Creative Multilingualism

A Manifesto

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1. The Creative Power of Metaphor

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Language diversity nurtures diversity of identity, thought and expression

The following principles are central to the work of Creative Multilingualism's research strand 'The Creative Power of Metaphor':

Our innate talent for metaphor connects our thought, language and action in a fluid process.

Our metaphorical thinking is influenced by the language(s) we know and the culture(s) we inhabit.

Metaphor opens up an infinite range of pathways to creativity.

'"Space-time" is simply the physical universe inside which we and everything else exists. And yet, even after millennia living in it, we still don't know what space-time actually is' (Carroll 2019: 34). This statement sums up current scientific knowledge about the interplay between three-dimensional space and one-dimensional time. Yet we all cope with the practical challenges of our daily routines, which involve knowing — roughly or precisely, depending on context and need — which specific location we are in, and what time of day, month or year it is. So how do we manage to get a mental grip on space and time, and how they connect? The answer is: we use our extraordinary talent for thinking and communicating through metaphor.

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Take the concept of 'progress'. This assumes that we move forward through time much as we progress along a path or road. Or the more obviously metaphorical saying 'time flies', which gives expression to an everyday sense of time passing faster than expected or faster than seems natural to a human being (see Fig. 1). The metaphor makes the abstract, intangible and shapeless concept of 'time' imaginable as a physical, animate body that moves swiftly through space, by analogy with the familiar phenomenon of a bird. Shared among speakers of English, the proverb goes back to Virgil's poem *Georgics* — though his Latin metaphor is in fact 'tempus fugit' (line 284) — 'time flees'. We may speculate what prompted the change of action as the metaphor became established in English. Did the vowel correspondence between 'time' and 'fly' make the phrase more memorable? Certainly, a shift in the English semantic system played a part, in that 'fly' used to encompass 'flee' as a (metaphorical) meaning, but this part of the associative range of the word became obsolete. Meanwhile German never adopted the classical quotation as a proverb despite an equally strong classical heritage — 'die Zeit fliegt' is less common than 'die Zeit vergeht', equivalent to the pedestrian statement that 'time passes'.

Fig. 1 Even well-worn metaphors are not 'dead'. They can gain new force when they are highlighted as meaningful, for example by elaboration. *Peanuts* © 1976 Peanuts Worldwide LLC. Dist. by Andrews McMeel Syndication. Reprinted with permission. All rights reserved.

We here gain a glimpse of the dynamic interplay between cognition, culture and language, and the creative potential generated by that process. This becomes evident in extensions and adaptations of the metaphor, as in the gently humorous Peanuts cartoon, or a message attributed to business leadership coach Michael Altshuler, which relies on his audience's familiarity with modern methods of travel: 'The bad news is: time flies. The good news is: you're the pilot.'

When we use one type of thing — in this case the bird or flying object — to give shape to another — here the abstract concept of time — we're training our ability to think creatively. We do so from the moment we start listening to the language(s) around us. And it's not too far-fetched to assume that the human ability to create analogies between concepts, transfer concepts from one conceptual 'domain' to another, and adapt established metaphors to new contexts, is akin to the engineer's creative adaptation of the flying mechanisms of feathered birds to create a flying machine. In recent decades, our talent for metaphorical invention has enabled us to extrapolate from physical webs, nets and networks to create the 'World Wide Web', the 'Internet' and 'networking'. Neural 'networks' are now being appropriated for robots that emulate human beings. Metaphorical creativity has generated new words and new meanings for existing words, and these in turn have facilitated collaborative development of innovative technologies. These are quite literally changing the world and the way we live with each other and the world around us.

Metaphor in Science

The different views of a particular problem arise from the prevailing metaphors held by each discipline. Sharing different metaphorical representations of a problem appears to open up possibilities for creative thinking. [...]

Metaphor plays a central role in the development of a scientific subject, from its very beginnings through to its full development as a mature body of knowledge and understanding. It figures in the scientist's initial creative impulses, in interpretations of experimental data, in formulations of scientific explanations, and in communication between scientists and between scientists and the rest of the world.

Theodore L. Brown, *Making Truth. Metaphor in Science* (2003: x).

We can see here how metaphor operates dynamically at the interface between cognition, culture and language, establishing a shared frame of reference in a particular temporal and situational context. What can disappear from view is that these processes happen within a particular language, using the linguistic material available to the speakers of that

language together with its cognitive and cultural inflections, in the time and space the speaker and their audience inhabit. 'Time flies' is not identical to 'tempus fugit'; and a new technology has opened up the potential for conceptualizing 'time flies' not in terms of an animate bird but in terms of an inanimate aeroplane that is subject to human control.

The purpose of this chapter is to look more closely at the dynamics of metaphorical creativity and what approaches can help to understand them, taking account of cognition, language and culture as interactive participants in a complex process of creating meaning that thrives on diversity.

Metaphorical Diversity

Conceptualizations of time illuminate the diverse ways in which human beings imagine abstract phenomena and make their concepts communicable through language. Like Latin 'tempus fugit', the English metaphor 'time flies' imagines time as a being that moves linearly from A to B, facing in the direction of motion. Implicit is the idea that the speaker is moving with it. By contrast, if we say 'winter is approaching', we envisage its coming towards us. Time may also be conceptualized in English as the observer moving across a landscape, as in the verb and noun 'progress', or the sentence 'She's approaching her thirtieth birthday'. The future is conceptualized as being in front of the observer while the past is behind: 'I'm looking forward to my holiday'; 'It's good to have that ordeal behind me'. These conventional time metaphors are acquired at such an early age by English speakers that they seem simply to reflect a natural reality, especially since they form part of a coherent system of conceptualizing time: in all the above examples, the movement is linear and happens on a horizontal plane. Yet comparisons with other languages demonstrate that these metaphors are grounded in culturally specific patterns of thought.

Over recent years, research has revealed an enormous variety of ways in which time is conceptualized. Studies in the field of psychology conducted by Lera Boroditsky and others, and summarized in her essay 'How Languages Construct Time' (2011), give a sense of how fundamental the differences are. For example, a study comparing English and Mandarin speakers showed that the latter were more

inclined to use vertical metaphors for time than English speakers, and that this correlated with a greater tendency to think about time in vertical terms (pp. 334–35). The direction of travel associated with time also varies from culture to culture: speakers of the South American language Aymara refer to the past as being in front of the observer while the future is behind (p. 336). And speakers of the Australian aboriginal language Kuuk Thaayorre, who use cardinal direction terms like 'east' or 'west' rather than relative terms such as 'right' or left', organize their time references on the basis of their spatial orientation — i.e. they are so aware of which direction they are facing in at any given point that they use this as the basis for referring to time (pp. 337–38; see also Boroditsky and Gaby 2010).

Moreover, in literate cultures the configuration of time is affected by the writing system: while speakers of languages that use Latin script order temporal events from left to right, speakers of Arabic and Hebrew, who read text from right to left, were found correspondingly to order events from right to left (p. 336). Further factors shown to influence conceptualizations of time are the metaphors that are being used in the specific discourse context, and, in the case of bilingual speakers, the language they are operating in (pp. 335–36, 339). Moreover, research including learners demonstrated that increased experience of talking about time vertically led to more vertical representations of time (p. 335).

These differences indicate that our linguistically articulated conceptualization of abstract domains involves an immensely complex interaction between the following:

- our cognition, including our emotions and imagination,
- our bodies in their spatial environment,
- our cultural heritage and cultural context,
- our language(s) in its/their oral and written manifestations,
- our linguistic and situational context.

The implications of this complex interdependence go to the heart of one of the great philosophical questions concerning language: to what extent language affects thought. Platonic philosophy is predicated on the absence of such a connection: the realm of ideas is considered to be

independent of language, and consequently not affected by linguistic diversity. Yet the evidence concerning the cultural *and* linguistic diversity of concepts of time points to a fundamental interdependence of language and thought: how we think about time depends on the language we speak. Daniel Casasanto puts it like this: 'It may be universal that people conceptualize time according to spatial metaphors, but because these metaphors vary across languages, members of different language communities develop distinctive conceptual repertoires' (2008: 75).

Does Language Shape How We Think? The Issue of Linguistic Relativity

People who speak different languages appear to conceive of the world somewhat differently and diversity of thought, perspective, and innovation seem intuitively linked to naturally occurring language diversity. Why is it, then, that many scholars in science, linguistics, and philosophy (perhaps in those fields more than elsewhere) are sceptical, if not overly critical, of the idea that languages may go hand in hand with different ways of conceiving and paying attention to the world, but also literally holding different perceptions?

Guillaume Thierry, 'Neurolinguistic Relativity: How Language Flexes Human Perception and Cognition' (2016: 691–92).

This linguistically inflected diversity of conceptualizations holds immense potential for individual and collective creativity. Throughout our lives, we learn to work creatively with the linguistic and conceptual repertoire we acquire as members of our cultural community, and our scope for creativity is structured and constrained by that repertoire. But we are not locked into a metaphorical straitjacket. This is evident in our ability to adapt conventional metaphors within a language and create new ones, and the ability of individuals to modify their conceptualizations if they are exposed to alternative metaphors, for example by learning another language.

Researching Metaphor — The Perils of Ignoring Language Diversity

A central tenet of cognitive theories of metaphor is that metaphorical expressions reveal metaphorical conceptual systems, that these systems are primary by comparison with the expressions, and that the concepts can be separated from the language in which they are expressed. A convenient consequence of these assumptions is that the language of the examples used in the research is not critical.

This has important implications for how we conduct research on metaphor. The tendency in cognitive linguistics and psycholinguistics has been to use English examples, often without acknowledgement of the limitations this may entail. For example, Gilles Fauconnier and Mark Turner focus exclusively on English examples when discussing the metaphor TIME AS SPACE in their essay 'Rethinking Metaphor' in *The Cambridge Handbook of Metaphor and Thought* (2008). Their purpose is to investigate the 'complexity of integrations that lie behind observable metaphorical conceptual systems' (p. 65) but the question whether examples in one language are sufficient is not posed. The implicit premise is that the language in which a metaphor is articulated has no significant bearing on metaphorical thought. Yet we have already seen that to even begin to understand the complex diversity of ways in which human beings create concepts of time, we need to look not only beyond English, but beyond western languages.

The need to take account of language difference when researching metaphor is also evident if we look at the conventions for conceptualizing metaphor established by George Lakoff and Mark Johnson in their seminal volume *Metaphors We Live By*, first published in 1980. They focus on the metaphor pattern 'A is B', which identifies the target domain and source domain of the metaphor, e.g. 'life is a journey' or 'argument is war'. The conceptual metaphor is distinguished by capital letters from its varied metaphorical expressions, as in the following example:

ARGUMENT IS WAR
Your claims are *indefensible*.
He *attacked every weak point* in my argument.
I *demolished* his argument. (2003: 4)

The statement in capital letters equates a linguistic activity (argument) with a physical armed conflict (war), and the expressions underneath exemplify — as a few examples among many — how the metaphor manifests itself in ordinary language (see also Fig. 2). The capital letters signify the purely conceptual nature of 'argument is war', with the implication that this statement is pre-linguistic or supra-linguistic.

Fig. 2 This cartoon about examinations of doctoral theses exemplifies the conceptual metaphor that 'ARGUMENT IS WAR'. 'Thesis Defense' (2014), xkcd.com, CC BY-NC 2.5, https://imgs.xkcd.com/comics/thesis_defense.png

Unlike the symbols used in Logic, however, words are always part of a specific natural language. We need go only as far as the German translation of *Metaphors We Live By* to find that the word 'argument' depends for its range of meanings on the English language, where 'argument' typically denotes a heated or angry exchange of diverging views. The translation 'ARGUMENTIEREN IST KRIEG' (Lakoff and Johnson 2018: 12) diverges from the English statement because the verbal noun 'Argumentieren' suggests a rational process of presenting reasons for or against a position without the association of anger. Although there is a shared Latin origin, the meaning has diverged within the respective language systems — the words are 'false friends'. In fact, German has no single word with the same set of associations as the English noun 'argument'. This is not an isolated difficulty but one that arises systematically from the fact that the meaning(s) and associations of

a word are defined by its place in the semantic system of the relevant language. Any idea expressed in words is therefore to some extent dependent on the language in which it is expressed — and the idea will subtly change when it gains expression in another language. Translation opens up creative options — see Chapter 6, on 'Prismatic Translation'. When researching conceptual metaphors, the need to attend to language diversity is therefore imperative. Every cultural group that develops a language creates its own ways of making its world meaningful through metaphor. To ignore that diversity is to ignore the creative power that comes with our talent for metaphor.

Traversing Metaphorical Pathways

When we use a language, we are continually treading established pathways of metaphorical association, training our metaphorical muscles and extending our metaphorical repertoire. In conceptualizing abstract entities, we often draw on universal aspects of human life, such as our bodies or kinship. Yet even closely related languages which draw on the same aspect will tend to differ in their selection from the range of possibilities. We can see this process at work in the lexical field of company structures in English, German and French (see the following page).

Each language is taking us along a slightly different route, creating different connections and suggesting new associative opportunities that have evolved over time and in interaction with the cultural context of its speakers — creating diachronic and synchronic relationships and connections which can only be captured imperfectly in schematic form. These may draw on words provided by other languages (in the examples given, German and French draw both on Latin and on each other), and they may interact with non-lexical features of the language. For example, the selection of 'mother company' in German (*die Muttergesellschaft*) and French (*la société mère*) from the possible kinship options accords with the feminine gender of *Gesellschaft* and *société*.

Leafing through a dictionary of a language quickly shows how important metaphor is in supplying us with words for abstract concepts. For example, the meanings listed for any common verb denoting a physical action will include metaphorical ones. Take the verb 'to run': it conveys a

TARGET DOMAIN	SOURCE DOMAIN		ENGLISH	GERMAN	FRENCH
COMPANY	**general hierarchical structure**		subsidiary		
	human body	**body part at the top of the body**	head office	Hauptsitz (*'head'/ main 'seat'*)	
		piece of furniture used by the body to seat itself		Hauptsitz (*'main seat'*) Niederlassung (*branch, cf. 'sich niederlassen' 'to sit down'*)	siège (*'seat', place where something is located*)
	kinship relations	**parent**	parent company		
		mother		Muttergesellschaft (*'mother' company*)	société mère (*'mother' company*)
		father			
		child [of parent]		Filiale ([*from Latin filialis:*] *branch*)	filiale ([*from Latin filialis via German:*] *'child' company, subsidiary*)
		daughter		Tochtergesellschaft (*'daughter' company, subsidiary*)	
		son			
	non-human life form	**tree**	branch	Zweigniederlassung (*branch*)	
INDUSTRIAL SECTOR				Branche ([*from French:*] *industry, sector*)	branche (*industry, sector*)

physical movement as in 'run to the bus' or 'run a marathon', and it is also used metaphorically as in 'run into trouble' or 'run a company'. We learn these conventionalized metaphorical meanings from a young age and use them as a standard part of the semantic system of the language we speak. The relationship between the literal and metaphorical meanings is part of our 'living' semantic system, which we draw on to comprehend and create new uses of words and new words.

In order to understand better how we cognitively process metaphorical meanings of words that also have non-metaphorical meanings, our research group conducted two related experiments, one with native speakers of English (Werkmann Horvat, Bolognesi et al.(a)), and one with two groups of Croatian learners of English who had intermediate and advanced competence respectively (Werkmann Horvat, Bolognesi et al. (b)). What we wanted to find out was firstly, whether native speakers of a language (in this case English) access metaphorical meanings with the same ease as non-metaphorical meanings of a given word, and secondly, how this compares with the processing of metaphorical meanings by learners of the same language (in this case Croatian learners of English).

Both psycholinguistic experiments deployed the same set of stimuli, consisting of a series of verbs used with a direct object that might yield a literal or metaphorical meaning, e.g. 'expose'+'skin' versus 'expose'+'truth'. The study with native speakers of English revealed no significant processing differences between literal and metaphorical meanings of the verb. This addressed the question of whether native speakers access a metaphorical meaning via the same word's literal meaning or directly. Our experiment confirmed what has largely become the consensus, namely that native speakers access metaphorical meanings directly and effortlessly rather than via a literal meaning. In effect, they treat such verbs as polysemous words, i.e. words with multiple meanings, irrespective of whether these are literal or metaphorical.

The second experiment, involving two groups of non-native speakers with differing degrees of proficiency, revealed significantly slower processing of all the meanings, which was to be expected for learners. Beyond that, however, the results were much less homogeneous both within and across the two groups than for native speakers and permitted no straightforward conclusions about how the learners

were processing metaphorical meanings by comparison with literal meanings. The results indicated, however, that learners were generally less familiar with the metaphorical than the literal meanings. This has important implications for teaching vocabulary to learners, suggesting that in a foreign language, metaphorical meanings need to be actively taught without relying on learners inferring those meanings from literal meanings. It also suggests that learners should be given practice in understanding the semantic system of the language as consisting of literal and related metaphorical meanings. This finding accords with research on vocabulary learning conducted in the field of education by the Creative Multilingualism research strand on 'Linguistic Creativity in Language Learning' in this volume (see Chapter 7), which suggests that giving learners opportunities to engage with metaphorical language in poetry may produce better vocabulary learning outcomes than an exclusive focus on more information-focused text types. Further research is however needed in this area.

The difference we found between native and non-native speakers accords with the findings of a study investigating the role of the right hemisphere (RH) of the brain in processing meaning: 'the unique role of the RH in activating and maintaining a larger range of word meaning and semantic features may be limited to native language, and does not fully extend to later acquired non-native languages' (Faust, Ben-Artzi et al. 2012: 230). From what we know about metaphor, we may surmise that our effortless understanding of a word's range of literal and metaphorical meanings is deeply embedded in early learning processes where language learning is integrally connected with learning to use our bodies, move around in space, and interacting with a living human community and natural environment.

A key area requiring more research is the extent to which metaphorical meanings are 'stored' in our lexical system in the same way as non-metaphorical words, with lexicalization potentially eliminating awareness of connections with literal meanings. Our hypothesis is that the relationship of a metaphorical meaning to a literal meaning of a word remains a latently significant factor in the semantic system we learn as we acquire our native language or languages, and that for words with surviving literal and metaphorical meanings, native speakers will readily activate the creative metaphorical potential if

the context or expressive purpose prompts such activation. In other words, the metaphor is not 'dead' but 'dormant'. When we learn words from an early age, we internalize them as part of a living system that encompasses metaphorical meanings created by processes of extension and transfer. We normally use them without being conscious of those processes, but new needs such as technological developments, a special communicative purpose or a spirit of poetic experimentation may prompt us to activate the creative potential and open up old pathways or invent new ones. In doing so, we can rely on our listener or reader having the lexical knowledge and the experience with metaphoric processes to respond with reciprocal creativity.

Investigating the Creative Power of Metaphor

Investigating creativity at the interface between cognition and language requires a wide range of approaches and research methodologies. The study of metaphor benefits from having a long history, starting with Aristotle and continuing in the long tradition of rhetoric and literary studies. Lakoff and Johnson's achievement was to shift the focus from metaphor as a feature of exceptionally crafted language to its ubiquitous role in our cognition and ordinary linguistic repertoire. This laid the basis for a burgeoning field of scientific investigation in cognitive linguistics, psychology and neuroscience, with experimental methods and interrogation of large corpora permitting systematic research on the cognitive processing and use of metaphor.

Scientific studies concerned with metaphorical creativity have focused on such questions as 'optimal innovation' (Giora, Fein et al. 2004: 116–20), and — drawing on fully automated metaphor generation — the criteria that need to be fulfilled in order for metaphors generated by artificial intelligence (AI) to be perceived as creative (Littlemore, Pérez Sobrino et al. 2018). There has however been a tendency in recent decades for research on metaphor to become overly reliant on approaches developed within cognitive science, and focused on investigating aspects of metaphor that lend themselves to testing by experimental methods, organization into clearly distinct categories, and interrogation of large corpora. Especially when investigating creative processes that may be unusual, singular and individual, however, it is useful also to involve

interpretive methods used in the humanities. For example, the conceptual framework of rhetoric with its holistic and process-oriented concept of language in action is often better suited to capturing creative metaphoric processes than science with its rationalist heritage.

By focusing attention on metaphor as a feature of ordinary speech, cognitive linguistics has established a strong basis for elucidating processes by which novel metaphors are created using techniques such as extending, elaborating and combining conventional ones (Lakoff and Turner 1989, passim; Kövecses 2010: 53–56). An example is the metaphor created by Neil Armstrong when he became the first human being to set foot on the moon, an event in 1969 that was transmitted across the world by television. His purpose was to anchor the historic event in the public consciousness: 'That's one small step for a man, one giant leap for mankind' (NASA 2019). The statement built on his literal, visible physical action and the equally literal upward movement of space travel, and infused those processes with the conventional metaphor of upward movement as progress towards something better. What made the statement memorable was its palpable connection to the unique historic moment experienced and articulated by a heroic human being. The metaphoric processes Armstrong deployed were immediately understood by an audience of millions — all of them well versed in the use of metaphor.

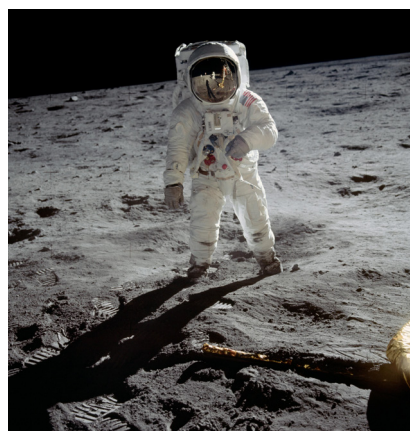

Fig. 3 'That's one small step for a man, one giant leap for mankind' (Neil Armstrong). This is a photograph by Neil Armstrong of his fellow astronaut Buzz Aldrin on the Moon (1969). NASA. Wikimedia Commons, Public Domain, https://commons.wikimedia.org/wiki/File:Aldrin_Apollo_11_original.jpg#/media/File:Aldrin_Apollo_11_original.jpg

We can see similar mechanisms at work in Charles Baudelaire's poem 'Élévation' (1961: 10), addressed to his 'esprit', i.e. mind or spirit:

> Au-dessus des étangs, au-dessus des vallées,
> Des montagnes, des bois, des nuages, des mers,
> Par delà le soleil, par delà les éthers,
> Par delà les confins des sphères étoilées,
>
> Mon esprit, tu te meus avec agilité,
> [...].
>
> (*Above ponds, above valleys, | Mountains, woods, clouds, seas, | Beyond the sun, beyond the ether | Beyond the boundaries of starry spheres, || My spirit, you move with agility,* [...].)

He extends the conventional metaphor of mental 'agility' by means of personification as he implicitly animates his 'esprit' by casting it in the role of addressee, and elaborates on the metaphor by evoking a journey that sets out from a physical landscape and travels up into the firmament. In this process, he combines several conventional metaphors: ACTION IS MOVEMENT, THINKING IS A JOURNEY, RATIONAL IS UP. While the statement is novel, the familiar elements allow our mental agility to respond gradually as we accompany the spirit on its cosmic journey. The poetic process thereby involves the reader as a participant who enacts the process conveyed in the poetically memorable words. While the poem is addressed to the speaker's 'esprit', it engages the reader through shared bodily experience.

The creative power of metaphor is however by no means always generated in such a clearly structured process. Indeed, metaphor may attain special creative strength in spiritual discourse where the literal merges seamlessly into the metaphorical, or in artworks that integrate metaphor in a multi-sensory experience. Here it can hinder rather than aid understanding to use an approach that is predicated on isolating the contribution of metaphor to the whole.

The 'Sacred Funk' performance project *Yòrùbá Sonnets* created by Lékan Babalolá, Kate Luxmoore and Olu Taiwo and hosted by Creative Multilingualism for a performance in Oxford, exemplifies what is at stake (Babalolá 2019b and Creative Multilingualism (Slanguages: Yòrùbá Sonnets) 2019a). The work unites the ancient oral Yoruba tradition of Ifá sacred verse and divination with English translations,

versions and creative elaborations. Occasional singing in Yoruba and incorporation of a Dorset folk song interweave with sustained English spoken word, articulated in formal British diction associated by Olu Taiwo with Shakespearean language, and accompanied by gesture, mime, dance and martial art moves. The performance is sustained by rhythms with cultural roots in West Africa while integrating musical elements from Trinidad and Brazil in a context of western funk (see Fig. 4). Invitations to dance by the spoken word performer encourage the listeners to involve their whole bodies in the experience of the work.

Fig. 4 The flyer announcing performances of *Yòrùbá Sonnets* in 2019 at Wolfson College, Oxford, and other venues visually and textually signals an exuberant fusion of ethnic heritage, cultures, traditions, languages and artistic forms. Babalolá et al. 2019c. Reproduced by kind permission of Lékan Babalolá.

Capturing the contribution of metaphor to this work of art is not straightforward. 'Master Wordsmith' Olu Taiwo highlighted the involvement of metaphor in the texts, in a post-performance exchange with the audience (Creative Multilingualism (Slanguages: Yòrùbá Sonnets) 2019c). Here, for example, is Verse 12: 'Victory over Suffering (if you feed the source of your birth you have victory)' (Babalolá 2019a: [15]). In listening to the comment on that verse, we can follow spiritual meanings unfolding from concrete things: 'It is from its roots that we feed the mighty African Teak! The Iroko tree [...]. For the people of heaven, celestial being, it is through ritual honour that we show our graceful face.' Yet the words are only one medium by which the work communicates its meaning. The resonant delivery enhanced by repetition and musical energy complements the meaning of the words, drawing associations with Yoruba spiritual ritual into the performance space.

Equally important are the metaphors generated among the audience members during a Q & A exchange following the performance. As well as being invited to give oral feedback, they were asked to provide written comments on feedback postcards (Creative Multilingualism (Slanguages: Yòrùbá Sonnets) 2019c and 2019b). One postcard commented on the 'Extremely immersive and profound experience' while another offered the following response: 'Fantastic mixture of poetry and music. Really strong visceral images. We need more of these cross-cultural collaborations.' Metaphor here becomes a means of articulating a holistic response to a multi-modal artform. It captures the nature of the experience as a communicative process that 'mixes' words with music, 'crosses' cultural boundaries and linguistic systems, and impacts on the very organs of the listener's body — both metaphorically and literally, we may surmise, given the elicitation of dancing participation. Another respondent used the metaphor of a 'journey' in their written response, articulating an experience of spiritual enrichment: 'Thank you for sharing this work. Feeling blessed by the wisdom and witticism of the Yoruba Sonnets! A beautiful journey.' The postcards also drew on metaphor to share personal cultural connections experienced in the course of participating: 'Thank you for taking me back to my homeland tonight', and — metaphorically complementing the music and the tree imagery — 'Resonates deeply with my roots'. Metaphor here works

creatively at many levels in a holistic process involving participants in a shared experience.

The metaphors generated spontaneously by the audience members emerged from a specific shared moment in a particular spatial and cultural context while engaging individual cognitive, imaginative, cultural, bodily responses. Understanding such particular interactive processes is as important for researching the creative power of metaphor as analysing general patterns. Moreover, as with the conceptualization of space-time, researching metaphor is dependent on metaphorical thinking and language. To conceptualize and communicate how metaphor works, we need metaphors — sharing them and experimenting with them as much as analysing them. This should not trouble us — rather, we should embrace our dependence on metaphor. It is an intrinsic part of the human condition.

Exploring Metaphor Further

Metaphor is a fundamental human talent which allows us to make continual connections between the physical world we experience with our bodies, senses and minds, and the worlds we imagine. It is a talent with infinite potential for creative development of our lives as individual and social beings in our natural and technical environment, and understanding its importance can give us important means of shaping our world and engaging with the global challenges we collectively face.

Research on metaphor used to take place almost exclusively in the humanities, based on a tradition of theory and practice going back to the Greek philosophers, rhetoricians and poets. Following the publication of Lakoff and Johnson's landmark volume *Metaphors We Live By* in 1980, the field underwent a comprehensive shift and most research is currently being conducted in linguistics, psycholinguistics, psychology and neurosciences, with important work also being carried out on practical uses of metaphor in the social sciences.

A significant danger of the shift to the social sciences and sciences has been the — often invisible and unreflected — dominance of English and the high status accorded to research that focuses on the mental role of metaphor as the aspect with higher status than its verbal aspect. The rise of corpus linguistics has brought more emphasis on the role

of big data to underpin empirical investigation, and there is now much greater appreciation of the need to include languages beyond English in research. But this is problematic especially with respect to corpus research because there tends to be lack of equivalence in availability and corpus quality across languages.

The way ahead rests with interdisciplinary research and giving a strong role both to the humanities and to qualitative research projects. They can provide an important corrective to some of the more optimistic expectations surrounding quantitative studies and foreground questions that may be in danger of becoming obliterated when one form of research gains dominance. They can also address types of metaphor that do not lend themselves to reliable tagging and that require interpretative methods — notably metaphors embedded in texts, and metaphors that are creative in unusual ways.

The future for metaphor studies lies in drawing on a diversity of methodologies, incorporating research on diverse languages and involving the respective communities in that research, and above all in productive dialogue between disciplines.

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Find Out More

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This article considers fundamental questions about the interplay between different types of cognitive metaphor and language.

Gibbs, Raymond W. 1994. *The Poetics of Mind: Figurative Thought, Language and Understanding* (Cambridge: Cambridge University Press).

The author shows how figurative language reveals the poetic structure of the mind, drawing on psychology, linguistics, philosophy, anthropology and literary theory.

Glucksberg, Sam. 2003. 'The Psycholinguistics of Metaphor', *Trends in Cognitive Sciences*, 7(2): 92–96, https://doi.org/10.1016/s1364-6613(02)00040-2

An examination of how people create and understand metaphors such as 'lawyers are sharks', demonstrating that we process these as easily as literal meanings.

Kohl, Katrin, Marianna Bolognesi and Ana Werkmann Horvat. 2019. 'The Creative Power of Metaphor: Multimedia Output', Creative Multilingualism, https://www.creativeml.ox.ac.uk/creative-power-metaphor-multimedia-output

These videos look at different aspects of metaphor, focusing on linguistic diversity, emotion, communication and creativity. The videos draw on interviews with researchers who attended an international conference organized by the Creative Multilingualism research strand 'The Creative Power of Metaphor' in 2019.

Kohl, Katrin, Marianna Bolognesi and Ana Werkmann Horvat. 2020. 'The Creative Power of Metaphor', Research Strand 1 of Creative Multilingualism, https://www.creativeml.ox.ac.uk/research/metaphor

Research project on metaphor conducted as part of the Creative Multilingualism programme between 2016 and 2020. This chapter draws on that research.

Littlemore, Jeannette, and Graham Low. 2006. *Figurative Thinking and Foreign Language Learning* (Basingstoke, UK: Palgrave Macmillan), https://doi.org/10.1057/9780230627567

The authors look at the role of figurative speech and figurative thinking in language teaching and learning and discuss the need to attend to figurative extensions of meaning when teaching vocabulary.

Credits

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Lékan Babalolá for the flyer announcing performances of *Yòrùbá Sonnets* in 2019 at Wolfson College, Oxford, and other venues (Fig. 4).

Peanuts for the cartoon image (Fig. 1).