural mediators (Belpiede, 1999; Casadei
418 and Franceschetti, 2009), interpreters, or community translators (Taibi, 2011; Taibi and
419 Ozolins, 2016) to access information in *normal conditions*, surely this confirms that
420 such needs will persist, in fact be exacerbated, in crisis situations. We suggest inverting
421 the research priorities, so that by building up data, resources, and technology, these can

422 be better deployed in the response and recovery phases. Just as other specialist skills
423 receive training to operate in emergencies, linguists ought to receive training to provide
424 support in crises and to create valuable expertise in handling language needs by being
425 embedded in crisis management practices. Translation, interpreting, cultural mediation,
426 and relationships between different language communities that enhance effective
427 communication in crisis connecting linguistic sub-groups to the broader society need to
428 be considered as part of the preventive measures that prepare residents for emergency
429 response (Federici, 2016). A good example is the initiative described by Clerveux *et al.*
430 (2010) where a Disaster Awareness Game (DAG) is developed to help increase hazard
431 awareness among school children in the Caribbean Community and Common Market
432 area. This multicultural area demands a multilinguistic approach to risk communication.
433 Clerveux *et al.* (ibid.) argue that children are an appropriate target for the DAG because
434 it is an investment in future disaster preparedness, but also because children of
435 immigrant families are a conduit of information between school and home. They show
436 awareness of the need for accessibility of the game, mentioning simple language and the
437 potential for translation. Nevertheless, the game itself, as represented in the paper, is in
438 English, which still falls short of truly serving multilinguistic needs. Another good
439 example is discussed in Shackleton (2018); New Zealand Red Cross worked with
440 members of CALD offering them translation training in order to contribute to a project
441 to increase awareness of emergencies affecting the Wellington region. In this project,
442 under-resourced language combinations saw CALD members develop a basic
443 understanding of translation and linguistic resources to describe natural hazards in the
444 local area through languages other than New Zealand's main languages (English and Te
445 Reo Maori). These are good illustrations of how translation can be embedded in
446 practices of risk reduction; the CALD members involved in the project would not be

447 professional interpreters in case of a response, but they could contribute to circulating
448 information in translations (written texts, texts written to be read, radio or TV
449 broadcasts) to allow CALD communities to attain information in a language they
450 understand and in a format accessible to them. The example has limitations, however, as
451 it does not entail a feedback loop seeking to find out from the CALD communities what
452 information they would like to have and which formats are most appropriate.

453 Written, oral, and multimodal communication channels are used at different
454 stages of a crisis, with different audiences. Only early phases of crises automatically call
455 for oral interpreting; preparedness activities and reconstruction phases after a crisis are
456 more likely to call for translation, if there is an awareness of language needs. These are
457 broad differentiations: empirical data to identify how municipal, regional, or national-
458 level policies connect CALD needs with emergency planning is required. The data need
459 to have a cross-border as well as a local dimension to make sense of the needs of CALD
460 communities; often the data on ethnographic and linguistic background may be
461 collected for other reasons (census, electoral rolls) and these data could help identify
462 existing needs and create the premises (databases, leaflets, technological resources) to
463 develop language support for the time when it is needed. Data accuracy, assessment of
464 real language competences, distance between rural and urban needs, and budget are
465 among the obvious obstacles to developing crisis translation resources. However, this
466 complexity can no longer be a sufficient justification for a reactive mode to deal with
467 the language barrier, because cross-referencing such data with other well-known
468 datasets on hazardscapes, risks, and models derived from statistical data can be done as
469 part of disaster prevention measures. Interpolating these existing data would create
470 more valuable resources than what can be put together in the middle of a response.

471 The role of translation in recovery, reconstruction, and preparation phases
472 (intended as learning from activities just completed during the response phase) has not
473 been studied much either. This point begins to be appreciated also in the crisis
474 communication literature:

475 In other words, to date, transnational corporations, political institutions, disaster
476 relief organizations, and other actors involved in cross-cultural crises and
477 communication have almost no evidence-based and well-established guidelines
478 they can use to organize or coordinate international crisis communication or to
479 develop culture-sensitive crisis communication strategies or messages (instruction,
480 adjusting information, etc.). (Schwarz *et al.*, 2016, p. 6)

481 Taking the most cynical of arguments, even if all the preparations are never going to be
482 needed, the benefits of involving CALD communities in preparedness strategies would
483 at the very least lead to more inclusive societies.

484 **Conclusions**

485 Crisis translation should be viewed from the point of view of reducing vulnerabilities
486 and providing efficient communication that would reduce costs if/when a crisis erupts.
487 Feeble yet slowly-growing is the voice of cost-effectiveness of investing in
488 preparedness, as in the Communication of the European Commission of 23 November
489 2017:

490 A fully integrated approach to prevention, preparedness, and response to disasters
491 in the Union and its Member States is urgently needed. We know that investment
492 in prevention saves lives and livelihoods; it needs therefore efficient targeting to
493 disaster risks. (EC, 2017)

494 Evidence of failings in crisis communication is plentiful and usually categorised
495 under ‘issues of communication’; reasons for avoiding these failings are compelling
496 (Greenwood *et al.*, 2017), translation is considered as a ‘perennial hidden issue’
497 (Crowley and Chan, 2011, p. 24; IFRC 2018, p. 103), yet its inclusion in emergency

498 planning (and studies thereof) remain minimal and alternatives of plain or clear
499 language are still offered as adequate solutions, but are blind to the needs of those who
500 have very limited or no competence in the ‘language’ in question in the first instance
501 (see Strayhorn *et al.* 2012, for example), who cannot read, see, or hear.

502 In this context, we highlight the rationale for demanding evidence-based
503 investigations into the impact of the language barrier on communication in crisis
504 situations. We need to understand authentic training needs to support linguists (intended
505 here as anybody with some knowledge of more than one language) who may need,
506 want, or be co-opted to operate as translators in rare-language combinations when they
507 are not professionally trained. We need to identify beforehand the needs of local
508 populations in relation to existing capabilities to deal with multilingual contexts and to
509 identify ways of developing additional capabilities. We need to seek a better use for the
510 skills, technologies, and existing data on translation to be used in planned and
511 sophisticated ways rather than as afterthoughts at the moment of dire need. Crisis
512 Translation, as we propose in this article, is a catalyst research area to develop a
513 holistic, multidisciplinary, and comprehensive understanding of the role of
514 communication in multilingual crisis situations, so as to better address the necessity for
515 accommodating language needs in crisis situations, thus lessening the impact of the
516 language barrier in cascading crises.

517

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