

PARTIAL PERCEPTION AND APPROXIMATE UNDERSTANDING¹

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Abstract

What is discussed in the present paper is the assumption concerning a human narrowed sense of perception of external world and, resulting from this, a basically approximate nature of concepts that are to portray it. Apart from the perceptual vagueness, other types of vagueness are also discussed, involving both the nature of things, indeterminacy of linguistic expressions and psycho-sociological conditioning of discourse actions in one language and in translational contexts. The second part of the paper discusses the concept of conceptual and linguistic resemblance (similarity, equivalence) and discourse approximating strategies and proposes a Resemblance Matrix, presenting ways used to narrow the approximation gap between the interacting parties in monolingual and translational discourses.

Keywords: *almost* resemblance, approximating strategies, Cluster Equivalence, collocations, corpus data, displacement of senses, meaning approximation, *more-or-less* resemblance, re-conceptualization (reconceptualization), Resemblance Matrix, tolerance threshold, vagueness

1. Introduction: World models and the real world

What we see around is not the only *real* model of the world but one of the numerous possible world models – moderated by our senses and cognition. Out of the numerous *logically and factually possible worlds of perception* as summed up by the biologist Richard Dawkins in his lecture (2005²) we perceive a fairly narrow range of reality, constrained predominantly by our human neuro-physiology³. Like in economics, the theory of the *second best* concerns the

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² Richard Dawkins *Why the universe seems so strange*. [Online] Available from: https://www.ted.com/talks/richard_dawkins_on_our_queer_universe

³ See numerous philosophical and psychological papers reflecting these ideas e.g., Witt and D. R. Proffitt (2007).

situation when one or more optimality conditions cannot be satisfied⁴, we have an analogical situation in the case of human perception. The focus of the paper is on the how and what extent the human frame of reference determines our understanding and communication. To paraphrase Wittgenstein, who said in his *Tractatus Logico-Philosophicus* (1921:5.6): *Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt*. ‘The limits of my language are the limits of my mind’ and then *All I know is what I have words for* I propose to discuss the question of *the limits of my world that impose the limits on my language*. More particularly, I want to argue that all communication is a matter of degree, and it presents what I first called *meaning approximation* in Lewandowska-Tomaszczyk (1999, 2012a), from which part of the present contribution originates. Crucial reasons for such a state of affairs, connected with the interpretation of the phenomena of *sameness*, *equivalence*, and *similarity or resemblance* will be discussed in the second part of the paper.

2. Vagueness

Meaning approximation is rooted in the presence of vagueness associated with two basic domains. The major distinction of all perceptual and – as a consequence – conceptual approximation – is between *ontological vagueness* on the one hand and *epistemological (cognitive) vagueness* on the other. Some things present – by their very character – an *almost* nature (to use the term proposed by the mathematician Sossinsky (1986), for which no exact definition exists such as in the case of some abstract and emotion concepts. They are instances of ontological vagueness.

Epistemological vagueness on the other hand involves what Sossinsky calls their *more-or-less* nature. They are those for which exact meanings do exist but for various reasons discussed further, the meanings are either inaccessible or volitionally disregarded.

Ontological vagueness involves then natural, existential absence of criterial properties of concept identification. The object cannot be satisfactorily defined because its boundaries are fluid and/or the content – non-cohesive. Epistemological (cognitive) vagueness on the other hand occurs in the situations in which there may exist necessary/sufficient meaning criteria for a linguistic sense definition but, due to various social, psychological (volitional, deontic), linguistic typological, or contextual reasons, they are not fully exploited in particular contexts.

⁴ The *theory of the second best* in economics concerns the situation when, as shown by the economists Richard Lipsey and Kelvin Lancaster (1956), if some optimality conditions cannot be satisfied, it is possible to constrain the system so that at least one variable must assume a value other than the first-best value. The model has also achieved some currency in social, political and legal theories.

2.1. Interpretive Multiplicity

Connected with epistemological vagueness is the presence of language interpretive multiplicity. How is it conditioned? Meaning of any semiotic system is part of a general organization of mental structures with its exponents on a visual, aural, tactile, gustatory, or linguistic level. Semantic signs, by their very nature, are typically not fully specified, so to achieve fuller interactional understanding they have to be complemented by inferential structures – a speaker's/listener's abilities to complete a message with unexpressed thought(s) or image(s). The inferential meanings reached by induction or abduction lead to meaning extension in terms of familiar knowledge frames, the extension not always identical to the one originally meant by the speaker (see Coulson, 2001 for a more extensive discussion). Say, Mary repeats what she heard from her friend Ann *I couldn't find my purse and there was this man running...* and Mary, reporting the event to me, says *Ann couldn't find her purse and then there was this THIEF running*. The information whether the person running was or was not a thief was not originally specified, as the meanings of the signs used did not describe the event in fuller detail. This enabled an additional, unintended, unexpected or in some cases – wrong – inferential interpretation with the addressee, due to some strongly entrenched frames of stereotypic experiences (Fillmore, 1982) concerning a typical course of action under such circumstances, in other words, Idealized Cognitive Models (ICMs) of events (Lakoff, 1987).

One can thus conjecture that comprehension and interpretation of linguistic meanings are always related to this *interpretive multiplicity in language*, rooted in and originating from a limiting nature of human perceptual/conceptual experiences, particular properties of world languages as well as the nature of verbal interaction and its contextual conditioning.

2.2. Effability

The relation between thought and language has always been – for millennia – a subject of philosophical theorizing, particularly with reference to the phenomenon of *effability*. Some of our thinking tends to be more *effable*, i.e., possible to express in a language, while its large part, particularly image-verbal thoughts, visions, emotions or dreams remain more felt than expressed, more imagined than put in words. Jerrold Katz's *Principle of Effability* (1978) proposes that every thinkable thought in natural language can be encoded and expressed by a sense of some sentence in language, however it does not find satisfactory support in today's research (e.g. Sperber and Wilson, 1995).

Language typological parameters, which constrain the expression of some of thoughts, act as a constraining parameter too. Some ontological categories are verbally marked and can be expressed in a number of languages, while some others are absent or left non-verbalized in the system (as e.g., the category of grammatical gender or most of the nominal case system in English).

Structural ambiguities typical of particular linguistic systems are also responsible for the absence of full interactional comprehension like, e.g. the word order ambiguities between the Agent and Patient in Polish with their grammatical homonymy between the Nominative and Accusative Neuter Nouns (*cielę* (Nom./Acc.) ‘calf’). Other examples include logical – as opposed to pragmatic – ambiguities as to the order of the actions in the *and*-conjoined constructions (*I had lunch and went shopping – but in a different order*) or referential vagueness in utterances.

2.3. Ability, permission and volition

Apart from these typological linguistic constraints on communication and understanding, there are certain meanings the speaker can take the liberty of choosing in order to convey a message such as adopting a particular semantic perspective via different *profiling* and *construal* of a given scene or event (Langacker, 1987, 1991). Also the *level of granularity* is what matters here.

Degrees of linguistic expression of thought are also partly a matter of authorization (permission) to inform about a particular state of affairs, i.e. to give details concerning particular events. Moreover, further constraints in discourse context involve the question of individual intentions. The speaker may not wish to share all thoughts, feelings, etc. linguistically (or otherwise) with the interlocutor (volition). Last but not least, the phenomenon of approximation is related to the speaker’s *linguistic repertoire* (linguistic competence). First of all, speakers have, as a rule, varying language repertoires which overlap to different degrees and some may be a more and some others – less, faithful portrayal of the speakers’ thoughts which they are prepared to share with others. Thus, these sources of meaning approximation lie at the interplay of ability, deontic conditions and volition.

3. Interactional communication

In interactional discourse we observe the *lack of symmetry in the scope and range of conceptual-semantic spaces across discourse participants*. This condition rests within the sphere of the speakers’ *knowledge of the world* and the breadth of their respective concepts. Furthermore, as argued above, verbal communication is not always overtly explicit. There are contexts in which conversational contributions strike a, more or less, similar semantic level, the ideal level in terms of Gricean conversational maxims (Grice, 1975). Some others – do not.

One very interesting, related, aspect of communication is the phenomenon of *politeness*, particularly with reference to so-called *minimizing strategies*, which are basically face-saving ways to communicate meanings (first related to a discussion of distancing and language functions in Malinowski 1936, then

developed in Gumperz 1982 in terms of *contextualization cues*). Some of these strategies have to do with approximative meanings via their *indirectness*. *Would you be so kind and try to put your luggage back on shelf so that I could get in?* does not represent a particularization communicative strategy *per se* but rather an *impoliteness minimizing strategy*, which is fairly approximative when one considers the semantic content of the sentence.

Apart from this basic conditioning of communicative approximation, there are also other, psychological and psycholinguistic factors, like memory lapses, interruptions, and the like, which are partly responsible for the processes of approximation.

To reassume then, it can be argued that for ontological, cognitive, volitional or deontic reasons, together with typological linguistic conditions, language speakers *do not* or *cannot* furnish the linguistic forms they use with the content of absolute identity with their conceptual intentions but rather they resort to the ‘second, third, or nth best’ options in communication contexts – both in monolingual discourses and even more so in intercultural encounters and translation.

3.1. Resemblance

And yet, we *do* communicate – we find evidence for this in common enterprises leading to jointly-planned outcomes, we can predict some events, we collaboratively develop ideas and put them in practice. The same forms used appear to bear some degree of resemblance to the originally intended thought (deliberate lying must be excluded here), although identity – that is a symmetrical one-to-one relation between things – is not what is observed. Rather, as argued for in the present paper, linguistic expression exhibits a stronger or weaker, typically one-way, conceptual resemblance to the thoughts intended and to identical forms used in interaction. Although not identical, such corresponding senses and meanings tend to foreground some most salient *similar* meaning properties, typically associated with the forms as used either by interactants in one language or across languages. *Similarity* is this context involves both the foregrounding of resemblance across various dimensions but, at the same time, also emphasizes differences, responsible for the processes of what I label meaning *re-conceptualization* (Lewandowska-Tomaszczyk, 2010).

3.2. Re-conceptualization of meaning⁵

Communicative activities involve a *re-conceptualization* of an original message as received by the Addressee in terms of their modification of both conceptual-

⁵ In some papers dealing with this matter the non-hyphenated spelling *reconceptualization* is used.

semantic *content* the message conveys and *the way* the content is constructed in a communication act. Each time when such a unit is repeated and used in new contexts, by different speakers, the meaning enters a new re-conceptualization cycle to form a *hybrid, blended* entity, which combines elements of the message sent by the Speaker and those residing in the Addressee's cognitive models, repertoire and background knowledge frames.

4. Cross-linguistic displacement of senses

In cross-linguistic comparisons what is conventionally observed are *weakly commensurable* (Lakoff, 1987) categorical hierarchies in language and, rooted in them, a *dynamic displacement of senses* (cf. Lewandowska-Tomaszczyk, 1987).

The cross-linguistic relationship is typically asymmetrical, not calibrated (see Lakoff, 1987). Lexical forms can be more semantically branched in one language than in another, with the polysemic, categorial or subordinate (hyponymic) clusters of concepts in the former that bear degrees of similarity (on a number of varying criteria) to those diverse forms in the latter, which can be more or less numerous in their branching. The form *compromise* in English with its extended cluster of *polysemic senses* involves the meaning of concessions in settling a dispute in some contexts, the sense of weakening and worsening in another, or else the sense of exposing a person to disrepute in still another one. Those English senses correspond to a displaced cluster of a more varied, inter-categorially linked, forms and concepts in Polish as observed in (1):

(1)

- (i) *They developed a compromise* 'Doszli do *kompromisu*'/ *They are ready to compromise on these points* 'Są skłonni załatwić te punkty w sposób kompromisowy'
- (ii) *That requirement compromises the security conditions.* 'To żądanie osłabia bezpieczeństwo'
- (iii) *They compromised themselves.* 'Skompromitowali się.'

The intra-semantic conceptual resemblance in English is much stronger in this case than that in the corresponding Polish set of meanings, which do not even form a cohesive semantic cluster as judged by an average Polish user. They are rather considered members of distinct semantic categories KOMPROMIS, OSŁABIENIE/POGORSZENIE, KOMPROMITACJA, which are not identified as showing a particular resemblance relation with one another.

5. Translational equivalence

Taking the conclusions presented above as premises for further arguments, a question can be asked with regard to the position of the concept of *equivalence* in translation. *Equivalence* in translation is understood in the present study in a broad sense as typically partial meaning resemblance between concepts, always mediated by re-conceptualization processes. Moreover, all re-conceptualization processes are regarded to be conditioned by a *conceptualisation* type represented by a particular linguistic unit, a degree of its *prototypicality* and *entrenchment*, type of *construal* and a range of *naturalness* in a particular context. Langacker (1987: 52) proposes that language is a set of structures graded with reference to their prototypicality and entrenchment. Ernst Gutt (1991) uses in this context the concept of “interpretive resemblance, the sharing of thoughts between the intended interpretations, which in fact forms a continuum, between full and zero resemblance”. It is the theory of *Relevance* (Sperber and Wilson, 1986) first of all, which involves an *interpretive use* of language relying on *resemblance in semantic representation or logical form*. Gutt modified the claim to cover cases of inter-lingual communication, viz. translation, and proposed that translation should be considered *interlingual interpretive use* based on *interpretive resemblance*, i.e. a degree of similarity between various interpretations of a given form (consult Lewandowska-Tomaszczyk, 2015). In the terms proposed in the present paper, the parameters which function as the basis of a judgment concerning the degree(s) of resemblance between linguistic forms and their re-conceptualization measure include first of all the judgment as to a distance between the meaning used to that of a category prototype, then the degree of its *entrenchment* in a particular linguistic system and in the linguistic system of their user(s), type of the meaning *construal* (with reference to the structure of objects and events, together with their semanticized form) and the degree of *naturalness* (Lewandowska-Tomaszczyk et al., 2001), based on the frequency of the use of these meanings and their forms in a particular context.

6. Resemblance

A typology of resemblance, similarity, or *equivalence*, i.e., forms of *equal valence*, although neither fully symmetric, nor reflexive or transitive as the concept of *identity* in logic and mathematics, covers a variety of cases, from one-to-one prototype equivalence in the perceptual, functional, axiological, etc. terms, via equivalence of logical truth, ideology, metaphor, polysemy constituents (see Lewandowska-Tomaszczyk, 2007), to pragmatic functional equivalence, even more diverse and varied.

Resemblance is not a context-free idea but rather a dynamic notion. While a rose resembles a peony on the one hand and a pine tree is similar to a fir-tree on the other, there is much smaller similarity between a rose and a fir tree, even

though they *are* similar on a general level of PLANTNESS and ANIMATENESS (see Gärdenfors, 2004: 4, for the comparison).

In this context three major classes of equivalence can be identified (Lewandowska-Tomaszczyk, 2013a, 2013b): *generalized*, with equivalence captured on higher categorization levels, *parallel*, more closely *aligned*, typical for domain-specific texts, and *particularized (particulate) equivalence*, engaging a fine-grained, more explanatory specification of word meanings, either by going deeper into semantic precision or else covering comparative semantic levels of a wider range, reaching over to inter-categorical extensions.

Particularization and Particulate Communication can take different paths. *Depth particularization* provides a more detailed description of the meaning, frequently in definitional terms, e.g., *the form of a 'cohort studies', that is following single age groups through successive periods* (BNC). *Width particularization* involves extending the meaning, typically by creating new, inter-categorical links which frequently exploit figurative, most often metaphorical, resemblance as in *This links itself to the three previous parts because it displays a process which metaphorically or symbolically represents change* (BNC), while *Gestalt particularization* approaches functional equivalence and involves substituting an original portrayal of an event with a different one, nevertheless maintaining some salient aspects of resemblance, also in terms of implicational content e.g. *A: Debbie knew how to defend herself, I saw to that, but a kidnapping's something else. B: What exactly do you mean by 'defend herself'? A: In America the police in major cities run courses that teach women to defend themselves, particularly against rape* (BNC).

Equivalence can thus be limited to a 'coarse-grained picture' of linguistic meaning as in generalized equivalence, while in order to achieve a 'fine-grained picture' what is needed is access to the networks of both linguistic, encyclopaedic as well as interactional (on-line discourse) meanings, all aspects of which are possible reference levels for translational or monolingual communicative correspondences as when one employs in utterances interchangeably different levels of knowledge frames as in *switch on the light* [profiling the resultant stage of the activity *light*] – *switch on the lamp* [profiling a device of giving light with a bulb, holder and shade] – *switch on the bulb* [profile of a direct light emitter i.e., *bulb*].

Approximating strategies are particularly visible in casual spontaneous conversation, in which more is assumed than said, more is contextualized than expressed, or else, when a lot is said, it is usually at a fairly superficial level of communication. Particulate communication (particularization), quite often called forth in conversation, typically involves general definitions in informal contexts, sometimes repetitions or paraphrases, as observed in English conversational corpora (2 and 3, italicized):

(2)

at about half past seven tonight, after a tiring day at school, you know it's always tiring at Christmas time, *making decorations and all this sort of nonsense and things you know*

(3)

492 A	m
493 No C, Clara Bow	f
494 I haven't even heard of her	m
495 On the good ship lollipop oh that was Shirley Temple	m
496 The other one was a bit silly really cos it says what is not a shag ?	f
497 <i>What is not a shag?</i>	m
498 <i>Yeah, but it, erm, er something dance in the sixties, a medieval something or other and something else</i>	f

In written texts and translation one can also use glosses and footnotes to particularize and deepen the meaning layers. And yet, it should be remembered that glosses, footnotes and paraphrases, do not bring about *identical* meanings. Each new wordform, notwithstanding the fact whether it is of a particularized form, or else a lexicalized same-language synonym in one language or a one-word equivalent across languages, which satisfies the conditions of parallel *aligned* equivalence, possesses its own systems of meaning layers – conceptual, connotative, affective, thematic, etc., so meaning equivalence provided by particularization and alignment, cannot by definition provide the *same* meaning on the plane of content and construal. Compare (4):

(4)

- 37 Honda have just recently produced a motorbike that erm is microcomputer controlled.
- 38 There's also things like head up displays for cars.
- 39 Sorry, what do you mean 'head up' displays?
- 40 Well this is the situation where you would ideally you don't want to have to look down at a speedometer.

Question (39) in (4) is a request for clarification of the phrase, while (40) makes reference to situations in which such devices are used, so it does not provide what can be considered a definition in a strict sense of the term. Furthermore, each form used in the answer activated a range of meanings different from those in the item *head up* in (39).

Actually then, in no one of the three types of equivalence (generalized, aligned, particulate), are the forms considered equivalent in different languages, fully commensurable. It is rather *a whole array of forms and senses* with relevant concepts in either the linguistic variety as used by the speaker or in a given source language that corresponds to a lexical form or a cluster of forms in the other variety or language as used by the speaker.

6.1. Tolerance spaces and the tolerance threshold

In models of resemblance, it is hypothesized (Gärdenfors, 2004) that there exists a certain (determinate) *tolerance space* between meanings meant by the Speaker/Writer and the Addressee or Source Language (SL) and Target Language (TL) users, with a whole range of possible reconceptualizations of the source materials. The tolerance space is bounded by a certain, contextually defined, *tolerance threshold* that would curb the proliferation of the senses beyond a certain resemblance category – in order to counteract misunderstanding and a communicative failure. Peter Gärdenfors (2004) might have been inspired by the ideas of Roger Davidge Doherty and his colleagues (2003) and their investigation on texture deformation processes to see analogies with the linguistic phenomena. Gärdenfors treats similarities in terms of physical geometry as captured by the basic notions of *betweenness* and *equidistance* on a dynamic cline.

The questions arise as to the identification of the constraining factors on the semantic similarity and the tolerance measures and the tolerance threshold for semantic differences even if the language used by discourse participants is the same. In the light of the previous discussion of resemblance its tolerance threshold must be considered dynamic and context-sensitive, investigated with reference to a possible range of structures and meanings in the exchange and which fall within the lower and upper bounds of tolerance spaces, as Gärdenfors proposes. In an exchange, say, in which the word *son* is substituted by the more general *boy* (*I have one boy*) the approximate meaning associated with *boy* falls obviously *within* the (upper bound) tolerance space while the word *man* would clearly cross the threshold in this particular context and fall *outside* it. On the same note, while, say *Peter*, might be considered *within* the space in this context (*This is Peter/my son*), it would fall *outside* the (lower) bound in in the sentence signifying possession (*I have a son/?Peter⁶*). So, meanings can be viewed as Gärdenfors proposes *points* of a tolerance space, while similar meanings (synonyms, equivalents, paraphrases) are "within tolerance if they resemble each other in a certain specified sense". It is also clear that the testing of the semantic

⁶ The sentence *I have PETER* with an emphasis on the item PETER, on the other hand will be interpretable in contrastive terms, e.g., as a reaction to the statement as in: A *Your wife left you* B (*but*) *I have PETER*

tolerance threshold takes place in terms of syntactic constraints in actual language use.

The contexts in which particular meaning forms would cross the threshold and fall *outside the space* are significant. They are typically signaled verbally, e.g., by an interactional rejection (*Rubbish!*), misunderstanding (*Did I get it right?*) or lack of comprehension (*I don't understand it*), possibly accompanied by attempts of concept clarification.

An interesting aspect of discourse approximating strategies to narrow the gap in meaning is presented in neologisms and novel uses of language phraseology, e.g. in *peacetime person* in (5) from a corpus of English conversations (Svartvik 1990):

(5)

A: that would suggest that other countries must keep such people on tap rather wastefully for decades, what about all the people who turn out in wartime to be fir instance brilliant for cyphers [...]

B: [...] you don't need them during peacetime
[...]

A: I must say I don't think I'd be much use in a war, I feel I think I'm essentially a *peacetime person*

Jokes and humour are classic examples of semantic approximation as in this jokingly indirect request drawn from SPOKES BNC corpus (6):

(6)

515 I remembered the noise I remembered the noise as we went past the pub, so I went back to the pub and sure enough there were fifty Sorry thirty burly men. m

516 It was er er er rugby union obviously. m

517 There were at least thirty big men. m

518 I said Excuse me lads, just before you start playing can you give us a hand? m

519 What is it? m

520 You know. m

521 I says Well *I've got a van* m

*and it's too light at the
back.*

522

Can you Oh, they thought m
this was great.

However, for jokes to be interpreted in accord with the speaker and their intentions, the addressee needs to activate the whole underlying system of knowledge frames which are to undergo a semantic leap (Coulson, 2000) towards a semantic effect as planned by the speaker, in the case of (6) – the frame of a van and its functions.

Of special significance are also the novel uses and/or contexts as presented in children's language (*full size horsy* in 7), which can involve, as in this case, an approximation to a conventional phrase-formation mechanisms:

(7)

504 Nana there's that shop with that horsy in.

505 Oh on the Kettering Road?

506 Mm.

507 Used to have a beautiful, almost *full size* wasn't it?

508 What do you mean *full size*?

509 Horses come in *different sizes*.

510 Well it wasn't a *small model*.

511 But you get small ponies, I mean it could be a *life size model of a horse* that big.

Some other exchanges (8) exemplify mostly the attitudinal and emotive meanings, approximate by their very nature, as in the case of a narrative in which the phrase (agricultural) characters is used with reference to farmers or villagers and the form *chinz* for Indian printed cotton cloth and some very informal expressions (*bloody boil*):

(8)

straight into the public side of the bar; the nearest corner bar; and there were a certain number of *characters* who I think were waiting to sell some sheep or some cattle or something, mostly *agricultural characters* and obviously in the way, little *chinz* the little little you know transparent curtains were fluffing, they'd been watching the whole thing from their little corner and there was this sort of the *bloody boil*

To put it briefly, we can conclude by borrowing Gärdenfors's definition (2004: 165) of communication modelling as a *certain tolerance space maps*.

On the other hand, what cannot be disregarded in the discussion of meaning approximation is the value and significance of Gumperz's 'contextualization cues' (1982). Gumperz (1982: 133) proposes that "a contextualization cue is any feature of linguistic form that contributes to the signaling of contextual presuppositions" and they involve both linguistic signals such as prosody and intonation but also connotative, stylistic, etc., and others from higher levels of language representation. Interactants accommodate in discourse and that is how new uses and generalized approximation come into the system and can be viewed as *semantic shortcuts* in language communication.

The substitution of meanings both in one language or across languages is thus based on the (partial) broad semantic similarity. The similarity is observed on the perceptual/functional/axiological etc., levels, as well as (total or partial) *form* similarity, e.g., when the observer identifies similarities across phonetically or prosodically (dis)pleasing sounds or intonation across different languages and is impressed with the similarity of the approximate semantic effects received. The effects on the Addressee of the forms which display some types of similarity are reminiscent of Austin's utterance *perlocutionary effects* (1962), affecting the listener. For example, the English form *teeny weeny* indicating a small size, signalled by sound symbolic vowel clustering, may be considered equivalent to the effects generated by the diminutive suffix in the Polish form *malusieńki*. The phrase *sharp scratch* – equivalent to Pol. *ostrzy zgrzyt* can be taken to employ the same type of fricative consonants in both languages to achieve a desired semantic-acoustic effect of the scratching sound, approximating the original to some extent⁷.

Other types of examples can be given to present resemblance by the substitution of some emotion terms for others in some discourses. Such a substitution exemplifies admissible approximations falling within a particular tolerance space: *fear* is intersubstitutable with *anxiety* and Polish *strach* with *lęk* and *niepokój* from the same conceptual cluster of emotion terms (see equivalence patterns in (11)), while to substitute *fear* for say *contentment* might signal crossing the allowable boundaries of the space – at least in prototypical contexts.

6.2. Methods of resemblance identification

In general terms, a methodology of resemblance identification involves qualitative and quantitative methods. In quantitative terms, similarity, as

⁷ It would require further experimentation to investigate the *degree* of the similarity between the two phrases in terms of a comparison of corresponding perlocutionary (sound symbolic) perception effects on English and Polish audiences respectively.

proposed in the present work, is calculated on the basis of a frequency of co-occurrence of a unit (word, phrase, sentence) with other units in the same contexts. In order to calculate meaning differences the relevant linguistic units need to be juxtaposed in varying contexts and their frequencies calculated as e.g., in collocations with a continually larger and larger contextual span. Other frequency-based counts, besides contextual co-occurrences of lexis (collocations), lexical density, type/token ratio and word keyness can also be considered.

Qualitative research methods focus on *Extralinguistic Aspects* such as cultural dimensions, background knowledge frames or the speaker's personal (idiosyncratic) preferences on the one hand and *Intralinguistic Aspects* involving language typological criteria, stylistic parameters as well as construal parameters in a broad sense such as profiling, granularity etc. on the other.

Both monolingual communicative as well as translational points of reference in establishing resemblance of meaning across texts function as factual *tertia comparationis* in this process. For a communicative success to be interactionally achieved, there must exist some *constraints* on the *perceived resemblance* between concepts as used by the speaker and those interpreted by the addressee. The constraints are put on a scale of reconceptualization patterns which function as markers of a particular resemblance identity space, bounded by upper and lower tolerance thresholds with a gradable range of conventional interpretations.

Thus the most typical reference point to establish resemblance is the (perceived) similarity to a prototype of different nature as exemplified in one language synonymy and in translational correspondences (see Resemblance Matrix below).

RESEMBLANCE MATRIX

I. Reference to a prototype [distinct culture-bound prototypes]

Broad semantic criteria

- (i) perceptual [visual, acoustic, etc.] e.g., *houses* of different styles and design, prototypically possess a roof and an entrance (e.g. Eskimo *igloo* 'dome-shaped Eskimo hut, made of blocks of hard snow', 'house, 'dwelling of any dome-shaped construction' (Greenlandic *igdlo* 'house'); perceptual resemblance – basis for metaphoricity *pony* > *pony tail* [possibly crossing inter-categorical boundaries]
- (ii) reference to peripheral members, particularly in cross-linguistic concepts (e.g. Eng. *robin* in the English category of BIRDS and a corresponding *wróbel* 'sparrow' in Polish, with *robin* considered a more peripheral member)
- (iii) radial categories [polysemy constituents], involving in-group category members and inter-categorical links (reference to polysemic clusters in Lakoff's sense, 1987), possibly crossing the boundaries of one conceptual category.

- (iv) functional equivalence (e.g., Eng. *home* – Swahili *nyumbani* ‘hegave thehouse’ as ‘peaceinmy home’; Pol. *województwo* ‘voivodshop’ – Eng. ‘county, province’; in the Lord’s Prayer Eng *our daily bread* – Eskimo *our daily fish* Nida 1992; intralinguistic resemblance Eng. *symptom* – *sign*)
- (v) emotional [intra and interlinguistic resemblance: Pol. *lęk-strach*/ Eng. *anxiety/fear*]
- (vi) axiological [*patriotism* contrasted with or perceived as *nationalism*]
- (vii) conceptual coarseness / granularity (e.g., Eng. *in-laws* – Po. ‘family from husband’s side’, non-lexicalized in some languages; Pol. collective nouns e.g., *kwiecie* (flowers perceived as mass) – Eng. *flowers* vs. Pol. *listowie* – Eng. *foliage*).

II. phonetic resemblance – typically sound symbolic – similar acoustic-meaning effects. (e.g., *neologisms* in translation) e.g.:

Lewis Carroll’s *Jabberwocky*

Eng. *the slithy toves* –

translated into a number of versions into Polish such as, e.g.:

Pol. 1. ‘jaszmije smukwijne’ (by Maciej Słomczyński),

Pol. 2. ‘ślimonne prztowie’ (by Stanisław Barańczak),

Pol. 3. ‘szlisgich hopuch świr’ (by Janusz Korwin-Mikke)

Each of the above examples of *Jabberwocky* translations into Polish introduces also similar semantic effects by exploiting morphological/sound symbolic semantic similarities across the two languages, e.g. *slithy* > *smukwijne/ślimonne/szlisgich*

III. identical truth conditions, but different connotative meanings, e.g., Eng. honeysuckle (Latin *Lonicera*), metaphorically connoting sweetness and tenderness – Pol. botanical equivalent wiciokrzew przewiercń (Latin *Lonicera periclymenum*), both denote plants that grow along the ground, along another plant, or up a wall. The Polish form activates the connotations contrasting with those in English; it is primarily associated with creeping (Eng. creeper), penetrating, insinuating itself, thus involves negative contexts, opposite to the connotations associated with Eng. honeysuckle (example quoted from Jerzy Jarniewicz, 1992).

IV. ideology (Eng. my home is your home used as equivalent of Pol. gość w dom, Bóg w dom lit. ‘guest (at) home, God (at) home’)

V. metaphor, metonymy, etc. (Eng. touched, denotes pity and compassion, more foregrounded than in one of its Polish ‘touch’ equivalents such as dotknięty lit. ‘touched’, synonymous to Pol. urażony ‘hurt, angry, sad’)

VI. associative aspects, e.g., those based on intertextuality; (e.g. the title of a novel by a Polish science-fiction writer Stanisław Lem *Głos Pana* lit. ‘Lord’s/Master’s Voice’, associated with God and religious context, or linked to the meaning of a master and slave. Eng. translation *His Master’s Voice*, also activates the master image, but additionally connotes a trademark in the British music business 1890 with this dog listening to a cylinder phonograph (Lewandowska-Tomaszczyk, 2010).

VII. recontextualization, i.e., a modification in accordance with a new context conditioning (e.g., a running commentary on a winning football match of a Polish team: *Poland win – recontextualized as we win by a Polish translator*).

VIII. perspective change e.g., via changing of the focus in terms of syntactic shifts (e.g., the active-passive voice contrasts *I received/got those flower – I was given those flowers – They gave me those flowers – Those flowers were given to me – Those flowers were received by me*).

IX. pragmatic equivalence of discourse functions as e.g., in the adjacency pairs Eng. *Thank you – You’re welcome* Pol. *Dziękuję – Proszę* Pol. ‘Thank you’ – lit. ‘Please’

In all those categories a change of construal and a reconceptualization process are at work in interaction. The translated interpretations typically exhibit varying degrees of distance from the original thought and semantic content.

7. Cluster equivalence as a norm prototype – Cultural Models

The observations made with reference to intralinguistic communicative equivalence – synonymy, polysemy, paraphrase – and cross-linguistic equivalence, including translational correspondences between one language and another, unambiguously lead to positing a thesis concerning the presence of intra- and inter-linguistic *cluster equivalence*, which would replace conventional word-for-word or phrase-for-phrase substitution proposals. A systematic study of parallel corpus data, in the present case – the PARALELA PELCRA corpus at Łódź University – analysed with the corpus tools developed by Piotr Pęzik (2014) at Lodz University, provides ample evidence for a displacement of senses between English and Polish and generates large numbers of *series* of Polish-to-English and English-to-Polish cluster equivalence patterns. The Polish form *zgoda* can be presented as one such example. The form corresponds to a number of English equivalents in a cluster, which denotes understanding and agreement such as *consent, approval, acceptance, assent, agreement unanimity, reconciliation*, etc., primarily in legal and administrative contexts, *our yes, go ahead, this cannot be refused* in political negotiation discourse, as well as

largely informal *that's right, that's all right, that's all settled, very well, well then*, etc. in informal spoken discourse. Each of the cluster members it turn, corresponds to an equally rich cluster of Polish equivalents, combined around the category of agreement, but also extending over to other conceptual categories, which presents instances of English-to-Polish displacement of senses.

One can also make an attempt to infer more complex *Cultural Models* as well as the models referring to the construal of meanings and their tolerance spaces from parallel corpus data and cluster equivalence patterns, using quantitative measures and qualitative analysis of keywords and collocational profiles (Lewandowska-Tomaszczyk, 2012; Lewandowska-Tomaszczyk & Wilson, 2015). Cultural models capture distinct social conditioning of concepts, and can denote everyday habits and activities or more abstract thinking and reference. Examples can be given based on word and keyword frequencies as e.g., the frequencies of use presented in the decreasing order with respect to the object of drinking in English corpora: *water, tea, beer, wine, champagne, and whisky*, generated on the basis of their frequencies in English corpus samplers (20 mln, Microconcord and Longman corpora), vis-à-vis the decreasing frequencies of the collocates with the Polish verb *pić* 'drink' and its derivatives. The forms *alkohol* 'alcohol', *wódka* 'vodka', *piwo* 'beer', *wino* 'wine', and *woda* 'water' are evidenced in the Polish language data, specifically in PELCRA samplers of a comparable number of units to those of the Microconcord and Longman corpora (Lewandowska-Tomaszczyk, 2012). Below *drink* (9) and *pić* (10) collocates are presented as sources of cross-linguistic and cross-cultural comparison. They are generated from the British National Corpora and National Corpus of Polish respectively, using the HASK collocating tool (http://pelcra.clarin-pl.eu/hask_pl/, Pezik, 2014). The large data confirm the collocation patterns identified in the smaller corpora with *tea, coffee, water, wine* at the top of the list with food occupying the first position in English and *alcohol, beer, coffee* and *tea* – dominating in the Polish collocations (columns A in (9) and (10) indicate frequencies of particular collocations). When juxtaposed to English (9) the Polish list (10) presents also a less varied *drink* collocate pattern, referring to *types of drink* than that observed for English.

(9) *drink* Nominal Collocates⁸

#	Collocate	POS	A	TTEST
1	food	N%	224.0	14.36
2	tea	N%	172.0	12.84
3	coffee	N%	162.0	12.50
4	water	N%	136.0	10.29
5	wine	N%	103.0	9.84
6	beer	N%	63.0	7.73
7	cup	N%	68.0	7.55
8	alcohol	N%	58.0	7.44
9	lot	N%	71.0	7.18
10	pint	N%	50.0	6.96
11	milk	N%	50.0	6.77
12	whisky	N%	39.0	6.11
13	glass	N%	42.0	5.69
14	champagne	N%	34.0	5.69
15	bottle	N%	27.0	4.71
16	toast	N%	20.0	4.37
17	drink	N%	24.0	4.30
18	brandy	N%	16.0	3.90
19	sherry	N%	15.0	3.80
20	juice	N%	14.0	3.52
21	ale	N%	13.0	3.51
22	drug	N%	19.0	3.34
23	rum	N%	11.0	3.26
24	gin	N%	10.0	3.08
25	guinness	N%	10.0	2.98
26	whiskey	N%	9.0	2.97
27	smoke	N%	11.0	2.95
28	stuff	N%	13.0	2.79
29	soup	N%	9.0	2.79
30	vodka	N%	8.0	2.77
31	orange	N%	9.0	2.76
32	litre	N%	8.0	2.68
33	lemonade	N%	7.0	2.61

⁸ The first column in the collocate tables indicates the frequency of occurrence ranking, the second (Collocate) identifies a particular collocate. The column POS identifies the collocate part of speech, column A presents the frequency of occurrence of particular collocations in BNC and NKJP respectively (National Corpus of Polish), and the last column TTEST shows the significance level of the frequencies. In Polish collocate tables, English equivalents are provided.

(10) *pić* Nominal Collocates

#	Collocate	POS	A	TTEST	
1	alkohol	noun	1249.0	35.06	'alcohol'
2	piwo	noun	913.0	30.01	'beer'
3	kawa	noun	775.0	27.66	'coffee'
4	herbata	noun	700.0	26.30	'tea'
5	woda	noun	737.0	26.01	'water'
6	wino	noun	650.0	25.23	'wine'
7	wódka	noun	634.0	25.04	'vodka'
8	mleko	noun	273.0	16.27	'milk'
9	sok	noun	154.0	12.30	'juice'
10	raz	noun	363.0	12.17	'once'
11	wszyscy	noun	191.0	11.52	'all'
12	co	noun	617.0	11.25	'what'
13	szampan	noun	120.0	10.87	'champagne'
14	napój	noun	115.0	10.50	'soft drink'
15	umór	noun	96.0	9.79	'get dead drunk'
16	rew	noun	113.0	9.48	'blood'
17	butelka	noun	98.0	9.43	'bottle'
18	jedli	noun	87.0	9.28	'(they) ate'
19	ojciec	noun	136.0	8.78	'father'
20	zdrowie	noun	120.0	8.73	'health'
21	szklanka	noun	78.0	8.54	'glass'
22	ogół	noun	114.0	8.40	'all'
23	ludzie	noun	213.0	8.30	'people'
24	mężczyzna	noun	119.0	8.14	'male'
25	whisky	noun	65.0	7.99	'whisky'
26	kieliszek	noun	66.0	7.87	'(alcohol) glass'
27	herbatka	noun	60.0	7.68	'tea (diminutive)'
28	kto	noun	170.0	7.62	'who'
29	papieros	noun	68.0	7.56	'cigarette'
30	drink	noun	58.0	7.52	'a drink'
31	ilość	noun	77.0	7.43	'amount'
32	polak	noun	54.0	7.34	'Pole'
33	osoba	noun	218.0	7.12	'person'

The cross-linguistic collocation data, enriched by the qualitative discourse analyses of the materials, can help infer distinct *Cultural Models* in such cases, typical of particular language users' communities. They also epitomize language-specific approximation of meaning (for the verbs of drinking and their collocates in this case) as used in Polish and English discourses.

Another dimension to exemplify cross-linguistic indeterminacy and ways to manage it in translation involves cultural models of emotions. As can be observed with respect to emotion models, e.g. FEAR terms in (Lewandowska-Tomaszczyk & Wilson, 2013), a cluster of *fear*-related concepts in the verbal object position, generated from the corpus materials, indicate language/culture-specific *fear* causes and stimuli, both more universal e.g., *death, crime* – as well as also more restricted such as *Nazi*, or else individual and emergent like *dogs*. The latter categories are more varied and involve culture-specific Emotion Event scenarios (Lewandowska-Tomaszczyk & Wilson, 2013). In numerous other cases typically presuppositional or implicational senses such as *cowardice*, are generated from extended distributional contexts. The causes, stimuli and other circumstantial properties of a concept in one language (SL, Polish in (11)) are often used as an extended cluster of translational equivalents in another language (English in (11)). What is also evident in (11) is *the extension of the tolerance measures* from a prototypical, more universal space via more extended, culture-bound equivalence to individual and circumstantial conditioning of events.

(11)

Pol. STRACH-to-Eng. FEAR extended cluster

(i) Prototypical tolerance:

- Trivial tolerance: Pol. *strach* – Eng. *fear*

(ii) CLUSTER tolerance:

- Pol. *strach* – Eng. [arousal] *anxiety, terror, horror*
- Pol. *strach* – Eng. [presuppositional/implicational] *cowardice*

(iii) CAUSAL tolerance:

- [stereotypical – more universal] Pol. *strach* – Eng. *death, crime*
- [social] Pol. *strach* – Eng. *Nazi, God*
- [individual] Pol. *strach* – Eng. *dogs* [emergent]

Quantitative distributional data involving the frequencies of collocates are also revealing in respect of other complex emotion clusters. *Love* in English and *miłość* in Polish indicate a preferred companionate, family and religious profile for *miłość* (see 12) and a more individualistic one for English *love* (see 13) (Lewandowska-Tomaszczyk & Wilson, 2015) in the sense of Hofstede's cultural dimensions (2001).

(12) Pol. *miłość* 'love'

Nominal Collocates

	Collocate	A	TTEST	MI3	English equivalents
1	bliźni	425.0	20.35	23.74	'fellow human being'
2	Bóg	529.0	13.48	19.36	'God'
3	ojczyzna	157.0	9.58	16.68	'fatherland'
4	polak	17.0	4.04	13.96	'Pole, Polish'
5	nieprzyjaciel	20.0	3.11	10.36	'enemy'
6	bliźnia	10.0	2.37	8.65	'fellow human being'
7	stwórca	12.0	2.00	8.41	'creator'
8	niejedno	12.0	1.82	8.24	'not one, many'
9	wierna	26.0	1.59	9.94	'faithful'
10	małżonkowie	15.0	0.48	8.00	'married couple, spouses'
11	kochana	7.0	-1.42	4.99	'loved, dear'
12	ludzkość	8.0	-3.67	4.79	'humanity'
13	lud	11.0	-5.80	5.45	'people'
14	rodzice	90.0	-7.53	12.14	'parents'
15	spojrzenie	11.0	-11.38	4.77	'look'
16	poeta	8.0	-13.40	3.47	'poet'
17	dusza	11.0	-14.59	4.48	'soul'
18	matka	74.0	-15.40	10.93	'mother'
19	para	7.0	-18.15	2.64	'couple'
20	mąż	18.0	-23.92	5.60	'husband'

(13) Eng. *love*

Nominal Collocates

#	Collocate	POS	A	TTEST	MI3
1	affair	N%	231.0	13.26	18.68
2	song	N%	76.0	5.86	14.10
3	bite	N%	29.0	4.73	12.77
4	story	N%	107.0	3.96	14.18
5	scene	N%	63.0	3.89	12.92
6	triangle	N%	11.0	2.15	8.43
7	potion	N%	5.0	1.98	7.82
8	nest	N%	14.0	1.97	8.69
9	poetry	N%	18.0	1.86	9.17
10	feast	N%	9.0	1.81	7.67
11	philtre	N%	3.0	1.71	9.49
12	tryst	N%	3.0	1.65	7.57
13	songs	N%	3.0	1.63	7.26
14	token	N%	7.0	1.58	6.92
15	shack	N%	3.0	1.37	5.45
16	rolle	N%	3.0	1.35	5.36
17	cheat	N%	3.0	1.31	

8. Final words

In the process of uncovering the ways of approximate communication, the present study has employed both qualitative as well as a frequency-based research approach. It presents samples of a system of *preferred* rather than discreetly delineated meaning usage patterns in language that account for meaning approximation practices. In the cases of mapping of one conceptualization system inferred from language data in terms of form-meaning clusters on that of other ones, the study identifies Cultural Profiles inferred from the displacement of senses and the re-conceptualization types dominant across particular pairs of languages or language varieties as well as the patterns of meaning approximation and correspondence *clusters* with regard to intra- and inter-linguistic communication types. The *extension of the resemblance tolerance measures* is also observed from *prototypical*, more universal patterns, through *culture-specific* preferences, to more fully *individualized* and *circumstantial* equivalence conditioning.

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Corpora

British National Corpus

A Corpus of English Conversation [CEC]

NKJP [www.nkjp.pl] *National Corpus of Polish*