# Paralanguage and ad hoc concepts

# Consequences for the Cultural Practices of Ethnic Minorities in the Central Highlands

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Ad hoc concept construction is regarded as a case of free pragmatic enrichment, so it is presented as a non-linguistically mandated process that is automatically accomplished during mutual parallel adjustment. Recent research suggests that this lexical pragmatic process may be marked and steered by various linguistic elements. These include evaluative morphemes, lexical and phrasal items adjacent to content words, and stylistic resources like repetition or rewording. This paper argues that paralanguage may fulfil a similar enacting function and finetune the conceptual representations arising from content words on the grounds of idiosyncratic, context-dependent features or shades, as well as propositional and non-propositional information about the speaker's psychological states. However, the paper restricts this function to expressive interjections, prosodic inputs like pitch, contrastive stress and pace or tempo, and gestural inputs such as language-like gestures, pantomimes and emblems. Conative interjections, intonation and proper gesticulation would be excluded from contributing to lexical pragmatic processes.

Keywords: free enrichment, relevance theory, ad hoc concepts, lexical pragmatics, interjections, prosody, gestures.

#### 1. Introduction

In an endeavour to understand how hearers arrive at the speaker's meaning,<sup>1</sup> Deirdre Wilson has delved, along with Dan Sperber and colleagues, into the comprehension of content words and their contribution to communication (Sperber and Wilson 1986, 1995; Wilson and Sperber 2002, 2004, 2012). They regard lexical items like nouns, adjectives, verbs and adverbs as conceptual elements encoding, or activating, concepts with a denotation. However, they treat their associated concepts as not full-fledged mental objects capable of capturing what the speaker actually means. Rather, they approach them as fairly general, schematic entities requiring inferential finetuning. Made

<sup>&</sup>lt;sup>1</sup> Following a relevance-theoretic convention, reference to the speaker is made through the third person singular feminine pronoun, while reference to the hearer is made through the masculine pronoun

during mutual parallel adjustment, such finetuning results in particularised concepts. Due to their specificity and context-sensitiveness, these concepts are dubbed ad hoc (Sperber and Wilson 1997, 1998, 2012; Carston 2000, 2002a).

In relevance-theoretic pragmatics, ad hoc concept formation is presented as a case of free enrichment of a logical form (Carston 2010a, 2010b). It is described as an inferential development of the conceptual components of such a mental structure that is characterised by two features:

i. It is necessary for obtaining a fully propositional form that may be evaluated in terms of truthfulness.

ii. It is completely exempt from mandate by any linguistic element, so it operates automatically.

Despite its automaticity, the output of this lexical pragmatic process is acknowledged to depend on other sentential material, manifest information and paralanguage.

However, the need for ad hoc concept construction may be signalled, and the output of the process may be greatly determined, by a number of linguistic elements. A first group includes morphological items like the diminutive and augmentative affixes available in some inflectional languages. A second group comprises lexical and/or phrasal elements like determiners, adjectives, expressive expletives and evidential participles. Still, stylistic resources such as lexical repetition and rewording may cause and direct the formation of ad hoc concepts. These elements and choices would work as overt signals or indicators that specific conceptual representations are needed in order to accurately grasp the speaker's meaning. They would even signal what direction their creation should follow (Padilla Cruz 2020, 2022a, 2022b, in press). The list of elements and devices could certainly be enlarged with additional ones from certain languages, language families or even less widely-spoken varieties.

Paralanguage, which has also intrigued Wilson, could play similar enacting and assistive roles. The need and expectation for particular notional representations may be overtly signalled by: elements like interjections, which are halfway between lexical items and vocal gestures; suprasegmental or prosodic utterance features like pitch and tempo, which affect how words and/or phrases are delivered; and visual clues like gestures or facial expressions, which accompany speech. These can also assist hearers in their formation. Therefore, this paper ascertains the contribution of these elements to ad hoc concept construction. It will show that, in addition to steering the formation of specialised concepts capturing specific types, features or aspects of what the speaker refers to through content words, some paralinguistic elements may also contribute attitudinal or emotional information. This might have far-reaching theoretic implications.

Paralanguage is a rather broad and heterogeneous category. In relevancetheoretic pragmatics, its varied elements and clues have been analysed in procedural or non-translational terms: instead of encoding conceptual material, they would enact the activation or creation of a representation of the speaker's attitude(s) towards, and psychological state(s) about, what she says (Wilson and Wharton 2006; Wharton 2009). This representation has been claimed to make up a layer that is superordinate to that occupied by the propositional representation of what the speaker says: the higher-level explicature.

If paralanguage helps specify concepts as regards the speaker's attitude(s) towards or emotion(s) about what she denotes, information about these would not need to be solely represented as an additional mental layer. It may instead find a place among the constellation of beliefs and information stored within a conceptual entity, thus enriching it. On the other hand, the characterisation of the procedure encoded or activated by paralanguage would need revising: it should not be solely presented as triggering the construction of attitudinal or emotional descriptions.

This paper firstly gives an overview of the paralinguistic elements and features that will be object of discussion, and sorts them out into three categories. Next, it summarises the overall relevance-theoretic approach to paralanguage. Then, the paper explains the ideas about concepts adopted by Sperber and Wilson in their most seminal and influential framework, and traces their subsequent evolution as a result of the research programme undertaken by Wilson and colleagues. After doing so, the paper centres on how paralanguage may contribute to lexical pragmatic processes and examines whether all paralinguistic inputs may do so. Finally, it offers some concluding remarks.

#### 2. Paralanguage: A Brief Overview

Paralanguage is sometimes considered to include only vocal characteristics of speech that are not properly part of a language, and hence to exclude facial expressions, hand gestures and bodily postures and movements. However, it is also assumed to include all the perceptible resources that help speakers transmit meaning (Wharton 2012, 571). It does not only encompass audible prosodic, or suprasegmental, characteristics such as pitch, word and sentence stress, contrastive stress, intonation contours, pace or tempo, and rhythm. It also includes, on the one hand, elements halfway between proper words and vocal gestures: interjections. On the other hand, paralanguage includes an infinite variety of very subtle or patently overt non-vocal, visual clues, such as facial expressions, gestures, movements, postures or poses. Accordingly, paralanguage can be sorted out into three categories.

Interjections

Interjections make up a fairly broad word class (Aijmer 2004; O'Connell and Kowal 2005; Ameka 2006). Some of its members belong to the primary subtype because of their phonological, morphological, syntactic and semantic peculiarities, which place them halfway between vocal gestures and words; see (1). In contrast, others are transferred from other lexical categories and are hence considered secondary; see (2).

(1) Oh! Alas! Wow! Ugh!

(2) Shit! Hell! Fuck! Oh my God!

A further distinction is made between emotive, or expressive, interjections, which exhibit psychological states, like those above, and conative, or volitive, interjections, which evince the speaker's desires and intentions (Wierzbicka 1991, 1992; Ameka 1992a, 2006)<sup>2</sup>. This is the case of (3), which is used to draw an individual's attention, or (4), which is employed to ask for silence:

(3) Hey!

(4) Shush!

Interjections have often been seen as instinctive, involuntary and symptomatic signals (Rosier 2000; Schourup 2001; Kleiber 2006), but their production usually involves a conscious assessment of the communicative situation and a selection from among a set of candidate items (Światkowska 2006). Some authors regard interjections as fully conceptual (Wierzbicka 1991, 1992; Ameka 1992a, 1992b, 2006), while others deny this (Wharton 2001, 2003, 2009). However, their specialisation and stabilisation to repeatedly communicate concrete, relatively easily identifiable feelings or emotions may associate some interjections with rather vague, fuzzy or general notions and others with more specific ones (Padilla Cruz 2009a). If, as Dámasio (1994) and Goleman (1995) suggest, there is a set of basic emotions, such emotions could be paired to concepts, which could in turn be associated with the interjections expressing them.<sup>3</sup>

Prosody

Prosody groups a wide variety of audible variations in speech production. They are usually paired with facial expressions, hand gestures and other kinetic behaviours in order to convey affective and attitudinal information, as well as information about the speaker's physiological or psychological state(s) (McNeill 1992; Ladd 1996; Gussenhoven 2004; Kendon 2004). Although prosodic features have been approached as linguistic or natural, spontaneous and unintentional features (Halliday 1967; Bolinger 1983), they are considered to vary, to a greater or lesser extent, in terms of their linguistic nature, naturalness or language-specificity.

Pitch refers to the acoustic highness or lowness with which a word,

 $<sup>^2</sup>$ . Still, other interjections may be phatic (Ameka 1992b) or refer to verbal performance, manage conversation and work as discourse markers (Clark and

<sup>&</sup>lt;sup>3</sup> For Damásio (1994), such elementary emotions are happiness, sadness, anger, fear and disgust, while Goleman (1995) also adds enjoyment, love, surprise and shame.

phrase or whole sentence is uttered. It certainly prompts the deduction of a wide array of impressions and implicit contents, some of which have to do with affective or attitudinal overtones (Couper-Kuhlen 1986; Wilson and Wharton 2006; Wharton 2009, 2012). For example, a high pitch makes a no sound forceful and unquestionable, while a low one may convey overtones of kindness or condescension.

While lexical stress is the prominence given to a word syllable and can mark meaning or grammatical differences – e.g., 'addict (noun) vs. a'ddict (verb) – sentence stress is the alternation of prominent and non-prominent words in a sentence to indicate important information. Additionally, languages like English avail themselves of contrastive stress, which contrasts lexical items with others that have previously been mentioned in terms of meaning or some trait (Ladd 1996; Madella 2020):

(5) Do you need a 'blue pen or a 'red pen?

Intonation is the voice movements made while speaking. Up until recently, falling and rising tones have respectively been paired with asserting and questioning, while falling-rising contours have been linked to overtones of insecurity, hesitation, doubtfulness or disappointment. In turn, rising-falling ones have been associated with feelings of surprise, pleasure, happiness or amusement, and a levelled intonation was connected with apathy, indifference, or lack of enthusiasm (Couper-Kuhlen 1986; Hirschberg and Ward 1995). Yet, on many occasions exact meanings and overtones can neither be precisely attributed to tones nor be said to encode them. Finally, pace is the speed or rate of delivery of spoken speech, whereas rhythm is the movement achieved while speaking as a result of timing, lexical stress and syllable length.

Kinesics

Kinesics is a broad category that includes hand, arm and body movements gestuality and facial expressions. Not all of them have the same characteristics, are used in the same fashion and communicate in the same manner. Concerning gestuality, Kendon (1988) and McNeill (1992) differentiate between various types:

a. Proper gesticulation, which is absolutely spontaneous hand and arm movements and touches accompanying speech: scratching, twirling hair, fidgeting, picking objects, etc. They reveal a variety of states like uneasiness, arousal or anxiety.

b. Language-like gestures, which are integrated into a linguistic string and contribute to its interpretation: the hand and finger movements that point to objects, highlight words, mark rhythm, or even illustrate the content of the message, like the hand movements to indicate the shape, size or largeness of objects.

c. Pantomimes, which are movements appearing in isolation and

depicting objects or actions, as if they were icons: the movements to mime opening a bottle, drinking a cup of tea or skiing.

d. Emblems, which are culture-specific gestures conveying agreed-upon meanings: hitchhikers' raised thumb or the 'ok' sign with index and thumb shaping a circle.

e. Sign languages, which are proper rule-governed linguistic systems.

From the first to the last type, gestures become less natural and spontaneous, depend less on the presence of language itself and become more linguistic. Therefore, gestures may involuntarily and/or accidentally unveil affective attitudes and psychological states, or decidedly, perhaps exaggeratedly, display them (Wharton 2009, 2012).

# **3.** Paralanguage In Relevance-Theoretic Pragmatics

The enormous variety of behaviours comprised by paralanguage is often produced in an uncontrolled, unconscious manner, thus inadvertently displaying, or accidentally unveiling, some information regarding the physical or psychological state of the speaker. Although she may not have a communicative intention when producing them, these behaviours may nevertheless lead the audience to draw some conclusions. In this case, paralinguistic behaviours constitute natural signs and, as such, "are not inherently communicative" (Wharton 2012, 572, emphasis in the original; see also Wharton 2009, 114-115). Translational meaning and help hearers activate specific mental attitude- or emotion-related representations or adjust their expectations of relevance (Wharton 2009, 61–65). Just as procedural elements encode processing instructions, paralanguage encodes some content, though sometimes altogether indeterminate or ineffable, and points the hearer to a particular direction when processing the behaviours that it groups. This suggests that these context-dependent behaviours do not contribute to the truthconditional content of utterances.

Regarding interjections, if they are appended to an utterance in initial or final position, or interrupt it, and make up a distinct tone-unit, they would be "indicators of higher-level explicatures" (Wharton 2003, 54). They enact attitudinal representations regarding the state of affairs that is alluded to in the proposition expressed:

(7) a. Alas, Mary has won the lottery!

b. [The speaker is sad/disappointed that [Mary has won the lottery]].

When interjections occur alone, as an individual utterance, such representations concern some manifest phenomenon in a cognitive environment:

(8) a. (Upon seeing the hearer's new outfit) Wow!

b. [The speaker is surprised by my new outfit].

Concerning prosody, relevance theorists initially analysed it as a facilitator of syntactic segmentation, parsing and context selection (House 1989, 1990). Pitch and intonation contours were argued to guide the retrieval of syntactic and semantic information, as well as the action that a speaker attempts to perform verbally (Clark and Lindsey 1990; Escandell-Vidal 1998; Fretheim 1998; Imai 1998).

However, paralinguistic behaviours can also be produced consciously and intentionally, thus communicating some meaning naturally. They then become signals with a communicative function enabling them to convey natural meaning (meaningN). Thus, they differ from coded verbal elements conventionally and arbitrarily conveying non-natural meaning (meaningNN; Wharton 2003, 2009, 2012).

The cut-off point between behaviours showing meaning and linguistic elements encoding it is not clear-cut, though. There seems to be a continuum, at one extreme of which fall pure cases of showing, while standard cases of linguistic encoding fall at the other. In between would lie a wide array of cases in which more or less direct and indirect evidences of meaning combine to various degrees. Indeed, many natural signals stabilise in languages, varieties or sociocultural groups as means to constantly exhibit the same sort of meaning. Hence, they involve some encoding and trigger particular representations of the speaker's psychological states (Wharton 2003, 2009, 2012; Wilson and Wharton 2006). Ultimately, they may even become culture-specific emblems. Such signals would become linguistic and be governed by "a linguistic code with its own special-purpose principles or mechanisms" (Wharton 2012, 574, emphasis in the original).

If utterances are already semantically underdeterminate and inference is always needed in order to arrive at the speaker's informative intention, the underdeterminacy of purposefully used paralinguistic signals may even be greater.<sup>4</sup>The information that they convey certainly resembles that communicated by linguistic elements like the attitudinal adverbials happily or sadly (Ifantidou 1992), which could obviously be employed in order to communicate it more explicitly.

In relevance-theoretic pragmatics, these adverbials are considered to contribute to higher-level explicatures as in (6b), or the speech-act or propositional-attitude descriptions under which the pragmatically enriched form consisting of conceptual representations is embedded:

(6) a. Happily, Mary has finished her thesis.

b. [The speaker is happy/exultant that [Mary has finished her thesis]].

Relevance theorists consider that intentional meaning-showing

<sup>&</sup>lt;sup>4</sup> Fully determinate meaning would require words to attain absolute explicitness of speakerintended meaning (Sperber and Wilson 2015, 135–136).

paralinguistic behaviours also contribute to such explicatures. These behaviours convey non-Translational meaning and help hearers activate specific mental attitude- or emotion-related representations or adjust their expectations of relevance (Wharton 2009, 61–65). Just as procedural elements encode processing instructions, paralanguage encodes some content, though sometimes altogether indeterminate or ineffable, and points the hearer to a particular direction when processing the behaviours that it groups. This suggests that these context-dependent behaviours do not contribute to the truth-conditional content of utterances.

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Prosodic inputs were also thought to create impressions and alter the salience of interpretations. However, pitch and intonation have subsequently been considered to encode procedures resulting in actional and attitudinal descriptions (Wilson and Wharton 2006; Wharton 2009):

(9) a. Mike, / are you joining us tonight?

<sup>&</sup>lt;sup>5</sup> Expressed attitudes, feelings and emotions have physiological reflexes that enable them to be experienced, and therefore characterised, with a certain intensity, vividness or temporal duration. They also have psychological correlates and may be mentally represented. But they originate as responses to phenomena or states of affairs (Damásio 1994). The non-translational content of interjections could also amount to procedures facilitating identification of the cause(s) of those reactions. To put it differently, the procedures that interjections would pack could signal the phenomenon or state of affairs that makes the speaker feel, or undergo, the state that she verbalises by means of an interjection (Padilla Cruz 2009b). Like indexicals (Wilkins 1992, 1995), interjections would thus point to the origin of, or reason for, a felt and voiced psychological state, of which they would somehow be a symptom (Rosier 2000; Schourup 2001; Kleiber 2006). However, to Wilkins (1992, 1995), the indexical nature of interjections would make them subcategorise hidden or covert referential slots in an underlying proposition, which must be filled with extralinguistic information. This claim is not consistent with some relevance-theoretic postulates on mutual parallel adjustment and free enrichment (Carston 2000).

b. [The speaker asks/wants to know whether [the hearer is joining them tonight]].

(10) a. Another ciga v rette?!

b. [The speaker is angry that [the hearer is having another cigarette]].

Paralinguistic signals must be interpreted analogically, on the basis of possibly subtle changes in their features that are proportional to the psychological state causing them (Wharton 2009, 122). But their contribution may be fairly indeterminate and their interpretation may require a greater amount of inferential labour. Due to such indeterminacy, paralinguistic signals can be situated along an explicitness-implicitness continuum depending on the amount of inferential work that their interpretation requires (Sperber and Wilson signals deliberate paralinguistic 2015. 123-124). Some could quite determinately show intended meaning, even though it cannot be fully grasped or precisely paraphrased in propositional terms. In contrast, the meaning of unintentional or uncontrolled paralinguistic signals would be far more indeterminate and perhaps almost unparaphrasable.

Imagine a guest at a party said (11) with overtly evident low pitch and falling intonation upon seeing that the host is offering some cheese:

(11) Cheese.

If the guest was known to adore cheese, (11) could easily and straightforwardly lead the hearer to construct the higher-level explicature in (12a). In this case, the meaning of low pitch and falling intonation would have been shown in a fairly determinate manner. However, by uttering (11), the guest could also intend to suggest that she is upset or angry that the guest is offering cheese, given that she does not like it or has an allergy to dairy products. If that information was unknown to a hearer, he might fail to create the attitudinal description in (12b), and the low pitch and falling intonation would also have failed to clearly and unambiguously show the guest's attitude.

(12) a. [The guest is delighted that the host is serving cheese].

b. [The guest is disappointed/angry that the host is serving cheese].

In addition to the role played by inference in determining the communicative contribution of paralinguistic elements, the interpretation of some of them crucially depends on some "specialised, perhaps dedicated, neural machinery" (Wharton 2009, 132) – perhaps some sort of emotion-reading mental mechanism integrated in the broader mindreading mechanism (Wilson 2012) – which would rely on "innately determined codes" (Wharton 2012, 573).<sup>6</sup> However, the import of intentionally used paralanguage does not need to be a propositional representation or a small set of propositions, but may be a wide array of propositions. Furthermore, it may not be solely restricted to

<sup>&</sup>lt;sup>6</sup> As supportive evidence, Wharton (2012, 573) mentions that primates and humans possess a neural machinery enabling facial recognition and processing of facial expressions

propositional representations, but may include, or amount to, sensorimotor representations like "images, feelings and states of mind" (Wilson and Carston 2019, 36). These make up a special type of cognitive benefits: non-propositional effects. These are open-ended by-products of processing, which involve the activation of perceptual, emotional or sensorimotor mechanisms. They cannot be finitely paraphrased by means of a sole proposition capturing all their nuances, and different individuals may come up with distinct paraphrases (Wilson and Carston 2019, 32). Accordingly, interjections could also trigger some sort of mental image of the speaker as she experiences some psychological state, or even emotions similar to those the speaker is thought to experience (Wilson and Wharton 2006; Wharton 2009). Likewise, specific tones and pitch may also prompt hearers to entertain diverse thoughts and experience a cascade of feelings and sensations that "cannot be pinned down to one specific proposition or small set of propositions" (Wharton 2012, 580).

Summing up, paralanguage merely shows somewhat direct perceptual evidence of intended import in some cases; in others, due to its stabilisation and its being somehow coded, it shows evidence, not of that very import, but of the intention to convey it (Wilson and Carston 2019, 34). When paralanguage is deliberately used, that evidence amounts to a pointing in the direction in which speaker-intended import is to be achieved. In other words, intentional paralanguage signals the type of content of purported effect(s), regardless of the actual nature or format of these – i.e., fully propositional or non-propositional – and of whether such effects contribute to a propositional-attitude description or to components of a representation of the proposition expressed, namely concepts. Drawing on Madella (2020), deliberately-used paralanguage could hence be described as an ostensive pointing mechanism assisting hearers.

# 4. Concepts And Ad Hoc Concepts

In Relevance: Communication and Cognition, Sperber and Wilson (1986, 1995) endorsed the Fodorian approach to concepts (Fodor 1983), according to which a concept is an element of the language of thought that denotes something in the external world. It is linked to information that is organised into three compartments:

a. The logical entry, which lists information about the quintessential properties of what the concept refers to.

b. The lexical entry, which contains information about the naturallanguage word verbalising the concept and its pronunciation.

c. The encyclopaedic entry, which gathers varied personal information about what the concept alludes to.

To Sperber and Wilson (1997, 1998, 2012), the concept-word mapping is imperfect. Although many concepts are expressible through just one naturallanguage word, others can be expressed through distinct terms, need a phrase in order to be expressed or completely lack a natural-language counterpart due to their specificity or complexity. Following the ground-breaking work by Barsalou (1983, 1987), the authors posited that the informational material associated with mental concepts is not static or unalterable, but flexible or malleable, depending on the context and the intentions attributed to the speaker. The actual denotation of words is contingent on the speaker's informative intention, so the concepts associated with them can capture many particular speaker-intended meaning aspects or shades: "speakers, trading on their hearers' pragmatic capacities, may employ a word to communicate any of a wide range of concepts inferable in context from the encoded lexical concept" (Carston 2012, 491).

Wilson and colleagues, most notably Carston, surmised that concepts' logical and encyclopaedic entries are amenable to changes: addition of new information and rearrangement or deletion of existing information (Carston 1996, 2000, 2002a, 2010a, 2012; Wilson and Carston 2006, 2007; Wilson 2011a; Hall 2017). Addition and rearrangement refine or narrow down the conceptual denotation to a more specific notional space. Thus, the context-independent concept SMOKE<sup>7</sup> activated by (13) below may allude to a particular tobacco product (cigarettes, cigars or a pipe), a specific tobacco type (Virginia, cavendish, perique, latakia, etc.) or any other characteristic of the action that is contextually manifest, such as its intensity or frequency. This results from the addition of the corresponding information to the concept's encyclopaedic entry or from its elevation, albeit temporarily, to a definitional status by rendering an encyclopaedic property logical.

(13) Paul smokes.

In turn, deletion of information enables a concept to refer to something less specific than its lexically-encoded sense. Thus, \*oval\* in (14) below could refer to an oval-like shape as a consequence of the erasure of the requirement of perfect and absolute ovality from its logical entry.

(14) The town's plaza is oval.

These modifications in conceptual entries match two processes affecting concepts: narrowing, or strengthening, and broadening, or loosening. They are characterised as automatic because they always operate regardless of the occurrence of other input elements (Carston 2000; Jary 2016). Yet, co-occurring linguistic elements and accompanying paralinguistic features may somehow determine their outputs. These processes are also seen as a necessary step prior to obtaining a fully propositional form that may capture what the speaker says and be evaluated in terms of truthfulness. Indeed, context-independent, lexically encoded concepts are believed to simply contribute some sort of raw or skeletal material requiring occasion-specific inferential fleshing out. Finally, these processes are portrayed as not mutually exclusive, but complementary. Arriving

<sup>&</sup>lt;sup>7</sup> Following another relevance-theoretic convention, concepts are notated in small caps.

at intended meaning may involve restricting a concept in some respects while simultaneously loosening it in others, as in the case of metaphor (Wilson and Carston 2006, 2007; Sperber and Wilson 2008).

The output of these processes is labelled an ad hoc concept. This is described as a more specific, context-sensitive conceptual representation which is built on the grounds of the conceptual material encoded or activated by a content word. It is created during the parallel adjustment of explicit and implicit speaker-intended meaning, on the basis of expectations of relevance, possible developments of an utterance's explicature and hypothesised contextual implications. Due to its specificity, and perhaps uniqueness, an ad hoc concept may be a one-off, purpose-built mental entity differing in some guise from the context-independent, lexically encoded concept. It is likely to have a short lifespan in an individual's cognitive activity, but it could also stabilise and spread throughout a community of language users.

Identification of these lexical pragmatic processes has facilitated alternative accounts of non-literal uses of language, figures of speech or tropes, such as metaphor, metonymy, hyperbole or simile (Papafragou 1996; Carston 2002b, 2010a, 2010b, 2012; Vega Moreno 2007; Wałaszewska 2010; Carston and Wearing 2012, 2015; Rubio-Fernández et al. 2013, 2015; Jodłowiec and Piskorska 2015).

With remarkable differences from cognitive-linguistic ones (Wilson 2011b), these accounts replace previous relevance-theoretic ones surmising that the increase of cognitive effort caused by such loose language uses is intended in the interest of yielding weak implicatures (Sperber and Wilson 1986, 1995, 2008).<sup>8</sup> Moreover, the relevance-theoretic account of ad hoc concept construction boosted understanding of some lexical phenomena when it comes to researching children's speech (Wałaszewska 2011, 2020), interpretation of novel metaphors (Wearing 2014), semantic change (Clark 2016; Padilla Cruz 2017), how insults work (Padilla Cruz 2019), acquisition of metaphor and metonymy (Falkum 2019), L2 metaphor comprehension (Ifantidou 2019; Ifantidou and Hatzidaki 2019), use of metaphors in certain genres (Ifantidou 2009; Unger 2019; Mateo and Yus 2021), their helpfulness in therapeutic discourse (Needham-Didsbury 2014) or the challenges that they pose to autistic people (Wearing 2010).<sup>9</sup>

The claim that ad hoc concept construction is not mandated by any element has recently been revisited (Padilla Cruz 2022a). In inflectional languages, morphemes like the diminutive and the augmentative may trigger

<sup>&</sup>lt;sup>8</sup> In turn, those accounts had replaced the Gricean approach relying on blatant violations of expected norms of truthfulness, informativeness or relevance (Grice 1957).

<sup>&</sup>lt;sup>9</sup> Carston (2013a, 2013b, 2016) has considered a more radical possibility: conceptual eliminativism. Accordingly, open-class words might not be associated to specific conceptual material in a stable manner, but rather open some sort of mental file subsuming varied information, or create some sort of address or label in memory connecting varied information.

adjustments resulting in particularised conceptual representations. Thus, addition of the diminutive to casa ('house') in (15) below could lead to the formation of casa\*/\*House, which would refer not necessarily to a small dwelling, but to a poor, seedy, rundown and gloomy one (Padilla Cruz 2020):

(15) Vive en una casucha en mitad del campo.

'He lives in a house[+DIM] in the middle of the countryside'.

Similarly, the definite and indefinite articles, demonstratives and possessives, which occupy the determiner position; qualifying adjectives, as well as lexical items and phrasal or sentential constituents fulfilling adjectival functions; expressive expletives like damned or bleeding, and evidential participles like supposed or alleged, may all give rise to more concrete conceptual entities (Padilla Cruz 2022a, 2022b, in press). Accordingly, the indefinite article would modulate man in (16) as denoting an unknown male person; the adjective in (17) would create an idiosyncratic representation alluding to a special, elegant, well-equipped, comfortable, cosy accommodation; the expletive in (18) would give rise to Guy\* referring to a contemptuous, reprehensible, foolish, imprudent person, and the participle in (19) would fine-tune \*extortioner\* as something paraphrasable as 'the man who is supposed to have extorted people because someone saw him doing so':

(16) A man is entering the shop.

(17) We booked a boutique hotel in the centre.

(18) That fucking guy is not wearing a facemask!

(19) Supposed extortioner tried last week.

Still, lexical repetitions and rewording could adjust already activated conceptual representations by delimiting, nuancing or enriching their denotational spaces. Thus, the repetition of the adjective in (20) may flesh out the concept in question as alluding to an exceptional, unexpected or shocking type of richness, while the replacement in (21) may refine the concept associated with the characteristic attributed to the essay as referring to messiness or nonsense.

(20) John is rich, rich, rich.

(21) Martha's essay is confusing... messy.

Just as these morphological, lexical and phrasal elements and stylistic choices may trigger and somehow determine the output of ad hoc concept formation in precise manners, paralanguage could also contribute to this lexical pragmatic process. Paralinguistic clues and features might overtly indicate that context-sensitive and specific notions are necessary in order to grasp speakerintended meaning and assist hearers in their formation. Since they are considered to act as pointers and constrainers of this pragmatic process, these behaviours will be generically referred to as 'markers' or 'indicators'.

# 5. Paralinguistic Markers Of Ad Hoc Concepts

The idea that paralanguage affects lexical pragmatic processes, thus contributing to the explicit truth-conditional content of utterances and guiding hearers to certain conclusions, is not at all new and was already entertained by Wharton (2009, 51 and ch. 6). What follows seeks to illustrate the contribution of the heterogeneous behaviours falling within paralanguage to ad hoc concept construction, an issue that has not been exhaustively tackled thus far. In fact, it is not clear if all of them contribute to it or if they do so in the same fashion.

Interjections

Interjections occupy distinct positions along a cline ranging from a conceptual pole to a procedural one, from cases of meaningnn to mere cases of showing (Padilla Cruz 2009a; Wharton 2016). In the case of expressive or emotive interjections, the origin, reason or cause of the psychological state that the speaker voices may be mentally represented in conceptual terms. Just as any lexically encoded concept may be specified and can refer to (more) particular conditions, instantiations, experiences, etc., the concept denoting the origin, reason or cause of a psychological state may also be enriched or adjusted. Its encyclopaedic entry may receive information about the attitudes, feelings and/or emotions that its referent causes. If that information was already present, it could be given more prominence and made essential, albeit momentarily, thus adjusting the concept.

Consider (22) below. The interjection in the second response alone could obviously allow the mother to attain some effect pertaining to her son's elatedness, delight or euphoria because of the dish that he is about to enjoy. It would thus prompt her to construct the higher-level explicature in (23).

(22) Son: What are we having for dinner?

Mother: Soup.

Son: Oh/Wow/Yay, soup!

(23) [sonx is Happy\*/Elated\*/Delighted\*/Euphoric\* [there is soup\*/to have\* soup\*]]

Additional available information could help finetune the lexically encoded concept as denoting a type of tasty traditional soup made with noodles and wild mushrooms. The by-product of this process could in turn enjoin the mother to deduce weak implicatures to the effect that her son loves that type of soup, prefers it over other soups or likes having it only for dinner. But deliberate and ostensive production of the interjection might alternatively enrich, or further narrow down, soup on the grounds of information concerning the son's likes, preferences, longings or feelings. Had the interjection argh been intentionally added, the information enriching it, or facilitating its restriction, would obviously have regarded opposite feelings. Regardless of the direction its specification takes, the creation of soup\* would also entitle the mother to derive an array of (weak) implicatures satisfying her expectations of relevance.

Consider now (24).

(24) Ow/Ouch, that hurts!

The interjection could of course be proffered instinctively and involuntarily, and amount to some audible symptom of the speaker's pain. Given the proposition expressed by the utterance that the interjection accompanies, it could even be redundant, as the speaker's feelings, or her informative intention, would be evident from that proposition. In this case, the interjection would provide further acoustic evidence securing the construction of some intended attitudinal description:

(25) [The speaker feels pain].

But the interjection could also be produced deliberately and ostensively. In this case, it could help the hearer specify the concept hurt as referring not to an average pain, but to a rather intense, sharp, unbearable or inhuman pain, or to a pain that hurts in an unexpected, astonishing, overwhelming or shocking manner. Such a specification may be accomplished through an addition of the corresponding information to the concept's encyclopaedic entry or by rendering that information definitional.

Although expressive interjections could contribute to lexical pragmatic processes in this fashion, conative interjections would obviously not trigger or impact lexical pragmatic processes. Their interpretation would be contingent on (an) inference(s) yielding some propositional or non-propositional effect concerning the speaker's desire(s) or the action that she wants the hearer to perform. In essence, conative interjections are orders and, as such, they present a state of affairs as desirable from the speaker's perspective (Sperber and Wilson 1986, 1995) and signal the individual expected or intended to bring it about. Accordingly, a conative interjection like (26a) would give rise to some sort of speech-act description like (26b).

(26) a. Shhh! (addressed to an individual who is speaking during a lecture)

b. [The speaker wants me to shut up].

Prosodic/suprasegmental markers

Depending on whether their interpretation is contingent on inference or biological codes, prosodic inputs may be sorted out as: natural signs, if they are interpreted inferentially; natural signals, if their interpretation involves decoding; and linguistic signals, if they are jointly interpreted through inference and decoding (Wharton 2012, 573–574). Their different places in the showing-meaningnn continuum make them "fall within the domain of pragmatics and contribute to a speaker's meaning" (Wharton 2012, 576). Concerning lexical pragmatic processes, prosodic inputs have also been claimed to interact with

lexical items so as to finetune their meaning (Wharton 2009, 141–142). However, it has not been duly illustrated whether all prosodic inputs do so and how.

When intentionally exploited, pitch may also delineate concepts. Suppose someone was comfortably sitting in their dining room while having a snack, and uttered either of the following with the nominal element overtly pronounced with low pitch:

(27) This is cheese!

(28) I love wine.

Pitch lowness would exhibit some (perhaps) ineffable psychological state e.g., delight, pleasure, enjoyment - which the speaker experiences as a consequence of having either of the products she mentions. It would point the hearer to some notional space connected with such a state, which is in turn caused by the particular type or brand of the product that the speaker is consuming, its (good or outstanding) quality, texture, flavour or notes, how it is cut or the fact that it is served at a certain temperature. Thus, pitch lowness would openly signal that it is not cheese or wine in general that are meant, but those of the particular type, quality, texture, flavour, notes, etc., which the speaker is having at that moment. Consequently, pitch would ostensively encourage the hearer to narrow down cheese and wine in those directions. This narrowing would require enriching the concepts' encyclopaedic entries with propositional or non-propositional information - images, impressions, etc. about the products' intended characteristics and perhaps endowing some of that information, albeit temporarily, with a definitional status. In any case, once the activated concepts are adjusted, the hearer, depending on his expectations of relevance, would be entitled to derive varied implicatures, for instance, to the effect that the cheese or wine in question are those that the speaker would recommend or have for a special occasion.

Contrastive stress is considered to involve additional cognitive effort (Sperber and Wilson 1986, 1995; Wilson and Wharton 2006; Wharton 2009, 2012; Madella 2020). Just as additional effort often warrants further cognitive benefits, added articulatory effort or strength may frequently be a clue to particularised meaning. Hence, this stress may also work as a prosodic stimulus that can be ostensively exploited. When falling upon a word, contrastive stress could also accomplish a signalling or highlighting function, thus openly indicating a peculiar speaker-intended meaning. Surely, in Examples (27) and (28) above, cheese and wine could also have received this type of prosodic prominence. It would ostensively mark that the lexically encoded concepts certainly need delimiting on the grounds of certain information, thus making it possible for the hearer to grasp the speakers' meaning. Contrastive stress then becomes, in Madella's (2020) terms, a prosodic pointing device.

A similar pointing function may also be ascribed to pace or tempo.

Nuanced concepts may arise as a result of the speed at which, not necessarily a whole sentence, but a sole word is articulated. Consider (29).

(29) Martha came slowly.

If the speaker pronounced the adverb very slowly, with vowel elongation in the tonic syllable, as if mimetically replicating the speed with which Martha walked, pace would generate slowly\* as a way of capturing an astonishingly placid speed, an exasperatingly tranquil one or one below some standard. It could even generate certain images picturing how Martha walked or trigger certain sensations. In addition to pointing to the need of a specific notion, pace would also iconically show the direction that its creation should follow, thus working as an iconic prosodic pointing device.

Intonation, in contrast, does not seem to play this role. In the dialogue in (22) above, the son's response could have simply been soup. Although delimiting the actual value(s) of the tone employed could be difficult, the son would not have invited the mother to shape an occasion-specific conceptual representation. Rather, his tone would have assisted her in the construction of (a) specific actional or attitudinal description(s) and given rise to non-propositional effects. Hence, intonation is perhaps the sole prosodic input that retains a pure role as constrainer of higher-level explicatures and does not enact lexical pragmatic processes by itself.

#### Gestural markers

The spontaneous nature of proper gesticulation perhaps deprives it of the pointing function attributed to some prosodic inputs, but other gesture types may fulfil it, thus becoming pointing devices, albeit visual. Language-like gestures such as head nods, raised eyebrows or finger or hand pointing, as well as expressions like smiles or grimaces, which can be deliberately made as a particular word is uttered, may certainly entitle the hearer to contrive an idiosyncratic conceptual representation. For example, a smile of delight and eyes (half-)shut will encourage the hearer to restrict cheese in (27) and wine in (28) as referring to quality cheese/wine or products of a brand that the speaker likes. A grimace of disgust or a gesture of disappointment, in contrast, would take that adjustment through a distinct route. Similarly, a gesture illustrating the shape or largeness of the referent of a noun could finetune the activated concept on the basis of the respective information or even prompt the hearer to forge some mental image.

Moreover, the mimetic character of pantomimes and the properties of emblems could even steer lexical pragmatic processes in more precise manners, thus becoming iconic or mimetic visual pointers. In (29) the speaker's openly placing her bent arms in front of the chest, hands with palms up, and ostensively moving them up and down repeatedly and very slowly would add supportive evidence for the ideas that Martha's speed was slower than average or irritatingly slow, on the basis of which slowly\* would be delineated. And something similar would happen in the case of an emblem like the Italian gesture for taste appreciation, pleasure and/or enjoyment, if the person doing it ostentatiously twisted the finger touching her cheek rapidly or vividly.

### 6. Conclusion

This paper has shown that paralanguage may signal and direct ad hoc concept construction. This involves admitting that paralinguistic inputs may work as pointers of this lexical pragmatic process when they are deliberately produced. Depending on their nature and the channel that they exploit, two sorts of pointers in addition to interjections could also be distinguished: prosodic and gestural. This has clear implications for the current relevance-theoretic approaches to paralanguage and lexical pragmatics.

The first of them has to do with the freedom from linguistic mandate of ad hoc concept formation: in addition to being triggered by certain linguistic elements, it could also be mandated by paralinguistic inputs. However, among prosodic ones, only pitch, contrastive stress and pace would ostensibly provide natural evidence for the relevance of occasion-specific concepts, as the role of intonation would be limited to facilitating speech-act or affective-attitude descriptions. Among gestural inputs, language-like gestures, pantomimes and emblems could overtly behave as visual pointers, since the spontaneous nature of proper gesticulation generally prevents it from doing so. Pantomimes and emblems, furthermore, could mimetically suggest the direction in which the expected output must be constructed.

Future research, nevertheless, should check the exhaustiveness of the list of paralinguistic inputs triggering occasion-specific concepts and perhaps incorporate additional ones from languages or varieties belonging to diverse (sub-)families.

A second implication affects the contribution of paralanguage to comprehension and its procedural meaning. Relevance theorists have thus far treated paralanguage as giving rise to actional and attitudinal descriptions. However, part of attitude- or emotion-related information may originate during lexical pragmatic processes as a result of the occurrence of specific paralinguistic inputs. These would make it manifest and entitle hearers to store it in the corresponding entries of activated conceptual representations, thus enriching and further delimiting them, albeit momentarily, with a view to creating a more specific, perhaps one-off conceptual entity. If so, the procedure that paralanguage encodes need not be solely connected with the construction of higher-level explicatures, but could be more loosely characterised as enabling the representation of attitude- or emotion-related information that may feature in a higher-level explicature or in a conceptual representation.

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