

## Metaphorical Conceptualizations of Language: Networks of Meanings and Meta-functions

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### ABSTRACT

This paper employs the innovative method of Elicited Metaphor Analysis to present original research in Malaysia into students' metaphors for 'language'. We summarize reasons why language and first/ second language learning are centrally important in education, and show patterned features of language metaphors in proverbs and in teacher talk about literacy. These may be one strand of student socialization into language-literacy conceptions. We then report our study of 408 university students in Malaysia who gave 977 metaphors for 'language'. Using a socio-cultural extension of conceptual metaphor theory from cognitive linguistics, we analyse these data into thematic clusters and metaphor networks of meanings. In student voices, this presents a surprisingly rich picture of language and shows evidence of linguistic meta-functions: student metaphors for language can be seen not only cognitively with affective and socio-cultural meta-functions, but also with moral-spiritual and aesthetic functions. These meta-functions accord with some educational theories. To show wider insider metaphor perspectives we cite our research with 'teacher' and 'learning' metaphors in Malaysia, and 'language' findings from China, Iran, Lebanon and the UK. The metaphor meanings and meta-functions broaden our conception of language as a medium of learning with strong implications for the teaching of languages and literacy.

**Key words:** Language Concepts, Metaphor Analysis, Meta-functions, Networks of Meanings

*Learning a language is a way to make connections with others.*

*Even a few words can open doors, hearts and minds.*  
(Simon Ager)

*Different languages protect and nourish the growth of different cultures, where different pathways of human knowledge can be discovered.* (Nicholas Ostler)

### INTRODUCTION

When we ask university students why they are developing more advanced literacy skills, they generally mention cognitive reasons: access to information and advancing their knowledge. Some add affective reasons: for enjoyment, entertainment and fun. When we ask about learning language, they usually talk about making connections with people in more socio-cultural orientations: they relate language to communication, communities, cultures and travel. For both the literacy and language question, many students mention utilitarian motives: getting better employment, enhancing a career, or simply to pass exams. More reflectively, a few may consider development of their first, second and other languages, plus related literacy, as self-development: to

develop their thinking, personality and human potential. Of course, such comments may reflect individual motivations and experiences of being taught, but common responses also show cognitive orientations and socio-cultural attitudes.

In this paper, we probe more deeply into the educational issue of how students understand 'language' in terms of metaphors. Given that language is both content and medium for learning, and with literacy has a central role in most learning, it seems significant to get information and insights into how a group of multilingual learners view language. Here, we outline the importance of language in terms of meta-functions: this is a framework of inter-related major functions that gives a big picture of language in education. We report our analysis of 977 metaphors of 'language' given by 408 multilingual university students in Malaysia, with 36 additional metaphors from 41 Malaysian secondary school students. This research gives rich details of student conceptualizations of language. It shows student-centred views in clusters of inter-related meanings which can inform teachers and other learners, not only for developing languages and literacy in language-related disciplines but also for teaching other disciplines.

## LANGUAGE AND META-FUNCTIONS IN EDUCATION

Language has particular salience in the curricula of education systems. It is a major carrier of meanings. It is the means or medium for most learning. It has linguistic meta-functions. As a curriculum content subject, languages are taught in schools, primarily as a first, but also as second or other language. Worldwide, named languages are visible on every timetable in primary and secondary schools. Languages often feature as both obligatory and elective courses in universities. Choices of which languages are taught in education and what this means for any given society depend on the relevant language repertoires and speech communities, and on language policies related to local, national and international contexts. In the case of Malaysia, in recognition of multi-racial and ethno-linguistic communities, Bahasa Malaysia as the national language is taught with English and, for significant groups of learners, Chinese or Tamil, besides indigenous languages. Historically, the balance between these languages in schools has often been in tension, but English currently retains a strong position and is a significant medium in universities. Whichever their first language, students in Malaysia cannot fail to be aware of other languages in education and in public life.

Language as a medium is the life-blood of education everywhere. Language carries the meanings in oral classroom interaction, in textbooks or electronic resources, and in moment-to-moment engagement with learning. Language mediates knowledge, understanding and skills in vast parts of literacy and oracy, besides visual literacy and numeracy, and in much artistic, humane and scientific learning. For individuals and institutions, a developed language facilitates how students reflect on the past, how they understand and contemplate the present, how they envisage future possibilities and imagine choices, including realistic, fictional and counterfactual alternatives. Language is imbricated in pedagogic relationships. It is infused in students' social and personal identities. Such concepts feature in professional teacher training. They are a strand of university teaching. Learning a second language facilitates reflection, gives a reflexive awareness and knowledge of a speaker's first language, and gives access to communities and cultures and their related of thinking and feeling. These are major justifications for teaching second or foreign languages beyond any immediate utilitarian or communicative functions.

For the present study, it is significant that language is used as a medium in education to develop and talk about key aspects of what education intends to develop in schooling and in university. These functions (see references below) include *cognition* (knowing, understanding, thinking and related mental processes), *affect* (emotional expression, empathy and motivations), *social* and *cultural* ideas and issues (relationships, attitudes, identities and connections in community ways of living), *moral* and *spiritual* matters (personal character, ethical and religious values, and appreciating the sacred), and about *aesthetic* experience (understanding and appreciating beauty). Here, we will call these core aspects of human learning '*meta-functions*' because they subsume so much of

the rationale, institutional purpose and day-to-day enactment of education. In the commonplace listing of school curriculum subjects (Maths, Science, Language, History, etc.), these meta-functions are cross-curricular strands which are represented through the daily classroom teaching of combinations of subjects or disciplines. More meta-functions might be added to this list (physical-developmental, historic, economic, political) but here we focus on these. Language relates to all of them. In education, language is infused in the ways they are learned, developed and expressed. Since the present study focuses on conceptions of 'language' we might call them *linguistic meta-functions* if they emerge in analysis of student responses concerning language.

If these meta-functions are like the spokes of a wheel, then language is the hub. The meta-functions feature in current approaches to educational theories and practices. However, these are often the spokes of different numbers and sizes in different kinds of wheels: they are rarely considered holistically. Most contemporary views of learning - as presented for teachers and educators - focus for obvious reasons on the cognitive skills. However, some educators have more humane visions to combine academic learning in cognitive, social and cultural functions (e.g. Joyce et al., 2008; Illeris, 2018) or as socio-cultural learning (e.g. Wells & Claxton, 2002) and sometimes combinations include affective and emotional dimensions (e.g. Illeris, 2016) or affective, social and ethical intelligence, combined in expansive education (e.g. Lucas & Claxton, 2010; Lucas et al., 2013); other presentations for teachers highlight the integration of spiritual, moral, social and cultural learning (e.g. EAUDE, 2008; Bigger & Brown, 2012) or the need to include aesthetics (e.g. Abbs, 1994, 2012; Bresler, 2004). It is not difficult to relate these meta-functions with the well-known theory of multiple intelligences (Gardner, 2006). Without exact correspondence to meta-functions in education, it is noticeable that these 8 or 9 intelligences include 'verbal-linguistic' intelligence and 'inter-personal' and perhaps 'spiritual' intelligence. Further known extensions include 'emotional intelligence' (e.g. Goleman, 1995), 'cultural intelligence' (e.g. Thomas & Inkson, 2017), 'moral intelligence' (e.g. Lennick & Kiel, 2011) and 'aesthetic intelligence' (e.g. Brown, 2019). These are circulated in applications for business, but they also apply to educational and literacy research (e.g. Toosi et al., 2016; Ng & Prihadi, 2020). The key point for the present study, though, is that it is not necessarily expected that university students in Malaysia or elsewhere would relate these meta-functions to their conceptions of 'language', and it may be even less expected that when they give metaphors for 'language' or 'learning' they might share conceptualizations which indicate these meta-functions.

Here we focus on metaphors for 'language' by analysing student metaphors and exploring how the metaphors may relate to these linguistic meta-functions. Within metaphor studies, but less explicitly and less extensively than in education, scholars do identify similar functions to relate metaphor to cognition and learning (Lakoff & Johnson, 1980; Berendt, 2008; Gibbs, 2008), to culture (Kövecses, 2005; Gannon & Pillai, 2015), to emotion (Kövecses, 2000; Cameron, 2011),

and morality (Lakoff & Johnson, 1999) and, just occasionally, to aesthetics in education (Eisner, 2002).

## LANGUAGE METAPHORS

Accessible ideas of the importance of language are seen in the world's proverbs. These illustrate key connections with peoples and identities, and the benefits of learning languages. As common sayings, these show themes which seem embedded in some students' socialized attitudes towards language. In fact, themes from proverbs and traditional sayings emerge in research data with student metaphors (Jin & Cortazzi, 2008). Regarding language learning, a Turkish proverb asserts, '*Bir dil insan, iki dil iki insan*' 'Speaking one language you are one person; speaking two you are two people'. A language can represent a deep personal and cultural identity: a Maori saying sums up, '*Toku reo toku ohōno*', 'My language, my awakening'. A well-known saying in Malay and Indonesian expresses succinctly, '*Bahasa jiwa bangsa*' 'Language is the soul of the nation'. Influential scholars, themselves multilingual speakers, have long since elaborated these intertwined ideas. Thus, the Czech leader Thomas Masaryk (1850-1937): 'Kolik jazyků znáš, tolikrát jsi člověkem', 'The more languages you know, the more you are human.' The philosopher Wittgenstein (1889-1951), simply said 'Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt'. 'The limits of my language are the limits of my world', implying that expanding one's language(s) is expanding horizons. The poet Goethe (1749-1832) asserted: 'Wer fremde Sprachen nicht kennt, weiß nichts von seiner eigenen', 'Those who know no foreign language know nothing of their mother tongue'. One of the founding fathers of linguistics, von Humboldt (1767-1835) elaborated: 'Language is the spiritual exhalation of the nation', 'Absolutely nothing is so important for a nation's culture as its language.' He related such concepts to those we now call refugees, migrants and exiles: 'The true homeland is actually the language. People long for it and those afar from home return most rapidly and easily, and most quietly, through their language' (Lern Helfer, 2000).

From such considerations of the pivotal significance of language in education, we turn to metaphor. Metaphor is widely recognized as a central feature of language. It is difficult to discuss language learning, or education or literacy without using metaphors. Educators and researchers use metaphors so readily that this easily passes unnoticed. There are two reasons for this: first, normal oral and written expression on any topic includes systematic use of metaphors which are often taken for granted (Lakoff & Johnson, 1980; Kövecses, 2016); second, educational topics attract particular clusters of metaphors: some stem from theories and others are routinely used in teacher talk about classroom practices and to talk directly with learners (Cortazzi & Jin, 1999, 2019, 2020).

Among educational professionals (and among students) there is no single metaphor nor even an agreed set of metaphors for such central features in education as 'language' and 'literacy'. Widespread examples in English show great diversity but many can be grouped and categorized. Some literacy metaphors have a *visual* orientation: children may

'get the picture' of a text, 'see' the meanings or 'visualize' scenes and 'viewpoints' as they 'recognise' familiar 'sight-words'. Other literacy metaphors have a *spatial* orientation: learners are progressively led to read 'on' the lines (for literal understanding), 'between' the lines (for implied meanings), and 'beyond' the lines (relating to wider contexts and personal interpretations), or to see meanings 'in', 'behind' and 'beyond' the text. Educational discourse may emphasize acts of *construction*: children 'build up' vocabulary, understand sentence 'structures', and 'construct' knowledge, supported by teacher 'scaffolding'. Perhaps these are related to *fabric-making* metaphors of 'texture' as writers 'string together' and 'weave' sentences to make 'patterns' or follow 'threads' of meaning. These can be contrasted with clusters of metaphors used orally by teachers which conceptualize educational progress as *forward-and-upward movement*: children's development of reading or maths is said to be 'going ahead', 'making strides', 'coming on in leaps and bounds' as they 'push forwards' to 'move on' towards 'higher levels'; some learners 'take off' to 'a flying start' to competitively 'race ahead', 'overcome barriers' and 'surmount hurdles', while others 'stand still', 'get stuck', 'drop back' or 'fall behind' (Cortazzi, 1991, Cortazzi & Jin, 1999). Students are likely engaged in some of these metaphors in their interactions with teachers.

Evidently such metaphors are not arbitrary; they are systematically inter-related in broader conceptualizations of language (Cortazzi & Jin, 2019, 2020). Indeed, many textbook introductions to language use telling metaphors to give theoretical orientations to students for their linguistic and academic language study. Metaphors help to make such study vivid, understandable and memorable. Students can readily come across 'language as a game' (Wittgenstein, 1958, para 48), 'a game of chess' (Saussure, 1960) or as a 'tapestry' of 'a textile' 'woven' on 'a loom' (Bodmer, 1994; Scarella & Oxford, 2012), 'a resource' of choices' (Halliday, 1975) or as 'an organ' which has 'growth' (Chomsky, 1982). This is most evident in book titles with metaphors of language as a living organism, which has 'life', 'growth'; 'decay', 'death', 'fossilization' and 'extinction' (Whitney, 1975; Jespersen, 1905; Aitchison, 2013; Crystal, 2014; Gusty, 2016). A common example is to publish book titles with 'plant' metaphors, so that language is a 'tree' with 'roots', 'stems' 'branches' and 'seeds' (Mitchell, 1908; Aitchison, 2000; Bringurst, 2008; Zhang, 2013). This metaphor is broadened so that language is considered a living 'ecological system' in eco-linguistics (Haugen, 1972; Mühlhäusler, 1996; Stibbe, 2021). Over time and with frequent use, some language metaphors encountered in the study of language are taken for granted; students may overlook how they are metaphors. Language as 'a tree' is a case in point in two ways: there are detailed 'genealogical trees' of 'language families' with 'parent', 'sister' and 'cousin' relations (Fromkin et al., 2003, p. 327; Yule, 2014, p. 227; McGregor, 2015, pp. 391-396). This is a case of a double metaphor: it transfers the longstanding 'family tree' metaphor to a classification tree to show 'branches' of historically related languages. Second, there is the standard linguistic technique to display structural relationships of



grammar in ‘tree’ diagrams with ‘branches’, displayed vertically and usually inverted, or horizontally, left-to-right, to show networks of choices. This tree is a conventional graphic tool to analyse, display and teach language structures, but language is itself commonly seen as ‘a tool’ (Vygotsky, 1978; Everett, 2012), for example, as ‘a key’, shared in a student textbook in this way: *So language provides a key to open the door to possible worlds, worlds which differ from the one we currently live in in any way we might imagine.*’ (Kniper & Scott Allen, 2017, p. 2).

Here, we propose that as researchers and teachers, as lifelong learners ourselves, we need to learn how students understand language in terms of metaphors. The present study investigates a student-centred view of metaphors for ‘language’ by asking students for their own metaphors. This is a crucial research theme, given the outlines above of the enormous significance of language in education and of metaphors within language, besides global movements towards more student-centred learning of all disciplines including language-oriented ones. We need to know in detail how students conceptualize language. This could have deep implications for their learning and for those teaching them. A method to research metaphor conceptualizations of language is Elicited Metaphor Analysis.

#### ELICITED METAPHOR ANALYSIS AS A RESEARCH METHOD

By analysing participants’ metaphors for language, we can obtain a strong idea of how they conceive of language, and metaphor research recognizes how language carries the meanings and meta-functions of what students learn, particularly when this is a language-oriented discipline but actually for all disciplines. This matters because of the complex roles and meta-functions of language and in their education all students are inevitably centrally engaged with language. In the big picture of education, metaphor research sits alongside investigations using more conventional methods: metaphor analysis is an intriguing and increasingly insightful complementary alternative which gives insider perspectives.

The present research method depends for its power on the idea that any metaphor can be analysed to show an underlying concept of what the metaphor is about. Notably, a single concept can often be abstracted from a wide variety of different linguistic expressions which superficially might be taken for separate metaphors. This is important because in the widely recognized Cognitive Metaphor Theory, metaphor is a basic part of our conceptual system (Sullivan, 2017). Metaphors are frequent in daily language and are held to be common cognitive structures which are the basis of much abstract reasoning and thought. Therefore, through analysing the language of collected metaphors, the underlying concepts held by metaphor givers and users can be analysed (Lakoff & Johnson 1980, 1999; Lakoff, 1993; Gibbs, 2008, 2017). Such concepts can be universal or culturally specific (Kövecses 2005). A small stream of applied research which springs from this theory focuses on metaphors for teaching and learning, including the teaching of languages (e.g. Cortazzi & Jin, 1999; Cameron, 2003; Cortazzi et al.,

2009; Jin & Cortazzi, 2011, 2020; Mouraz et al., 2013; Barkhuizen, 2013; Barkhuizen et al., 2014; Fisher, 2017; Hanne & Kaal, 2019). Some of this research is cross-cultural (e.g. Berendt, 2008; Jin & Cortazzi, 2017) and some studies relate to Malaysia (Nikitina & Furuoka, 2008; Hasim et al., 2013; Cortazzi & Jin, 2020a) but apparently few published investigations anywhere have a specific focus on ‘language’ metaphors. The present study contributes to fill this gap.

In more detail, a metaphor is one kind of analogy in which ‘a target’ which is usually abstract or complex (here ‘language’) is compared to something concrete, familiar or more easily understood (here, e.g. ‘a bridge’) which is ‘the source’ of the comparison in ‘Language is a bridge’. In conceptual metaphor theory, sets of these features in a comparison (‘entailments’) are ‘mapped’ from the source to the target for two reasons: to make explicit or elaborate the underlying connections and to establish an over-arching metaphor which is held to be a conceptual structure. In ‘language is a bridge’ features of a bridge are brought to mind in order to introduce, develop or remind speakers of something about ‘language’. Of course, for various speakers such features may be different. For example: ‘Language is a bridge: it connects people’, ‘it’s a means to cross to other cultures’, ‘it speeds up communication.’ In educational discourse, reasons for using such a metaphor may not necessarily be cognitive. They may be constructed for a social or affective alignment. For example, in a context of learning English, ‘Language is a Bridge of Sighs’ might be puzzling. But if a participant gives the entailment of ‘...because as learners we are prisoners going to our punishment’ we may pick up the reference to the legendary footbridge in Venice which evokes stories of prisoners crossing it over the canal to await life imprisonment or execution. So, this is a negatively evaluated association for students learning language. Fortunately for an analyst, this meaning is indicated in the entailment. It is relevant that there is ‘a Bridge of Sighs’ in several cities around the world. In another instance, a Chinese metaphor is ‘Language is an army crossing a one-log bridge’. This image of a different bridge conjures up a string of entailments relevant for English language teaching in China: there are huge numbers of learners, going one-by-one in a concerted activity across a large gap; it demands concentration, coordination, time and effort; and there is a danger of falling off into a chasm. For such cultural references, it is helpful or often vital that they are elaborated by participants, otherwise the researcher is guessing or possibly imposing a different social or cultural meaning with different affective associations.

For these reasons, in our socio-cultural extension of the general conceptual metaphor approach, we ask participants for their own metaphors, in their own words, with their own entailments. We pay considerable attention to the collections of entailments since they represent more holistic pictures of sets of underlying conceptions. This Elicited Metaphor Analysis is specifically considered and exemplified as a research method in education with examples in different publications (Cortazzi & Jin, 1999, 2020b; Jin & Cortazzi, 2019; Wan & Low, 2015). Confirmation of validity of this method may be obtained via observation and photos of classroom

activities, consistency of some metaphors with common-place proverbs and traditional sayings, consistency with key quotations in educational philosophies, or direct feedback from teachers and students (Cortazzi & Jin, 1999, 2020a, b; Jin & Cortazzi, 2008, 2019, 2020).

## PARTICIPANTS

In this study, the 408 participants may be considered an educated multilingual sample with linguistic sophistication. They were students in four prestigious research universities in Malaysia. We draw on 36 further metaphors from 41 Malaysia secondary school students. University participants included 39 studying in year 1; 159 in year 2; 63 in year 3; 31 in year 4; and 118 postgraduates; among whom 231 were females and 80 males (some participants did not provide all demographic data). Participants were either studying disciplines in which language is central (English, TESOL, Speech and Language Therapy, Education) or other disciplines (Business, Public Administration, International Studies, Engineering): so far, perhaps surprisingly, there is little discernible difference of metaphors given in different disciplines. All data were given by participants in English, which for all of them is a second or other language, but all are users of English in their academic and professional studies, including a small number of international students. A feature of potential influence is the range of other languages known, either as a first or other language, since the extent of a speaker's repertoire of languages is likely to influence their awareness and understanding of language. These other languages included predominantly Malay, the national language, with significant participant numbers speaking Indian languages (mainly Tamil, but also Hindi, Urdu, Malayalam, Panjabi, Telegu) and Chinese (mainly Mandarin, but also Cantonese and dialects), and some indigenous Malaysian languages: this reflects the national ethno-linguistic context. Further languages spoken included Arabic and Persian, with just a few speakers of French, German, Japanese, Turkish, Edo and Thai.

## DATA COLLECTION AND ANALYSIS

Using a proforma, participants were each asked to complete several sentence prompts using a metaphor, 'Language is ... because ...'. This was part of a larger project about teaching and learning. There was no specification about whether this referred to any specific first, second or other language or more abstractly to language in general. All sentences completed were in English. In the context, items in the proforma also asked about learning and all participants were currently taking specific major courses in English: some seemed to focus on English in their responses, most did not specify a particular language. Importantly, the task is designed to be completely open: students can respond with any metaphor. In principle, almost any source domain might be mentioned. However, the request for reasons ('because...') means respondents need to give 'entailments' to connect whatever metaphor they can think of with both the target and source. Many students found this an interesting and creative task.

This is perhaps confirmed by the enormous range and variety of responses. A breadth of involvement seems evident in 977 metaphors (i.e. tokens) which can be sorted into 165 different categories (types). The precise number of categories, however, depends on classification decisions: in this dataset, types could be counted to range between 150 – 200 or more.

One issue is how to handle and classify hyponyms (semantic relations of 'kind of' or 'type of') and metonyms (semantic relations of part-to-whole or part-to-part) (Wan & Low, 2015). For example, in this study there are metaphors specifying 'language' as 'an animal', 'wild animals', 'a pet', 'a snake', 'a lion', 'a herd of buffaloes': these sources have quite different entailments. They might be classified separately into six different sources with different entailments, or they might simply all be treated as a single general source of 'an animal' with a range of entailments (which have done). Similarly, language metaphors specifying language as 'a tree', 'a root', 'a seed', 'a leaf' can be grouped as 'a tree' and language as, 'a brain', 'a neuron cell in a brain', 'our blood', 'a muscle' may be grouped as body parts or in a participant's words, 'a whole body'. Rather than inventing super-ordinate categories or using presumed cognitive structures with abstract names, we use participants own words for categories. In contrast, we have classified 'a bridge' and 'a road' separately, though both might be analysed as 'connectors of points in space' or 'structures to give access to another place' but these are not participant terms. Bridges and roads seem quite distinct images: participants commonly see a bridge as 'connecting' and a road as 'a path' or 'way' to 'travel'.

Our main qualitative concern is with participant meanings rather than on numbers, therefore we analyse the target-source-entailment relations to see conceptualizations of 'language'. The most productive feature of metaphor is that one *target* can have many *sources* from a wide range of domains, and further, that one source can have many *entailments* (see examples below). This openness allows for cognitive choice, changes of affective emphasis or socio-cultural combinations in interpretation, and creativity in wording and meta-functional alignments. In our analyses of the single target of 'language', our database shows 165 different sources (or more) with a huge range of entailments. In a socio-cultural perspective, we examine the entailments, which warrant detailed attention to distil participants' conceptualizations of language. Thus, some of our analyses below match combinations of sources and entailments to make networks of systematic ideas related to 'language' (See Figures 1 and 2 below).

These metaphor networks are significant. Rather than conducting a cognitive exploration of the most frequently given metaphors, we concentrate on combinations of sources and entailments because these provide evidence of socio-culturally based conceptualizations of a target ('language') through several or many sources and larger numbers and types of entailments which have been elicited from a broad range of participants. Technically, for network charts (Figures, 1 and 2), an item is included only if a metaphor source is mentioned by at least five participants (often by 20-50), and two sources match a minimum of two commonly

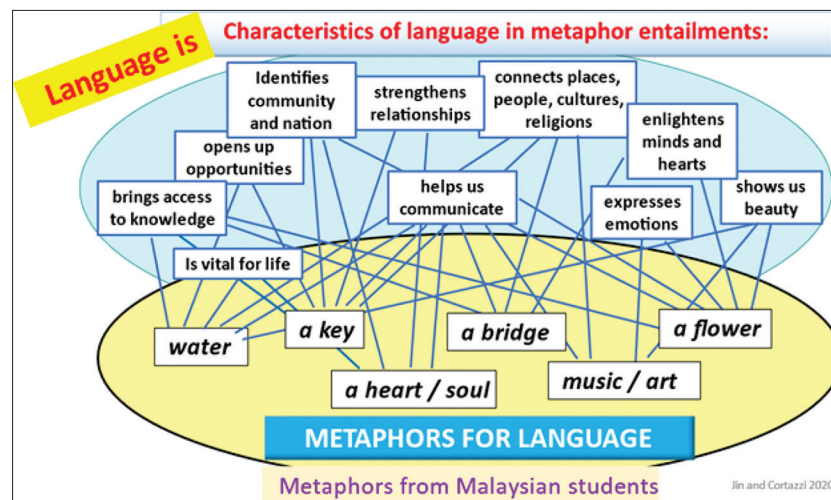


Figure 1. A partial network of students' language' metaphors in six source domains and ten clustered entailments

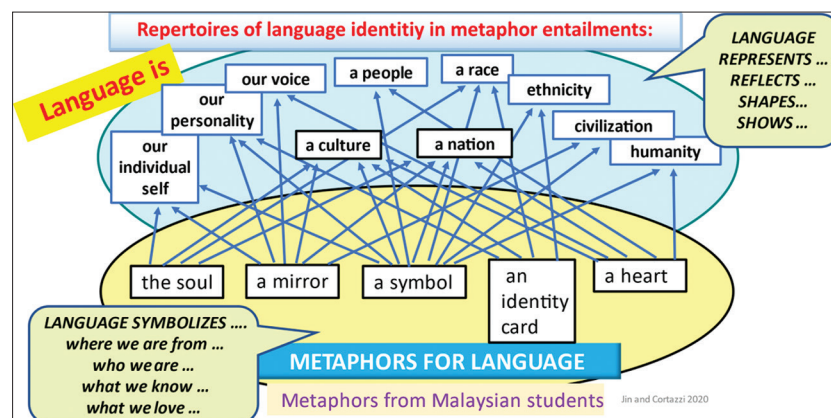


Figure 2. Repertoires of identities mentioned in a network of the metaphor entailments of some source domains

related entailments. The displayed networks of cross-matchings provide systematic evidence that these items are socially-based conceptualizations (rather than simply from a few individuals). They are patterned in social groups. We use participant-quoted labels to retain their voices and sustain close-to-data perspectives. For a display of meta-functions (Figure 3) we adopt the same principles. Each of these displays is selective for the present purpose of illustration: each could be considerably elaborated by adding further sources or entailments in increasingly complex cross-matchings. A more comprehensive investigation of literacy-related and educational metaphors would examine more targets and further inter-related networks to show elaborated panoramas of participant perspectives or 'landscapes of metaphors' (Cortazzi et al., 2009, 2015; Jin & Cortazzi, 2011, 2019; Cortazzi & Jin, 2020b).

It seems vital to preserve participant voices, hence all quoted examples here are in their own words. We use their words rather than analytic abstractions. This is crucial for the entailments since in our socio-cultural extension of the conceptual metaphor approach we want to know what 'language' means for participants in their own explanations for their own metaphors. These lie in the entailments, cited in their own words.

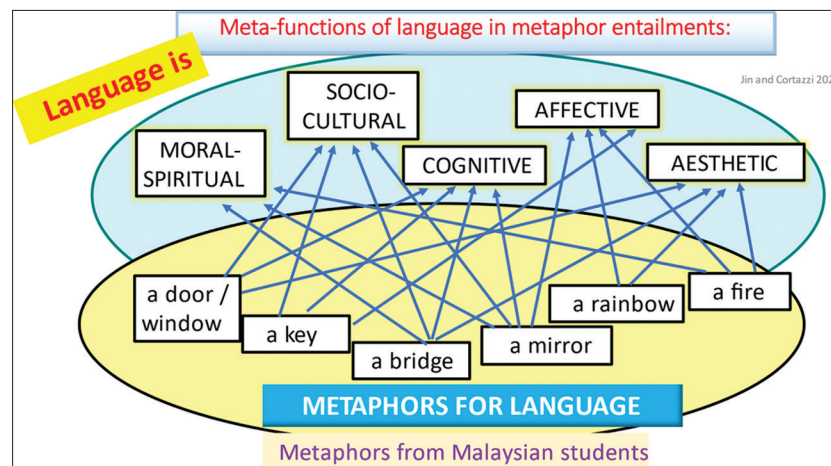
Students may give metaphors they have heard in proverbs or those current in society (see above), they may give

metaphors they have encountered in their academic study of language (see above) and different disciplines, or they may see how metaphors allow more innovative expression in their own words and they may spontaneously create their own metaphors. In our database, all of these occur; however, this diversity does not seem problematic for this socio-culturally oriented method since any of these may derive from students' experience and in their community or educational socialization into language. Any or all of them can inform their conceptualizations of language. The point of the current study is to ascertain these conceptualizations, rather than to track individual sources for them. If students do give some conventional metaphors or provide some which are heritage metaphors in traditional oral or written cultures, this shows cultural continuity and is partial confirmation that while these particular metaphors are not immediately innovative, they are evidence of socio-cultural awareness of streams of metaphors in society (Jin & Cortazzi, 2008).

## RESULTS AND DISCUSSION

First, we give some examples of 'language' metaphors to give a better flavour of the diversity data. These examples can relate to language learning. They show how these students see the usefulness of language and the benefits of





**Figure 3.** A network of some ‘language’ metaphor source domains related to meta-functions in entailments

continued learning of a language. ‘Language is a book: it is full of words that define one’s individuality, it gives you the answers’, ‘languages make us know about learning many things.’ ‘*Language is ... a door: it opens the way to many possibilities, ‘with it we gain a lot of opportunities outside’, ‘with it, you becomes yourself’, ‘we get opportunities to learn the cultures of other countries.’... ‘a vehicle, the method to get around the world’, ‘it conveys what you are thinking’, ‘it can move you forward to a new life.’... ‘a power: ‘it gives you energy and the strength to communicate’, ‘it goes across various disciplines of thought’, ‘it gives you the power to control.’... ‘money: the more you learn, the more you earn’, ‘if we don’t choose it, we will lose it’, ‘with it we can get better jobs’, ‘it is very important, in fact more important than money.’* ‘Language is a romantic: it helps you to dream dreams, if we do not understand it we get a headache.’ ‘Language is a shadow: it will accompany you wherever you go, it can take many forms and shapes, expand and grow, ever changing, complicated, but it can make me available for employment in the future.’

Some food metaphors for language show awareness of linguistic variety and bilingual activities of switching or mixing languages. ‘*Language is ... food: it’s an essential part of humanity, every human needs it; you can eat it in a variety of ways; we need different types of food’, ‘we’ve got so many types of languages in the world and they are so interesting.’... ‘a sweet: it can show that people of Malaysia are very nice when they talk.’* Using food metaphors of dishes in Malaysia, Singapore and Indonesia: ‘*Language is a rojak: sometimes we speak Malay and sometimes we speak English; ‘Language is rojak buah: sometimes we speak Malay, sometimes we speak English and sometimes we speak both together’* (‘*rojak*’ is a fruit and vegetable salad, *rojak buah* is a fruit salad with sweet and spicy sauces and peanuts).

Some metaphor responses show negative meanings or mixes of positive and negative attitudes. Often these are expressed with a touch of humour. ‘*Language is ... a rocky road: it is bumpy and hard.’... human torture because sometime teachers scold us blindly.’... ‘constipation: sometimes you want to speak out but no word comes out.... ‘water: it is*

pure but it can be polluted.’... ‘a drug: it hurts and comforts at the same time.’... ‘a nut: it is very easy to crack it, if you know how to do it.’... ‘chewing gum: we have to digest the flavour and spit the rest out.’... ‘‘*Language is a durian: you will either love it or hate it’, ‘it might be hard to conquer but once you do there will be something good in store.’ ‘sand: it can be beautiful on the beach but you can get it stuck in your shoes and in your eyes.’... ‘a killer because with language our relationships could split up’... ‘a flirtatious girl: it makes you feel so smart, so cool, and then suddenly they stand you up.’*

### Metaphor networks

In Figure 1, language is shown to have multiple inter-related functions in students’ minds. Some items relate to the metaphors quoted above. The general opinion that learning and using language is for communicative and utilitarian purposes is confirmed: language ‘helps communication’, ‘opens up opportunities’ and ‘is vital for life’. The cognitive meta-function is seen in ‘access to knowledge’ and ‘to enlighten minds’. A socio-cultural function is evident in connections and ‘relationships’ to ‘people’ and ‘places’, ‘communities’ and ‘cultures’, ‘nations’ and ‘religions’ (these diverse links to identities are explored below). A moral-spiritual function might emerge in mentions of ‘religions’ and ‘enlightening hearts’, which are parallel to an affective meta-function of ‘expressing emotions’ and ‘enlightening hearts.’ An aesthetic meta-function is indicated in ‘show us beauty’.

Figure 1 demonstrates in part how metaphor sources and entailments are interwoven: it misses much if these are simply listed. It shows the inadequacy of treating language in education in classrooms in terms of just one or two major functions. It suggests that a more holistic and functionally comprehensive approach to language and literacy might relate to students’ own conceptions and would, arguably, be part of a learner-centred approach. It seems a considerable challenge for teachers to develop student language learning and personal and professional uses of language in these terms, yet this would be worthwhile. It also implies that while these metaphors emerge from many participants, it is unlikely that

any particular student or teacher would, so far, consciously use these as a framework in teaching-and-learning activities for language-related study. However, it suggests that discussing such metaphor relations could be thought-provoking for both students and their teachers. It implies that sharing these ideas with students, especially if they are related to ongoing activities-in-hand, could be useful to extend the range of student conceptions of language and widen their focus of language relevance and deepen their thinking and feeling about language.

### Identities

Deep and varied values of identity are reflected by and constructed in language (Preece, 2019). Hence it is not surprising to find some allusion to identities in these metaphors of students in Malaysia. However, the frequency and range of identities mentioned in metaphor entailments seems quite extensive, bearing in mind that this Elicited Metaphor Analysis is quite open. In the method used here, there is no constraint against any given metaphor, nor any encouragement towards particular metaphors from participants in their metaphor-making, other than that they should be metaphors for 'language'. Metaphors given of 'language is an identity card' show both past and future ideas: language is said to 'give a sense of belonging to what we have inherited' and 'it is our destiny'. Many metaphors showed language relating to a sense of 'self' and sometimes 'our soul' but not always transparently: 'it reflects the other part of you, not the real you.' Figure 2 gives a picture of this, using labels and quotes which are directly in participants' voices. It reveals more individual notions of identity, personality and voice on the left, spreading through social, cultural, racial and national conceptions of identity, moving on the right towards wider visions of 'human civilization' and 'humanity' or 'mankind'.

The network analysis of this feature of conceptualization of language shows the 'symbol' and 'mirror' metaphors are central with the most links; however, the criss-crossing of source-entailment relations shows these identities to be deep-rooted in these participants' notions of 'language'. How language in general, or the teaching of specific languages, achieves this merits further research on student views in contexts where multilingualism and multi-cultural concepts are nationally valued. Further, language education is seen, at least in Europe, as the curriculum area to develop intercultural citizenship (Byram, 2008; Byram et al., 2016). Figure 2 shows that potentially this area might be developed using metaphor orientations.

### Meta-functions in Metaphors

The following examples illustrate selected metaphors with a range of entailments with indications of meta-functions. Some metaphors may be aligned in different directions or they may be very brief, so they may not represent any identifiable meta-functions, at least from the present list. Other metaphors clearly represent more than one meta-function, so sometimes these combine together within a single metaphor. In general, we analyse social and cultural as 'socio-cultural'

and moral and spiritual as 'moral-spiritual' because often in shorter entailments they are difficult to distinguish and they sometimes overlap.

*'Language is a bridge'*: 'it voices out our thoughts so that they can cross over to others'; 'it helps people to meet and mix'; 'a bridge of relationships, it helps you to connect with others'; 'it connects people from different races and religions' (*social meta-function*) 'it connects people from different cultures', 'it takes you to another culture' (*cultural meta-function*); 'it connects two souls'; 'it is God's greatest invention, it complements God's other great creation which is humanity' (*spiritual meta-function*); 'it's a beautiful bridge, we communicate with lovely people' (*aesthetic / social meta-functions*).

*'Language is a key'*: 'a key to knowledge, through it we acquire all knowledge'; 'without it we cannot open the door to knowledge' (*cognitive meta-function*); 'it opens doors to meet and understand different people' (*social meta-function*); 'a key to enter people's social gate and integrate into their culture' (*socio-cultural meta-function*), 'it opens the door to another country and the culture of the people there,' (*cultural meta-function*); 'through language we can access our culture and access knowledge' (*cultural / cognitive meta-functions*); 'it's a beautiful key, it can be used all over the world' (*aesthetic meta-function*).

*'Language is a mirror'*: 'it reflects how much as person knows' (*cognitive meta-function*); 'it reflects the image of a nation' (*socio-cultural meta-function*); 'it's a mirror of our culture, it shows us the cultural tone and the attitude of a race' (*socio-cultural meta-function*); 'it mirrors that someone loves their language' (*affective meta-function*); 'it's a mirror of the soul'; 'it's the soul of a people / race / nation because it is a nation's identity' (*socio-cultural / spiritual meta-functions*).

Figure 3 shows how six metaphors from our data match the five proposed meta-functions. It illustrates how individual metaphors given by groups of participants not only show a range of separate entailments (as in Figure 1), but individual metaphors also represent a range of meta-functions (as above) which can be combined not only for one metaphor but, more interestingly, across several or many metaphors. If this is demonstrable with six metaphors, which otherwise seem to have little in common as a set, then the present dataset of 977 metaphors has intriguing further potential for detailed educational analysis. This is important since the meta-functions have deep relationships with not only holistic theoretical views of education and multiple intelligences but also with holistically-oriented theories of metaphor, as shown earlier. If these meta-functions are shown to be parts of the conceptualizations of students in relation to the single metaphor target of 'language', then logically they may well be evident in other metaphors. This is the case with other metaphors for 'teacher' and 'learning' as summarized below with analysed metaphor data from Malaysia.

Arguably, then, in any learner-centred approach to literacy and education the meta-functions should have high profiles in teaching-and-learning activities since it is apparent that in this research students are already using them, albeit



perhaps not yet with explicit awareness. Figure 3 demonstrates that, with metaphors, the meta-functions work together in potential repertoires or profiles of combinations: this is the main thrust of those educational theories and approaches towards multiple intelligences mentioned above, besides some theories of metaphors which begin to see metaphor, too, as engaging in combinations of similar over-arching functions. A challenge for researchers and teachers is what to do about this in literacy and language classroom. We could make a start with drawing conclusions about exploiting the possibilities revealed in metaphors.

Before this, we summarize some findings from other cross-linguistic metaphor research we have carried out in China, Iran, Lebanon and the UK.

### Brief Cross-linguistic Comparisons

Studies of metaphors for 'language' in China, Iran, Lebanon and the UK can be compared with those illustrated above in Malaysia. They show some common features across large numbers of metaphors. However, there are also some differences in salient trends (Cortazzi & Jin, 2014). Metaphors for 'language' from students in these four locations all include 'a bridge', but examples from China show a strong affective meta-function which was absent in a 'bridge' in our Malaysian data. Chinese students mentioned: 'Language is a bridge: people use it to understand and come closer', 'it's a connection between human hearts', 'it can take you to other people's hearts', 'it connects minds and emotions, it helps you to fall in love', 'without it you can only stay in your castle without laughter or happiness, only with loneliness.' Perhaps bridges in China, with several thousand years of not only functional but ornamental bridge design in gardens and residences, have more emotional associations.

On the other hand, the Malaysian mentions of identities (Figure 2), in a nation explicitly conscious of its multiracial society, were far less evident in these other data. Metaphors for 'language is a passport' – which is one kind of identity document – were rare in these other locations (and there was one mention only in Malaysia), except in Lebanon where 97 students gave such examples as: 'Language is a passport to culture', 'with it, I can have access to all cultures', 'it helps us to visit places and have access to diverse cultures', 'it reflects the country the person belongs to', 'with it you can be more than one person', 'you can be another person, because with more than one language you can have more than one personality.' This metaphor can be tied to identity, of course, but for many Lebanese, with a long-standing history of migration, international commerce and cosmopolitan travel, it seems to imply cultural diversity and extension or amplification of personality.

A metaphor of 'Language is a new world' was mentioned by just one participant in each of Malaysia and the UK, by a few in China, but in our data it is common in Lebanon and even more common in Iran, where it seems to indicate a sense of discovery, humility, amazement, finding others and a new self. 'Language is a new world: every day you can find something new', 'you can understand a new nation, new customs, new happenings, a new way of living', 'it's a

borderless world, I can communicate with others of any culture', 'it's the embodiment of a culture, it gives you another personality, you find a new identity', 'we encounter all the world's questions in it, you will feel very insignificant once you step in it.'

Evidently, these 'language' metaphors often include ideas about movement and travel, implied in language learning, which are common across all these participants. In Britain such metaphors emphasize expectations, excitement, exploration, but difficulties in learning and using language before a final achievement. 'Language is ... a roller-coaster: there's a steep hill of learning but an easy and fluent ride down', 'a journey, there's a frightening process with a fear of the unknown that is fulfilling', 'a train, it takes you on a long journey and introduces you to new experiences', 'a long haul flight to a new country, there's a great expectation and much you don't know', 'a spaghetti junction because there are lots of confusing criss-crossing roads but in the end they will get you somewhere.' ('A spaghetti junction' is itself a metaphor in Britain for a giant crossroad where multiple highways meet with numerous over- and under-passes; in appearance it resembles cooked spaghetti).

'Language is a weapon' features infrequently in data from Iran, the UK and Malaysia, more in China (where it indicates positive and negative uses in 'a two-edged sword') but outstandingly in Lebanon, where memories of civil war, long-standing regional armed conflicts and receiving huge numbers of war refugees may be a factor. However, in metaphors the entailments are mainly academic, though with aggressive verbs (fight, attack, challenge, hurt, defend, destroy): 'Language is war' implies 'you can challenge others with it, you can defend yourself with it against enemies', 'it can be used to defend your opinion or to attack communication problems', 'it can be used by soldiers to fight ignorance', 'you can't fight in life without something that will make you strong and confident.'

In all these locations, participants' 'language' metaphors have common sources related to food (e.g. language 'nourishes the mind', 'you can't survive without it') and related to trees and plants; some in Malaysia were shown earlier. Chinese students exemplify this with clear meta-functions: 'Language is a garden where flowers are growing which we need in our hearts', 'it's flowers come out everywhere, they make the world more beautiful and people more kind-hearted', 'an apple tree which can bring you a sweet and large harvest and you get good friends and a happy life', 'a green tree in the yard of love.' 'Language is a cake, it will make people happy and full of spirit', 'salt: without it the world will become tasteless and people won't appreciate the beauty of life.'

These show interesting comparisons, from which we can conclude that the rich picture from the Malaysian data has likely commonality internationally, but with some specific or localized emphasis, such as that on identity. An implication is that Malaysian students or others elsewhere, can gain insights from cross-cultural comparisons of conceptualizations of 'language'. The picture of ideas about 'language' among Malaysian students can be consolidated further,

with theoretical implications, by analysed evidence of the presence of meta-functions in metaphor data concerning 'a teacher' and 'learning'. These complement the metaphors for 'language' previously discussed.

### Meta-Functions in 'Teaching' and 'Learning' Language and Literacy

The meta-functions identified here are parallel to those found in Malaysian students' metaphors for 'a good teacher' (Cortazzi & Jin, 2020a). These can be related especially to the teaching of language and literacy, and to language related disciplines. As might be expected word-wide, many participant's metaphors show how, *cognitively*, teachers have strong functions to share and develop students' knowledge, 'to enlighten us with knowledge and wisdom'. In a strong meta-function of showing care and concern for students, *affectively* teachers specifically show 'warmth', 'kindness', 'passion for their subject' and 'love for teaching'; 'they provide the inspiration' and 'develop the motivation' to lead students 'to happiness'. Teachers 'light up people's lives in society', as *socio-culturally* they 'bring students to a successful future'; they are 'a dictionary of culture', 'the pulse of the nation', 'they save our country'. In what may seem an idealized picture, but one which from specific references is clearly based on participants' experiences of good teachers, a *moral-spiritual* meta-function shows teachers with 'devotion' and 'self-sacrifice', 'they lift up spirits', 'brighten the soul', 'build up characters' and in a phrase, which echoes Islamic daily prayer, they 'guide us in the right way'. In a further meta-function which, for language and literacy teachers presents interesting challenges, *aesthetically* teachers 'have a beautiful character', 'lead us to beauty' and 'inspire creative and imaginative minds.' An interpretation of this for language and literacy teaching is that, overall in the grand scheme of life, teachers are concerned with knowledge and skills, but also with cultivating virtues and values, to help students to achieve high visions: 'without teachers' assistance we won't reach our destination'; 'our teachers want us to fly as high as possible', 'without them you can't learn anything', 'without a teacher, none of us would be the person we are today'; 'they will be with you until the day you die' (Cortazzi & Jin, 2020a).

Strong resonances with the above picture emerge from metaphors for 'learning' from students in Malaysia (Cortazzi & Jin, 2019, 2020b). They give insights for literacy and language teaching. For example, the 'journey of learning' is conceptualized by students as 'a struggle', 'with thousands of obstacles', 'it's full of ups and downs.' Although 'it is endless', 'continuous', 'unstoppable', students 'have to keep going', they 'should not stop', even if 'it takes a lot of effort'. With these conditions, 'the process takes us ahead', 'we are always moving forward', 'every step counts.' There are definite benefits and rewards: 'to get new knowledge'; 'we get new knowledge from all around the world' and 'different experience' in 'the road to knowledge', 'the road to a job' 'to find treasure' and 'to grasp the future' 'at the end point we dream of.' On this 'learning journey', *cognitively* 'this journey to knowledge' 'gives you new knowledge';

*affectively* 'it's an adventure of exploration', 'a joyride', 'a journey of joy and pain' which is 'exciting', 'happy' and 'wonderful'; while *socio-culturally* 'it connects us with other people', 'we have interaction with others', 'we share with others.' In terms of *moral-spiritual* aspects, 'the experience makes you a better person', 'we can improve ourselves everyday', if students 'take the right way, it will lead us back to our Creator;' 'It's a stairway to heaven, very important because that's what Allah would want us to do so we can get closer to Him'. *Aesthetically*, 'it is an indescribable beauty because we have to experience it first', it is entering 'a beautiful garden, beautiful outside and even more beautiful when we get inside'; 'I need my teacher on this journey, she's so beautiful inside and outside.'

### IMPLICATIONS AND CONCLUSIONS

The analysis here represents a rich picture of the functions and roles of language, as portrayed in student metaphors for language. Since students can provide such arrays of metaphors it seems likely that in language-related university courses more could be made of the roles of metaphors in linguistic accounts and professional uses of language. In those courses using English or other second languages as a medium of learning, more could be made of how students conceptualize 'language' and how explicit reflection, discussion and development of this understanding could help to advance and elaborate their learning. More could be made, perhaps, of apparently simple questions, such as 'What is language for? Why do we use more than one language? Why do we learn foreign languages? Why do we study our own language?' The research results indicated here provide examples of insights and possible application to extend and deepen likely answers to what are actually essential questions.

We have shown in an extension of Cognitive Metaphor Theory towards a socio-cultural orientation that the single target metaphor of 'language' can elicit large numbers of sources and a huge number of entailments. By attending to entailments across sources we can show clusters of metaphors and networks of source-entailment relations which give a more comprehensive conceptualization of 'language' which is spread among participants. This picture can be shared with teachers and learners. Of major interest are the combinations of sources and ranges of elaborations of meanings in entailments because these suggest broader visions of 'language' and of particular languages. Students can be encouraged through awareness-raising activities to extend their thinking about languages. They can widen their repertoire of how they think about and use language by considering combinations of meta-functions, since it is likely that currently some functions are under-used, e.g. aesthetic and moral-spiritual meta-functions.

Any given metaphor frames understanding of a metaphor target, such as 'language'. It embodies a view by selecting a source and then selecting entailments to highlight features of the target. The point of the metaphor frame is to achieve a particular orientation and focus, but by design frames also exclude. So, in a sense, this could mean a re-framing of ideas about language by systematically introducing and applying

less used or original combinations of sources, entailments and meta-functions. Teachers might introduce less common or particularly insightful and inspiring metaphor sources and entailments to show the possibility of changing the frame. The general strategy would be to extend the repertoire of metaphors and therefore to extend ways of thinking and feeling about metaphorized topics. For example, while ‘language is a bridge’ is common, and has mostly (not always) fairly obvious entailments, others may bring out different entailments in relation to a context in hand. What do the following mean? ‘*Language is music... a painting... a volcano... a snake... a museum... a fire ... a red sky... a magic spell ... war... a plastic bottle... a rain forest... a rainbow holiday... a prolonged stay in hospital... a Bridge of Sighs... an army crossing a one-log bridge*’ How would these metaphors be interpreted with entailments from an aesthetic, affective or moral angle? Or from the angle of another culture?

Research activities also have their metaphors, their networks of meanings and meta-functions. Adapting a British student’s metaphor for language, we can say, ‘Researching is a unique form of music; it sounds so beautiful, it must be practised and interpreted, you only know how it goes if you listen to it.’

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