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# APPROXIMATION AS A CONSTITUENT OF WORLDVIEW V.V. Mykhaylenko (Chernivtsi, Ukraine)

**V.V. Mykhaylenko. Approximation as a constituent of worldview**. The present paper is focused on functional semantics of approximators in the author's discourse. The conceptual system of 'approximation' and its verbalizer – a semantic domain of approximators – are modeled. It is proved that approximators transform objective 'precision' into 'subjective' vaguenes, provided the interlocutors' common presupposition in the 'non-professional' discourse.

**Key words:** ambiguity, approximation, approximator, vagueness, corpus, discourse, generality, semantic domain, specification, worldview

**В.В. Михайленко. Апроксимація як складова картини світу.** Стаття присвячена функціональній семантиці апроксиматорів у авторському дискурсі. Змодельовано концептосферу 'апроксимація' та семантичне поле 'апроксиматорів'. Доведено, що апроксиматори трансформують об'єктивну точну номінацію у суб'єктивну приблизну тільки при загальній пресупозиції комунікантів у структурі 'непрофесійного' дискурсу.

**Ключові слова:** апроксиматор, апроксимація, дискурс, картина світу, корпус, семантичне поле, узагальнення, уточнення.

**В.В.** Михайленко. Апроксимация как составляющая картины мира. Статья посвящена функциональной семантике апроксиматоров в авторском дискурсе. Смоделированы концептосфера аппроксимации и её вербализатор — семантическое поле апроксиматоров. Доказано, что апроксиматоры способны трансформировать объективную 'точность' в субъективную 'размытость' при общей пресуппозиции коммуникантов в структуре 'непрофессионального' дискурса.

**Ключевые слова:** апроксиматор, апроксимация, дискурс, картина мира, корпус, обобщение, семантическое поле, уточнение.

#### Introduction

The semantic value of the word is not clear-cut and borderlined, for instance. 'engineer' is a person whose job is to design or build machines, engines, or electrical equipment, or things such as roads, railways, or bridges, using scientific principles: a civil engineer, a mechanical/structural engineer, a software engineer 'a person whose job is to repair or control machines, engines, or electrical equipment: a computer engineer. Besides, word meaning may include some components characteristic of the National Variant, cf: UK 'engine driver', US 'train driver.' We may go back to M. Black [Black 1937: 427–455] who admitted the vagueness of

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word meaning in natural languages and later H. Hersch, M. Caramazzo [Hersch, Caramazzo 1976: 254-276] developed the idea of the vague character of notions in natural lanaguages. Anna Wierzbicka [Вежбицкая 2011: 116] fully supports the referred thesis but she cannot agree with their statement that word meaning is represented by a set of vague and fuzzy semantic components. She cited the example of 'tree' [Langacker 1987: 133] and in her "Lexicography and Conceptual Analysis" [Rowe, Bakel: 2011] she offered, clear-cut interpretations for 'tree' and other concepts of such type. The author also explicates a number of English 'approximators (approximatives)' such as around, about, approximately, roughly, at least, at the most, almost and nearly. In each case, she offers a paraphrase substitutable for the particle itself. She argues against a 'radically pragmatic' approach to particles, advocated by Sadock and others, and advocates an alternative, 'radically semantic' account. She tries to show that even the vaguest 'hedges' and 'approximatives' can be given rigorous semantic explications, which correctly account for the particles' use. The components themselves may be not precise but they must be 'subjective' and they do not refer to external reality but rather to language means of conceptualizing of that reality [Santos 1998: 597–613].

There is wide agreement that a term is vague to the extent that it has borderline cases. This makes the notion of a borderline case crucial in accounts of vagueness. Vagueness can be contrasted with ambiguity and generality. This will clarify the nature of the philosophical challenge posed by vagueness, supervaluationism and contextualism [Putnam 1975: 71–98]. The issue of whether all vagueness is mainly linguistic. It is standardly defined as the possession of borderline cases, for instance, a 1.8 meter man. No amount of conceptual analysis or empirical investigation can settle whether a 1.8 meter man is tall. Accordingly, several philosophers characterize higher order vagueness as an illusion [Santos 1998: 133–160]. Ambiguity and vagueness also contrast with respect to the speaker's discretion. If a word is ambiguous, the speaker can resolve the ambiguity without departing from literal usage.

Ambiguity is important and it is worth examining what the phenomenon is and how it differs and relates to similar phenomena such as indexicality, polysemy, vagueness, and especially sense generality. Ambiguity is generally taken to be a property enjoyed by signs that bear multiple (legitimate) interpretations. In common parlance, the word 'ambiguity' is used loosely: often simple underspecificity will suffice for a charge of ambiguity [Langacker 1987: 458–508].

Crispin Wright considers that vague concepts define the world rather as an imperfect focused slide defines an image [Wierzbicka 1985: 133]. The discussion of 'vagueness' in linguistics mostly focusses on the interpretation of so-called 'gradable adjectives'. Within that class a difference is made between relative adjectives like 'tall' and absolute adjectives like 'flat'. An important difference between these two types of adjectives is that in contrast to relative adjectives, absolute adjectives allow for natural precisifications: if we fix a level of granularity, relative adjectives are still vague, but absolute adjectives are not. Still, also absolute adjectives give rise to

vagueness. This suggests that vagueness also has something to do with what a natural, or appropriate, precisification is.(Robert van Roojen) Linguistic nominalism identifies concepts with the linguistic expressions used to express them (with [star] being identified with the predicate "is a star," perhaps). Type linguistic nominalism identifies concepts with types of verbal expressions (with [star] identified with the type of verbal expression exemplified by the predicate "is a star").

In the present paper the functions of approximators to define the meaning of the Noun Phrase is under study. Our hypothesis is that the author tries to partially devague NPs using those 'particles.' On the one hand, it is necessary for the author to define time, place, or volume of the object while generating discourse, on the other hand, for the reader to interprete the characteristics of the object. The text fragments illustrating various discourse registers of Modern English represented in the British National Corpus (a 100 million word collection of samples of written and spoken language from a wide range of sources) are singled out and the quantative characteristics of approximators are also employed in the investigation.

#### Discussion

Conceptual analysis is one of the main traditional methods of philosophy, arguably dating back to Plato's early dialogues. The basic idea is that questions like 'What is knowledge?', 'What is justice?', or 'What is truth?' can be answered solely on the basis of one's grasp of the relevant concepts. The standard procedure for testing such an analysis is by means of counterexamples, typically in the form of hypothetical cases as they are used in thought experiments. A counterexample may speak against the necessity of some of the conditions, or against the sufficiency of the conditions. Almost all of the elements of this traditional conception of conceptual analysis are controversial, but it still continues to guide a considerable amount of philosophical research.

Although conceptual analysis, construed decompositionally from the time of Leibniz and Kant, and mediated by the work of Moore, is often viewed as characteristic of analytic philosophy, logical analysis, taken as involving translation into a logical system, is what inaugurated the analytic tradition (Joachim Horvath). A good statement of the traditional conception of conceptual analysis is Grice's "Postwar Oxford Philosophy" in Grice 1989. Unfortunately, there are not many focussed discussions of the method of conceptual analysis, which often tend to be intertwined with other philosophical issues. Important contributions by some of the main proponents of conceptual analysis in the last few decades are Lewis 1970, Lewis 1994, Strawson 1992, Bealer 1998, Jackson 1998, Peacocke 1998, Chalmersand Jackson 2001, Goldman 2007, Henderson and Horgan 2011, and Chalmers 2012. Critical discussions that the method of conceptual analysis can be found in Putnam 1970, Putnam 1975, Ramsey 1992, Millikan 1993, Block and Stalnaker 1999, Weinberg et al 2001, Laurence and Margolis 2003, Williamson 2000, Williamson 2007, and Kornblith 2007, Mykhaylenko 2014.

The classical theory of concepts is one of the five primary theories of concepts, the other four being prototype or exemplar theories, atomistic theories, theory-theories, and neoclassical theories. The classical theory implies that every complex concept has a classical analysis, where a classical analysis of a concept is a proposition giving metaphysically necessary and jointly sufficient conditions for being in the extension across possible worlds for that concept. The classical view also goes by the name of "the definitional view of concepts," or "definitionism," where a definition of a concept is given in terms of necessary and jointly sufficient conditions.

Conceptual analysis is a philosophical method, the activity of attempting to clarify the meanings of concepts or ideas by employing logical devices. It tries to discover what elements a concept is composed of and how these elements are related. It also states the relations between certain concepts and the necessary and sufficient conditions of the application of given concepts [Iranmanesh, Piri, Adolhasani 2009: 443–452]. Conceptual analysis is the basis for propositional analysis. Only when we understand the meaning of a word can we employ it in formulating precise questions and thus provide correct solutions [Mykhaylenko 2014].

For analytical philosophy, this activity of reaching the understanding of a given concept is vital. In its early period, conceptual analysis was taken as a synonym of philosophy. "So his (i.e., the analytical philosopher's) self awarded title of 'analytical philosopher' suggests 'conceptual analysis' as the favoured description of his favoured activity."

Modeling an approximation system [Indurkhya 1987: 445–480] as a fragment of the English worldview we manage to reveal the following constituents: estimation, overestimatiom, underestimation, calculation, scalalage, rating, and underrating. If the concept approximation is represented by the lexeme approximation then its nucleus semantic component must be estimation. There may be two subsystems represented by the constituents underestimation and overestimation. The means of verbalizing this system may vary from lexical grammatical (nouns, pronouns, adjectives, verbs) to syntactical (phrases and sentences). Our object under study is approximator which traditionally belongs to the lexical grammatical category of adverbs [Thomason, Stalnaker 1973: 195–220] or in the discourse analysis it is termed as a 'particle.' Further on the semantic analysis (definitional and componential) can help model a semantic domain to represent the referred conceptual system.

## **Investigation**

Approximation is "something that is similar to something else but is not exactly the same" was registered in 1400-50 as 'approximacioun' borrowed from Middle French which in its turn was borrowed from Medieval Latin 'approximātiōn', see the stem: 'approximātiō'. Primarily in Mathematics it is 'the process or result of making a rough calculation, estimate, or guess; an imprecise or unreliable record or version; an inexact number, relationship, or theory that is sufficiently accurate for a

specific purpose; an estimate of the value of some quantity to a desired degree of accuracy; an expression in simpler terms than a given expression [Rowe, Bakel 2011: 229–230] which approximates to it; the act or process of drawing together; the quality or state of being close or near 'an approximation to the truth' or 'an approximation of justice.'

According to Crispin Wright [Wright 2010: 133] vague concepts carve out their extensions rather than a blurred shadow carves a region of their background on which it is cast. Consequently, between the extension of such a concept and that of if its complement, lies a blurry pemubral region – the domain of the borderline case. Vagueness is a pervasive feature of natural language.

Members of almost any lexical category can be vague. Prototypical vague expressions are adjectives like 'tall', 'fast', 'red', and 'adolescent'. The Sorites Paradox is the hallmark of vagueness and formulated in terms of a noun, 'heap'. But also many adverbs ('very', 'rather', 'probably', 'softly', 'well') and quantifiers ('many', 'a lot', 'a few') give rise to vagueness [Rooij 2011: 195–220]. In fact, no linguistic expression whose meaning involves perception and categorization can be entirely free of vagueness. This is true for proper names and definite descriptions ('Amsterdam', 'the border between Belgium and the Netherlands'), verbs like 'start', 'finish' and 'understand', but also for more abstract linguistic categories such as tense (past or future) and aspect (perfective or imperfective). If a vague term occurs in a complex expression, this complex expression is often vague as well. Because 'very' and 'a heap' are vague, the expressions 'very sick' and 'not a heap' are vague too. Some expressions turn vague expressions in complex expressions that are less vague. A measure phrase is a prototypical example (turning 'tall' into '3 feet tall'). Other expressions have the opposite effect: while '2 o'clock' is not vague, when we combine it with a hedging expression like 'approximately', 'about', 'almost', 'roughly', etc. it becomes vague. Lakoff gives a list of more than 60 hedging expressions, and discusses in what sense they differ in meaning [Lakoff 1973: 458– 508].

Vagueness should also be contrasted with context dependence. Whether what is expressed by a sentence like '*I am Robert*' is true or false obviously depends on who (of potentially infinitely many persons) utters it, a context dependent fact. Vagueness and context dependence are in principle independent properties, although they often co-occur. Left and right are contextdependent but not (very) vague, whereas nouns like vegetable and bush are vague but not (very) context dependent (Kamp & Partee, 1995). The fact that natural language is context dependent complicates, but does not threaten truth-conditional semantics [Rooij 2011: 4].

<u>Approximately</u>, an adverb, means 'close to; around; roughly or in the region of.' According to its dictionary definition 'approximately' must be used to express 'indefinite distance,' however, the text fragments (2828 cases) singled from the British National Corpus representing various discourse registers (economy, education, cuisine, history, etc.) reveal some more functional semantic components, e.g.:

## APPROXIMATELY + (Num + N [SUM])

Japan has few energy resources of its own and it has learnt to be frugal: energy prices are approximately twice those in Britain. <u>AB6</u> 646.

Approximately twice ← twice twice those in Britain.

### $APPROXIMATELY + NP \leftarrow Num + N [SIZE])$

A letter had been received from Perin's Community School asking the council's reaction to the possible building of a small swimming pool, approximately 8 by 12 metres, which would serve both the school and the local population. B031935.

Approximately 8 by 12 metres  $\leftarrow$  8 by 12 metres.

## $APPROXIMATELY + NP \leftarrow Num + N [TIME]$

Combine wine, water, sugar and spice in a glass jug and microwave on high for approximately 4 minutes or until boiling, or boil in a saucepan. <u>BN 5</u> 776.

approximately 4 minutes ← 4 minutes

# $APPROXIMATELY + NP \leftarrow Num + N [DISTANCE]$

When the ice at last melted and the seas rose, Sri Lanka had not only drifted apart from its parent India, it had become cut off by an ocean gap of approximately 20 miles (32 km). <u>CK2</u> 800.

Approximately 20 miles  $\leftarrow$  20 miles.

## $APPROXIMATELY + NP \leftarrow Num + N [INSTITUTION]$

The latter came into existence following the demolition of the colleges of education in the latter part of the 1970s and now number approximately 70 institutions. GUV472.

# Approximately 70 institutions $\leftarrow$ 70 institutions

'Approximation' is the dominant component of the meaning of the f llowing adverbs: nearly, about, almost,: around, ballpark figure, bordering on, circa, close to, closely, comparatively, generally, in the ballpark, in the neighborhood of, in the region of, in the vicinity of, just about, loosely, more or less, most, much, not far from, not quite, proximately, relatively, roughly, upwards of, very close constituting the Semantic Domain of 'Approximation' [Iranmanesh, Piri, Adolhasani 2009: 443–452].

<u>About</u>: 'reasonably close to; on the verge of — usually used with be and a following infinitive; used with a negative almost to express intention or determination; on all sides; around; in rotation, around the outside; here and there; in the vicinity; near; in the opposite direction'. There are 195782 cases of about in the BNC, e.g.:

#### ABOUT + (N) TIME

For about a year afterwards Anna received aromatherapy massage whenever she felt the need – once, sometimes twice, a month. B06 392.

To judge from the pottery found with it, the famous Phaistos Disc dates to about 1700 BC. CM9 542.

about 1700 BC. ← 1700 BC.

 $ABOUT + NP \leftarrow Num + N [QUANTITY]$ 

And about eighty jobs in Swindon may be at risk. K1R 57.

About eighty jobs ← eighty jobs

# $ABOUT + NP \leftarrow Num + N [VOLUME]$

As a rough guide base rates are usually kept within about a  $\frac{1}{4}$  per cent margin either side of market rates. K8W 1004.

About a  $\frac{1}{4}$  per cent margin  $\leftarrow \frac{1}{4}$  per cent margin.

<u>Around</u>: as an adverb (without a following noun; after the verb 'to be'): ahead, anticlockwise, around, clockwise, clockwise, counterclockwise, cross-country, down, downwind, eastbound, homeward; direct, advancing, oncoming, up, forward, towardsfrom all sides; used oncoming, hedged in with/by. There are 43403 cases of 'around' registered in the BNC, eg:

# AROUND + NP [PART OF A BODY]

1. Everyone so enjoined slaps his dog around the ears, and they all seem to enjoy it. ABS2240.

Around the ears  $\leftarrow$  the ears.

## AROUND + PrepNP [PLACE]

2. Isn't there enough work around in the UK? APL 126.

Around in the UK  $\leftarrow$  in the UK.

## $AROUND + NP \leftarrow Num + N [VOLUME]$

3. The message is simple: if Sizewell saves around  $\frac{1}{2}$  M tonnes of oil a year it is definitely worth having; if not, it becomes marginal. B7A 97.

Around ½ M tonnes ← ½ M tonnes

#### AROUND + IP [SUBJECT]

4. I'd have loved to have built a 10-year career around him, but I fully understand his reasons for going. CBG 5456.

#### Around him ← him

<u>Most</u>: 'to the greatest or highest degree —often used with an adjective or adverb to form the superlative; to a very great degree;' nearly all, the majority, the mass, almost all, the bulk, the lion's share, the preponderance. There are 98057 cases in the BNC, e.g.:

# 5. $MOST + PrepNP \leftarrow Of + N + N [NUMBER]$

Awareness of opinion polls was most predictable in the Pre-Campaign Wave. A62 407.

Most predictable ← predictable.

## $MOST + PrepNP \leftarrow Of + Adj + N [COLOUR]$

6. The astral body, also known as the emotional body, reflects most of the auric colouring. B06 681.

Most of the auric colouring  $\leftarrow$  the auric colouring.

#### $MOST + PrepNP \leftarrow Of + N [LIQUID]$

7. Most of the rest of the iodine reached the population via milk, produced all over the country, that was not banned. B74 112.

Most of the rest of the iodine  $\leftarrow$  the rest of the iodine.

MOST + Part P ← Adv + PII [FREQUENCY]

8. That need is most frequently satisfied by recourse to a nut or three. B7D 471. Most frequently  $\leftarrow$  frequently.

<u>Almost</u>, adv.' – very nearly but not exactly or entirely;' nearly, about, approaching, close to, virtually, practically, roughly, all but, just about, not quite, on the brink of, not far from, approximately, well-nigh. There are 30348 cases in the BNC, e.g.:

## $ALMOST + NP \leftarrow Num + N [SUM]$

9. By 1983 these services accounted for almost £I billion of the annual budget and any savings made there could be transferred to the main activity of treating patients. ABU 1153.

Almost £I billion  $\leftarrow$  £ I billion.

# $ALMOST + All + Prep NP \leftarrow Of + N's + Adj + N [TERRITORY]$

10. Almost all of the world's tropical forests are in developing counties where rapid population growth means that the pressure on land for food production is high. B1E 209.

Almost all of the world's  $\leftarrow$  all of the world's.

# $ALMOST + NP \leftarrow Adv + Num + N [OBJECT]$

11. These are almost certainly first records for these species. AML 1092.

Almost certainly ← certainly.

# $ALMOST + NP \leftarrow I + N [TIME]$

12. The heaven appeared almost all night as if it were burning' — AD 1098. B7.I 1878.

Almost all night ← Almost all night.

#### ALMOST + Adj P [COMPLETION]

13. In general they claim that recovery of the polluted parts of the Sound is almost complete. J3H 734.

Almost complete ← complete.

# $ALMOST + NP \leftarrow Adv + N [CERTAINTY]$

14. Thomas Gower became a leading figure in the Sheriff Hutton connection and was almost certainly constable of the castle itself, although this is nowhere explicitly stated. EEE 388.

Almost certainly  $\leftarrow$  certainly.

<u>Near</u>, adv. – 'at, within, or to a short distance or time; almost, nearly; in a close or intimate manner; closely (near related); archaic: in a frugal manner'. There are 17881 in the BNC, e.g.:

## $NEAR + PrepNP \leftarrow To + N [AIM]$

15. Through ceaseless activity and a triumph of will-power, she had by 1987 come as near to success as was possible for one, self-sufficient human being. A66 1640.

Near to success  $\leftarrow$  to success.

#### NEAR + NP [PLACE]

16. They also owned Longfords Mill near Avening. ANC 601.

near Avening ← Avening

17. Common Scoter are virtually confined to the open sea, although oiled birds will visit fresh water near the coast. B31 1269.

#### Near the coast $\leftarrow$ the coast

<u>Nearly</u>, adv. – 'in a close manner or relationship (nearly related); almost but not quite (nearly identical; nearly a year later); to the least extent (not nearly as good as we expected).' There are 11148 cases in the BNC, e.g.:

#### $NEAR LY + NP \leftarrow Num + N [TIME]$

18. The problem was not so easily solved, nor do I believe, nearly half a century later, that it has been happily settled yet. B11 425.

Nearly half a century later ← half a century later.

#### $NEARLY + NP \leftarrow All + I + N [QUANTITY]$

19. Nearly all our crew were to tell us harrowing anecdotes of personal encounters with hungry pythons – some of which had been measured at over twenty-eight feet long. FEP 1190.

Nearly all our crew ← all our crew.

<u>Closely</u>, adv. – 'around, by, near, hard, in, nearby, nigh'. There are 5434 cases in the BNC, e.g.:

### CLOSELY + NP ← PII+N [STATE OF OBJECT]

20. Pairwise comparisons of closely related species support this prediction. CRM 9925.

Closely related species ← related species/

<u>Virtually</u>, adv. – 'in fact or to all purposes; practically; almost but not quite; nearly'. There are 4331 cases in BNC, e.g.:

#### VIRTUALLY + NP [STATE]

21. The British were dismayed but a further memorandum from the Americans in January 1943 was virtually a declaration of dissociation. B78 1220.

Virtually a declaration of dissociation ← a declaration of dissociation

# $VIRTUALLY + NP \leftarrow I + N [OBJECT]$

22. Virtually every plant that has grey leaves will press well (apart from the ones that are too fat in the leaf). CE4 28.

Virtually every plant ← Virtually every plant.

<u>Nigh</u>, adv. – 'near in place, time, or relationship —often used with on, onto, or unto; neary, almost'. There are 100 cases in the BNC, e.g.

#### $NIGH + NP \leftarrow NUM + N [TIME]$

23. In this poem he thanks his benefactor for obtaining his release after 'Well nigh sev'n years' of captivity.' CFX 1091.

Nigh sev'n years ← nigh sev'n years

Standard Gricean pragmatic explanations of the use of language assumes that communication is a cooperative affair. In such a situation it never does any harm to be as precise as possible (disregarding processing costs). Thus, being vague can never be advantageous. This is in accordance with a standard game theoretical result saying that messages with precise meanings can be communicated successfully only in case the preferences of speaker and listener coincide.

Approximators limiting vagueness of meaning expressed by the following nouns, adjectives and adverbs [Bellert 1977: 337-35] can model the Semantic domain of 'Approximation" in English: nearly, almost, practically, almost but not quite nearly, around, by, near, hard, in, nearby, nigh, almost but not quite, nearly identical, to the least extent, almost, nearly; in a close or intimate manner, closely, nearly about, approaching, close to, virtually, practically, roughly, all but, just about, not quite, on the brink of, not far from, approximately, well-nigh, nearly all, almost all, ahead, anticlockwise, around, clockwise, anticlockwise around, clockwise, up,; counterclockwise. crosscountry, downwind. direct. down. homewardadvancing, oncoming, ahead, forward, into towards, bound for something, from all sides, almost, on all sides, around, in rotation, around the outside; here and there, in the vicinity, near, in the opposite direction'.

Some of these expressions can turn vague expressions in complex expressions that are less vague. A measure phrase is a prototypical example (turning 'tall' into '3 feet tall'). Other expressions have the opposite effect: while '2 o'clock' is not vague, when we combine it with a hedging expression like 'approximately', 'about', 'almost', 'roughly', etc. it becomes vague. G. Lakoff [Lakoff 1973: 458–508] gives a list of more than 60 hedging expressions, and discusses in what sense they differ in meaning. The adverbs: approximately, nigh, virtually, closely, nearly, near, about, almost, most, and around are used by the author to introduce an aspect of vafueness and to appromitize precise to express the state of the characters, the state of things, the state of the society, and the state of the community.

#### **Conclusions and further research**

Concept analysis is a formal linguistic exercise to determine certain defining attributes. The basic purpose of concept analysis is to clarify ambiguous concepts in a theory, and to propose a precise operational definition which reflects its theoretical base [Langacker 1987: 56–59]. A final reason why vague expressions are so prevalent in natural language might be that vague expressions are very useful to make value judgments [Franks Veltman, 2002].

As universals, concepts may be treated under any of the traditional accounts of universals in general. Realism about concepts (considered as universals) is the view that concepts are distinct from their instances, and nominalism is the view that concepts are nothing over and above, or distinct from, their instances. Conceptualism with respect to concepts holds that concepts are mental entities, being either immanent in the mind itself as a sort of idea, as constituents of complete thoughts, or somehow dependent on the mind for their existence (perhaps by being possessed by an agent or by being possessible by an agent). Vagueness in linguistics is a problem about the meaning of linguistic expressions. It seems natural to assume that to be a competent speaker of English one has to know what it means for 'John came' to be true or false [Rooij 2011: 3]. Different agents can possess, grasp, or understand the same concept, though such possession might come in degrees. Approximators are

mainly used to partially devague the meaning of nouns, adjectives, and adverbs reprenting semantic domains of time, place, and quantity.

It is standardly assumed that the existence of vagueness in natural language is unavoidable in ordinary discourse. Our powers of discrimination are limited and come with a margin of error, and it is just not always possible to draw sharp borderlines [Rooij 2011: 6–7]. Though professional discourse must avoid vagueness and its approximators which may incur willful distortion of meaning in the legal discourse these issues need a thorough investigation.

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