CHAPTER 1

'Ideophone' as a comparative concept

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This chapter makes the case for 'ideophone' as a comparative concept: a notion that captures a recurrent typological pattern and provides a template for understanding language-specific phenomena that prove similar. It revises an earlier definition to account for the observation that ideophones typically form an open lexical class, and uses insights from canonical typology to explore the larger typological space. According to the resulting definition, a canonical ideophone is a member of an open lexical class of marked words that depict sensory imagery. The five elements of this definition can be seen as dimensions that together generate a possibility space to characterise cross-linguistic diversity in depictive means of expression. This approach allows for the systematic comparative treatment of ideophones and ideophone-like phenomena. Some phenomena in the larger typological space are discussed to demonstrate the utility of the approach: phonaesthemes in European languages, specialised semantic classes in West-Chadic, diachronic diversions in Aslian, and depicting constructions in signed languages.

1. Introduction

Ideophones are words that seem to carry their meaning on their sleeve. In Siwu, a language of Ghana, you only have to say the word *mukumuku* to get a taste of its meaning 'mumbling mouth movements', and *tagbaraa:* means 'long' like the word itself is long. Such colourful examples can easily lead to the assumption that ideophones can be defined as iconic words: lexemes characterised by structural resemblances between form and meaning. But several problems arise. Are all iconic linguistic signs ideophones? Are all ideophones iconic to the same degree? What makes us think of ideophones as iconic in the first place? Are ideophones united in other ways besides their apparent iconicity?

This chapter is an effort to bring together in one place a number of considerations bearing on these questions. I revisit fundamental issues in the definition and operationalisation of ideophones. The aim is to provide conceptual clarity in the service of comparative work on ideophones and iconicity. While some work has succeeded in drawing out salient points of unity and diversity in ideophone systems across languages, it has been hampered by the lack of a common framework to capture key dimensions of variation. The five dimensions presented here are rooted in descriptive and comparative work on ideophones across the globe, and help illuminate the typological possibility space of ideophones and kindred phenomena.

2. 'Ideophone' as a typological concept

Here is the argument to be pursued in a nutshell. The term 'ideophone' is best seen as a comparative concept (Haspelmath 2010), like 'adjective', 'future tense' or 'serial verb construction'. This has two sides. First, it means the concept is intended as a language-general notion, not directly defined in terms of its occurrence in particular languages. Second, it means that we expect instantiations of this concept in particular languages to show language-specific nuances. Just like German adjectives are different from Lao adjectives, and yet it still makes sense to have a typologically general notion of 'adjective', so Siwu ideophones are different from Japanese ideophones while still being usefully seen as instances of the same typological concept of 'ideophone'.

2.1 Five key properties of ideophones

The earliest investigations of ideophone-like phenomena used a wide range of labels, from 'intensifying adverbs' and 'picture words' to 'onomatopoeic interjections' and 'radical descriptives' (Dingemanse 2018). Doke, a scholar working on the Bantu languages of Southern Africa, introduced the term 'ideophones' in a bid to do justice to the large grammatical category of items of this type encountered in just about any Bantu language (Doke 1935). Descriptive work soon revealed the existence of similar lexical classes in languages beyond Bantu and beyond Africa. Samarin discussed a wide range of "languages in which words are found which, despite the nonrelatedness of the languages themselves, reveal certain phonologic and semantic similarities" (Samarin 1970: 155). His contemporary Diffloth pointed to ideophone-like words in Bantu, Chadic, Indo-Aryan, Dravidian, Mon-Khmer, Japanese and Korean and commented, "[s]uch a wide geographic and historical distribution indicates that ideophones are characteristic of natural language in general, even though they are conspicuously undeveloped and poorly structured in the languages of Europe" (Diffloth 1972: 440).

Today, the label 'ideophone' has come to be widely used and has shed its Bantu connotation (Wescott 1977). It is used in descriptions of languages around the

world, from Awetí, Basque and Chintang to Xhosa, Yir-Yoront and Zuni (Alpher 1994; Gxowa 1994; Tedlock 1999; Rai et al. 2005; Reiter 2012; Ibarretxe-Antuñano 2017). The alternative labels 'expressives' and 'mimetics' continue to be current in the prolific research traditions of South-East Asian and Japanese linguistics (e.g., Diffloth 2001; Iwasaki et al. 2017), but there seems to be broad agreement that these point to essentially the same phenomenon, with expected language-specific and areal nuances (Akita 2015; Armoskaite and Koskinen 2017). Other terms occasionally used in cross-linguistic studies of the phenomenon are 'sound-symbolic words' or 'iconic words', but for reasons clarified below, I think these do not cover quite the same ground.

Justifying the existence of a category of ideophones or any other lexical or grammatical class in a given language is something that has to be done on languageinternal grounds. Here I lay out the elements of a cross-linguistic definition of the phenomenon that can help in language description but can also support generalisations across languages. In previous work I have proposed the following characterisation: "Ideophones are marked words that depict sensory imagery" (Dingemanse 2012: 655). The formulation is designedly simple: general enough to leave room for language-specific notes yet specific enough to have empirical bite for comparative purposes. It captures four key properties of ideophones that are recurrent across languages (for details, see Dingemanse 2012; Ibarretxe-Antuñano 2017):

- i. ideophones are MARKED, i.e. they have structural properties that make them stand out from other words
- ii. they are words, i.e., conventionalized lexical items that can be listed and defined
- iii. they DEPICT, i.e., they represent scenes by means of structural resemblances between aspects of form and meaning
- iv. their meanings lie in the broad domain of SENSORY IMAGERY, which covers perceptions of the external world as well as inner sensations and feelings

This definition of ideophones has been fruitfully applied in descriptive and comparative settings (e.g., Mihas 2012; Jacques 2013; Barrett 2014; Kwon 2015; Nuckolls et al. 2016; Ibarretxe-Antuñano 2017; Mattes 2018). However, it is incomplete. Implicit in its formulation, and in studies of ideophones more broadly, is another characteristic: ideophonic words typically form an open lexical class that makes up a distinctive stratum of vocabulary (Westermann 1927; Newman 1968; Diffloth 1972; Güldemann 2008; Akita 2008).

v. ideophones form an OPEN LEXICAL CLASS, i.e., a set of lexical items open to new additions

Ideophones form a sizable lexical class in many unrelated languages, from Aslian (Matisoff 2003) to Japanese (McCawley 1968) and from Ewe (Ameka 2001) to Quechua (Nuckolls 1996). Evidence that the class is open to new members comes from its sheer size, which is on the same order of magnitude of other major open word classes in many languages. Further evidence comes from processes of ideophonisation and ideophone creation, which can add new members to the class (Westermann 1927; Kunene 1965; Dingemanse 2014).

That ideophones form a recognisable lexical class does not mean they must be a distinct syntactic category or show the same morphophonological properties across languages. This is a question that must be answered for each language on its own terms. For instance, while the Chadic languages Hausa and Tera both have a recognisable lexical class of ideophones, their syntactic behaviour requires description in language-specific terms (Newman 1968). Similarly, while both Japanese and Korean have large and open lexical classes of ideophones, their morphophonological make-up differs according to the language (Sien 1997; Akita 2011). As Ameka puts it, ideophones "are first and foremost a type of words – a lexical class of words – which need not belong to the same grammatical word class in a particular language nor across languages" (Ameka 2001: 26).

Some words may be imitative in origin yet not classified as ideophones. In Siwu, words like *kpɔkpɔɔ̇* 'duck (n)' or *ifokofoko* 'lung (n)' are not part of the ideophone class: even though they likely have imitative origins, they behave morphosyntactically like nouns and their semantics is primarily referential rather than qualificative. On the other hand, words like *tsɔ̀kwɛtsɔ̀kwɛ* 'sawing movement', or *nyɛ̃kɛ̃nyɛ̃kɛ̃* 'intensely sweet' are united in belonging to the class of ideophones, an open lexical class that has, in this language, at least a thousand more members.

2.2 Refining the definition

While it might be possible to argue that the issue of lexical classification is captured partly in the markedness of ideophones – after all, groups of words acquire their markedness in relation to other strata of vocabulary – it is better to make it explicit, both to align with established practice in language description and to allow more precise comparative statements. Therefore, I propose the following sharpened definition of ideophones:

IDEOPHONE. A member of an open lexical class of marked words that depict sensory imagery.

This more specific version subsumes the earlier formulation and is compatible with it, but it explicitly defines the comparative concept of ideophones as an open lexical class. As we will see, this more explicit formulation can help to illuminate the typological unity and diversity in this area. Given the long history of interest in ideophones (reviewed in Dingemanse 2018) it is remarkable that there are relatively few definitions intended for comparative use. Doke's work has sometimes been used in this way, though it was actually designed for Bantu grammatical description. To show how the current definition builds on earlier comparative work, Table 1 compares a number of accounts of ideophones used or intended for cross-linguistic comparisons.

	(Westermann 1927)	(Doke 1935)	(Newman 1968)	(DeCamp 1974)	(Childs 1994)	(Akita 2011)	(Dingemanse 2012)	this chapter
open lexical class	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark
structurally marked		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
conventionalised words		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
depictive mode	\checkmark			\checkmark			\checkmark	\checkmark
sensory meanings	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 1. The evolution of a definition: building blocks identified in comparative work

Other properties than those listed here have been considered, though not as widely: ideophones have been described as "vivid" (Doke 1935), "syntactically isolated" (Nuckolls 1996), and "context-dependent" (Moshi 1993). These features either directly follow from the basic properties (all depictions are vivid performances by nature, and as such require a degree of syntactic freedom) or are not unique to ideophones – ideophones do not seem more context-dependent than other words in face-to-face interaction.

Each of the approaches to ideophones in Table 1 has its own preoccupations and points of emphasis. Some focus primarily on form and meaning (providing an essentially phonosemantic definition) while for others, the depictive mode of signification is more important. The definitions by Newman and DeCamp are almost entirely complementary: "[a] phonologically peculiar set of descriptive or qualificative words" (Newman 1968: 107) is clear on the structural side but does not bring out the depictive character of ideophones, whereas DeCamp's "a word which conveys an impression of an action or a sound rather than naming it or directly imitating it" (DeCamp 1974: 54) foregrounds the depictive nature of ideophones but mentions no structural properties. Despite such differences in emphasis, there is strong convergence across the board in the properties proposed as fundamental to understanding, describing and comparing ideophones.

2.3 Ideophones are not (just) iconic signs

A recurring temptation in a small portion of work on ideophones is to define them simply as iconic words that exhibit a direct, unmediated connection between sound and meaning (Johnson 1976; Tedlock 1999). For Tedlock, ideophones are "words or phrases that do the work of representation by phonetic means" (Tedlock 1999: 118). If we take this at face value it would mean that we need nothing more than the phonetics to assign an interpretation to forms like *mukumuku* or *tagbaraa*. The reader is invited to try this, and then compare the result to the lexical meanings given in the first paragraph of this chapter.

The reason this rarely works is threefold: (i) the number of possible iconic interpretations of any string of speech sounds is vast, (ii) the space of possible lexical meanings is orders of magnitude larger if not infinite, and (iii) both the form and meaning spaces are warped by language-specific properties (Bühler 1934; Werner and Kaplan 1963; Dingemanse 2018). Especially in languages with inventories of conventionalised ideophones that run into the thousands, there is no way that these words could simply present unmediated iconic associations (Güldemann 2008). Instead, iconic associations in ideophones are socially mediated, and are shaped by local linguistic systems. This argument finds empirical support in experimental work in which people are made to guess the meanings of ideophones (Fischer-Jørgensen 1978; Iwasaki et al. 2007). They can do this to some extent, but never without error and usually only moderately better than chance. This is because ideophones are conventionalised words that combine iconic and arbitrary form-meaning mappings.

Still, ideophones are often treated as iconic signs by language users and linguists alike. Clearly there is something about them that invites us to treat their form as suggestive of their meaning. This is their depictive mode of signification (Kunene 1965; Dingemanse 2012). The relation between ideophones and iconicity is mediated by convention and highlighted by depiction. The act of depiction is the spotlight that invites us to find iconic form-meaning associations. To bring this out more clearly, consider the relation between depiction and iconicity, and between ideophones and iconic signs (Ahlner and Zlatev 2010; Dingemanse 2012; Clark 2016).

DEPICTION. An analogical mode of communication that invites and affords the construal of iconic mappings between form and meaning.

ICONICITY. A perceived resemblance between aspects of form and meaning.

IDEOPHONE. Member of an open lexical class of marked words that depict sensory imagery.

ICONIC SIGN. Conventionalised linguistic sign that exhibits some form of iconicity.

The conceptual distinctions made here have some implications worth noting. Because ideophones are defined as lexicalised depictions, we can expect them to exhibit some iconic form-meaning associations, but, as with all conventionalised linguistic resources, we also expect a degree of arbitrariness. Decoupling the definition of ideophones from iconicity fits the nature of attested ideophone systems, which show a degree of language-specificity in form-meaning associations, and considerable internal diversity in terms of their perceived iconicity (Güldemann 2008; Akita 2009).

Because ideophones are depictions first and foremost, they can invite us to experience a sense of iconicity (perceived resemblance) even when it may be hard to put a finger on the precise structural correspondences between form and meaning. This helps explain why native speakers are adamant that all ideophones are iconic (Kita 1997; Hamano 1998): they have a lifetime of experience with ideophones being presented as depictions. Outside the context of the depictive frame, the iconicity of at least some ideophones can be far less obvious. The effect can be compared to paintings that vary in degree of abstraction and nonetheless tend to be treated as depictions (Dingemanse 2012). Properly framed, Duchamp's *Nu descendant un escalier* is likely to be interpreted as an iconic representation of a moving body, even though at a careless glance it could be compared to a mere decorative rug, as Theodore Roosevelt once did (Roosevelt 1913). Likewise, if we frame an ideophone as a depiction it is easier to appreciate its iconic potential than when we encounter it in a sea of other syllables. A useful metaphor for this process is that framing something as a depiction can seduce us to see it as iconic (Webster 2017).

Because depiction is defined as a communicative act and not by reference to iconic signs or ideophones, important similarities become visible between ideophones, iconic gestures, direct quotations, bodily demonstrations, and enactments, all phenomena united by their fundamentally depictive nature (Güldemann 2008; Ferrara and Hodge 2018). While it pays off to be attentive to the semiotic kinship between these phenomena, there are also salient differences in terms of modality, gradience and conventionalisation (Okrent 2002).

Ideophones and iconic signs are at best overlapping sets. This means that not all ideophones may be equally iconic, as we saw above. It also means that not all iconic signs are ideophones. In particular, languages can have clusters of iconic signs which we may or may not want to call ideophones. This helps clarify the typology of ideophones and related phenomena, both in spoken languages (Liberman 1975) and in signed languages (Lu and Goldin-Meadow 2018). Which brings us to the next section.

3. Ideophones and related phenomena

Typological definitions generally aim to capture the centre of gravity of a phenomenon rather than providing a list of necessary and sufficient properties. This approach is in line with recent typological thinking about word classes (Dryer 1997; Croft 2001; Haspelmath 2007, 2010). For ideophones, it goes back at least to Childs (1994: 181, 196): "[i]t is thus best to think of ideophones as a prototype category", with "a core of 'best' ideophones at the center. As one moves outward members become less and less 'good,' leaving the ideophone category and joining another word class, or even joining forms of non-linguistic expressiveness such as gesture".

Today, this insight can be captured in a framework like canonical typology (Corbett 2007; Brown and Chumakina 2013; for an elegant example of this method applied in the domain of phonaesthemes, see Kwon and Round 2015). This approach formulates a canonical core in terms of elementary dimensions which together create a possibility space in which related phenomena across or within languages can be positioned. For ideophones, the five characteristics identified here can be treated as the elementary dimensions. Each of them is amenable to finer-grained treatment, and there may be more than five, but hopefully this is a useful first pass. Together they generate a multidimensional space in which we can locate ideophone and ideophone-like phenomena within and across languages. So a given linguistic resource can be more or less class-like, structurally marked, word-like, depictive, or sensory in meaning, and the further it deviates on these dimensions from the canonical prototype, the less reason there is to identify it with the comparative concept of ideophones.

There is broad agreement that Japanese, Basque, Quechua, Semai and Siwu are good examples of languages with open lexical classes of marked words that depict sensory imagery, i.e., ideophones. But what about items that do not clearly form coherent lexical classes, or languages realised in different modalities? Here I survey four areas in the broader typological space to show how a comparative definition of ideophones can help us get a handle on typological diversity.

3.1 Phonaesthemes

Phonaesthemes are form/meaning pairings that recur across clusters of words like *flash/flare/flame* or *twirl/curl/whirl* (Bolinger 1961; Bergen 2004; Kwon and Round 2015). Phonaesthemes and ideophones are defined on planes that crosscut each other. As submorphemic patches of form-meaning associations, phonaesthemes can occur throughout the lexicon; as a lexical class of depictive words, ideophones may be especially likely to feature such recurrent form-meaning associations (cf. Kwon, this volume). Indeed, two of the four languages beyond English cited by

Bergen (2004) as having phonaesthemes are well-known for their large ideophonic systems: Japanese (Akita 2009) and Indonesian (Uhlenbeck 1952). Phonaesthetic words share with ideophones a degree of structural markedness (as seen for instance in phonotactically rare onsets or codas). Words featuring phonaesthemes are also conventionalised lexical items, and their meanings tend to be in the domain of sensory imagery. But phonaesthemes can be distinguished from ideophones with respect to at least two of the five key properties considered here: they do not usually form an open lexical class, and they are not depictive.

Phonaesthetic words often straddle several grammatical categories, and at least in Indo-European languages, small clusters of phonaesthetic words tend to occur as isolated patches in the vocabulary, rather than forming a larger lexical class (Kwon and Round 2015: 13–14). Despite their phonaesthetic elements, words like *flame* (n) or *twirl* (v) are, on the whole, fairly unassuming lexical items: their morphosyntactic behaviour aligns with other members of their grammatical categories and they are not regularly produced with performative foregrounding, the tell-tale cue of a depictive sign. Ideophones on the other hand tend to be whole words foregrounded as speech heard in a special way. If phonaesthemes suggest hints of meaning in a rather unassuming way, ideophones are their eye-catching counterparts, wearing the extravagant garb of performative foregrounding as an open invitation to map sound onto sense.

It has been noted that Standard Average European languages seem to lack ideophones (Diffloth 1972; Liberman 1975; Nuckolls 2004). That is not to say that their lexicon does not harbour ample instances of iconicity (Jespersen 1921; Waugh 1994; Perry et al. 2015). Phonaesthemes are one of the areas where a bit of iconicity comes to the surface even in the lexicons of Standard Average European languages (Nuckolls 1999). As Liberman has noted, "In many cases (e.g. English) there is not a clearly identifiable ideophonic section of the lexicon, as there is in Bahnar, Korean, etc., but rather scattered classes of examples which have ideophonic or partly ideophonic character, and which shade off into areas where meanings are iconically arbitrary" (Liberman 1975: 146). We can capture this observation by reference to the canonical concept of ideophone: though these languages feature scattered clusters of partially iconic signs, what appears lacking in at least some of them is an open lexical class of marked words that depict sensory imagery.

3.2 Semantic subclasses: The case of Mwaghavul

While African languages are often seen as presenting textbook cases of ideophone systems, here too, fine-grained description can bring to light differences that are worth capturing. In a recent study of ideophone-like words in Mwaghavul, a Chadic language of Nigeria, Roger Blench stakes out the following position:

Ideophones not only fall into different word classes, but also into a range of conceptual classes. They may demonstrate a characteristic phonology, morphology or canonical form, but this is absent in some languages, even where the ideas they express are conserved. To characterise this richness, it is helpful to switch to a larger class of 'expressives' (a characteristic Asian terminology) to encompass these ideas; ideophones would just be a subset. (Blench 2013: 53)

The data that prompts this discussion is a rich set of 'body epithets' in Mwaghavul. These are colourful words that draw attention to bodily characteristics, often in an insulting way, e.g., *dùghùl* 'flat footed', *kaamkaam* 'jug-eared', *koryòng-koryòng* 'standing with crooked legs'. Body epithets are semantically similar to ideophones, and indeed the practice of using ideophones in insults is well-documented (Samarin 1969). However, according to Blench, this set of words does not appear to show the structural markedness that would allow them to be described (in this language) as ideophones, despite the fact that in related languages, these domains are often covered by ideophonic lexicon.

To resolve this puzzle, Blench presents two proposals. The first is to put forward 'body epithets' as one of a number of more specific 'conceptual classes' carving up the space of ideophones in the Nigeria/Cameroon area. Other subclasses include onomatopoeia, ontophones ("terms that indicate states of mind or sensory experiences"), ophresiophones ("descriptive terms applied to odours") and colour intensifiers ("terms added to basic [colour] vocabulary to denote different intensities") (Blench n.p.). This proposal is at the level of language description: the claim is that these classes are especially useful for characterising some segments of the lexicon in the Nigeria/Cameroon area.

The second proposal is to introduce a larger class of 'expressives', which would include not just ideophones but also words with ideophone-like meanings that appear to lack other ideophonic properties. This is a proposal at the level of language comparison: the diluted superset of 'expressives' is proposed to have crosslinguistic application, and is listed as being broadly similar to ideophones in terms of its properties, though perhaps with less strict application of the diagnostic of structural markedness (Blench 2013: 56). This ideophone-like class of 'expressives', linked to work on Asian languages, is apparently to be distinguished from even more inclusive uses of the term 'expressive' like Klamer's (2002), which includes not just 'sense words' but also names and taboo words.

I think the case is sufficiently covered by adopting only the first proposal. It is very useful to have a localised inventory of conceptual or perceptual classes of ideophones, especially when it captures recurrent trends in related languages or linguistic areas. It is not clear what the second proposal adds, and it raises two questions. A definitional one: how far can we dilute the definition of a phenomenon before we lose substance? And an analytical one: when does a language-specific classificatory knot justify the introduction of a new comparative concept?

From the apparent lack of structural markedness of Mwaghavul body epithets, Blench makes a leap to the comparative level: "identifying expressives by shape clearly does not work for many languages" (Blench 2013: 55). This is a truism: there are few if any attempts to define ideophones solely by shape, as we have seen above. Though Blench doesn't mention this, most approaches already use a combination of structural, semiotic and semantic characteristics, as we saw in Table 1 above. Moreover, the counterproposal to introduce a meaning-based superset of 'expressives' seems vulnerable to the inverse problem. If we were to drop the criterion of structural markedness entirely, this leaves us only with a very general semantically based notion. What is to stop us from including every word in every language that happens to 'conserve the ideas' normally expressed by ideophones? What degree of conservation is sufficient for inclusion in the superset of expressives?

A canonical definition of ideophones can help to resolve this matter. For the synchronic description of Mwaghavul, it seems we can distinguish a class of body epithets alongside classes covering a number of other salient perceptual domains. If and when the language-specific categories are described to satisfaction we can then link them to the comparative concept of ideophones by specifying exactly how they are similar (e.g., classes of sensory imagery) and/or different (e.g., degree of phonological markedness). We can even employ a localised version of canonical typology to systematically articulate, for a number of subclasses, their similarities and differences to the canonical category of ideophones in the language (Kwon 2017).

3.3 Diachronic diversions: An Aslian parallel

There is another reason it is unattractive to deal with a recalcitrant class of words by shelving them away in a larger, diluted category. It may lead us to lose sight of diachronic connections between ideophones and ideophone-like phenomenona (Dingemanse 2017). Consider a possible parallel in two branches of the Aslian language family spoken in mainland Southeast Asia.

Aslian is well-known for its ideophones. As noted above, such words are usually called 'expressives' in this region, though most authors directly equate them to ideophones and define them using the same combination of structural, semantic and semiotic criteria (e.g., Diffloth 1976 on Semai; Kruspe 2004 on Semelai). Cognate forms occur across different branches in this closely-knit language family (Kruspe 2004), and some may be traced back even to the common ancestor of Khmuic and Aslian (Burenhult and Majid 2011). For clarity, I will use 'ideophones' as the overarching term in the comparative sense.

Semai (Central Aslian) has an ideophone class of the same order of magnitude as nouns and verbs (Diffloth 1976). Semai ideophones exhibit the marked sound patterns and sensory meanings typical of depictive vocabulary (Diffloth 1972). As part of this class Semai has a comparatively large number of smell ideophones. Examples include $p\eta\bar{u}s$ 'of mold; wet fur' and $s?\tilde{e}:k$ 'of rancid fish/meat' (Tufvesson 2011: 91). The North Aslian language Jahai has a corresponding set of smell terms, cognate in many cases. Examples include p?us 'moldy or musty odour' or $pl?e\eta$ 'blood odour' (Burenhult and Majid 2011: 24).

However, unlike in Semai, the Jahai terms are not ideophones. There are clear structural arguments for the non-ideophonic nature of these words in Jahai (Burenhult and Majid 2011: 25–26): they are "analyzed on syntactic grounds as stative verbs", and as such, they "can be negated, relativized, and nominalized": all properties not normally connected to ideophones. Maniq, another North Aslian language, presents much the same picture: the majority of its smell terms are stative verbs (Wnuk and Majid 2014), and indeed Maniq appears to lack a dedicated lexical class of ideophones (Wnuk 2016: 101).

So here we have two classes of words that are broadly semantically equivalent in closely related languages: Semai smell ideophones and Jahai and Maniq smell verbs. One of them is clearly ideophonic, the other not. If we were to follow the logic of Blench's second proposal above, we might lump them together under a diluted, semantically based notion of 'expressives'. However, this would obscure what is in fact an interesting historical development of lexical stock in two opposing directions: the ideophonic, depictive direction in Semai and the predicative, stative verb direction in the North Aslian languages. Comparative evidence from the larger family indicates that the depictive words (as in Semai) may represent the ancestral state (Kruspe 2004), so the simplest explanation would be that a common ancestor of the North Aslian languages introduced a change in the stative verb direction.

Once again, a canonical definition of ideophones helps illuminate this case, as it allows us to be precise about how exactly the North Aslian words differ from their Semai equivalents. In this case, it can no longer be said they are one and the same lexical class; instead, in Jahai and Maniq, these words now pattern with stative verbs and appear to have lost their depictive mode of representation, leaving only the sensory meanings and cognate forms to enable us to draw a parallel to their ideophonic cousins in Semai.

3.4 Are there ideophones in signed languages?

The etymology of 'ideophone' is transparently sound-related, and most scholars associate the notion of ideophones with spoken languages. Nonetheless we can ask whether it must be a modality-specific phenomenon. Are there ideophones in signed languages?

This is an important question, as it is always a good idea to avoid modality chauvinism and aim for maximally general concepts. But a difference must be made between the conceptual tools we use to ask such questions (which must be modalityagnostic), and the typological notions we use to capture empirically attested patterns of language structure (which must be modality-sensitive and may turn out to be modality-dependent). Take phonology. While it makes modality-agnostic sense to ask what the minimally distinctive features are, the answer turns out to be modality-dependent: in the visual modality the key dimensions of distinctive units include handshape, location and movement (Stokoe 1960), whereas in the aural/ oral modality they include laryngeal features, manner and place of articulation (Hyman 1975). The question here is whether something similar holds for spoken language ideophones and kindred phenomena in signed languages.

In the first study to tentatively relate ideophones to structures found in a sign language, Bergman and Dahl (1994) link the ideophone system of Kammu (an Austroasiatic language spoken in Northern Laos) to certain iconic features of tense-aspect expression in Swedish Sign Language. The main observed similarity is the use of reduplication: this is connected to the expression of iteration and repetition in both Kammu ideophones (Svantesson 2018) as well as in Swedish Sign Language tense/aspect expressions. So the Kammu ideophonic root ηuk can be derived into reduplicated forms like $\eta uk k \dot{n} \eta uk$ 'keep nodding' and $c\dot{\eta} uk c\eta uk$ 'nod a few times at some interval'; and similarly, the Swedish Sign Language sign for wAIT can be produced with a repeated movement or with slow or fast reduplication, with analogous differences in possible aspectual interpretations.

However, the differences are more striking. The meanings of Kammu ideophones cover a broad range of sensory imagery, while the putative similarity only extends to one formal feature of ideophones and signs (reduplication) and one dimension of meaning (temporal/aspectual unfolding). Kammu ideophones are a distinct lexical class with their own morphosyntactic profile, whereas the Swedish Sign Language tense-aspect expressions consist of iconic morphological operations on other lexical signs, produced in simultaneous constructions. The similarity lies in the iconic use of reduplication. It seems unnecessary to posit a class of ideophones in Swedish Sign Language.

In other work in sign language linguistics, spoken language ideophones have been linked to mouth gestures, the iconic markers that function as facial additions to manual signs (Ajello et al. 2001; Hogue 2011), or to the depicting constructions that often feature such mouth movements (Lu and Goldin-Meadow 2018). This is mainly because spoken language ideophones and signed language depicting constructions (mouth movements included) are united in being depictions, inviting addressees to perceive iconic correspondences between form and meaning. But here, too, the differences should not be glossed over. Whereas ideophones are conventional, lexical items, iconic aspects of depicting constructions are relatively unconventionalised and are typically combined with categorical handshapes or classes of signs (Ferrara and Halvorsen 2017). There are six common depictive mouth gestures in American Sign Language which can be overlaid on manual lexical signs to iconically signify broad aspectual meanings like ongoingness or unimpededness (Hogue 2011). But there are thousands of ideophones in spoken languages like Japanese, Korean, Basque, or Gbeya (Dingemanse 2018). The similarity in mode of signification notwithstanding, the linguistic status of these items appears to be fundamentally different in spoken and signed languages.

So are there ideophones in sign languages? Not in the sense of an open lexical class of marked words depictive of sensory imagery, current evidence suggests. There are important similarities in mode of signification, and in the gradient modification of semiotic substance to derive analogous modifications in meaning, but these are best captured in more general terms. Conceptual tools for doing this already exist. The notion of reduplication covers the morphological processes used in both ideophones and Swedish Sign Language tense/aspect expressions. The Peircean classification of signs into indexical, iconic and symbolic provides a modality-agnostic way of thinking about possible relations between form and meaning (Peirce 1955) and the three corresponding modes of communication indication, depiction and description - are universally relevant to the analysis of communicative behaviour across modalities (Clark and Gerrig 1990; Ferrara and Halvorsen 2017; Ferrara and Hodge 2018). The linguistic facts do not impel us to posit a class of ideophones in Swedish Sign Language or American Sign Language, much like they do not require us to posit a class of adverbial mouth gestures in most spoken languages.

Partial equivalences can obscure telling differences. In many spoken languages, we find a distinctive stratum of conventionalised depictive signs amidst a sea of otherwise largely descriptive lexical stock. These ideophones are typically produced as performances that stand out in terms of prosody and are characterised by a low degree of syntactic integration (Kunene 1965; Güldemann 2008). In signed languages the cards appear to be dealt differently: iconicity is more pervasive throughout the lexicon (Perniss et al. 2010; Perlman et al. 2018) and creative depiction is rampant

in simultaneous constructions, overlaid on more discrete and categorical signs (Lu and Goldin-Meadow 2018).

One perhaps surprising consequence of this is that we do not need to define ideophones with reference to the spoken modality. If we were to find a sign language in which there is an open lexical class of this type, this would be worth noting, and it might well deserve a label in common with equivalent phenomena in other modalities. But so far, the evidence suggests that spoken languages are more likely than signed languages to have a dedicated lexical class of conventionalised words depictive of sensory imagery. This appears to be a genuine finding of a biased distribution across semiotic resources, enabled by a modality-agnostic definition of a comparative concept.

Part of the explanation lies in the differential affordances of audible and visible semiotic resources. Speech has a relatively narrow range of affordances for iconic expression and invites more linearised and conventionalised productions. Visible semiotic resources have a broader range of affordances for iconicity, which may make depictions more interpretable even if they veer away from conventionalisation (Levelt 1980; Taub 2001). However, this only scratches the surface, and ignores the interesting fact that ideophones in face-to-face interaction seem to attract depictive resources across modalities, such as manual gestures or bodily depictions (Kunene 1965). The relative conventionalisation of depictive devices across semiotic resources is a fruitful locus for comparative research in cross-modal typology.

4. In closing

I have set out the evidence for 'ideophone' as a comparative concept and refined an earlier definition, readying it for more explicit comparative use. The utility of a typological definition must show itself not just in how it captures core cases, but also in how it illuminates the periphery of a phenomenon. To that end, the five core elements of canonical ideophones can be seen as five dimensions along which we can characterise crosslinguistic variation.

Our exploratory tour through the typological space of ideophones has been necessarily brief and selective, but it has hopefully prepared the ground for more systematic treatments. To the boundary cases discussed in some detail here we can add a range of observations that seem ripe for such a treatment. For instance, some ideophone-like forms may not form a distinct lexical class but may be derived from roots with expressive morphology, as in the Mayan languages Tzeltal and Yucatec (Maffi 1990; Le Guen 2012). Others may not be all that depictive, or may feature meanings that are more schematic than sensory, as in the Luhya languages (Bowler and Gluckman 2018). Within a language, lexical items may vary in the degree to

which they are ideophone-like, partly as a function of frequency and morphosyntactic flexibility (Dingemanse 2017). Onomatopoeia, defined as words that originate as imitations of sounds, rarely form a coherent lexical class and may therefore only partly overlap with canonical ideophones (Kilian-Hatz 1999; Akita 2009). In each case we can articulate how a given phenomenon relates to the canonically defined concept of ideophones. The attested linguistic diversity, while bewildering at first, resolves itself into an orderly possibility space when we navigate using the compass of a comparative concept.

The most useful typological definitions inspire further exploration: they do not so much plant a flag as draw a map. As I have shown here, current research on ideophones provides ample material to replace the 'here be dragons' of older accounts with a typologically informed understanding of conventionalised depictions in spoken language. Now we need more fine-grained considerations of the features and dimensions that make us think of words as ideophonic or ordinary. And the next frontier is already in sight: we must extend this comparative perspective to the use of ideophones in face-to-face interaction and the distribution of depictive resources across modalities. Many adventures await us.

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