

# Emotional linguistic relativity and cross-cultural research

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# Emotional linguistic relativity and cross-cultural research

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Abstract: The now classical question of "linguistic relativity", which hypothesizes that language can influence thought and behavior, becomes a more complex hypothesis when applied to the semantic domain of emotions. This is because the linguistic encoding of emotions can influence not only the way we *think* about them, but also the way we *experience* them. This chapter discusses the implications of "emotional linguistic relativity" and reviews the psychological theories of emotions that support this hypothesis. I then show that our current linguistic knowledge about the ways languages across the world encode emotions, although limited in many respects, should be sufficient to test the emotional linguistic relativity hypothesis with respect to resources such as words and metaphors. Overall, it seems that what is needed to progress on this question is interdisciplinary dialogue between linguists, psychologists, as well as anthropologists.

**Keywords:** linguistic relativity, emotion language, psychological constructivism, linguistic typology

# 1. Introduction

Emotion is a fundamental dimension of human experience, and yet different languages offer very different means to talk about it (see Heelas 1986; Wierzbicka 1999; among many others). Anthropological research has long confirmed that although there may be *some* universal features in humans' emotional experiences, emotions are also culturally informed (Myers 1979, 1986; Levy 1984; Lutz 1986; Rosaldo 2013), so that people in different human groups can experience emotions in distinctive ways. In addition, recent psychological studies tend to corroborate the idea that language can influence the way we construe or experience emotions (see, for instance, Lindquist and Gendron 2013; Wood et al. 2016). So, should we conclude that the way we feel may depend, at least in part, upon the language(s) we speak? What is the weight

and role of language in constraining variation in the way we experience and deal with emotions? In other words, what is the scope of "*emotional* linguistic relativity"?

This question is particularly thorny because the answers bear on at least three different matters: languages and their diversity, emotions and their diversity, and the relationship between linguistic and emotional diversity. This splits the task between at least three disciplines, namely linguistics, anthropology and psychology. Linguistics provides descriptions of emotion-oriented linguistic resources in different languages across the world, but emotional experience, conceptualization and behavior fall out of its scope. Anthropologists have contributed very fine discussions of emotional experience in a range of different cultural groups. They often consider language as well, but they tend to assume rather than question linguistic relativity (Ponsonnet forthcoming-b). Linguistic anthropologists do consider both language and emotions together, but to my knowledge they rarely produce the sort of comprehensive systematic studies that would highlight regular correlations between linguistic variation and variation in conceptualization and experience. Finally, psychologists study emotions as such, and some of them have considered the role of language in emotional experience, conceptualization and behavior. However, apart from a few exceptions, they are not concerned with linguistic diversity as such, and to my knowledge no psycholinguistic study has sought to test emotional linguistic relativity so far.

This chapter will discuss the contributions of these disciplines towards our understanding of "emotional linguistic relativity", to which extent the hypothesis may be considered viable, and for which aspects of language it could possibly be tested. The linguistic relativity hypothesis itself and its implications in the domain of emotions are discussed in Section 0. Section 0 reviews some of the suggestions (often implicitly) contributed by psychologists about the plausible mechanisms behind this hypothesis. In Section 0, I present the current knowledge

and understanding of the cross-linguistic diversity in the domain of emotions, and how it articulates with the findings and speculations in other disciplines.

## 2. Emotional linguistic relativity

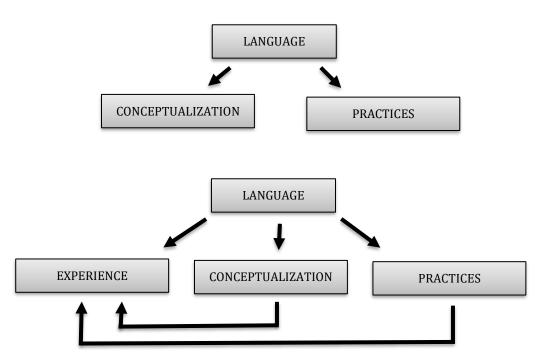
This section introduces the now classical "linguistic relativity hypothesis", and its developments in the domain of emotions — hence "*emotional* linguistic relativity". Defining emotions in the context of this chapter is difficult, because this synthesis will discuss the work of many authors from several disciplines, and these authors do not share a common definition of emotions (Widen and Russell 2010). For lack of a better solution, the article was written with a relatively consensual definition in mind: emotions seen as *internal* states (emotional behaviors being their observable counterparts) that are *cognitive* (contrasting with sensations such as pain or hunger) and have a *subjective* component (unlike pure judgments, e.g. to agree) (see Ortony, Clore, and Foss 1987; Ponsonnet 2014a: 5–17).

# 2.1. The many ways in which language can influence our emotions

The canonical linguistic relativity hypothesis (or "Sapir/Whorf hypothesis") was inspired by Whorf (1956) after early discussion from Humboldt ([1836] 1988) and later Sapir (1949) among others. It postulates some causal influence of language (i.e. usually, the particular linguistic resources offered by a given language), upon thought (conceptualization, i.e. the ways in which emotions are grouped by the brain into categories), and practices (speakers' behaviors, habits, etc.) (Lucy 1992). Much of the research and discussions focus on the first correlation, between language and thought. While a "strong" version of the hypothesis that would postulate strict determination of thought by language is largely deemed implausible, psycholinguistic "neo-whorfian" research has established that the "weak" version may have some validity, demonstrating *some* influence of language in *some* domains. Levinson (2003) famously showed

that the type of spatial descriptions prevalent in a given language impacts speakers' representations of space, suggesting that language could influence thought; and speakers' behavior in space, suggesting that language could influence practices. While these conclusions set an important milestone in the exploration of the Whorfian hypothesis, Enfield (2015) for instance calls for further testing in more complex and socially relevant domains, i.e. domains where interactions between speakers and their understanding of each other's internal states play a more prominent role.

The domain of emotions is such a complex and socially significant domain. In addition, intuition suggests that, as represented in Figure 19.19.1, the hypothetical paths of linguistic relativity in this domain are multilayered, for several reasons. At the first level of implication where language has some influence on "thoughts" — i.e. things happening "in the brain" —, we can hypothesize influence upon two different dimensions: on the one hand, the conceptualization of emotions, matching the more generic linguistic relativity hypothesis; and experience of emotions on the other hand. In other words, with respect to emotions the question is not only "can language influence the way we think?", but also "can language influence the way we feel?". Secondly, it seems plausible that the way we conceptualize emotions influences how we experience them, which opens another indirect hypothetical path of influence between language and how we feel (see 0 and 0). For instance, French is unusual in having a word for 'the pleasure of being in a new and different place', or dépaysement. If having such a word makes it easier for French speakers to conceptualize the corresponding emotional states, perhaps it also favors their experiencing these states? Thirdly and finally, if we consider the second part of the linguistic relativity hypothesis, i.e. influences of language on practices, we should also hypothesize feedback effects (see 0). Indeed, our practices about emotions, for instance emotional management, support and attention given to emotions, are very likely to influence how we feel (and this is presumably a recursive mechanism). For example, having a word for *dépaysement* may bring French speakers to discuss the corresponding emotion more often, and possibly seek it more often as a result? Thus, as can be seen in Figure 19.19.1, there are at least three additional intuitively plausible paths that may justify how language can influence the way we experience emotions.



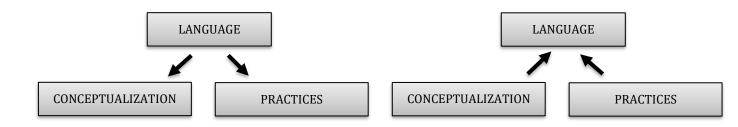
**Fig. 19.1:** Top: General linguistic relativity hypothesis. Bottom: Emotional linguistic relativity hypothesis.

The hypothetical paths highlighted in the above diagram are very abstract, speculative and schematic, covering psychologically and socially complex phenomena, but they do offer a background and a starting point to our understanding of emotional linguistic relativity.

# 2.2. Language as a window on emotions

Linguistic relativity is specifically the hypothesis that language influences conceptualization and practices. As such, it should not be conflated with the converse hypothesis represented in Figure 19.19.2 (right): that concepts and practices shape language,

implying that linguistic tools mirror their speakers' experience, conceptualization and practices about emotions (Enfield 2002a; Ogarkova 2013: 47–50).



**Fig. 19.2:** Left: linguistic relativity hypothesis. Right: "language as a window on emotions" approach.

Implicitly relying upon the hypothesis that emotion words mirror salient emotion categories, many studies do use language as a "window on emotions". The accounts of emotional life provided by anthropologists such as Briggs (1970), Myers (1979, 1986), Rosaldo (1980) or Lutz (1986), are largely structured around the emotion lexicon — in fact, more often, emotion nouns — used as a blueprint of emotional behaviors and values. Myers (1979), for instance, essentially organizes his analysis of the Pintupi "moral order" around six Pintupi emotion nouns namely *pukulpa* 'happiness', *ngaltu* 'compassion', *yalurrppa* 'sorrow', *watjilpa* 'homesick, lonely', *kunta* 'shame'. This focus on nouns is problematic, because it is a feature of Australian languages that they have few emotion nouns (Ponsonnet 2016), but these languages have many more emotion terms in other word classes.

Approaching emotions via language obviously has heuristic virtues (as attested by the richness of the above cited anthropological studies), and there are many reasons to think that linguistic tools reveal *something* about the representations and practices of their speakers (Enfield 2002a). Among anthropologists, Levy (1973, 1984) suggested a more specific model sustaining this mechanism, with the notion of hyper/hypocognition: not having a word for a

given emotion implies that it is socially and experientially "played down", as he observes for sadness in Tahiti. Several linguistic theories have defended the view that thorough definitions of emotion words reveal emotional scenarios that tell us about the interactional contexts in which emotions occur and the emotional stages they involve. In this perspective, Wierzbicka (1999: chap. 6) has argued that the particular emotion words a language has mirrors its speakers' values and habits, by virtue of the emotional and interpersonal scripts encapsulated in these words. For instance, the profusion of words for 'good feelings' in English (e.g. *cheerfulness*, *friendliness*, *enthusiasm*, *enjoyment*, *fun*, etc.) is considered an effect of the prevalence of these feelings in "anglo" culture, while the positive connotations of some Polish words for negative feelings (e.g. *tesknota* 'nostalgia/homesickness/longing/heartache') mirror social acceptance for negative emotions.

Also dealing with scripts but extracting them via a different route, Kövecses (2000, 2002) contends that emotion metaphors (see 0 and 0) tell us about typical emotion scenarios. For instance, the generic metaphor ANGER IS A PRESSURIZED FLUID IN A CONTAINER points to various phases of anger — onset, attempts to control, and finally expression of anger — and highlights the social imperative to control anger. In addition, the particular instantiations of this generic metaphor used in each language may unveil cultural differences in conceptions and values related to anger among each language group (Ogarkova, Soriano, and Gladkova 2016).

Yet another method seeking to find out about emotion categories via emotion words leans upon the GRID paradigm (Fontaine, Scherer, and Soriano 2013) and GRID questionnaire page of the Swiss Centre for Affective Sciences. The GRID instrument is a questionnaire on emotion words designed to highlight various components of emotions (e.g. bodily effect, behavioral response, intensity), themselves hypothesized as defining components of emotions under the appraisal psychological model of emotions (Scherer 2013). Speakers' answers to the

GRID questionnaire are therefore expected to reveal profiles corresponding to the psychological nature of corresponding emotions, then to be compared across languages.

The insights offered by these studies suggest that the "language as a window on emotions" approach has undeniable benefits. However, it is important to remember that the correspondence between words or metaphors on the one hand, and concepts (or practices) on the other hand, has not been extensively tested. In fact, psycholinguistic studies in other semantic domains have shown that words do not systematically reflect conceptual configurations (Malt and Wolff 2010; Malt et al. 2011), and there are known exceptions to the "words as sign posts to practices" axiom in the domain of emotions (Ponsonnet 2014a: 207–217). A safe caveat with respect to the "language as a window on emotions" approach is perhaps simply to remember that windows can only show a small portion of what is hidden by our walls. In other words, they offer partial perspectives, but a partial perspective is often better than none. In any case, it is important to distinguish the "language as a window on emotions" approach from the linguistic relativity hypothesis, and in this chapter I will be concerned primarily with the latter.

# 2.3. Relevant dimensions of language

If emotional linguistic relativity is a complex matter, emotional language is certainly complex too for a start, as it recruits extensively from a broad range of resources. In this section I highlight two distinctions between aspects of language that will be relevant to the following discussion of emotional linguistic relativity.

# 2.3.1. Description versus expression

Linguists who have studied the language of emotions (for instance, Besnier 1990: 419; Bednarek 2008; Foolen 2012: 350; Majid 2012a: 432; Ponsonnet 2014a: 21–22; among many

others) have often relied upon a simple dichotomy between two types of linguistic resources: descriptive linguistic resources on the one hand (mostly words, e.g. "she is *impressed*"), and expressive linguistic resources on the other hand (for instance, evaluative morphology, prosody, interjections, e.g. "wow!"). Most of the time, expressive resources are implicitly defined as those that fall under Bühler's (1934) notion of symptom, or Peirce's (1955) notion of index: they result causally from a state experienced by the speaker. Subsequently, an emotive interjection like "wow!" can only express the speaker's state at the time of utterance. By contrast, descriptive resources — for instance a lexical item like *impressed* — enable speakers to refer to anybody's state, at any point in time: "she was *impressed*", "she will be *impressed*".

Descriptive resources mostly include the lexicon (i.e. words), as well as metaphors and some grammatical constructions. Expressive resources include a more diverse — albeit less studied — range of resources such as morphology (typically evaluative morphology, for instance diminutives, like the -y in *kitty*), interjections, prosodic features such as melodic contours or voice quality, marked grammatical constructions, choice of register, etc. (see, for instance, Besnier 1990; Majid 2012b). Expressive resources are typically backgrounded in metalinguistic awareness, where descriptive resources like words are naturally prevalent (Silverstein 1993). We may expect that these two semiotic types require distinct treatment when assessing linguistic relativity.

# 2.3.2. Linguistic resources versus the way speakers use them

Languages across the world offer very different tools to their speakers, both in terms of vocabularies and grammatical rules. We know that many languages have words for emotions that have no equivalent in most other languages — like the German *schadenfreude*, i.e. satisfaction felt at someone's misfortune (Watt Smith 2015), to cite just one among many famous examples. Some languages can encode fear or surprise grammatically by means of

constructions called apprehensive and mirative, while many others cannot. From this point of view, languages provide tools and rules that define quite strictly the utterances that speakers can form to talk about emotions.

In addition, a language comes with a set of conventions and habits that dictate usage (Hymes 1972): how speakers should employ their lexical and grammatical tools to address each other depending on context and social status, articulate narratives; what topics are appropriate for conversation and with who, etc. For instance, it is customary for English speakers to utter "thank you" or something equivalent to acknowledge a service, even if the service was paid for. Among speakers of many languages, for example Kriol in the Australian Northern Territory, this linguistic practice is far less systematic, even though the language does have the word teingkyu 'thank you'. Such rules differ from grammatical rules in nature and are sometimes referred to as rules of "pragmatics". While some of these rules are as prescriptive as grammatical rules, others may be better viewed as preferences rather than rules, for instance using conditional modality for requests in English, "could you pass me the salt?"; and/or leave grey areas, for instance the choice between vous and tu in French. Violating usage rules and violating grammatical rules attracts very different consequences. There may be interdependence between pragmatics and grammar (for instance, grammar may provide pronouns of honorary address, while honorary addresses are orchestrated by conventions of discourse pragmatics), but many rules of usage are relatively independent from the rules of grammar. Thus, we may imagine a group shifting to a new language with a completely different grammar, and yet maintaining many of their usage rules (see Nicholls [2013] and Ponsonnet [2020] for an example in Australian Kriol). Overall, the two types of rules are two different beasts altogether, and this distinction should be kept in mind when considering linguistic relativity in the domain of emotions, where rules of usage certainly play a crucial role (see 0 and 0).

## 2.4. What is needed to assess emotional linguistic relativity

There are several possible ways to demonstrate correlations between the linguistic encoding of emotions (resources and usage) on the one hand, and experience, conceptualization and practices about emotions on the other hand. One way consists of proceeding typologically, by collecting a large amount of empirical data relative to the observable elements on each side of the equation – namely, languages and practices — to be able to identify recurring patterns of associations between the two. That is, given a large number of linguistic descriptions, and a large number of ethnographic descriptions of emotional practices for the corresponding groups, it may be possible to show that certain linguistic features typically come together with certain practices. Establishing such correlations would presumably not tell us about the causal directionality between language and practices (0), but would nevertheless be an interesting step forward. In this approach, linguistics must combine with ethnography in order to demonstrate or invalidate emotional linguistic relativity.

Our linguistic knowledge about how emotions are described and expressed across the world's language is still incomplete (see Section 0), but some aspects such as words or metaphors are reasonably well known. However, systematic ethnographic descriptions of emotions are relatively rare. In addition, linguistic and ethnographic studies have so far not been tailored to mirror one another, so that mass comparisons between the two are beyond our reach for the moment. Adopting areal foci (e.g. on a language family or a part of a continent) and/or specific linguistic targets could render the task more affordable. For instance, studying systematically the correlation between the type of metaphors of anger available in a language and the way speakers of this language deal with anger socially and individually may be feasible given our current knowledge of emotion metaphors (Ogarkova, Soriano, and Gladkova 2016) and the circumscribed nature of the ethnographic studies required. Remaining obstacles are the

inherent difficulties in systematizing ethnographic studies, as well as lack of concertation between the disciplines.

Another option to tackle the linguistic relativity hypothesis consists of testing the emotional linguistic hypothesis experimentally. Indeed, psycholinguistic experimentation was the path via which potential linguistic relativity was made apparent with respect to descriptions of space (Levinson 2003; see 2.1). Some psychological studies have experimentally tested the impact of subjects' linguistic background upon their interpretation of non-conventionalized prosodic variation (Elfenbein and Ambady 2003; Pell et al. 2009; Sauter et al. 2010; Bhatara et al. 2016). These studies mostly report that the interpretation of prosody is independent of the subjects' linguistic background (albeit with some in-group advantage). While this could be interpreted as a marginal indicator against linguistic relativity, what was really tested in these studies was the universality of non-conventionalized expression of emotions — not the influence of the conventionalized encoding of emotions upon one's experience, representation and practices about emotions (Scherer, Clark-Polner, and Mortillaro 2011).

As will now be discussed in Section 0, psychologists themselves articulate relatively specific hypotheses about the role of language in shaping emotional experience, conceptualization and practices (behavior).

# 3. Emotional linguistic relativity in psychology

In relatively recent years, the "basic emotion" theory (Izard 1977; Ekman 1992), which postulated a subset of primary emotions construed as universal "natural kinds" and reflecting unified patterns of physiological and neurological activity, has largely been superseded by models that allow for more complexity. Under these new models, "basic emotions" are backgrounded or altogether replaced by notions of emotions viewed as multi-dimensional events resulting, in part, from cognitive processes (Scherer, Shorr, and Johnstone 2001;

Mesquita 2003; Boiger and Mesquita 2012). Such emotions cannot be systematically matched with physiological or neurological processes, and instead the unity of our experience of, say, fear or anger, is largely constructed. Based on such models, most authors concur that emotions are not strictly universal but allow for some cross-cultural variation (matching empirical observation, see 0), and that language can significantly influence our construction of emotional experience. These hypotheses are already supported by research on bilingualism, which show precisely how the affective experience of bilinguals is affected by the language they speak (Pavlenko 2014: 245–298). Beyond the specific case of bilingual individuals and the relationship between first and second languages, current psychological research supports the emotional linguistic relativity hypothesis and the idea that language influences thoughts and experience — although psychologists rarely use the expression "linguistic relativity" itself, and in fact rarely consider linguistic diversity at all. In the following section, I present some of the specific suggestions articulated by psychologists about how language may influence emotional experience, conceptualization and practices or behaviors.

# 3.1. The expression-discharge hypothesis

A common assumption about the relationship between language and emotions is basically that "it's good to talk" (Wilce 2009: 78). This folk theory is reflected in metaphors like "get it off your chest", where negative emotions are figuratively depicted as an intrusive element to be expelled from inside the person (see Kövecses [2000: 154–156] on BODY AS A CONTAINER OF EMOTIONS metaphors). This idea that verbalizing one's emotions *as such* directly provides emotional relief — referred to as the "expression-discharge hypothesis" by some psychologists (Rimé 2009: 74) — construes language as a management tool capable of relieving us of negative emotions. This would mean, for instance, that an English speaker vocalizing their disgust by saying "yak!" would as a result feel less disgusted (Byrne 2017). If this view of

language is correct, then differences in the linguistic resources, or in conventions of use guiding the expression and description of emotions in various languages, could make a difference as to which emotions can more easily be expelled, and therefore modify the way speakers ultimately feel.

However, while the common assumption that "getting it off your chest" may echo humans' demonstrated need to share emotional experiences (Rimé 2009: 65–71), the evidence for direct causation between expression and relief is debated. There is some (neuro-)physiological evidence in favour of this hypothesis (see for instance Byrne [2017], Wood et al. [2016: 274] on responses of the amygdala to emotion labelling; Lieberman et al. [2007], Lieberman et al. [2011], cited by Wood et al. [2016: 274]) but on the other hand, several studies suggest that the benefits of discussing one's emotions does not result from an expression-discharge mechanism, but from much more complex cognitive and social mechanisms (Rimé 2009: 74–80; see 3.4).

# 3.2. Language and experience: words as "glue"

In line with early suggestions by Russell (1991), Barrett (2009) hypothesizes that emotion words are categorization tools that "glue the various instances of [a given emotion] together into a single category" (Barrett 2009: 1292). That is, emotional experience does not naturally divide into strictly differentiated clusters. Instead, variation is the rule, and the fact that people group diverse experiences under certain labels is an effect of the power of categorization of words. Elaborating upon Barret's (2009) suggestion, Lindquist and Gendron (2013) claim that "language constructs emotion perception", arguing that the words we use to describe emotions define our experience of our emotions (i.e. our feelings in Scherer's [2013] sense of the term). Given that different languages offer different sets of emotion words to their speakers, these views imply that speakers of different languages should categorize emotional experience in

different ways, and thus experience emotions differently — but this has not been systematically tested.

# 3.3. Language, emotional intelligence and emotional management

Another way in which language may, according to psychological research, influence emotional experience has to do with emotional management and the regulation of negative emotions. Apart from the expression-discharge hypothesis (0), several mechanisms of linguistic influence have been postulated in this respect, some depending upon linguistic resources as such (i.e. emotion words), and others depending upon the rules governing the use of these resources to produce discourse and narratives about emotions.

## 3.3.1. Expanded lexica

The first mechanism, having to do with words and discussed by Wood et al. (2016) for instance, derives from the role of categorization highlighted in 0. According to Wood et al., the true functional reason why languages have emotion words at all is not for the sake of their descriptive power, which they regard as very limited. Instead, in line with psychological research showing that linguistic categorization has a potential to impoverish cognition (Schooler and Engstler-Schooler 1990, cited by Enfield 2015: 208), Wood et al. (2016) postulate that the function of emotion words is to help us regulate intense emotions: "labelling and thus categorizing an emotion may demote it from an immediate, driving urge to an object we can consciously attend to" (Wood et al. 2016: 274). In this hypothesis, not only do emotion words define our emotional experience (as discussed in 0), but they also support regulation, and thus well-being (for more discussion and references, see for instance Memarian et al. [2017]).

The view supported by Wood et al. (2016) assumes a broader correlation between the capacity to reason and make adequate inferences about emotions, i.e. emotional intelligence on

the one hand, and successful emotional management on the other hand. Indeed, and although this trend of research is still in its early stages, psychological studies have confirmed some correlation between emotional intelligence and emotional well-being (Schutte et al. 2002; Fernández-Berrocal and Extremera 2016). It is in this perspective that Wood et al. (2016) suggest that having a larger number of emotion words could allow for further emotion management (see also Malt, Gennari, and Imai 2010: 34). Based on the same hypothesis, Lomas (2016) proposed that exposure to cross-linguistic lexical diversity may help improve our emotional well-being: by learning more words, we should improve our emotional intelligence, our capacities to regulate emotions, and ultimately feel better. This suggests that speakers of languages where words denoting, say, guilt, are absent — as is often the case in Australian Aboriginal languages for instance — may find it harder to manage their experience and behaviors in contexts where emotions akin to what we call guilt in English are at play. Lomas (2016) (one of the only psychological studies referring explicitly to the linguistic relativity hypothesis) cautiously suggests that studying emotion lexica from a broad range of languages and cultures may be a beneficial exercise. Expanding upon Lomas's (2016) suggestion, we can note that cultural and linguistic diversity is not the sole source of lexical diversity: speakers of all languages can coin new emotion words to refer to fine-grained emotions — and many actually do. The notable online presence of broad-audience webpages offering a "Dictionary of Obscure Sorrows" (https://www.dictionaryofobscuresorrows.com/), "23 perfect words for emotions you never realized anyone else felt" (Dalton 2015), "40 words for emotions you've felt but couldn't explain" (Wiest 2016) suggests that speakers are inclined to implement such strategies themselves. To my knowledge, no study has yet explored whether/how such strategies also take place in everyday life (e.g. in conversations, in personal diaries), or the extent to which they result in improved well-being.

## **3.3.2. Emotion metaphors**

If we assume a correlation between emotional intelligence, emotion regulation, and well-being, then the structure of the emotion lexicon is not the only aspect of language that can alter or improve the way we feel. Metaphors, as originally theorized by cognitive linguists under the Cognitive Metaphor Theory (Lakoff and Johnson 1980; Lakoff 1987; Kövecses 2002) are another type of linguistic resource that has been considered to influence our conceptualization of emotions. According to these cognitive linguists, linguistic metaphors are verbal expressions that depict their target figuratively, thanks to an analogy with something else. For instance, the expression "he's fighting his fears" is a linguistic metaphor that personifies fear as an enemy or opponent. In the Cognitive Metaphor Theory, linguistic metaphors reflect cognitive metaphors, that is, conceptual analogies that are cognitively endorsed by speakers and motivate the creation and use of linguistic metaphors. As pointed out by Murphy (1996), early cognitive linguists themselves did not propose clear models of the cognitive nature and role of metaphors, and therefore did not actually test their cognitive claims empirically. In more recent years, however, many psycholinguistic experimental studies have suggested that conceptual metaphors have some cognitive reality, at least to the extent that a subject's exposure to properties highlighted by metaphors has an impact on their cognitive performances. For instance, speakers of a language that, like English, employs verticality metaphors for power (HIGH IS UP), seem more inclined to judge that someone is powerful if the name appears at the top of a screen than at the bottom (see for instance Landau, Meier, and Kiffer [2010] for a review).

Like many abstract domains, emotions are particularly prone to metaphorical representations in a vast majority of languages across the world if not all of them (Wierzbicka 1999; Kövecses 2005), and some psycholinguistic studies have focused on emotion metaphors. For instance, Williams and Bargh (2008a, 2008b) have shown the influence of physical warmth

and distance — metaphorical properties for evaluation and affection in English — on interpersonal emotions and responses. Given this demonstrated effect of the physical properties that ground metaphors in cognitive functions, it seems plausible that the particular range of metaphors available to talk about emotions in one language or another may influence the way speakers construe emotions and from there, the way they understand and manage them (Ponsonnet 2014a: 44–47). To my knowledge, such linguistic-relativity effects upon emotion management have not yet been tested empirically.

#### 3.3.3. Discourse and narratives about emotions

Last but not least, discourse about emotions can also enhance emotional intelligence, and in consequence channel well-being. Some studies have confirmed this effect in the context of child development: Laible and Song (2006), for instance, show that further elaboration in caregivers' discourse about emotions can improve emotional and relational understanding in young children. There is also good evidence that for adults as well as children, sharing emotional episodes with others can modify one's emotions. According to Rimé's (2009) meta-analysis on the social sharing of emotions, social sharing can help us resolve negative emotions to the extent that it helps us understand emotions and find strategies to cope with them (Rimé 1993; Kennedy-Moore and Watson 1999). The social sharing of emotions implies constructing narratives and transforming social representations that help absorb further emotional elements (Rimé 2009: 81; Pascuzzi and Smorti 2017). All these benefits can also result from exposure to discussions of emotion in less interactive contexts. For example, reading literature where the emotional states of characters are discussed in minute details may improve emotional intelligence and emotional management (as discussed for instance by Caruso and Salovey [2008], cited in Oatley [2009]).

Thus, whether in child development or in adult life, the way we represent emotions and emotional events in language can influence the way we understand, and subsequently manage, emotions. To that extent, the particular conventions that regulate the elaboration of discourse around emotions in various languages — for instance the literary and poetic genres that have course in a given language — are likely to impact the way emotions are managed, conceptualized, and therefore experienced.

# 3.4. The social benefits of sharing

In addition to cognitive benefits leading to better emotional management, sharing emotions with others has further social benefits that can, in turn, modify people's emotional experience. According to Rimé (2009), the social benefits of communicating emotions to others operates at two levels. The first, most immediate but also more superficial level, has to do with empathy, affection and other emotional support (see also Clark and Finkel 2004). The relief provided by these responses is only temporary, but more importantly, this enhancement of social bonds at the local level of emotion sharing tends to propagate throughout social networks (because of the secondary sharing of reported emotional experience). Ultimately, emotion sharing consolidates the network itself, which in turn supports the emotional well-being of its members.

Given that, as pointed out by Rimé (2009: 80), all this is achieved "by using language", it seems plausible that the linguistic resources and conventions specific to a given human community may influence the very nature of this community, and the level of emotional care available to its members. Here, not only the descriptive resources (words, see 0) are likely to have an impact, but also presumably the conventions of discourse, as well as expressive resources (interjections, prosodic contours and the like) — because they partly determine, for

instance, which emotional matters can be more vividly shared and thus attract further empathy and social bond.

# 3.5. Conclusions on linguistic relativity in psychology

While the expression-discharge folk conception that emotions can be eliminated by expressing them ("getting it off your chest") is not very strongly supported by empirical evidence, psychologists' models and discussions of emotions do suggest many ways in which language may influence emotional experience, conceptualization and practices. Among plausible paths of emotional linguistic relativity made the most explicit by psychologists are the role of language in shaping conceptualization and experience (e.g. Barrett 2009; Lindquist and Gendron 2013), and in influencing emotional intelligence (Lomas 2016). Another mechanism has to do with the social sharing of emotions, in which linguistic differences may improve emotional intelligence, influence shared representations and practices about emotions, and modify social networks and their caring capacities.

As for the type of linguistic resources involved in these proposed mechanisms, emotion words are the one that psychologists have considered the most explicitly — which is not surprising, given that words are notoriously more accessible to lay-speakers' metalinguistic awareness than any other linguistic resource (0). Metaphors have also been explicitly considered, as linguistics and psychology tend to work hand-in-hand on this question. In addition, the social sharing of emotions, conventions of discourse (0) and expressive resources (0) may play a role as well, but this mostly remains implicit in psychologists' discussions.

In spite of many suggestive studies and models, psychologists rarely discuss emotional linguistic relativity as such. In fact, they hardly consider linguistic diversity altogether — even when they explicitly consider language. Since linguistic research tells us that languages across

the world differ greatly in the way they describe and express emotions, it seems that testing psychological models against this linguistic variation would make a lot of sense.

# 4. Exploring linguistic diversity

Understanding the influence of cross-linguistic variation upon the experience, conceptualization and practices about emotions presupposes that we know how languages across the world describe and express emotions, and to which extent they vary in this respect. Although our knowledge of such matters remains preliminary, linguists have made some significant progress in this direction in the last decades, especially since the 1970s. Based on research efforts in various branches of linguistics, and aided by anthropologists with an interest in language (e.g. Briggs 1970; Howell 1981; Lutz 1982), the range of resources that typically foster descriptions or expressions of emotions across languages is now relatively well established. A non-exhaustive list of the most foundational works would include, among many others: Wierzbicka (1999), Harkins and Wierzbicka (2001) in semantics; Dirven and Niemeier (1997), Athanasiadou and Tabakowska (1998), Senft (1998), Enfield and Wierzbicka (2002b), Novakova and Tutin (2009), Ponsonnet (2014a), Tersis and Boyeldieu (2017) in descriptive and field-based linguistics; Kövecses (2000), Huang (2002), Ponsonnet (2017b) in cognitive linguistics; Blumenthal, Novakova, and Siepmann (2014), Bednarek (2008) in corpus linguistics; Ponsonnet (2018c), Vuillermet (2018) in linguistic typology; Wilce (2009, 2014) in anthropological linguistics. Below I list a selection of these resources, loosely ordered from the most descriptive to the most expressive. Among them, the descriptive resources — higher in the list — are relatively well documented and understood, while expressive resources — lower in the list — are mostly understudied, in spite of their evident prevalence in language use.

The lexicon, i.e. emotion words, presumably found in all languages (Wierzbicka 1999:
 276).

- Emotion metaphors, including body-based metaphors, also a potential universal (Wierzbicka 1999: 276).
- Grammatical categories and syntactic constructions, for instance apprehensive and desiderative modals (Lichtenberk 1995; Vuillermet 2018), mirative constructions (DeLancey 1997), dative experiencer constructions (Bickel 2001; Hagège 2006), adversive passives (Tokunaga 1988), honorifics (Ochs and Schieffelin 1989), and more. Here the features and their degrees of grammaticalization vary immensely across languages.
- Morphology, in particular evaluative morphology, found in many but not all languages
   (Grandi and Körtvélyessy 2015; Ponsonnet and Vuillermet 2018; Ponsonnet 2018a).
- Emotive interjections (Ameka 1992; Wilkins 1992; Goddard 2014; *inter alia*), a very plausible universal, but cross-linguistic knowledge about interjections is very limited.
- Prosodic features (Ochs and Schieffelin 1989; Omondi 1997; Ponsonnet 2014a: 127–
   142), also presumably a universal, but this domain is drastically understudied.

In describing the above resources, linguists have typically sought to identify universal features rather than describe the extent of variation, but obviously the former task also brings the latter result. Because descriptive linguists rarely focus their attention on emotional resources per se (with notable exceptions, see above), a lot of the primary data, as found in grammar monographs for instance, is somewhat cursory. When typological linguists focus on emotions, they typically choose a type of linguistic tool as their starting points — for instance metaphors (Kövecses 2005), evaluative morphology (Ponsonnet 2018a), apprehensives (Lichtenberk 1995; Vuillermet 2018) —, but are then forced to rely upon data and analyses produced with another focus in mind.

A major impediment to the description of emotional language and speech is the difficulty to collect adequate data. Indeed, linguistic data collection usually implies recording speakers, but this is obviously very detrimental to spontaneity, and/or to the discussion of many potentially emotional topics in general. In major languages, it is possible to draw from literature or from large digitalized corpora, but this implies studying written registers, where expressive features in particular are drastically altered compared to oral registers. For smaller languages, where linguists collect data directly from speakers "in the field", successful methods have been tested (Ponsonnet 2014b), but they certainly impose dedication and effort.

Given these parameters, the current state of our knowledge about the linguistic encoding of emotions is somewhat erratic. We know quite a lot about certain features like words, metaphors, evaluative morphology or even some relatively rare grammatical constructions (e.g. apprehensive systems, dative experiencer constructions). But we ignore seemingly simple facts such as which emotive interjections a language should be expected to have (Ponsonnet forthcoming-a), or which emotionally loaded melodic contours are commonly conventionalized across the world. In addition, aspects of emotional language for which linguists are capable of outlining a world-wide typological overview including an inventory of possible linguistic profiles and their distributions (for instance, across language families or geographic areas) are few. In other words, we are so far mostly unable to characterize how, say, Indo-European languages of Western Europe, African Bantu languages and Australian Pama-nyungan languages typically describe and express emotions with such or such resource, and compare to each other in this respect. Such characterizations are more or less established, at least for major language families, with respect to other aspects of language (for example, tense and aspect, possession, and many more), and they would certainly constitute a very useful first step in assessing emotional linguistic relativity.

The present section will not attempt to cover the totality of the linguistic research and results about emotional language. This would be too vast, and valuable synthetic publications are already available (Besnier 1990; Wilce 2009; Majid 2012a; Soriano 2013; Blumenthal, Novakova, and Siepmann 2014; and see Foolen [2017] for a historical account of the cross-linguistic study of emotions). Instead, I will present is some details what we know of the best-documented resources — namely the lexicon (0), metaphors (0) and evaluative morphology (0) — highlighting the extent to which this echoes the research in psychology discussed in the previous section. As will be discussed in 0, the bulk of expressive resources and discourse conventions relative to emotions, that are much harder to document, have attracted far less attention to date.

#### 4.1. Lexical semantics

Lexical semantics is the study of how meaning is packaged into words, and an important dimension of variation here is how words in different languages divide reality in different ways (Evans 2010: 508–511). To take the concrete domain of body parts as an example, many languages in the world have one single word for 'hand' and 'finger', while many others — like English — have two. Comparable differences apply in the domain of emotions: for instance, in German *Eifersucht* means 'jealous with respect to someone', and *Neid* 'jealous with respect to something', but in English *jealous* applies to both states. Some languages have words for emotions that are not lexicalized (i.e. expressed by a single word) at all in most other languages — among most famous examples are the Japanese *amae*, referring to self-indulging love (Watt Smith 2015), or the Ilongot (Philippines) *liget*, which is a kind of angry energy (Rosaldo 1980; Watt Smith 2015). Generally speaking, emotion lexica can vary significantly in their size and make-up across languages.

Emotion lexica are the dimension of emotional linguistic resources where diversity is the best known and understood. For larger languages, data can simply be extracted from dictionaries. In addition, comprehensive data is available for some smaller languages where emotions have been documented by linguists (e.g. Senft 1998; Ponsonnet 2014a), but also by anthropologists and occasionally by psychologists (see references above and below). Several works by linguists (Wierzbicka 1999; Ogarkova 2013) and by psychologists (Russell 1991; Lomas 2016) have provided reviews and reached a degree of generalization.

The most recent and comprehensive meta-analysis of this material, Ogarkova (2013), is summarized here with some additions. Ogarkova (2013: 50–52) identifies several areas of convergence in the way languages lexicalize emotions (i.e. describe emotions with words), namely:

- Most languages have emotion words. Note, however, that the number of emotion words varies enormously, from as low as seven in Chewong (Austroasiatic, Malaysia),
   according to Howell 1981: 134); to several hundreds (Russell 1991: 428; Ponsonnet 2014a: 146).
- Some emotion categories such as those translated in English by anger, fear/fright,
   shame/disgrace, and jealousy/envy are most commonly lexicalized.
- Emotion words tend to contrast with one another along similar dimensions across languages, typically intensity, i.e. how strong the emotion is, and valence, i.e. whether it is positive or negative. We may add to Ogarkova's observations that many languages have more words for negative emotions than for positive emotions (Averill 1980).
- Prototype approach studies show that many emotion words in each language sit at the "basic" level of conceptualization. That is, they are the default labels used in ordinary discourse like the word *dog* or *cat*, contrasting with labels such as *animal* (higher level category or superordinate), *greyhound* or *siamese* (lower level category or subordinate).

Ogarkova (2013: 52) also identified several dimensions of variation. An important one is in whether languages have a superordinate term (or cover term like *emotion* or *feeling* in English) for emotions, and what the scope of this term is. Another dimension concerns which specific terms are available:

- Many languages have emotion words that are absent in most other languages, sometimes called "untranslatable words" (see above).
- In some languages emotions that are commonly lexicalized elsewhere are absent, i.e. they have lexical "gaps" for instance, Dalabon (Australia, Gunwinyguan) does not have a specific term for pride/proud (Ponsonnet 2014: 203).
- Very commonly, emotion terms across languages partially overlap in meaning, so that they may be good translations of one another in some contexts, but not in others. For instance, 'ashamed' is sometimes a good translation of *sheim* (<Eng. 'shame') in Australian Kriol, but in some contexts *sheim* means 'being afraid of someone', and 'ashamed' is no longer a good translation (Ponsonnet 2020: 50–53).

With respect to these partial overlaps, Ogarkova (2013: 58–59) finds that the nuances most typically relate to what Wierzbicka (1999: chap. 2) has called the emotional scenarios uncovered by a word exact definition, for example:

- The typical antecedents of the emotional events, e.g. the Spanish *verguenza* is more frequently triggered by ridicule than *shame*, its best English equivalent (Hurtado de Mendoza 2008).
- The subjective valence of the emotion, e.g. Chinese has words for 'sad love', i.e. love as a negative emotion (Shaver, Wu, and Schwartz 1992).

- The association of an emotion with physiological symptoms, e.g. Greek *stenahoria* is reported to be typically accompanied by a feeling of suffocation which is not implied by its best English equivalent, *frustration* (Panayiotou 2004).
- The behaviors and interpersonal attitudes typically associated with an emotion. For instance, the Woleanian *song*, which Lutz (1988: 301) describes as a type of anger, is typically manifested by withdrawing behaviors (sulking, refusing to eat, suicide attempts).

Another dimension of lexical variation beyond those listed by Ogarkova (2013) has to do with the morphosyntactic status of emotion terms. In some languages, emotion lexica display clear (dis)preference for certain parts of speech: Polish has a large number of emotional adjectives (Dziwirek and Lewandowska-Tomaszczyk 2010); the Gunwinyguan language Dalabon (like most Australian languages) has very few emotion nouns (Ponsonnet 2014a: 150). This has consequences on the syntactic and metaphorical representations of emotions (0).

In sum, these preliminary generalizations suggest that although some languages have additional emotion words and others have gaps, overall many emotions tend to be lexicalized in most languages (including some primary emotions such as fear and anger, but also socially complex emotions such as shame or jealousy, see Keen n.d.), albeit with some potential variation in the exact meaning of the corresponding words. Furthermore, the scenarios in which emotion words are embedded (Wierzbicka 1999; Kövecses 2000) indicate variations in the social framing of these emotions, i.e. in moral values and expected behaviors; and finally, the morphosyntactic status of emotion words may imply different types of metaphors.

These foci of lexical variation seem well suited to channel emotional linguistic relativity in the perspective of the psychological hypotheses discussed in Section 0. Variation in lexical categories is plausibly substantial enough to modulate the conceptualization of emotions into different categories and to therefore "glue" emotional experience in different ways (0; Barrett 2009; Lindquist and Gendron 2013). In addition, the range of emotion words available in a language, and the metaphors it may support, can plausibly enhance diverse aspects of speakers' emotional intelligence, so that management practices could differ depending on the structure of the lexicon (0; Lomas 2016). Finally, the nuances in the scenarios conveyed by emotion words are likely to channel subtly different discourse contents, with consequences on the development of emotional intelligence (0) and the social sharing of emotions (0). None of these plausible loci of emotional linguistic relativity have been tested so far, but our current empirical and theoretical knowledge combined would presumably allow researchers across disciplines to do so.

## 4.2. Figurative representations of emotions

As discussed in 0, a number of psycholinguistic studies claim that linguistic figurative representations of emotions (i.e. metaphors) correspond to cognitive properties in the brain. If these studies are correct, it seems logical that the speakers of two languages that use different metaphors should be equipped with different cognitive apparatus. To my knowledge, this hypothesis has not been tested so far, at least not with respect to emotion metaphors. Linguists have themselves discussed some more specific linguistic relativity hypotheses along these lines.

# 4.2.1. Body-based figurative representations

As observed by Wierzbicka (1999: 276), most and perhaps all languages in the world have some conventionalized expressions that figuratively depict emotions via representations of some (plausible or imaginary) bodily symptoms — as with the English "broken-hearted". These metaphors often originate in felt somatic emotional responses such as accelerated heartbeat or a tensed belly, with additional figurative elaboration (Ponsonnet 2014a: 239–255;

Ponsonnet and Laginha 2020). Across languages, abdominal organs such as the heart, the belly and the liver are the most common seats of emotions. In addition, some body parts are regularly associated with certain emotions via expression and behavior: for instance, the eyes with anger (e.g. Tunisian, Maalej 2004), or the hands with generosity (e.g. Burmese, Vittrant 2013); and many body parts attract figurative roles in just a few languages (e.g. the throat in Kaytetye, Pama-nyungan, Australia, Turpin 2002). Work on body-based representations of emotions cover a broad range of languages across most continents (Enfield and Wierzbicka 2002a; Sharifian et al. 2008a). Sharifian et al. (2008b) offer a tentative typology, identifying three patterns: abdocentrism (common in Australia or Oceania, for instance), cardiocentrism (in East Asia in particular) and dualism, combining the heart as a locus of emotions and the head as a locus of cognition (Indo-European languages, languages of North Africa). Ponsonnet and Laginha (2020) and Ponsonnet (forthcoming-c) offer systematic typologies for languages of the Australian continent.

The cognitive status of such linguistic associations of body parts with emotions is a matter of debate among linguists themselves. While cognitive linguists at the origin of Cognitive Metaphor Theory (0) implicitly postulate that linguistically treating a body part — say, the heart — as the seat of emotions implies that speakers endorse corresponding conceptualization of emotions as taking place in/affecting the heart, others have argued that the words for 'heart' may then simply be polysemous, denoting the body part on the one hand, and the seat of emotions on the other. Polysemy has been taken to entail that the association of emotions with the body is simply a linguistic tool with no consequences on the way speakers understand emotional events (Goddard 1996; Enfield 2002b; Ponsonnet 2014c). Ponsonnet (2014a: chap. 7–8) points out that figurative representation can have some currency for speakers without being taken fully "literally". Indeed, Dalabon speakers (Australian, Gunwinyguan) are aware of the linguistic association between emotions and the belly conveyed by their language:

they use this association in non-linguistic semiotic practices (e.g. rituals). Yet, this does not necessarily imply that they believe emotions affect the belly. It is also useful to remember that body part terms are subject to rapid semantic change, and in particular adjacent parts or organs are very prone to exchange labels (Wilkins 1996). Therefore, a word that means 'liver' and 'seat of emotions' might have meant 'belly' at the time when the metaphorical expressions came into the language (Ponsonnet and Laginha 2020). Therefore, even when speakers do, synchronically, associate emotions with the body part used in metaphorical expression, such conceptual associations may be relatively versatile rather than deeply culturally entrenched.

# 4.2.2. Other emotion metaphors

Apart from body-based tropes, emotions are also often depicted metaphorically as entities independent of the experiencer's body. For instance, the English expression "to fight one's fears" personifies fear as an enemy or opponent, and the "get it off your chest" metaphor associated with the expression-discharge hypothesis (0) represents emotion as a foreign entity inside the person. Although less cross-linguistic systematization is available on non-body-based than on body-based emotion metaphors, we owe some comparative generalizations to Kövecses (2005). He highlights strong cross-linguistic convergence for at least two major emotions: happiness (Kövecses 2005: 36), which is often depicted as a large mass of fluid; and anger, which Kövecses (1995, 2005: 68) claims to be (quasi-)universally represented as a fluid under pressure in a container. Anger metaphors have attracted much attention in descriptivist and cross-linguistic studies (see Ponsonnet [2017a: 551] for a review, as well as Ogarkova, Soriano and Gladkova [2016] for recent developments), with the conclusion that anger metaphors seem to converge across languages more than metaphors for other emotions (Ponsonnet 2017a). This suggests that some emotions apply stronger universal pressures upon their figurative

representations than others, but not enough is known about metaphors for emotions other than anger across languages to refine the hypothesis.

Another dimension of cross-linguistic variation in emotion metaphors is the proportion of body-based metaphors versus non-body-based metaphors. The complete absence of body-based figurative representations of emotions in a given language is unattested, but in many languages, body-based tropes are a minority and non-body-based metaphors are prevalent. This is attested in English and many other European languages, as well as in some creoles for instance (Levisen 2016; Ponsonnet 2017b), and may in fact be a prevalent pattern. By contrast, many languages, at least in Asia (e.g. Burmese, Vittrant 2013) and Australia (Turpin 2002; Gaby 2008; Ponsonnet and Laginha 2020) display a large number of body-based representations of emotions. In some of these languages, body-based tropes are the unmarked way, if not the only way, to depict emotions. Ponsonnet (2014a: 295–297) has hypothesized that for instance in languages that have few emotion nouns (see 0), the quasi-absence of metaphors where emotions are reified or personified could impact the way speakers are inclined to manage emotions.

# 4.3. Morphology

Morphology is the study of morphemes, which are the smallest meaningful units in language. A very common type of morpheme is affixes, i.e. devices that can be added at the beginning or end of a word to modify its meaning. For instance, in *unknowingly*, *un*- is a prefix that expresses deprivation, and -*ly* a suffix that produces adverbs. Affixes and other types of morphemes are a relatively common way of expressing emotions, and this is the type of expressive emotional resource about which we have the most linguistic knowledge so far.

Within emotionally loaded morphology, "evaluative morphology" refers to morphemes that express the speaker's perception of some scalar properties of the referent, as is commonly

found across the world's languages (Grandi and Körtvélyessy 2015). These scalar properties often have to do with size, and the morphemes are then called diminutives (-y in kitty, -ino in Italian raggazo 'boy' => raggazino 'little boy') or augmentatives (e.g. Italian -one: gatto 'cat' => gattone 'big cat'). Diminutives and augmentatives typically express emotions in addition to size. The range of emotions that this covers across languages has been studied in detail in a number of languages for diminutives (see Ponsonnet [2014a: 81] for a non-exhaustive review), leading to tentative typological generalizations (Jurafsky 1996; Ponsonnet 2018a). Ponsonnet's (2018a) preliminary typological study confirms that the range of emotions covered by diminutives across languages is relatively consistent, and that diminutives quasi-universally express affection, endearment and other relatively "mild" positive emotions associated with children. Here a major aspect of cross-linguistic variation is simply whether a language does have evaluative morphology, enabling the morphological expression of this set of "mild" positive emotions, or whether these forms are simply unavailable. In addition, there is some cross-linguistic variation in the way evaluative morphology expresses specific emotions. For instance, compassion is prevalent in diminutives of South American and Australian languages, and sexually oriented love is only attested with diminutives on the African continent, where it is sometimes associated with courteous poetry (see Taine-Cheikh 2018). Comparable observations apply to augmentatives (Grandi 2002; Ponsonnet 2018a), which typically express negative emotions such as disgust or repulsion, but have stronger positive values (admiration and respect) in some languages only. These nuances presumably result in diminutives and augmentatives endorsing relatively different discourse functions in different languages, but this aspect has never been studied in a non-Indo-European language (Dressler and Merlini Barbaresi 1994; Travis 2004).

Beyond evaluative morphology, the diversity of ways in which morphology can express emotions across the world's languages remains largely unknown. Morphemes dedicated to the expression of affection, compassion or contempt are also common, presumably resulting from diminutives and augmentatives having lost their size-related meanings (Rose 2018), but we know very little about the cross-linguistic distribution and semantic variation of these morphemes. The preliminary investigations published in Ponsonnet and Vuillermet (2018) show that morphology can express a broad range of emotions including affection, endearment, annoyance or irritation, contempt, fear and surprise. Sadness is not attested, but the data remains cursory and further investigation is needed.

As seen in 0, expressive resources may plausibly enhance the social sharing (primary or secondary) of certain emotions (based on Rimé 2009). Thus, the potential offered by a language to express emotions via morphology — e.g. whether it has evaluative morphology or not, and what emotions these devices cover — could influence the social orientation of a given group towards an emotion or another, which in turn could modify how the members of this group experience and manage this emotion. However, expressive linguistic resources are essentially absent of psychologist's discussions and have been neglected by linguists as well. As a result, aside perhaps from evaluative morphology, we are far from being able to assess emotional linguistic relativity with respect to expressive resources — whether morphological, grammatical, interjective, prosodic or other.

# 4.4. Discourse practices

As discussed in 0, the way we talk about emotions is not governed only by rules of grammar, but also by rules and conventions that guide the way speakers elaborate discourse and communication. It is plausible that if there is any cross-linguistic variation in such rules of usage, this would play a role in emotional linguistic relativity. Indeed, as acknowledged by Rimé (2009: 80), language is the main medium via which emotions are shared, and in turn the extent and mode of social sharing is likely to influence speakers' experience, conceptualization

and practices about emotions (0 and 0). For instance, we know that there is variation in the extent to which different language communities may be inclined to share emotions (Briggs 1970; Rosaldo 1980), and this could translate as differences in emotion-management strategies (0). Besnier (1990: 431-434) offers a review of some of the relevant literature by anthropological linguists. Unfortunately, a lot of the research in this domain has concentrated on relatively autonomous contexts such as rituals and performances, or specific modality such as writing — perhaps because every day conversation it is not easy to document (but see Jefferson 2015). Another problem is, as pointed out by Goodwin and Goodwin (2001) for instance, that expressive features play a crucial role in emotional discourse, and since we also know little about them (0), it is even harder to analyse emotional discourse. Researchers working within the Conversation Analysis framework (Sacks, Schegloff, and Jefferson 1974) have applied their methods to conversations about emotions in English (Jefferson 2015), but have not significantly expanded this work to consider linguistic diversity. Anthropological linguists working on emotions have repeatedly emphasized the importance of studying discourse conventions and expressive features (Ochs and Schieffelin 1989; Goodwin and Goodwin 2001; Wilce 2009), and have indeed produced some studies to that effect. While many such studies deal with a handful of major languages (e.g. English, Spanish), other languages are sometimes in focus — for instance Irvine (1990) on Wolof registers and how they index the affective dimension of social differentiations; Kockelman (2003) on emotive interjections in Q'eqchi' Mayan (Kichean branch of the Maya family); Ponsonnet (2018b) on intonation contours in Australian languages of the Gunwinyguan region — to cite just a few. These works offer very welcome glimpses into humans' interactional and communication practices about emotions, but they are yet too rare to allow for significant generalization.

To conclude, we have virtually no idea as to which discourse conventions and practices may be universal, and which may vary across languages. Therefore, although rules and conventions of discourse may very plausibly entail emotional linguistic relativity, further linguistic description is necessary before we can refine and test this hypothesis.

## 5. Conclusion

The linguistic relativity hypothesis — which postulates that language influences thought (i.e. conceptualization) and practices (i.e. shared habits and behaviors) — branches out to multilayered implications when applied to the semantic domain of emotions. Indeed, conceptualization is not the only thing the brain achieves with respect to emotions: it also experiences them. Therefore, to the question "can the language we speak change the way we think?", a second one should be added: "can the language we speak change the way we feel?". In addition, the way we conceptualize emotions is likely to influence the way we experience them, and our practices and behaviors about emotions are likely to influence our experience as well. Thus, "emotional linguistic relativity" relates to many different hypothetical mechanisms, involving several distinct aspects of language.

Much of the research on emotions in the social sciences (in anthropology and linguistics in particular) has implicitly assumed that language results from, and thus reflects, its speakers' conceptualization and shared practices about emotions. This has allowed researchers to use language as a heuristically valuable "window on emotions" — but meanwhile, emotional linguistic relativity itself has rarely been carefully discussed, let alone tested. This is somewhat surprising, given that several theories of emotions recently developed in psychology do postulate mechanisms that implicitly or explicitly support emotional linguistic relativity. Notable pathways of linguistic influence on emotions identified by psychologists are conceptualization and experience, which may be channelled by linguistic categories; emotional intelligence, which may be enhanced by additional linguistic categories or by certain discourse practices; as well as the social sharing of emotions, which may be shaped by the expressive

linguistic resources available to share emotions, as well as by discourse conventions. Many aspects of language are likely to be involved along these pathways: descriptive linguistic resources (i.e. words or metaphors), expressive resources (for instance, diminutives, interjections), and conventions of usage that govern discourse and communication. However, in spite of the support brought to the emotional linguistic relativity hypothesis by their own models, very few psychologists consider cross-linguistic diversity and the emotional linguistic relativity hypothesis as such.

Yet, linguistic research tells us that the semantic domain of emotions offers significant cross-linguistic variation, although we still know relatively little about it. Emotions are a complex semantic domain that recruits across different types of resources and is therefore difficult to document — which may explain why our empirical knowledge in this field remains fragmentary. Nevertheless, linguists have made significant progress on a few aspects. Emotion words have attracted the most attention, and in this domain we know that languages are subject to significant variation (particularly in the social underpinning of emotions), around a common core of commonly lexicalized emotions. Cross-linguistic studies on emotion metaphors suggest that there may be relatively little variation around some emotions like anger, and much more in others. In some other respects our knowledge is far less advanced: our cross-linguistic understanding of most expressive resources (morphology aside) and of discourse practices around emotions remains drastically limited. For instance, we know very little about the scope of cross-linguistic variation in emotive interjections, or in emotional melodic contours.

As it happens, the emotional linguistic resources that are best known from linguistic studies
— mostly emotion words and metaphors — are also the ones that psychologists have discussed
the most explicitly. It appears that linguists and psychologists are currently in an ideal position
to leverage each other's strengths to devise psycholinguistic experiments that can tell us more
about the role of lexical and metaphorical cross-linguistic variation in shaping emotional

experience or in informing emotional intelligence. Thus, with respect to words and metaphors, emotional linguistic relativity can readily be tested. In sum, emotional linguistic relativity presents itself as a promising avenue of interdisciplinary research that should bring many new insights in the near future.

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