The 1st Context, Cognition and Communication Conference

Context dependence in language, action and cognition

BOOK OF ABSTRACTS

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KEYNOTE SPEAKERS

GENOVEVA MARTI Meaning, Culture and Context

ICREA and Universitat de Barcelona

Recent discussions of semantic theory cast doubt on the universality of the intuitions that drive the Kripke-Putnam approach to the semantics of singular and general terms. On some proposals, what an expression refers to is argued to be relative to cultural or conversational context. Some have postulated even wide variations in the semantic *modus operandi* of names and general terms in different uses by one and the same speaker. Is the mode of determination of reference relative to cultural, individual or conversational factors? My purpose is to explore the impact that a positive answer to that question would have for a unified semantics along the lines proposed by Kripke and Putnam

ALBERT NEWEN

Concepts as Templates of Mental Files: The Constituency of Concepts and The Treatment of Some Phenomena of Context-dependence

Ruhr-Universität Bochum

In the first part of the presentation, I propose a new account of concepts, situated between empiricist accounts on which concepts can be fully analyzed in terms of a network of associated perceptual information (Barsalou 1999, Prinz 2004), and rationalist accounts on which concepts are radically different in format from perceptual representations. The latter holds for e.g. Fodor's (Fodor 1975) language of thought and for Dretske's theory of digital representations (Dretske 1983). I argue that a theory of concepts should integrate the main aspects of both the empiricist and the rationalist accounts. The alternative view of concepts involves two main claims concerning the organizational structure of concepts: (1) Concepts can be fruitfully understood as consisting of two components, (a) an integrated network of associated information (the empiricist part) used for the categorization of some types of entities (e.g. objects) according to properties, and (b) a handling system that organizes this associative network (the rationalist part): both components are implemented in mental files; thus concepts can be characterized as templates based on mental files.

In the second part of the presentation the leading question is: how can we account for different types of context-dependency of words expressing concepts? I argue that given the framework of concepts as templates based on mental files, this can nicely account for several types of context-dependency. Furthermore, I have suggested a framework that accounts in principle for the enormous flexibility in using natural language

JOHN PERRY The Great Detour

Stanford University and University of California, Riverside

Frege's theory of sense and reference sent 20th century philosophy of language (and philosophy of mind) on a great detour. He had the beginning of a better theory in the *Begriffsschrift*. I will show how the *Begriffsschrift* theory can be adapted to deal with the problem he raises for it in "Über Sinn und Bedeutung", and the further issues he raises in "The Thought", and, for that matter, all troublesome examples in the philosophy of language in the 20th century and beyond.

STEFANO PREDELLI The Power of Onomatics

University of Nottingham

I discuss certain question related to the use of proper names, starting with (name-independent) issues of what I call impartation (as when an utterance of 'I am here' imparts information about my location to anyone within earshot) and related issues of settlement (as when I say 'somebody is speaking'). When it comes to proper names, I extend these ideas about use in the direction of onomastic considerations, namely information ensuing from certain properties of a name's origin. I mention what I call authorized naming practices (as in the connotation of masculinity in 'John') and other phenomena in their vicinity, and I address the vague boundary between them and what I call the 'encyclopedic penumbra' (as in certain distant etymological sources of meaning).

CONTRIBUTED PAPERS

PAWEŁ BANAŚ

Utterance Semantics of Reflexive-referential Theory of Meaning

Jagiellonian University

In his book "Reference and Reflexivity" John Perry tries to reconcile referentialist intuitions with some descriptive aspects of Fregean theory. As a result, he offers a "reflexive-referential theory of meaning". The view he defends is that referentialists are right to see referential content as a kind of "official" content i.e. "what is said" or "what the speaker says in virtue of making the utterance". Yet, Perry recognizes some problems ("co-reference" and "no-reference") that referential approach is bound to face.

His solution is a postulate that even if referential content is indeed usually the "official" content of what is said, it is not the only content semantic theory is to be concerned with. In case of indexicals (including demonstratives) as well as proper names, although what they usually contribute to a proposition are their referents, utterances containing such terms have also cognitively significant reflexive content that involves conditions for identifying those referents (which may, in case of identity statements, even become the "official" content).

This is how Perry's theory solves e.g. a co-reference problem:

Let's assume that one says Marshall Mathers is Eminem [x]— from the classical referentialist point of view, one says something trivial (namely, that a=a). For Perry, however, a proper semantic theory should note the cognitive significance of such an identity statement. This significance is clear when one turns to reflexive contents of proper names used; on this level [x] says that the person associated with "Marshall Mathers" by the conventions exploited by the use of that name in [x] is the person associated with "Eminem" by the conventions exploited in the use of the name in [x].

Although Perry's theory seems to solve neatly some philosophical puzzles, Kent Bach noted that it faces some problems as well. In my paper, I focus on two aspects of criticism Bach addressed when referring to the 1st edition of Perry's book (and which remained problematic in the 2nd edition as well).

The first problem for Perry's theory is its being utterance semantics rather than sentences-in-context semantics. The other one concerns Perry's decision to see referents of proper names and indexicals as their semantic "official" contents. However, as Bach points out, it might be argued that such terms do not refer but rather are used to refer (and, hence, to see referring as a pragmatic rather than semantic mechanism).

Both points of criticism are closely connected and draw from a view on semantics/pragmatics distinction that Bach and I share ("what is said" as a linguistically provided but sensitive to narrow context information vs. "what is conveyed", that is information made relevant by the act of uttering the sentence).

Bach notices that Perry actually ignores nonreferential uses of both proper names and indexicals. And it is intention of a speaker that makes use of a proper name referential. It is a pragmatic rather than a semantic mechanism and it is exploited by each particular utterance (use). Hence, utterance semantics, as I am to argue, tend to fudge the semantic-pragmatic distinction.

ALLISON BARNES

Content-fixing for "She-Herself" in the Attribution of Indexical Reference

University of Victoria

Discussions of high-level mindreading typically focus on the attribution of whole propositional attitudes to others (Goldman, 2006). How do mindreaders' construct contents for others' attitudes? The problem I address concerns the representation of indexical contents of others' attitudes.

Mindreaders are themselves referring in the act of attributing an attitude if there is an intention to understand both its type and content. Often, the content of the attributed thought or reference isn't expressible by a definite description. Rather, the attributed reference is picked out by an indexical, and is not picked out as having specific properties; indexical contents aren't descriptive. The content of a whole belief attribution such as "the show is starting now" has an indexical constituent expressing a reference to an extra-linguistic time. In this sense, the pure indexicals are devices of direct reference and have semantic context sensitivity; the referent of "now" is semantically context-dependent since "now" has already agreed upon character or linguistic meaning (Perry, 2001). Indexical references are also always inherently personal/ perspectival intentional relations to present or absent objects.

Quasi-indicators are third-person pronouns dedicated to the attribution of indexical reference (Castañeda, 1989). In ascribing "Marie believes that she herself is smarter", the quasi-indicator is 'she herself'. "She herself" is an embedded constituent that attributes an 'I' (de se)-thought to Marie and thereby represents, in an impoverished way, how Marie believes. The quasi-indexical constituent of the proposition has internally fixed content; the content is also externally fixed in its semantic dependence on its antecedent "Marie", in her situation. The indexical content of the quasi-indicator is in a sense irreducible (i.e. it can't be substituted without the significance being altered) (Corazza, 2004). The content is narrowly fixed in virtue of the mindreader's perspectival intentional relation to Mary as an agent (W-Smith, 1981). To get the meaning right (and noting that agreement with her is not specified), the quasi-indicator works as a shifter. By itself, the content of the quasi-indexical constituent is fixed by psychological factors, and not by

environmental or social parameters; the content is individuated narrowly. Given the context, the attribution picks up a broad content. Taken as a whole, the attributed state is individuated in two ways.

This is all consistent, in my view, with the hypothesis that the attribution is the output of a high-level simulation routine; "she-herself" is a simulated meta-representation. If that's right, then it is plausible that the vehicle of the represented content is introspection-coded (Goldman, 2006). An introspective vehicle classifies the mental concept BELIEF type and binds the quasi-indexical content to generate an individuated third-person attribution.

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PETER BAUMANN Some Problems for Truth-Relativism

Swarthmore College, Department of Philosophy

Over the last 10 years or so, authors like John MacFarlane or Max Kölbel have proposed and defended a new form of relativism: truth-relativism. According to it, the truth values of assertive sentences (or of the propositions expressed by such sentences) vary with context. However, they don't do so because their truth conditions varied with the speaker's (or thinker's) context; rather one and the same proposition can have variable truth values in different contexts in which it is assessed for truth (in different contexts of assessment).

In this paper I will present two problems for truth-relativism. First, a problem about direct expressibility. Obviously, a predicate of relative truth (S is true as used in context u and assessed for truth in context a) does not obey anything like the disquotational equivalence schema that holds for ordinary monadic truth:

The proposition that p is true iff p.

If it did (*The proposition that p is true at a iff p*), a contradiction would be very easy to derive. I argue that this lack of the disquotational property for relative truth constitutes a serious problem: Because of this lack there are no resources for what I call the "direct expressibility" of what is said "indirectly" in the case of ascriptions of relative truth; there is no room for semantic descent, no way of "translating" ascriptions of relative truth into ascriptions of non-relative, monadic truth. Since this direct expressibility is an important aspect of linguistic representation, the lack of it constitutes a serious problem for truthrelativism (but cf. Einheuser 2008, Brogaard 2008a and Torrengo 2010; see also Nozick 2001, 34-36 and Almér 2005, 150-151).

The second problem for truth-relativism can be seen as a follow up problem on the first. It can be expressed as the question whether or in what sense a non-disquotational notion of "relative truth" is a notion of truth at all. Isn't disquotation essential to truth? MacFarlane (2005, 2014, ch.5) puts great weight on the claim that certain rules about assertion, especially about their retraction, favor truth-relativism about its competitors (notions

of absolute truth). The role the notion of relative truth plays in our practice of assertion and the fact that there are certain rules of assertion supports the claim that the notion of relative truth really is a notion of truth. However, it can be doubted that these rules have to be seen as rules about truth instead of, say, ideal warranted assertibility or something else. But then the notion of "relative truth" does not deserve the title "truth" anymore.

There is thus some reason to worry that truth relativism faces a dilemma: With disquotation it becomes inconsistent, without disquotation it not only seriously restricts the expressive powers of language but isn't even about truth anymore.

GRAHAM BEX-PRIESTLEY Putting Free Will into Context

University of Sheffield

In this paper I explore the idea that ascriptions of freedom have context dependent truth conditions. The main argument is this: freedom requires alternate possibilities, claims about what is possible are context dependent, therefore claims about acting freely are also context-dependent. Although I provide reasons in favour of the two premises, I do not hope to settle those debates here. My aim is to show that this is a novel area in which to consider the effects of context dependence in the philosophy of action, and that the resulting theory has enough plausibility to make it worth exploring. Not only is it interesting in its own right, it also provides a way to bridge the gap between compatibilism and incompatibilism. That is, even in contexts in which we consider the past and the laws of nature fixed, ascriptions of freedom may be compatible with physical determinism in some contexts and incompatible in others. The surprising conclusion is that if we grant that free will require alternate possibilities and that physical determinism is correct without exception, sentences such as "Mary stole the cookies of her own free will" may sometimes still be true.

To reach this conclusion I argue that determinism does not transfer 'upwards'. Determinism at the 'bottom level' does not imply determinism at higher levels. It sounds like a denial of supervenience, but it isn't. It might seem helpful to think about how physical determinism does not imply biological determinism. However, biological determinism may be false simply because a description of our genes excludes a large portion of the universe – twins make different choices due to their different environments. What I must argue for is the following: while a complete description of the microscopic state of the universe at a given time plus the correct physical laws may imply only one possible future, this does not guarantee that a *complete* description of the macroscopic state of the universe will imply only one possible future. I argue that this is true because macroscopic events are multiply realisable.

A complete description of the macro-past is thus compatible with several different micro-pasts. If I consider an agent's future options keeping past events fixed, the context (whether I am considering the macroscopic or the microscopic) will fix whether those options are open to her or not. In most

ordinary circumstances I will be thinking about large scale events such as what school she went to, what decisions she has made in the past, and so on. This is compatible with different futures even in a deterministic universe, and in these situations I may correctly attribute freedom to her choices. Conversely, when I am holding the micro-events of the past fixed in the philosophy seminar, I would be wrong to attribute freedom to her choices because there is only one possible future compatible with those past events. I end by looking at experiments showing that the folk vary their ascriptions of freedom depending on context, and noting interesting parallels between free will contextualism and epistemological contextualism.

ADRIAN BRICIU

Context and Compositionality

University of Barcelona

In my talk I'll present two arguments against recent proposals, due to Pagin and Pelletier (2007), Recanati (2010) and Lasersohn (2012) to weaken the principle of compositionality. These proposals are motivated by the desire to make room for pragmatic determination of truth-conditions within a systematic account of the meaning properties of natural languages. If this accommodation is possible then, allegedly, forms of context-sensitivity that can't be handled by fixing the value of a limited set of contextual parameters won't threaten the project of giving a systematic account of natural languages.

According to the standard version of compositionality the content of a complex expression relative to a context is a function of the content of its constituents at that context and of its syntactic structure. According to the weakened version the content of a complex expression relative to a context is a function of the contents that its constituents at that context, of its syntactic structure and of the context itself.

I'll argue, first, that if weak compositionality is to make room for radical forms of context sensitivity, then it will fail to deliver meaning-rules that are productive and systematic. Thus it will fail to deliver one of its expected explanatory benefits. In a weakly compositional account a single syntactic structure can contribute in more than one way to the interpretation of complex expressions, and its contribution can vary freely with the context of utterance. If English is weakly compositional then the sentence "The leaves are green" can express different contents at different contexts while its constituents have constant contents across the very same contexts. The source of variation is in the manner in which the contents of constituents combine at different contexts. In a weakly compositional account a syntactic rule can be paired with a meaning rule that introduces a multitude of meaningoperations which vary freely with the context of utterance. But if meaning rules are to be learned they must systematically match meaning-operations with contexts. Since there are indefinite numbers of potential contexts such a rule will have to give indefinitely many matchings between operations and contexts. But matching every possible context with the associated meaningoperation, in an explanatorily non-vacuous way, is an impossible task as long as one is wedded to the idea that some forms of context-sensitivity are not the result of varying a determined set of contextual parameters.

Secondly, I'll argue that weak compositionality presupposes an implausible account of the syntax-semantics interface. If coupled with the plausible claim that knowledge of syntax and knowledge of vocabulary are sufficient to deliver knowledge of meaning of complexes it threatens the autonomy of syntax (i.e. the idea that conditions on grammaticality are purely formal and make no reference to meaning). If coupled with the claim that meaning rules need to be learned independently of syntactic ones it has further empirically implausible consequences.

MARÍA CAAMAÑO-ALEGRE The Role of Presuppositions in Framing Effects

Philosophy Department, University of Valladolid

In the field of social sciences, where intervention in the subjects' behavior is frequently verbal or at least dependent on language, the use of a wide variety of linguistic means to gather information about their beliefs, expectations, assessments or plans of action has significantly increased. In this respect, the reliance on various kinds of surveys and interviews has extended substantially, and has the difficulties concerning the so called "framing effects". Broadly speaking, these effects are related to the influence that different ways of presenting the same issue may bear on the respondent's response. The aim of this paper is to elucidate the semantic-pragmatic side of this problem, a side that has not yet received enough attention in the standard literature on the subject. In doing so, the role of presuppositions is emphasized, since it is argued that different frames generate different inferential contexts connected to well-established linguistic practices.

The present account also challenges a common assumption in the sphere of economic methodology, usually referred to as the principle of extensionality or the invariance principle (Bourgeois-Gironde & Giraud, 2009, 385-87), which establishes that individuals' preferences should not be affected by variations in the description of a problem. It is thus assumed that different ways of presenting the same set of possible options should thus not change the subjects' choices with respect to those options. Although behavioral economists have indeed diverged from the prevailing view in economics -arguing that framing effects should be approached, not as mere cognitive flaws in the recognition of identical options, but as signs of the subjects' attitudes towards different aspects involved in those options, the explanatory factors identified by them fall short to capture the importance of some semantic-pragmatic elements involved in the interpretation of frames. The influential studies by A. Tversky and D. Kahneman (1981, 1991) certainly shed some light on the way individuals process information depending on how the latter is presented to them. Although they did that mainly by empirically ascertaining several psychological biases -like loss aversion and the endowment effect, which are activated according to the kind of frame being used, they also acknowledged that the reference point regarding the

value of an outcome does not stay neutral but varies depending on what is induced by the frame itself. The underlying semantic and pragmatic nature of this variation, however, is not analyzed by these authors.

After examining the few attempts that have been made to explain framing effects in terms of situated linguistic understanding and a revised notion of extensionality (Bourgeois-Gironde & Giraud, 2009, 385-87, Moscati, 2012, 8), I argue that presuppositions about the most likely context of use of expressions appearing in a frame bring about inferences about their meaning.

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MATTHEW CAMERON

Context Two Ways: Metaphysical and Epistemological

Arché, University of St Andrews

Two notions of context figure prominently in contemporary theories of semantics and pragmatics. The first is a metaphysical notion specifically relevant to formal semantics for the purposes of assigning content to expressions (e.g., Kaplan's (1989) context of utterance). Call this the narrow context, an abstract, formal representation of features of context that are systematically associated with certain context-sensitive expressions, as triggered by their semantics. The apparent semantic properties of certain pronouns (e.g., 'I', 'she') and adverbs (e.g., 'now', 'there', 'actually') are typically taken to indicate the need to appeal to some such notion of context in a formal semantic theory for natural language.

A second notion of context, motivated by attention to discourse, construes it as a body of information that interlocutors exploit in order to convey information, generate and infer implicatures, discern one another's reasons for saying the things they do, etc. Call this pragmatic and epistemic notion the wide context. Stalnaker's (1978) notion of the common ground between conversational participants is a paradigm example of wide context, intended to capture a rich array of information characterized in terms of the doxastic and epistemic states of the individuals in a given communicative interaction.

The two notions are presumably related to one another, but the exact nature of the relation has rarely been explicitly addressed. Recently, Stalnaker (2014) notes that the relation can be thought of in (at least) two different ways according as to which has conceptual priority. Narrow context might constitutively determine the wide context such that the doxastic and epistemic states of the individuals in the wide context are simply facts flowing from the parametric values of the narrow context. In this case, "it will be a fact about the individual in the world at the time that he or she is presupposing certain propositions, and that certain propositions are common ground in the conversation that the individual is participating in at the time" (p. 25). Alternatively, the wide context might determine a set of narrow contexts whose values are all compatible with the doxastic and epistemic states of the individuals in the wide context.

Stalnaker's (2014) discussion of the relation is not conclusive, but suggests that he favours prioritizing wide over narrow context, as do others (e.g., King (2014), Stokke (2010)). In this paper I assess these different ways of construing the relation between the notions of narrow and wide context and argue that neither is completely satisfactory. In particular, prioritizing wide context results in an over-generation of contents determined by the narrow context, compromising its theoretical role. Likewise, prioritizing narrow context undermines the role of wide context in capturing the information presupposed by the members of a group. Some potential resolutions are then considered. The upshot, however, is a need to re-examine the relationship between semantic and pragmatic notions of context.

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RODANTHI CHRISTOFAKI

The Self and Its Meaning: Insights from Japanese

University of Cambridge

According to Perry (1979), 'I' is an essential indexical because it expresses a first-person perspective, namely a 'belief state' of the self. Assuming essential indexicality at the level of thought, are there any equivalents of essential indexicals that refer directly to the self in natural languages? The answer seems straightforward for languages having a single 1^{st} person pronoun like English, but less so for those with numerous self-referring forms (diachronically 51 as per Tsujimura 1968, about 118 as per Christofaki in progress). Why such a difference?

One proposed answer is that speakers of languages like English have an absolute sense of self, while those speaking languages having many forms for the self to be used in different occasions have an ever-changing, fluid sense of self. This strongly relativist position has been supported by Japanese (e.g. Hamaguchi 1985) and foreign scholars alike (e.g. Wetzel 1994).

Another proposed answer is that although the concept of self is universal, it has two aspects, the private and the public one (Hirose 2000): Japanese has many forms for the public and one for the private self, with English having one for both. This corresponds to a further-level distinction between private and public language (Hasegawa&Hirose 2005), which explains many differences between the two languages. However, it introduces a strict 1-1 mapping between form and meaning, which seems indefensible at a cross-linguistic level.

I argue that we can maintain the concept of self as a universal while accepting that different facets of the self may be highlighted in different occasions. This is made possible assuming 'lexicon/grammar/pragmatics trade-offs' (Jaszczolt 2012), which enable different languages to express the same concepts. Thus the difference between private and public expressions can be explained in terms of register, without introducing strict concept-form correspondences. Register is itself analysed as truth-conditionally irrelevant meaning using Predelli's (2013) theory of bias, which introduces a conventionally encoded constraint on the membership of an expression in a certain context of use. When an expression with a certain bias is uttered in a context, a pragmatic presupposition is added to the common ground

in a performative manner (Schlenker 2007). The speaker is signalling that he considers the current context appropriate for the expression's bias, and unless challenged by cointerlocutors, the common ground is updated via accommodation (Lewis 1979) and the specific register is established for this context. Moreover, these pragmatic presuppositions can also give rise to conversational implicatures, accounting for the versatility of some Japanese forms (e.g. signalling anger, promoting a specific self-image, etc).

This account of the extra meaning (on top of the indexical one) of Japanese self-referring expressions about the self conveniently applies to other (non-indexical) expressions in Japanese, which is notorious for its honorification. But far from being an ad hoc solution tailored for Japanese, it also accounts for the difference in T-V pronouns, and between 'I' and imposters such as 'yours truly'. Lastly, I also discuss implications for direct referentiality (Kaplan 1989), and attempt a semantic representation.

VASCO CORREIA

Contextual Debiasing in Argumentation and Decisionmaking

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Research on cognitive biases and heuristics has attracted bourgeoning interest over recent years, not least since it purportedly confirms that human beings are prone to a host of cognitive illusions that tend to affect their judgment in contexts of argumentation, reasoning and decision-making (Adler & Rips 2008, Kahneman 2011, Mercier & Sperber 2011). Phenomena such as the overconfidence effect, the confirmation bias, the hindsight bias, the gambler's fallacy, and the illusory correlation, to name just a few, have been shown to have a negative impact on the rationality of people's judgments, beliefs and decisions. Moreover, biases also appear to be costly and maladaptive from a practical perspective, insofar as they often lead people to take unnecessary risks, procrastinate, neglect useful information, downplay early symptoms, jump to conclusions, indulge in stereotypes, and so forth (Dunning 2009, Lilienfeld et al. 2009, Stanovich 2011).

Yet the question of how to deal with such biases has divided researchers. While most authors argue that cognitive biases are irrational and should be counteracted through so-called *debiasing* procedures (Elster 2007, Kahneman 2011, Stanovich 2011, Larrick 2004, Tetlock 2005, etc.), others maintain that biases and their associated heuristics are in fact adaptive forms of reasoning that promote the achievement of the individual's goals under constrains of time and information (Gigerenzer & Todd 2000, Gigerenzer 2008, Stich 1990).

In this paper I argue that the proponents of Debiasing have it right, i.e. that we ought to mitigate biases and their effects whenever these are deemed irrational and maladaptive. The question remains, however, of what type of debiasing methods effectively work in real-life contexts. Here, too, there is disagreement. The advocates of Critical Thinking claim that debiasing can be achieved simply by teaching people about biases, urging them to diagnose their irrational tendencies, and by fostering both the knowledge and the practice of the correct forms of reasoning (Johnson & Blair 2006, Paul 2012, Thagard 2011). Others draw on empirical studies to

claim that critical thinking is by and large ineffective in preventing biases (Arkes, 1981, Mercier & Sperber 2011, Willingham 2007). I show that the evidence on the ineffectiveness of critical thinking is in fact mixed, and that, consequently, we should leave the door open to debiasing methods that involve the improvement of people's critical thinking skills.

That being said, I also develop a Contextual Approach to Debiasing, according to which debiasing strategies are indeed more effective if they rely on extra-psychic, environmental and social constraints, rather than cognitive change at the level of the individual. Loosely speaking, the idea is that individuals have a better chance of promoting the rationality of their beliefs and decisions if they submit their thinking to social and environmental structures. I examine some examples of these contextual strategies, with focus on the notion of accountability. It should appear, however, that the appeal to contextual devices ends up reinforcing—albeit indirectly—critical thinking and cognitive improvements.

ALEX DAVIES

What Does Cancellability Show?

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According to the explicit cancellability test for conversational implicature: P is cancellable from the utterance of a sentence in a context if one can utter the sentence in context and go on to say, "but I don't mean to say/imply/suggest that P" without contradicting oneself. Cancellability is supposed to show that a proposition is not "part of" the content of a sentence in context. More ambitiously, cancellability was Grice's way of showing that assessments of the truth of a sentence in context are autonomous from assessments of the sentence in context along other dimensions (pace J. L. Austin). In this paper, I argue that cancellability fails to distinguish between conversational implicatures, on the one hand, and certain kinds of entailment and semantic presupposition, on the other. It therefore cannot be used to show that a proposition is not "part of" the content of a sentence in context. We can define entailment and semantic presupposition modally and model-theoretically.

Entailment

Modal Entailment: "S" modally entails "T" in a model M if and only if in all logically possible worlds in which the proposition expressed by "S" in M is true, so is the proposition expressed by "T" in M.

Model-Theoretic Entailment: "S" model theoretical entails "T" if and only if in all models M that can be used to interpret "S" and "T" (given their model-invariant semantics), if the proposition expressed by "S" in M is true, so is the proposition expressed by "T" in M.

Semantic Presupposition

Modal Semantic Presupposition: "S" modally presupposes a proposition P in a model M if "S" expresses a proposition Q in M, which is neither true nor false relative to all logically possible worlds in which P is not true.

Model-Theoretic Semantic Presupposition: "S" model-theoretically presupposes a proposition P if, in each model M that can be used to interpret "S" (given its model-invariant semantics), the proposition that "S" expresses in M is such that it is neither true nor false relative to all logically possible worlds in which P is not true.

A sentence's modal entailments and modal semantic presuppositions will be context-sensitive if the sentence's content is context sensitive. Moreover, when one tries to cancel a proposition from a sentence, in context, one changes the context of the sentence. To carry out the test one has to embed the sentence in a larger linguistic environment: namely, one that includes "but I don't mean to imply that P." As I will show, this environment can shift the content of the embedded sentence when that sentence has a context-sensitive content. But then the test cannot ensure that the following doesn't happen: in the pre-test context "S" modally entails or modally semantically presupposes that P. But in the test context, "S" does not modally entail or modally semantically presuppose that P. Because of this, the explicit cancellability test does not show that "S" in its original context does not entail or semantically presuppose that P.

MARÍA DE PONTE & KEPA KORTA

Root Canals and Colorless Rooms. Prior's Knowledge Argument

University of Seville (the first author) & University of the Basque Country (the second author)

When discussing the role of time in language and thought, it is often unclear how the various aspects of the discussion are related to each other. Ontological (and physical) considerations about the nature of time are raised, together with epistemological (and phenomenological) aspects about how we experience the flow and the direction of time and even semantic insights about our talk about time, without clear connections and distinctions between the arguments at each level.

Prior's famous paper "Thank Goodness that is over" (1959) is a clear case at hand: ontological, epistemic and semantic considerations are entangled in a way that creates the illusion of an ontological argument about the nature of time. In this paper, we defend the thesis that Prior's argument, and those akin to it, are best interpreted as "knowledge arguments," similar to that raised by Frank Jackson (1986) against physicalism. We contend the argument relies on three basic assumptions: one linguistic, one epistemic and one ontological. At a linguistic level, we argue that an utterance like "Thank goodness that is over [now]" expresses the same proposition as "Thank goodness the date of the conclusion of the root canal is Friday, June 15, 1954," when uttered on the same date. At the epistemic level, we argue that they are associated with different motivating thoughts, which explains why only one, and not the other, could be appropriate in certain situations. At the ontological level we reject the assumption that the proposition related to the utterance "Thank goodness that is over [now]" and its associated thought require the existence of A-properties.

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ALEXANDER DINGES Relativism and Assertion

Universität Hamburg

The paper is concerned with relativism in the domain of predicates of personal taste (see e.g. (Kölbel, 2009; MacFarlane, 2014)). Very roughly, relativism says that (i) sentences like "Licorice is tasty" express the same proposition independently of the speaker and their taste standard; and (ii) this invariably expressed proposition has truth-values only relative to a given taste standard. I defend relativism so understood against two possible objections against this view.

The first objection has it that relativism cannot make sense of relativistic assertion once we accept a Stalnakerian framework, according to which "the essential effect of an assertion is to change the presuppositions of the participants in the conversation by adding the content of what is asserted to what is presupposed." (Stalnaker, 1978: 323) ((Egan, 2014: 93) indicates this worry but doesn't take it as seriously as I think it should be taken.)

I will argue that this worry is based on a misconception of the Stalnakerian framework. In particular, the worry arises only if we see assertions as attempts to change the common ground. More plausibly, though, they are proposals to do so. Given this assumption, relativism still entails that proper relativistic assertion requires the absence of a presupposition of non-commonality regarding taste standards. I will show, though, that this requirement is perfectly in line with the intuitive data.

The second worry has it that relativism implausibly severs the connection between (monadic) truth and correctness. In particular, suppose you think that licorice is tasty because you like licorice, while I think it is not because I don't. According to the worry, relativists must accept that I can properly assert

(*) What you believe is false, but your belief is correct all the same.

This, however, seems like a dubious outcome. (For this worry, see e.g. (Cappelen and Hawthorne, 2009: 131; Boghossian, 2011: 61f; Wright, 2012: 439–441; Huvenes, 2014: Sec. 6; Ferrari, forthcoming: 4f).)

I will argue that, once we accept the previously derived requirement of the absence of a presupposition of non-commonality on proper relativistic assertion, relativists are no longer bound to accept (*). For they can deny the propriety of assertions of (*) in the following way: I can correctly assert the first conjunct of (*) only if licorice is not tasty relative to my taste standard. Similarly, I can correctly assert the second conjunct of (*) only if licorice is tasty relative to your taste standards. So once (*) has been asserted, there will be a presupposition of non-commonality regarding your and my taste standard. As a result, relativism does entail that asserting (*) is problematic at least when you are among my interlocutors. (*) may even be problematic when you are not among my interlocutors if we accept the following suggestion in (López de Sa, 2008: 307): Speakers may be treated as if they are part of a conversation when "there are possible (close, easily actualizable) conversations, which would involve the people in question" or when such conversations are "[i]magined, or easily imaginable".

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DAISY DIXON

The Death of Metaphor and the Death of Semantic Minimalism

University of Cambridge

The aim of this paper is to argue that the gradual dying of a metaphor into literal language presents an unnoticed problem, composed of three challenges, to semantic minimalism — the view that the semantic content of an uttered sentence is exhausted by a proposition containing minimal context-sensitivity. First, certain dead metaphors whose metaphorical past can be revived disrupt the semantic minimalist's strict separation of semantics and pragmatics. Call this the problem of dormancy. Second, agreement between users of live and dead metaphor will not count as genuine agreement under a semantic minimalist analysis. Call this the problem of agreement. And third, the vague boundaries between the stages of a metaphor's lexicalisation force semantic minimalists to posit sharp but unknowable cut-off points where there don't appear to be any. Call this the problem of vagueness. I offer some potential responses on behalf of the semantic minimalist to each of these challenges, but all are found wanting. I conclude that semantic minimalism fails to account for the flexible, malleable nature of metaphor-death.

TAMARA DOBLER

Is Thought Occasion-Sensitive?

ILLC, University of Amsterdam

A number of authors have recently argued that the meaning of a natural language sentence underdetermines the proposition, thought, truth-conditions, or content expressed by it on an occasion (e.g. Recanati 2012, Travis 2008, Carston 2008, Pagin 2005, Dekker 2014, Vicente 2012, Chomsky 2000, Davies 2014, Hansen 2011, Lasersohn 2012, Lewis 1981). However, a parallel thesis for concepts and thoughts to the effect that their (contribution to) truthconditions are similarly occasion-sensitive struck many as bizzare¹. Thus Fodor maintains that "you can say (that is, utter) things that are ambiguous; but you can't think things that are ambiguous" (Fodor 2003: 156). In (Fodor 2003) and (Fodor and Lepore, 2004) Fodor presents an argument against the occasion-sensitivity of concepts (vs. Travis 2000) based on the model of ambiguity resolution. Fodor's main motivation for the claim that the semantics of thought can't be occasion-sensitive is based on the assumption that occasion-sensitivity and compositionality exclude each other: occasion-sensitivity can be true only on pain of denying that thoughts are compositional (and a fortiori, systematic and productive). Compositionality, as the central tenet of RTM, is for Fodor 'non negotiable'. Hence it must be that concepts and thoughts are not occasion-sensitive.

In this paper I aim to defend the thesis of occasion-sensitivity of concepts and thoughts against Fodor's charges. First, I will show that Fodor's argument trades on the vehicle-content conflation *vis-a-vis* thought and that it does not establish what Fodor takes it to establish, namely, that the contextual information plays no *constitutive* role in determining the content of thought.

Second, I shall develop a model for occasion-sensitive concepts within the Travis (2000) framework, in which word meanings are represented as atomic concepts without fixed extensions. Whilst ambiguity resolution consists in selecting a concept denoted by a word (conventionally or ad hoc), the resolution of truth-conditions concerns the conditions of application of a selected concept. In this framework concepts acquire an extension only in context, whilst the conditions of application vary with purposes and goals

¹For the defense of this view see: Travis (2000), Searle (1980), Clapp (2012)

of communication. I shall also distinguish the proposed model for concepts from other models in lexical pragmatics, including Fodor's (Carston 2012, Allott and Textor 2012, Vicente 2015).

Finally, I will argue that occasion-sensitivity and compositionality need not be mutually exclusive as Fodor supposes provided certain externalist requirements are eschewed from the semantic theory. Still, the compatibility solution I will suggest differs from the most common one in the literature in that it does not involve composing occasionsensitive, *ad hoc*, or modulated meanings, whose context-sensitive extensions are taken to be a result of narrowing and broadening extensions of encoded concepts construed as operations on sets (cf. Pagin and Pelletier 2007, Recanati 2012, Carston 2012).

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GIULIA FELAPPI

Otto Said that I am a Fool: Indexicals, Kaplan's Monsters and Propositional Attitudes

University of Southampton

Sententialism is a theory about propositional attitude sentences, such as

(1) Otto said that I am a fool.

While according to the standard theory, i.e. propositionalism, (1) expresses a relation between Otto and a proposition, according to sententialism (1) expresses a relation between Otto and a sentence and "I am a fool" is then mentioned in (1).

In this talk I will focus on the following objection to sententialism that stems from indexicals. Kaplan observes (1977: 510-511):

If we *mention* the indexical rather than *use* it, we can, of course, operate directly on it. Carnap once pointed out to me how important the difference between direct and indirect quotation is in

- [(2)] Otto said "I am a fool"
- [(1)]Otto said that I am a fool.

Thus indexicals behave differently in (1) and (2): if (2) is true, Otto said something about himself, while if (1) is true, Otto said something about me. Why do indexicals behave differently in the two reports if, as in accordance with sententialism, in both "I am a fool" is mentioned?

I will show that sententialists can solve the problem, by relying on the different reason why we mention the sentence in the context of the two reports. While in (2) the sentence is the direct object of Otto's saying, in (1) the sentence represents Otto's attitude.

Thus sententialism is safe from the argument from indexicals, and this is a conclusion about propositional attitude sentences. But we can also draw a conclusion that concerns primarily indexicals and is of independent interest. For suppose that the situation to be reported is (2). While in English we would use

(3) Otto said that he is a fool,

in Amharic we would use something whose literal translation is (1). Thus even if I utter the Amharic report and the first personal pronoun occurring in it, I am reporting that Otto said something about himself, not me. On the basis of this example, Schenkler concludes that attitude predicates are monstrous context shifters (Predelli 2014). Now the passage by Kaplan quoted earlier is part of his discussion of monsters and, famously, Kaplan held that monsters do not play a role in English (1977: 510).

I will note that Schlenker reaches his conclusion on the explicit assumption that attitude reports should not be analyzed sententially (2003:45). But, as I will show, the discussion of sententialism is in fact crucial. For if sententialism is the correct account, then in the Amharic case the pronoun does not denote either Otto or me, but the pronoun itself and this is perfectly compatible with the thesis that attitude predicates are not monsters. Thus sententialism shows that Schenkler's conclusion is unwarranted and that Kaplan might be right about monsters.

Against the received view, I will then conclude that if one does not like monsters, and context shifters in particular, indexicals might actually be a point in favour of sententialism, not against it.

DIRK FRANKEN

Naming as a Kind of Indexical Reference

University of Marburg

I will argue that referring to someone by name is a particular kind of indexical reference. I will, however, reject what seems to be a direct entailment of this claim, namely that so-called proper names like 'Paul', 'Mary', 'John' etc. are distinct indexical expressions. Instead I will argue that every occurrence of any one of these expressions is a token of one and the same indexical.

To make sense of this idea, it is useful to draw a distinction between expressions and words. Roughly put, an expression is determined by something like a succession of letters and a word is determined by a conventional meaning. Words typically coincide with expressions, but there is no reason to assume that this is necessarily so. According to my proposal, all tokens of the expressions we know as different proper names (henceforth: names_{exp}) are tokens of one and the same word (henceforth: NAME). So, the referents of these tokens are determined not, as standard accounts has it, by meanings assigned to the names_{exp} they are tokens of, but by the meaning of NAME. NAME itself is a kind of indexical. Its meaning is given by a token-reflexive description which discriminates in (almost) every context of use an object which is the referent of the token of NAME used in this context. A reasonable first try for such a description is: "the single object at the origin of a unitary communication chain of such-and-such a kind leading to this token."

As is easily noticed, according to this account the referential success of a token of NAME depends on there being a communication chain of the right kind connecting the relevant token with a single object. If this condition is met in the context of use of a token, this token has a referent, otherwise it has none. As a consequence, names $_{exp}$ need not have conventional meanings on their own to perform the function of implementing unitary communication chains. They just serve as pragmatic devices for speakers to indicate whether or not they talk about the same object they, or someone else, talked about before. In this way names $_{exp}$ can be used to indicate sameness or difference of reference without having themselves meanings which determine these references.

I concede that my proposal is somewhat unintuitive. But I will try to show that this deficiency is outweighed by its theoretical virtues. First, I

will give some principled reasons for the controversial assumption that all reference by name has to be reference via description. Then, I will show that the only acceptable accounts – next to my own one – that meet this criterion are *meta-linguistic* accounts. These accounts claim that a name is synonymous with a (rigidified) description that mentions the linguistic expression of the name itself. Finally, I will set forth three recalcitrant problems that arise for descriptivist accounts of proper names and argue that my one is superior to meta-linguistic accounts in dealing with these problems.

ALDO FRIGERIO

A Theory of Salience for Indexicals

Università Cattolica di Milano

As is well known, Kaplan has claimed that indexicals are direct reference devices. However, he does not think that the directness of a designator implies that there is no semantic mediator between the designator and the referent. On the contrary, the character of an indexical acts as such a mediator. As Marti (1995) has pointed out, in Kaplan's view, to say that a reference device is direct does not mean that it is Millian (i.e. that its meaning is nothing but its referent), but it means that only the referent enters into the truth conditions of the sentence.

Kaplan argues that the sentences containing indexicals express Russellian singular propositions on the basis of the behavior of indexicals in presence of modal and temporal operators. In these cases, the character of the indexical is never evaluated in a world and time different from those of the speaker's. For this reason, while definite descriptions may have wide or narrow scope with respect to these operators, indexicals always take the largest scope.

We can give two interpretations of this behavior of indexicals: (i) they express a Russellian proposition: their character does not enter into the proposition. (ii) the character enters into the proposition, which is a descriptive proposition, but for some reasons operators always take narrow scope with respect to the descriptive content of the indexical. Kaplan accepts (i) because he sees no reason why a descriptive content should always take the widest scope. Yet I will explore a different view: (ii) is true and actually there is a reason why indexicals always take the largest scope. On this view, the semantic peculiarity of indexicals with respect to definite descriptions does not consist in the directness of their reference but in what I call saliency. In contrast to definite descriptions, indexicals must refer only to something salient in the context of utterance, i.e. to something the speakers are paying attention to during their conversation. How can saliency explain the behavior of indexicals in presence of modal and temporal operators? In order to be salient for both the speaker and the addressee, an object must be present in the utterance context. Something is salient only when both the speaker and the addressee are paying attention to it and are mutually aware that the other is doing the same. This condition is satisfied only when there is

an object that stands out for some reason. But an object can both stand out and draw the attention of all the speakers only if it's part of the utterance context. Objects from other worlds, times and places cannot draw the speakers' attention at the same time. Since the referents of indexicals must be part of the context, these devices of reference cannot take narrow scope. This suffices to account for the behavior of indexicals in presence of operators.

Some advantages of this view, such a uniform account of exophoric and anaphoric indexicals, or such the account of some uses of indexicals and definite descriptions (the/*this first man who went to the Moon; stop *the/that man) will be illustrated during the talk.

GEOFF GEORGI

Demonstratives in First-Order Logic

West Virginia University

David Braun (1996) and Nathan Salmon (2002) have argued that both the syntax and semantics for 'dthat' fail as theories of the demonstrative pronoun 'that' in English. To study the logic of the true demonstrative 'that' in Kaplan's framework, we must allow distinct (syntactic) occurrences of the same word 'that' to differ in content relative to the same context.

One result of Kaplan's failure to incorporate demonstratives satisfactorily into logic and semantics is that some of the deepest insights into logic his theory reveals have gone unrecognized. Logical truth on Kaplan's view is a property that a sentence or formula has or fails to have absolutely. Reflecting their origins in two-dimensional modal logic, contexts are one more parameter over which we generalize to obtain logical truth.

In this paper, I reject this view of the role of contexts in logic as too limited. I argue that for sentences and arguments containing demonstratives, the fundamental logical properties of logical truth and logical consequence obtain or fail to obtain only relative to contexts. A complete theory of contexts requires identifying all the relevant features of the use of indexicals and demonstratives in reasoning and conversation (Predelli 2005). One lesson of the use of 'that is identical to that' in examples due to Perry (1977), Braun (1996), and Salmon (2002) is that reasoning with demonstratives requires tracking coordination relations between occurrences of demonstratives. Building on the work of Kit Fine (2003, 2007), such coordination can be straightforwardly represented in the formal contexts of Kaplan's framework, and doing so provides the tools to develop rigorously the conception of logic defended in this paper.

In an earlier defense of this view (Georgi 2015), I focus on a variation of Kaplan's own modal logic of indexicals. Here I focus on first-order logic in part to simplify proofs of soundness and completeness. We relativize sequents to coordination relations (where Δ and Γ are sequences of formulas):

$$\Delta \Rightarrow_R \Gamma$$

and then give sequent rules that track shifts in coordination. I sketch a proof that a sequent $\Delta \Rightarrow_R \Gamma$ is provable if and only if Γ is a consequence

of Δ relative to any context c whose coordination relation is R. But the goal of this paper is not merely to present new technical results for the logic of demonstratives. That these results obtain for the first-order logic of demonstratives shows that the significance of demonstratives for logic exceeds their behavior as rigid designators in counterfactual reasoning and modal logic. The results are also independent of the debate over referential and quantificational semantic accounts of complex demonstratives (Braun 2008; King 2001). The results in this paper support the conclusion that adding true demonstratives to a language changes the logic at a very basic level. Finally, the results in this paper show that the proposed view does not identify the bearers of logical properties and relations with sentences relative to contexts (Zardini 2014). Any objection on these grounds misses its target.

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MICHAEL GLANZBERG Not All Contextual Parameters Are Alike

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A great deal of discussion in recent philosophy of language has centered on the idea that there might be hidden contextual parameters. But relatively little attention has been paid to what those parameters themselves are like, beyond the assumption that they behave more or less like variables do in logic. My goal in this paper is to show this has been a mistake. I argue that there are at least two very different sorts of contextual parameters. One is indeed basically like variables in logic, but the other is very different, and much more like overt referring expressions.

The paper provides an in-depth study of an example where we see both classes of contextual parameters at work: predicates of personal taste. These are predicates like tasty or fun. I claim that these sorts of predicates have two distinct contextual parameters. One is common to all gradable predicates, and simply tells us what standard - what degree of tastiness or fun - is sufficient to count in a given context. In this respect, tasty is no different from e.g. tall. The other, I argue, is an experiencer class, which tells us to whom something is to be measured as tasty or fun in a context. This is distinctive of predicates of personal taste. The latter claim is controversial, and I offer evidence supporting it. I then show that the two hidden parameters we find in predicates of personal taste are very different, and exemplify our two classes of parameters. The experiencer parameter behaves strikingly like familiar overt referring expressions. I show this by mapping its syntactic, semantic, metasemantic, and pragmatic properties, and show that they overlap substantially with those of overt referring expressions. In particular, I argue that syntactically it can be overtly realized, enters into control and binding relations, and appears to show Principle B effects. Semantically, it is marked for thematic role, and for a distinctive semantic point of view property. Pragmatically, the point of view requirement limits its anaphoric potential. Metasemantically, its value is set by overt speaker intentions, like referring expressions' values are. In contrast, I show that the standard parameter behaves much more like a hidden variable. It has few marked semantic or pragmatic properties beyond being set by context, and being available for some form of quantifier-binding. We thus find, in predicates of personal taste, examples of both sorts of hidden parameters I claim can be found, and we see that they are genuinely different.

The paper concludes by showing that the two sorts of contextual parameters come from two different sorts of expressions we find in language. Parameters like the experiencer have their sources in lexical categories, and fill thematic argument positions assigned by these categories. Thus, they pick out participants in events as we are describing them with sentences. In contrast, parameters like the standard have their sources in functional categories, and have only abstract semantic contents. This, I suggest, explains their differing properties.

PAWEŁ GRABARCZYK & TADEUSZ CIECIERSKI

Compositional Conceptual Role Semantics

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Something like the following argument, we believe, is what leads to a skepticism towards the very idea of *Conceptual Role Semantics* (*CRS*, henceforth):

"(...) you can't identify meanings with conceptual roles tout court, since unlike meanings conceptual roles tout court aren't compositional." (Lepore (1994) p. 198)

In response to this challenge we are going to propose a version of CRS that is compositional (CCRS, henceforth).

A version of *CCRS* we are going to describe is based on the *Directival Theory of Meaning*, a theory originally proposed by the inventor of categorial grammars - Kazimierz Ajdukiewicz - in the 1930s (cf. Ajdukiewicz (1978) pp. 35-89). Although it could practically be considered to be the first full-blown conceptual role semantics, it was never recognized as such and remains almost completely forgotten. We believe that the theory is well worth revisiting as it contains some original ideas that might have an impact on modern semantical and philosophical discussions.

In the first part of our paper we are going to describe basic ideas of the Directival Theory of Meaning. Roughly speaking, one of its most important features is that it derives linguistic meanings from a unique combination of syntax and pragmatics. It starts with the titular "meaning directives" which should be understood as specific sentences the language users are obliged to accept in particular types of situations. The meaning of an expression is, then, defined as the set of all places it occupies within the system of such directives. We will describe this definition of meaning in details, illustrate it with examples and discuss briefly some problems it faces.

In the second part of our paper we will attempt a precise formulation of the compositionality problem for the $Directival\ Theory\ of\ Meaning$. Following the original idea of Ajdukiewicz, we distinguish between connected and $unconnected\ languages$. A connected language L is a language that satisfies

the following principle: for each expression E of L there exists a meaning directive that contains (non-trivially) E within its scope. Languages that are not connected are unconnected. In such languages some expressions do not figure in the scope of meaning directives. The problem of compositionality for the *Directival Theory of Meaning*, therefore, has two versions: one for the connected languages and one for the unconnected languages. It is also important to note that it can be formulated precisely only if we work with the so-called *Husserlian languages* (cf. Hodges (2001), i.e. languages where synonymy applies only to expressions of the same semantic category).

In the third part of the paper we are going to show that the problem of compositionality has a positive solution both for connected Husserlian languages and unconnected Husserlian languages. In fact, we will discuss three possible solutions that can be offered here: one for *connected Husserlian* languages and two for unconnected Husserlian languages. In the first case, compositionality is a direct consequence of the definition of meaning proposed by the *Directival Theory of Meaning*. This consequence, unfortunately, is followed by an unwelcome fact: we have to assume that the set of meaning directives is infinite. In the second case, we have to define a new notion of meaning (strictly speaking: an extension of the original notion of meaning given by the Directival Theory of Meaning) for expressions that do not figure in the meaning directives of a language. This new extended notion of meaning may appeal to syntactic composition of complex expressions (it is reasonable to assume that all *syntactically simple* expressions figure in at least one meaning directive). It may also appeal to the idea of meta-directive: a rule that tells how one can generate new meaning directives if certain other directives are given. In both cases, the discussed version of CCRS is compositional.

In the final part of the paper we would like to discuss briefly a question how the *CCRS* may embrace narrowly conceived context-dependence (i.e. indexicals and demonstratives).

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JUSTYNA GRUDZIŃSKA-ZAWADOWSKA & MAREK ZAWADOWSKI

Modeling Context: Comparing Dynamic Semantics and Type-Theoretic Approaches

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A fundamental insight of dynamic semantics is that quantificational sentences have the ability to change contexts by setting up new referents and anaphoric pronouns have the ability to refer back to them. A rich variety of anaphoric (dynamic) effects has been observed, including:

• Maximal anaphora to quantifiers

E.g.: Most kids entered. They looked happy.

The observation in Kamp & Reyle (1993), Van den Berg (1996), Nouwen (2003) is that the anaphoric pronoun *they* in the second sentence (what we will call an anaphoric continuation) refers to the entire set of kids who entered. Thus the first sentence must introduce the set of all kids who entered.

• Quantificational subordination

E.g.: Every man loves <u>a woman</u>. They (each) kiss <u>them</u>.

The most obvious way to understand the anaphoric continuation is that every man kisses the women he loves rather than those loved by someone else (Kamp & Reyle (1993), Van den Berg (1996), Krifka (1996), Nouwen (2003)). Thus the first sentence must introduce a dependency between each of the men and the women they love that can be elaborated upon in further discourse

• Cumulative and branching continuations

E.g.: Last year <u>three scientists</u> wrote <u>five papers</u>. <u>They presented them</u> at major conferences.

The first sentence allows the so-called cumulative and branching readings. On the cumulative reading, it is understood to mean: Last year three scientists wrote (a total of) five papers (between them). On the branching reading, it is understood to mean: Last year three scientists

(each) wrote (the same) five papers. The observation in Krifka (1996), Dekker (2008) is that the dynamics of the first sentence can deliver some cumulative or branching relation that can be elaborated upon in the anaphoric continuation .

Thus the main question arises how to best model context to capture the numerous dynamic effects observed. In our talk, we will compare two main contemporary approaches to the dynamics of natural language quantification: dynamic semantic theories (Groenendijk & Stokhof(1991), Kamp & Reyle (1993), Van den Berg (1996), Krifka (1996), Nouwen (2003)) and modern type-theoretic approaches with dependent types (Ranta (1994), Cooper (2004), Tanaka, Nakano& Daisuke (2013), Grudzińska & Zawadowski (2014), Chatzikyriakidis & Zhaohui (2015)), pointing to some advantages of the latter ones.

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MARIE GUILLOT

Communicating Thoughts about Oneself. A Neo-Fregean Approach

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In "The Problem of the Essential Indexical" (1979), John Perry shows that indexical attitudes – beliefs and desires about oneself, this or that, the here and now - put pressure on a standard conception of attitude content. In this talk, I'll concentrate on attitudes about oneself: 'de se' attitudes. As reconstructed by Dilip Ninan (2016), the problem is this: no single entity we might want to identify as the content of an attitude de se can simultaneously (1) reflect what is special about such an attitude (De Se Content), (2) bear an absolute truth-value (Absoluteness), and (3) be publicly accessible to all thinkers (Publicity). This leaves room for three theoretical options: (1) giving up De Se Content (Perry's stance); (2) giving up Absoluteness (Lewis's stance); (3) giving up Publicity (Frege's stance).

In the ensuing debate, Frege's approach, in contrast to the other two, has often been treated (with a few notable exceptions) as a non-starter. This seems to be for two main reasons. First (i), it is unclear what sort of thing the limited-access attitude contents required by a Fregean view might be; (ii) second, it is often assumed that such 'private' contents would be incompatible with the fact of communication.

The goal of this paper is to vindicate the Fregean take on the problem, and to offer some suggestions as to how both those challenges could be addressed.

In reply to (i), I propose that the model of phenomenal concepts (Chalmers 2003), and more generally phenomenally-grounded concepts, can offer one possible way to understand what it might mean for the content of de se attitudes to be 'private'. I suggest that the concept of self is grounded in the basic phenomenal awareness a subject has of herself, in much the same way that the phenomenal concept "red" is grounded in the subject's phenomenal awareness of redness. The relevant phenomenal self-awareness, I argue, is the sense of "mineness" or "for-me-ness" (Kriegel and Zahavi 2015) that accompanies any conscious mental state. I call this approach the phenomenal model.

In reply to (ii), I argue that a neo-Fregean view of the de se of the kind I advocate is in no worse position to account for the communication of de se thoughts than Lewis's and Perry's views, owing to a partial restriction on the publicity of de se content implicit in both those views. Once this restriction is made explicit, it turns out that the Fregean stance might be the least costly one after all: the Perrian stance gives up De Se Content and Publicity; the Lewisian stance gives up Absoluteness and Publicity; the Fregean need only give up Publicity. I finish by exploring one possible way to understand how, on the phenomenal model, communication without Publicity could obtain. This involves giving up a simple model of communication as requiring that the speaker's and hearer's attitudes share their content, and opting instead for the idea that communication requires the hearer to form adequate concepts of the concepts present in the speaker's attitudes.

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ARKADIUSZ GUT & ROBERT MIRSKI & FAN ZHENXU

Linguistic and Cultural Contexts in the Functioning and Development of the Mindreading System

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In my presentation, I am going to challenge the central assumption of radical independence of the ability to read mental states (mindreading) from linguistic and cultural factors and, at the same token, to reinforce the stance that culture (within a particular language) influences how children and adults understand the mind. Within the framework of modern psychological research, mindreading is most frequently a quasi-technical term used to describe a complex ability thanks to which we interpret both ourselves and others as psychological creatures, and thanks to which we are able to reason about mental states. In turn, the idea that this specific human ability is universal was linked to the assumptions that: (a) an understanding of mind develops via the preordained maturational unfolding of a neurobiological mindreading module, (b) people are equipped with an innate system of heuristics thanks to which children explain others' behavior with reference to intentions and belief-states.

To challenge such a stance, I will introduce as a theoretical framework the distinction between the *low* and *high* or *early* and *later* systems in the area of mindreading and show that the specificity of the later-developing mindreading system emerges and develops in interaction with other systems—starting with language, through the involvement of executive functions, and ending with such external systems as the environment of early education.

Next, it will be shown that the arguments for intercultural differences in the cognitive system with regard to mindreading competence have taken into account: in the broader context — those differences which are connected with (i) ways of self-perception (a different self-construal), (ii) taking either an internal or external perspective while describing a social situation in which a subject has participated, (iii) the way people evaluate themselves, especially when they characterise their own decisions in the context of interactions with other subjects; and — in the narrower context — (iv) the differences in

the lexicon of mental terms, (v) preferences in explaining human actions, (vi) different attribution styles (external vs. internal). (vii) developmental differences in the emergence of the fully-fledged mindreading capability. To show the influence of culture-specific factors on mindreading, in my argumentation, I will be particularly focused on the *narrow context* arguments. To do so, I will refer to (a) experimental research involving adults (showing variations in perspective-taking) (b) experiments involving developmental differences in the emergence of the fully-fledged (*later*) mindreading capability, (c) differences in narrative practice occurring in parental education, and (d) social scripts (cf. interdependence—independence).

ALISON HALL

Context, Questions, and Pragmatic Enrichment

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Contextualists argue that pragmatics contributes to the explicit content of an utterance ('explicature') beyond the reference assignment and disambiguation that Grice (1989) acknowledged as necessary: there is ubiquitous enrichment of encoded lexical meanings (as when 'drink' is interpreted as 'regularly drink larger-then-advisable quantities of alcohol', or 'bachelor' is interpreted narrowly to exclude, e.g., the Pope. Evidence for enrichment comes from truth-value judgments, a strategy justified by the wide consensus that the explicature is the utterance's intuitive truth-conditional content.

This method of individuating explicature has been questioned by those who favour a minimalist approach to the proposition expressed. Here, I consider an argument from Borg (2012; forthcoming), who claims that apparent enrichments reflect not the original content that the utterance was used to communicate, but decisions about how to sharpen/loosen that content in order to judge the utterance true or false (related arguments are given by, among others, Cappelen & Lepore 2004; Corsentino 2012). An example is "There's no drink left", uttered at a party, which according to contextualists would have the explicature there is no alcoholic drink left. But what if the party guests later discover a full, but locked, wine-cellar? Intuitively, the utterance is still true, so does this mean the explicature was there is no accessible alcoholic drink left? (Borg forthcoming) Her point is, the putative enrichment does not settle all questions that arise about the conditions under which the utterance would be true. This undermines contextualists' argument that the fact that "There's no drink left" does not determine truth conditions in context shows that this undergoes enrichment, and supports Borg's minimalist view.

First, I respond to Borg's arguments by showing that when one considers the context in which an utterance is made, it is much clearer what questions affect truth-value judgments than Borg suggests. There is no reason to expect the explicature of an utterance to settle further questions that arise subsequent to interpretation of the utterance for the contextually-relevant purposes (where, I suggest, we are actually considering the explicature of a different – imagined – utterance of the same sentence). Borg's arguments do

not, then, provide grounds to abandon the appeal to pragmatic enrichment. In the second part of the paper, I discuss whether the idea that enrichment involves sentence meanings being developed to answer contextually-relevant questions can serve as a general constraint on enrichment (see Schoubye & Stokke 2015 for a version of such an account). I show that this is challenged by cases of enrichment that is not motivated by any antecedently salient question, or that goes beyond what would suffice to meet expectations of relevance, informativeness, etc., that arise in the context.

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JOSÉ V. HERNÁNDEZ-CONDE

Articulating Context Dependence: Ad Hoc Cognition in the Prototype Theory of Concepts

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Recently, Casasanto and Lupyan (2015) have proposed an appealing and daring thesis: there are no context-independent concepts, that is, all concepts are *ad hoc* concepts. They convincingly argue that the seeming stability of concepts is merely due to commonalities across their different instantiations but that, in fact, there is nothing invariant in them. On their view concepts only exist when they are instantiated for categorizing, communicating, drawing inferences, etc., and those instantiations are produced on the fly from a set of contextual cues.

However, the main weakness of C&L's framework is that it lacks a proposal for articulating it within a theory on the structure of concepts. My aim is to show that the *ad hoc* cognition framework can be characterized by means of a prototype theory of concepts developed in terms of a conceptual similarity space.

According to the prototype theory, concept membership is a function of the similarity between prototypes (of concepts) and the representation of objects. If objects and concepts are represented within a geometric space whose dimensions are the constitutive properties of the relevant concepts, what we have is a dimensional model of the theory (also referred to as a similarity space theory of concepts), where similarity is inversely proportional to distances between objects and/or concepts (Gauker 2007). And, although most advocates of similarity spaces identify concepts with prototypes or conceptual regions indistinctly (Gärdenfors 2000), my first point will be that regions and prototypes are very different things: what results from the generalization of a set of exemplars of a given category are prototypes (not conceptual regions), and prototypes are also the only requirement for categorization processes.

Based on this proposal, I will distinguish two different notions of concept which may be identified with two distinct stages of their life cycle: (A) *Stored concepts*, or information registered persistently by our minds about the location of prototypes. (B) *Instantiated concepts*, which exist only as a result of cognitive processes associated to categorizations, inferences, etc. The

instantiation of a concept requires the calculation of similarities between the evaluated object and the prototypes of all the considered concepts. Having said the above, the *ad hoc* cognition framework emerges in a natural way from the prototype theory once we realize that there exist (at least) four context-dependent factors that always may influence on how instantiations happen: (a) what are the relevant concepts; (b) the type of metric; (c) the importance of the different dimensions; and (d) the weighting given to each relevant concept.

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THOMAS HODGSON

The Alleged Transparency of Propositional Structure

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A nice, popular view is that sentences in context have contents which are structured propositions. When sentences such as (1) are used to express singular thoughts about e.g. objects, places, or times these contents are singular propositions which have these things as constituents.

(1) Neptune is a planet.

The important difference between general and singular is captured, on this view, by claims about the structure and constituents of contents. Empty names are a problem for this sort of view because it is unclear what singular content could be associated with a sentence containing an empty name such as (2).

(2) Vulcan is a planet.

Various solutions have been proposed for this problem. My paper is on one that has been relatively neglected which I will call the *structural variation* thesis or Variation.

- In good cases, where the name has a referent, sentences such as (1) and (2) express singular propositions.
- In bad cases, where the name lacks a referent, such sentences express general propositions containing a unique property associated with the empty name.
- The difference is due to a difference in how the world is, mediated by whatever metasemantic theory is correct.
- Speakers may well not notice the difference: structure is not *transparent*.

This would solve the problem of empty names. It might not be the best solution, but I will argue that more can be said in favour of it than might

first appear. In particular I will address the following objection: Variation must be rejected because it is in tension with *Transparency* which is the thesis that the structure of a content is known to the speaker who expresses it.

I will argue that Transparency is less plausible than Variation. Anybody who accepts that context, in the 'wide' sense, partly determines content will accept that the content of an expression need not be transparent to the utterer (Brown 2004). This may entail not entail a difference in structure, but in the case of 'unarticulated constituents' it will (Perry 1986).

Transparency cannot be defended on the basis that the identity of content is known to the utter of a sentence (assuming some version of externalism). Nor can it be defended on the basis that structure must be know to the utterer (assuming there are unarticulated constituents). One might hold that while neither of these properties are transparent, the difference between a singular and general content is (Dickie 2014). But there is no reason why a defender of Variation should accept what now seems to be just the assertion of the negation of their view.

I conclude that the view that wide context partially determines propositional structure is a defensible solution to the problem of empty names.

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MINYAO HUANG

Levels of Self-Awareness and *De se* Thoughts

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De se thoughts are thoughts about oneself that one would express by the first-person pronoun 'I'. After Castaneda (1966), Perry (1979), Kaplan (1989), and many others, this category of thoughts has been characterised by their causal powers to initiate self-oriented actions and beliefs, which distinguish them from thoughts about someone that happens to be oneself. In Perry's famous example, the messy shopper initially thought that someone was making a mess without knowing that it was him. His behaviour changed when he realised that, 'I am making a mess'. The 'I'-thought prompted his behaviour due to the immediate self-awareness it encodes, which is missing from the initial thought that is unknowingly about himself.

In this paper I suggest that the kind of self-awareness that has traditionally characterised de se thoughts pertains to psychologically 'lower' levels of self-awareness, roughly awareness of the self in here-and-now situations. Drawing on psychological models on the cognitive development of self-awareness (Neisser 1997, Morin 2006), I argue that de se thoughts can encode higher levels of self-awareness, such as awareness of the self as extended in time, awareness of the self in conceptually-specified roles and characteristics. Crucially, higher levels of self-awareness produce more complex 'I'-thoughts, and require more complicated mental representations for explaining their causal efficacies. Consider (1), wherein President Obama describes his own conflicting reactions vis-à-vis different 'parts' of himself.

(1) OBAMA: When the verdict came in, a part of me was very disappointed. That part of me grieved for the Martin family....

JOY BEHAR: Is there another part of you, Mr. President?

OBAMA: Yes there is, Joy. There's the white part of me.

SHERRI SHEPHERD: And how did the white part of you react to the verdict, Mr. President?

OBAMA: Well, Sherri, the white part of me was overjoyed, giddy even. The news of Zimmerman's acquittal had the same effect Jeremiah Wright sermons have on the black part of me¹.

Moreover, different actions may be prompted by different conceptions of oneself as seen by others. Supposed Mil is a criminal at large whose picture is on a wanted poster. He is standing in front of the poster, next to a policeman. Recognising himself in the picture, he may think to himself,

(2) The policeman is coming after me.

Does he run away or not? It depends on whether he takes the policeman to recognise himself qua the person next to him as the man on the poster. Thus, his thought in (2) would prompt different actions, depending on the ways he takes himself to be presented to the policeman.

I propose that de se thoughts which encode higher-level, conceptually-mediated self-awareness can be construed in terms of self-ascription of properties (in the sense of Lewis 1979) relative to qua objects (Fine 1982, Asher 2006). The qua objects correspond to different 'aspects' of the self and serve as the locus of the ascription. I discuss the ramifications of conceptually-mediated de se thoughts for the cognitive significance and directly referential status of the essential indexical.

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MADELEINE HYDE

Centred-World Perceptual Contents and the Communication of *De Se* Beliefs

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A popular way of explaining how perceptual experiences are *intentional* (viz. issue an account of 'how things are') is by describing their contents as representational – see e.g. (Tye, 2000) (McDowell, 1994) (Searle, 1983) (Jackson, 2016). Views are divided on what their representational contents are like. According to a recent view from Jackson (2016), experience presents us with a set of possible 'locations', centred on an embodied perceiver. So we might, with Jackson, think of the representational content of perceptual experience as a set of *centered worlds* (Jackson, 2016, p. 7).

The basic idea: that perceptual experiences are essentially egocentric, is *prima facie* intuitive (Cappelen & Dever, 2013). If this is right, then our perceptual beliefs, shaped by the centred-world representations comprising perceptual experiences, are (at least implicitly) De Se (about oneself). At this point, Jackson's account *runs into trouble*.

Any account of *De Se* propositional attitudes faces a by-now familiar problem. If successful communication requires that the content of the belief asserted matches the content of the belief taken up by the audience, attempts to communicate *De Se* beliefs will often fail. Something has gone wrong if, when I assert 'I am a teacher', a non-teacher in my audience learns that they are a teacher. Yet according to this picture of communication, that's precisely how the content of this assertion should transmit.

If De Se attitudes in general are incommunicable, so are De Se perceptual beliefs. This is undesirable: perceptual judgments should have communicable contents, so we can have genuine disagreements over how things look etc. Moreover, we want it to be the case that, even if you are 1,000km away, you can learn something about how things are in my perceptual field when I report to you that things look thus-and-so.

I argue that asking for parity of content between the belief asserted and belief the listener learns demands too much. For *De Se* attitudes to be communicable, we must allow them to shed the 'first-personal' aspect of their content when transmitted. This may work if we permit variation in the kind of content communicated across different stages of communication.

I suggest treating *De Se* attitudes as having two kinds of content: *De Se content* – which is only understandable from the perspective of the relevant individual, and *neutral content*, which is shareable – see (Egan, 2006) and (Ninan, 2016) for a similar distinction. For example, in perception: if A reports that 'there is an empty chair to my right', the content of their judgment can be neutralised as 'there is an empty chair to the right of A', so that the audience can gain the appropriate content.

I will spell out how this operates – with reference to perceptual cases – to vindicate the centred-world view of representational content against the communication problem facing general theories of *De Se* attitudes. The results will not just affect our theory of communication: we will also gain some insights into how 'indexical' contents of perceptual experience interact with our perceptual beliefs.

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BARTOSZ JANIK

Stability Theory of Belief and Delusional Belief

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Contemporary debates about delusions usually relate to the doxastic status of delusions and its possible connection to rationality [Bortolotti & Miyazono, 2015]. Although I will not be dealing directly with this issue, I would argue that delusions are (irrational) beliefs.

In this article, I would like to tackle this issue in a different way through its analysis from the point of view of stability theory of belief developed in [Leitgeb, 2014] and [Leitgeb, 2013].

The stability theory of belief is a theory of rational belief and degrees of belief based on three assumptions: the logical closure of rational belief; the axioms of probability for rational degrees of belief; and Lockean thesis which binds the concepts of rational belief and the degree of belief. The central point and the supposed weakness of this theory is a strong form of context sensitivity of belief which could be modelled by both the agent's degree of belief function and the partitioning of the underlying possibilities [Leitgeb, 2013].

For the sake of this paper I will assume a broader version of the stability theory of (rational) belief by saying that the cases of irrational beliefs such as delusional belief could be modelled from within this theory by using proper partitioning of the possibilities along with the altered degrees of agent's belief.

The main argument of this paper will be based on exposition of how aberrant inference from the data to the delusional belief, usually represented by using biased Bayesian models [McKay, 2012] [Davies, Egan, 2013] could be represented more accurately by using the concept of contextual partitioning of belief hypotheses space and by using degrees of belief associated with that partitioning. I would argue that the delusions are a product of rational inference model guided by biased partitioning, hence contextual features of the inference are the most important. Incorrect partitioning is supposedly an effect of aberrant salience attribution [Corlett et al., 2010].

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CLAUDIA PICAZO JAQUE

Occasion-Sensitivity and What Is Said

University of Barcelona

A salient reason for abandoning a semantic approach to natural language in favour of more pragmatic views has been provided by so-called Travis cases. These cases typically consist in one sentence (free of indexicals and ambiguities) being used in two different contexts, one in which the sentence seems to be false, one in which it seems to be true. If these cases work, then semantics (the properties of the sentence qua type, independently of its uses) is compatible with variation in truth-conditions. Travis calls this phenomenon 'occasion-sensitivity'. Given that Travis cases can be generated for a variety of different sentences, acceptance of some Travis cases leads one to embrace a radical pragmatic view (as Cappelen and Lepore and Borg have argued). However, rejecting the cases is problematic, since it forces us to take as literal contents not clearly available to speakers. In this talk, I will focus on two pragmatic interpretations of the phenomenon and argue that the more moderate is problematic. I focus on predicates. According to Radical Contextualism (views as Carston's, or Recanati's Wrong Format View) Travis cases show that the conventional meaning of any sentence S underdetermines the proposition expressed by S in an occasion of use. By contrast, according to Occasionalism (Travis' view, but Recanati's Meaning Eliminativism could also be included here), Travis cases force us to abandon the assumption that there are contents with intrinsic truth-conditions outside a context of use (i.e., propositions in the contextualist sense).

Because of the possibility of generating and iterating Travis cases, Radical Contextualism holds a strong Underdeterminacy Thesis: linguistic meaning, in general, underdetermines the proposition expressed. Since it is committed to there being such a thing as the proposition expressed, or a conventionally enriched meaning not susceptible of further Travis cases, Radical Contextualism must distinguish two kinds of content, different in nature—linguistic meaning, underdetermined, and contextual meaning, not underdetermined. A Radical Contextualist can follow two strategies in her defence of his version of the Underdeterminacy Thesis. First, she can claim that the conventional meaning of a predicate underdetermines the property expressed, with properties being context-insensitive. Second, she can claim that it underdetermines

the concept expressed (or intended by the speaker) with concepts being context-insensitive. Both strategies face a worry of lost effability. Strictly speaking, we cannot coin words that encode the properties expressed, for the meaning of those words would in turn underdetermine the property expressed. Moreover, there might be a variety of candidates for being the property expressed. And more importantly, the plausibility of the first strategy depends on the possibility of speakers intending to refer to those ineffable properties, and so it depends on the first strategy. However, the first strategy is also problematic. Given that our linguistically encodable concepts are occasion-sensitive, we have no reason to think that we engage in thoughts involving radically different concepts. Moreover, it is false by introspection for conscious thought, and our communicative intentions plausibly concern thoughts we can consciously entertain.

NATALIA KARCZEWSKA

Disagreements about Taste as Disagreements about the Discourse

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Contextualism has been accused by some [Lasersohn, Kölbel] of being unable to appropriately account for disagreements about subjective matters (taste, morals, aesthetics). It seems that if I say that oysters are tasty and you say they are not, the contextualist is obliged to claim that since my utterance of "... is tasty" has a different content that your utterance of "... is tasty", we are not genuinely disagreeing but merely talking past each other. This observation inspired the relativist account of taste discourse – the account that is supposed to make room for such 'faultless disagreements' – disagreements in which both speakers can be right.

In my talk I present two metalinguistic solutions to the 'lost disagreement' problem proposed (independently) by Sundell and Plunkett [2013] and Barker [2012] that are compatible with contextualism. The first kind of solution is aimed at showing that certain disagreements are not disagreements about the literal content of utterances, but about the ways in which certain words should be used in a given context. Therefore, when we argue whether or not something is spicy, in fact we are arguing about where to put the threshold for spiciness in a certain situation. We can also negotiate this way about many evaluative and normative terms (and the negotiation might also involve the character of these terms).

I argue that metalinguistic negotiations about taste, even though successful in explaining the intuition of disagreement in a vast number of cases, are not an accurate solution to the disagreement problem in contextualism when it comes to the most paradigmatic case of "tasty" which stems from, among others, their multidimensional semantic character.

I also argue against the account of faultless disagreement explained via vagueness of taste predicates [Barker, 2012]. According to Barker, disagreements about taste are usually rather disagreements about "tasty" – since "tasty" is a vague predicate, speakers may faultlessly disagree about its borderline cases. I believe that the notion of faultlessness employed in the discussion of vagueness [Wright, 1994] is a different notion than the one employed in the discussion of taste discourse [Kölbel, 2003] and that

disagreements of taste cannot be explained in terms of vagueness of the taste predicates. The notion of faultlessness postulated by Kölbel has to do with the subjectivity that is involved in making the propositions containing taste predicates true or false. On the other hand, the notion Barker (and Wright) seem to argue for has to do with the lack of linguistic authority over deciding whether or not a given predicate is applicable. I argue that we rarely disagree about borderline cases of tastiness as it is very difficult to find them.

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FILIP KAWCZYŃSKI

Contextualism and Meaning Holism — Cooperation or Competition?

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Although the debate surrounding context dependance in language seems to be rather autotrophic, sometimes it is noticed that Contextualism has a (elderly) relative from outside the debate, called Meaning Holism / Semantic Holism (hereafter: MH). When the kinship is recognised, the theories in question are typically considered to be supporting each other, as they appear to sprout from the same root, and both clearly stand in direct opposition to atomistic views according to which there are some stable and constant atoms of meaning associated with words. However, the relation between Contextualism and MH is not eagerly analysed in details — perhaps (at least to some extent) due to the *bad press* that the latter view has got these days.

In my paper I discuss two issues concerning the relation between Contextualism and MH.

First, by examining nature of the relation itself I attempt to bring to light the fact that although it may be quite easy to reconcile Contextualism with MH, it is not the only option since it is possible to accept the former while rejecting the latter. MH is the view — roughly speaking — that meaning of each word is determined by meanings of all other words belonging to the same system (language, theory etc.). Whether such account leads to Contextualism or not largely depends on which kind of semantic attitude — externalistic or internalistic — is involved. I believe that being a meaning holist and an externalist at the same time does not force one to adopt contextualist position — at least not any of its radical versions.

The second issue I discuss the so called "instability arguments" that are often developed against MH. Briefly, it is argued that if MH is correct, then language appears to be a very unstable ground, with its meanings changing frequently, and the fact that people are able to communicate effectively seems to be nothing more than just extremely fortunate coincidence. In the same spirit, Contextualism is often attacked for being the theory that makes communication almost impossible, as it allegedly postulates meanings to be determined *ad hoc* with regard to a context in which they occur.

In his recent works Henry Jackman presented several arguments in defence of MH, that are based on revised understanding of nature of the links between meanings of words within a given system. In my paper I investigate whether it is likely to advance analogous arguments to defend Contextualism, what points to the conclusion that due to several factors—among others, because of differences between MH and Contextualism discussed in the first part of the paper—it is not possible.

KATARZYNA KIJANIA-PLACEK

Descriptive Uses of Names

Institute of Philosophy, Jagiellonian University

I will propose in this talk an account of the uses of proper names in which the names themselves contribute properties to the propositions expressed rather than individuals. I will concentrate on cases which cannot be analysed by the Being Called Condition proposed by predicativists (Burge 1973, Fara 2015a,b,c, Matushansky 2006, 2008). Such cases were first introduced to the literature by Boer (1975) and Jeshion (2012, 2015) as counterexamples to predicativist analyses of proper names and include the following types of examples:

Family Examples:

- (1) Joe Romanov (my barber) is not a Romanov;
- (2) Waldo Cox (my gardener) is a Romanov (an exciting fact revealed by recent historical investigations).

Costume (Representational) Examples: (3) Two Obamas came to the Halloween party.

Resemblance Examples: (4) Two little Lenas just arrived.

Artwork (Producer) Examples: (5) He gave me a Picasso for my birthday. Machiavelli Examples: (6) Dick is a real Machiavelli.

I share Boer's and Jeshion's opinion that these examples are problematic for predicativists but will argue, contrary to Jeshion, that none of (1)-(6) can be analysed as cases of deferred reference (Jeshion 2015, compare Nunberg 1993). Furthermore, I will argue against treating Machiavelli examples as a case of the metaphorical use of language (as is the prevailing opinion, compare Jeshion 2012). Instead, I will propose an interpretation of examples such as (3)-(6) via the mechanism of descriptive anaphora, according to which a name is anaphoric on an object, which is salient in the extra-linguistic context of the utterance of the sentence in which that name occurs. The object points to its salient property and it is this salient property which is the semantic contribution of the name to the proposition expressed. The mechanism of descriptive anaphora is a generalisation of that introduced in Kijania-Placek (2012, 2014, 2015) for the analysis of descriptive indexicals. While on this

proposal Costume Examples, Resemblance Examples, Machiavelli Examples and some Artwork Examples receive a uniform interpretation, Family Examples require special analysis and will be treated as common nouns (compare Jeshion 2015).

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- 5. Fara, D (2015c) 'Romanov' Is Not Always a Name, ms.
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ADAM JOHN KIMBERLEY

On the Supposed Incompatibility of Semantic Underdetermination and Truth Conditional-Semantics

University of East Anglia

Arguably, *the* central issue in the current minimalist-contextualist debate is the truth or falsity of the following thesis:

Semantic Underdetermination (SU): the semantic content of well-formed declarative sentences (relative to contexts) underdetermines the truth-conditional content that utterances of those sentences express.

Both those for and against SU have taken its truth to imply the inadequacy of truth-conditional semantics (TCS)¹. This belief, however, rests upon the assumption that the notion of truth operative in TCS is the same as that in truth-value assessments of content. In this paper, I argue against this assumption by demonstrating that there is an important role for TCS in the characterisation of particular structural features of human I-Languages². Furthermore, this conception of TCS is entirely of a piece with SU.

While it is plausible that the notion of truth operative in truth-value assessments of content is one governed by certain world-involving relations, this is not the notion of truth operative in TCS. This notion of truth is governed by certain *structural features* of *linguistic-types*. These structural features are determined by empirical facts about human I-Languages and the role of TCS is to characterise and enter into the explanation of such features – e.g., compositionality, thematic-structure, negative-data (i.e., impossible interpretations of syntactic structures), and semantic-entailment relations.

This conception of TCS is entirely consistent with even a radical form of SU³. Even granting, for the sake of argument, that no linguistic-type ever determines a truth-evaluable content (relative to a context), this does

 $^{^{1}\}mathrm{See},$ e.g., Carston (2002); Borg (2004; 2012); Recanati (2004; 2010); Cappelen & Lepore (2005).

²On 'I-Language' see Chomsky (1986). On Similar conceptions of semantic theory see Higginbotham (1985) and Pietroski (2005a; 2005b; 2006; 2010; forthcoming).

³See Travis (1985; 1996).

not prohibit the characterisation of the relevant structural features of those linguistic types by TCS. One need not be able to judge linguistic-types as being true or false, relative to some context, in order to assign compositional semantic-values to them. Such values may include truth-values, but the role of such values is not to determine a level of truth-evaluable *content*. Rather, their role is exhausted in the exhibition and explanation of the structural features of linguistic-types. Furthermore, even granting a radical form of SU, this does not prohibit the structural features of linguistic-types from placing *constraints* on possible contents expressible by utterances of tokens of those linguistic-types, without thereby determining them. Thus, I conclude, TCS is entirely compatible with even a radical form of SU.

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ADAM KLEWENHAGEN

Truth-Conditional Pragamatics or Speech-Act Centered Semantics? Pragmatism Beyond Contextualism

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What Herman Cappelen and Ernest Lepore called the "Mistaken Assumption" (MA) in their *Insensitive Semantics* and what Salmon, in his "Two Conceptions of Semantics", called "the speech act centered conception of semantics" seem to be easily equatable. According to the former "a theory of semantic content is adequate just in case it accounts for all or most of the intuitions speakers have about speech act content"¹, according to the latter "semantic attributes of expressions (...) somehow reduce to, are to be understood by means of, are derived from, or at least are directly determined by, the illocutionary acts performed by speakers in using those expressions, or perhaps the illocutionary acts that would normally be performed in using those expressions." This kind of equation was also made by Cappelen and Lepore. It is based on the assumption that speech act content must take truth-conditional, propositional form and therefore the only plausible semantically relevant role of the context would be that of fixing the expressions' meaning or reference. On the other hand, this view seems strictly connected with Salmons' and others' onesided account of the notion of expression-use which is taken to be only an occurrence in a certain utterance situated in a particular time and space. If the only "use" of expression needed for the theory is the one that makes an expression appear on certain occasion as a mereological part of a speech act, i.e. this "use" which turns out to be just an expression-token, then the only contextfixing this theory will establish is the one that modifies tokens of one type under various circumstances. As, according to Cappelen and Lepore, MA leads directly to contextualism, every linguistic pragmatism labelled "speech acts centered semantics" is fated to be a variation of contextualism. On the contrary, in my submission, I try to point out an essential difference between speakers' "intuitions (...) about speech act content" understood as "intuitive truth conditions"

¹H. Cappelen, E. Lepore, *Insensitive Semantics. A Defence of Semantic Minimalism and Speech Act Pluralism*, Oxford: Blackwell Publishing Ltd, 2005, p. 53.

²N. Salmon, "Two Conceptions of Semantics" in: N. Salmon, Content, Cognition and Communication, Oxford University Press, 2007, p. 344.

and possible forms of how illocutionary acts determine the meaning of an expression. In order to do that, we need to distinguish between (a) speech act's truth-conditional and illocutionary content (or between "what is said" and "illocutionary force" as parts of an utterance content), (b) between "use" as indicated appearance and "use to be made of" an expression and (c) between so called "epistemic" and "metaphysical" role of the context. Finally, I defend a kind of speech-act semantics, by proposing the notion of context-sensitive meaning, where crucial role of context-fixing is not the one of completion, expansion, or disambiguation of expression-type used (in the first sense) in context, but the one that makes it possible recognise certain illocutionary act determining both use made of the expression-token and its meaning in a given context.

KONRAD ANDRZEJ KOBYLIŃSKI Evolution, Context and Relevance Theory

University of Silesia

H. P. Grice showed how, through inference, there is a conveyance of a communication beyond conventionally coded language level. One of the most interesting modifications of Grice's approach is the relevance theory proposed by D. Sperber and D. Wilson. They accept Grice's central claim that an essential feature of most human communication is the expression and recognition of intentions. This theory argues that the hearer will search for meaning that fits his/her expectation of relevance in any given communication situation. Relevance guides not only our language usage, but all human cognition tends to be geared towards the maximisation of relevance, which is understood as a trade-off between effort and effects. In short, the human cognitive system tends to pick out information which connects to existing assumptions in such a way as to improve the individual's overall representation of the world by making it more likely to be true. While Grice assumed that inference can enrich the semantic content of the message encoded in the language, Sperber and Wilson claim that human communication is first and foremost a matter of inference, and that language is the add-on. In my speech, I would like to take up the issue of whether there is a reasonable, evolutionary justification for the emergence of the principle of relevance. This presentation sets out to describe context in a solid sense with a view to account for context selection as evolutionary factor, i.e. the way in which humans use a mere part of their context while processing a stimulus or an utterance rather than the whole of it.

STANISŁAW KRAJEWSKI

Context Dependent versus Conetxt Independent Quantifiers

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In natural language there exist many quantifier expressions, that is, expressions that state or estimate the number of objects of a certain kind, or the evaluate size of a collection or compare sizes, etc. They include phrases like 'all', 'always', 'nowhere', 'almost never', 'most', 'infinitely many', 'many', 'from time to time', 'a few', 'quite a few', 'several', 'just one', 'at least one', 'as many as', 'roughly as many as', and many, many more. In mathematics, other quantifier expression are used, for example 'there are finitely many', 'there are uncountably many', 'the set of ... is dense in ...', and the phrases like 'almost all', 'a negligible amount' are given various precise meanings.

In logic, from syllogistic to Frege to mid-20th century predicate logic, only two quantifiers were incorporated: the general and the existential. They are the only ones taught in general logic courses. Some other ones can be defined within first order logic, for instance the numerical quantifiers. In higher order logics and in set theory, or theories, many more quantifiers can be defined. Definitions in mathematics are expressed in a technical language of a given branch, but logicians have learned how to express these definitions in the language of logic.

However, it is clear that logic is poorly equipped, if at all, to deal with many from among the quantifier expressions listed above. For example, the term 'many' is hardly definable in general since its meaning depends on the situation in which the term is used. It is context-dependent.

To understand a context-dependent quantifier we need an appropriate understanding of the world. Logic itself is not sufficient.

It seems that logic deals with context-independent quantifiers only. And hopefully each such quantifier can have its counterpart in logic. The tentative thesis is:

Quantifiers graspable in logic = Context-independent quantifiers.

This serves as an important first approximation. The matter is not so simple, though. First, various mathematical concepts explain the intuitive

idea of "almost all" in relation to an infinite domain. Thus "almost all" seems to be both (mathematical) context-dependent and defined (in various ways) in logic (and only in broadly conceived logic). This reservation can be overcome. Second, how can we show that all context-independent quantifiers are definable in logic? We would need a definition of (a quantifier) being context-independent. This is clear in specific cases, but can a general definition be given? What is needed is a criterion for context-independence of quantifiers (or perhaps even more generally). The idea is that there is no need for any specific knowledge about the world. Yet, to understand the Magidor-Malitz quantifier one certainly needs some non-trivial knowledge. It is, however, different from the knowledge of contingent features of the world, physical or social. To characterize no need for such knowledge another thesis can be attempted, a proposal that justifies the importance of the most familiar quantifiers. It postulates a possibility of defining in basic logics.

HSIULIN KU

Semantic Modulation: Basing on Semantic Potential

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Truth conditional pragmatics has been challenging the traditional view of truth conditional semantics that the semantic content expressed by an utterance of a sentence (in a context) is determined only by the syntactic form of sentence and the semantic content of the constituents in sentence. Its basic tenet is that what is said by a sentence is never without contextual intrusion. The relevant theses follow up: there is no minimal proposition for sentence or minimal content for word; the meaning of linguistic item is inevitably modulated in the context. Many cases have been shown to indicate such semantic modulation in interpretation, such as (i) the unarticulated constituents (UCs), the pragmatic determinants of what is said, i.e. contextually supplied information which is semantically relevant but syntactically unmarked; (ii) the loosen use, the flexible range of the use of an expression such that the intuitively understood content of a sentence is broader than its conventional meaning; (iii) the transfer, an expression is used, through a particular relation provided by the context, to denote something which is not the formal, correct reference of the expression.

Among them, the UCs case faces the challenge from indexicalism, the view that all these UCs cases can be traced back to the underlying logical form of the sentence, such that a minimalism's stance still holds: the truth conditional content of a sentence is entirely determined by its logical form and the meanings of components, quite the principle to keep all terms' meanings or logical forms as stable and fixing. In this paper, I shall point out another kind of modulation, the cognitive profile modulation, to show that Jason Stanley's argument to accommodate UCs basically misleads the role of UCs. This will be done by following steps: (i) the contribution of expression in sentence comes from its semantic potential, including the aspects of cognitive profile and representation, and the interaction with other expressions and contexts. Lexical terms' meanings are modulated in sentence by nature. (ii) The syntactic modulation is a consequence of the profile modulation, such that different readings of a sentence or lexical term come with different syntactic modulation, resulting in the different logical forms for a single sentence. It follows that (iii) there is no fixing logical form for a sentence, such that indexicalism is failed to claim that all the UCs can be accommodate by the underlying logical form.

A further diagnosis of and reply to indexicalist's insistence on logical form is presented as well: (i) logical form is constructed out from the semantic potential. (ii) Stanley misleadingly thinks that a rule-governed requirement is against free pragmatic enrichment.

ELENA KULKOVA

Neural Mechanisms of Figurative Language Processing

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In accordance with the Embodied Cognition view, concrete words and sentences denoting actions activate motor and premotor cortices (Aziz-Zadeh et al., 2006; Raposo et al., 2009; Desai et al., 2013). However, it is unclear whether processing of abstract non-literal language leads to sensorymotor activations as well (Cacciari et al., 2010; Raposo et al., 2009; Cacciari and Pesciarelli, 2013), which would imply that the same mechanisms are employed for both literal and figurative language processing (Hauk et al., 2004; Buccino et al., 2005). Current research addresses these questions: it aims to provide Transcranial Magnetic Stimulation (TMS) evidence of motor involvement in sentence processing to be conditioned by the type of meaning (literal or figurative) and to be dependent on the number of additional factors (first of all, context). To demonstrate that cognitive mechanisms of sentence processing and engagement of neural networks are sensitive to context, we implement single-pulse TMS at different stages of literal and figurative sentence processing. We assume that exposure to the various types of context - limited (when only noun part and verbal component of a sentence are presented) or broad (the whole sentence) - influences mechanisms of sentence processing and, consequently, leads to variations of motor cortex activation.

Differences in the motor cortex excitability, indexed by Motor Evoked Potentials (MEPs) changes, are expected to be minimal across literal and figurative sentences when limited context is available. However, when broader context is provided, motor activation during sentence processing is supposed to vary significantly across stimuli sentences (literal, metaphoric, idiomatic and abstract ones). The level of motor cortex excitability is expected to be positively correlated with the extent of the basic verb meaning, preserved in the semantics of a verb in a sentence. Thus, motor cortex activation is hypothesized to decrease for the figurative and the abstract sentences, compared to the literal ones.

Therefore, the results of the research will shed more light on the neuroanatomical networks involved in idiom and metaphor comprehension and

yield new insights into the role of context in non-literal sentence processing.

PALLE LETH

Speakers, Hearers and Demonstrative Reference

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What is the semantic value of a demonstrative in context? The possible divergence between speaker's (S) intended value and hearer's (H) assigned value has given rise to diverse approaches. Some theorists claim the instance of determinacy is S's intention (Kaplan 1989, Predelli 2002, Montminy 2010), others that it is settled by the demonstration accompanying the demonstrative (Kaplan 1978, Reimer 1991). Some theorists consider contextual determination to amount to all-things-considered judgments (Travis 1989, Gauker 2008). Others favour accounts where the value is the intended object, provided it coincides with the most reasonably assigned value according to what's accessible to H (King 2014). Whether the approach is speaker or hearer oriented, the common presupposition is that in addition to S's intended value and H's assigned value, there is the actual, objectively correct, value (Perry 2009). But the arguments put forward seem much to depend on the theorist's intuitions and whether her sympathy is with S or H (Åkerman 2015).

I will argue that within a theory of utterance interpretation with respect to demonstrative reference objective truth-conditions are dispensable. A rational reconstruction of the interactive interpretation concerning utterances for which S's intended and H's assigned value diverge suggests there is no such thing as the correct value of a demonstrative in context. In order to account for communication with demonstratives it is sufficient to invoke the subjective truth-conditions of S and H (Neale 2007).

In many cases where S's intended and H's assigned value diverge, H will take S's intention as eventually revealed to her to be decisive. This however doesn't imply that S's intention constitutes the correct value. Rather, H erases the original utterance and replaces it by a novel utterance for which intended and assigned value coincide. The issue as to the objectively correct interpretation of the original utterance doesn't arise, because that utterance is erased and replaced.

There are also cases where H assigns a semantic value to the demonstrative though she has come to believe it wasn't intended by S. H does so when she has an interest in preserving the utterance, typically because it

has consequences for which she holds S responsible. But the issue as to the objectively correct interpretation of the original utterance doesn't arise in these cases either. H need not claim her value assignment constitutes the correct interpretation, but only that her assignment corresponds to the most reasonably assigned value and that speakers are responsible for what they are reasonably taken to say.

It seems then that abandoning objective truth-conditions permits us to reconcile speaker and hearer oriented theories of demonstrative reference. H typically asks what S wanted to refer to or what S most reasonably was taken to refer to, but not what S objectively referred to. The issue between S and H doesn't concern the correct value assignment, but whether to erase the utterance or not. I will look at some varieties of interpretive interaction which I think may be analyzed along these lines and consider the generalization to other areas of utterance interpretation.

GRZEGORZ LISOWSKI & KONRAD WIŚNIEWSKI

The Impact of Context on Knowledge Attribution in Continuously Changing Conditions

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In the paper 'Inexact knowledge' (Williamson, 1992) the following condition on knowledge has been presented: (Safety Condition on Knowledge) if an agent x knows that p, then p is true in all sufficiently similar cases. One of the main drawbacks of the Safety Condition pointed out by the critics is that it is not defined precisely enough (e.g., Neta & Rohrbaugh, 2004). Following this objection, it is worth noting that the notion of a "sufficiently similar case" is not very precise and therefore does not generate any specific predictions concerning knowledge attribution. The main purpose of this paper is to provide a way of understanding this notion and illuminating contextual factors that influence knowledge attribution.

Following the intuition expressed by Timothy Williamson (1992), it is hypothesized that the main factor influencing how large the margin for error needs to be for knowledge attribution is the agent's ability to assess the situation with her perceptual faculties. However, it has been shown that knowledge attribution depends on the context in which an agent is acting in situations in which the agent can be wrong (Schaffer & Knobe, 2012). It is thus hypothesized that people will attribute knowledge significantly more frequently to agents who can express a belief without any possibility of error than to those who cannot, and that they will be significantly keener to attribute knowledge in a context in which the consequences of falsity of the belief are smaller.

The experiment is conducted as an Internet survey using the LimeSurvey software. The sample should consists of 1200 participants that vary in nationality, gender and education. They are presented with a story in which an agent is assessing a value of a continuous variable basing on a readout from a measurement device with a given (and known to her) possible measurement error. The stories differ in how likely the agent is to err: not likely at all, minimally likely, very likely, or she almost certainly errs. Each of those

four error-likelihood conditions is further divided into three: in one, no consequences of the falsity of the belief for the agent are indicated, in another, there are significant consequences for the agent, and in yet another, the consequences are very insignificant. Respondents are then asked to mark on a 7- point Likert scale to what extent do they agree with whether knowledge can be attributed to the agent.

A result supporting our hypotheses would prove the usefulness of the Safety Condition on Knowledge in predicting knowledge attribution in cases concerning continuously changing phenomena. Moreover, it would support contextualism in a certain class of cases. Finally, it would have implications for further research concerning factors that influence the likelihood of knowledge attribution, such as morality or social relations.

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GUIDO R. LOEHR.

Abstract Concepts, Compositionality and The Contextualism-Invariantism Debate

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Concepts in cognitive science are theoretical constructs that are posited to explain higher cognitive abilities such as object classification, decision-, inference- and analogy-making (Barsalou, 2012; Machery, 2009). According to the majority view, these explanatory posits are thought to be stable mental representations in long-term memory that are retrieved in an automatic and context-insensitive manner (Machery, 2015; Barsalou 2012; Laurence & Margolis 1999; Fodor 1998; Keil 1994). I refer to this view as Invariantism or Defaultism. According to the competing and increasingly popular view, concepts should be construed as knowledge that is not retrieved by default, but constructed "on the fly", from now on referred to as Contextualism or Variantism. Defenders of this theory (e.g., Casasanto and Lupyan 2015; Kiefer and Pulvermüller 2012; Hoenig et al. 2008; Kiefer 2005; Barsalou 1992, 1987) argue that the available empirical and conceptual evidence is best accounted for by unstable and context-dependent conceptual representations.

The clear advantages of default representations are that they can easily account for the apparent stability of concepts in thought and communication and its computational simplicity. When seeing a tiger, we do not have to retrieve all of our knowledge associated with tigers to construct a concept upon which we base our decision to run away. Instead we can immediately react appropriately because of the fast retrieval of our default concept of tiger that includes the feature 'highly dangerous'.

To explain appropriate behavior in less typical situations, however, default theorists have to posit another kind of knowledge structure, called background knowledge, which is supposed to show how the individual adjusts their default knowledge to an unfamiliar context. For example, in a zoo it would be inappropriate to run away upon hearing that there is a tiger because we have the background knowledge that tigers in zoos are usually behind bars.

I argue that Invariantism cannot account for two important desiderata for any theory of concepts, compositionality and scope. I show that Invariantism cannot explain abstract concepts (concepts without physical referent or whose referents share few features) and how concepts compose and without collapsing into Contextualism. Furthermore, I argue that stability of thought for which Contextualism seems especially problematic, can easily be accounted by it.

Finally I discuss the objection that empirical evidence may make the theoretical debate unnecessary. I argue that Contextualism and Invariantism are often mischaracterized and that if properly characterized, both views cannot be falsified. Consequently, no empirical evidence can challenge my conceptual results and, contrary to the mainstream opinion (see e.g., Bloch-Mullins, 2015), only theoretical reasons can put forth a decision on this issue.

PIOTR MAKOWSKI

Distal Intentions in Empirically Unstable Contexts of Actions

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Distal intention or D-intention (Pacherie 2008) is a type of propositional attitude, the formation of which precedes in time the practical implementation of its content. When an agent A *D-intends* to ϕ , the A's decision to ϕ settles a goal before A's practical reasoning about how to ϕ . According to the most widely accepted model of diachronic rationality of an agent (Bratman 1987, Broome 2013), distal intentions are subject to the norm of rational stability over time – they should be revised or retained according to the information about practical contexts of our actions. Still, the model can scarcely be applied to such contexts which are highly unstable (due to their unpredictability or uncertainty). In such contexts, simple rational retention of D-intentions nor their rational revision is not a sufficient warranty of the success of the practical scenario for which these intentions are designed. This suggests that the model of the psychological stability of an agent, which is based on the diachronic rationality of an agent and which has been accepted in the contemporary philosophy of action, is insufficient and needs be combined with and another model.

To fill this gap, I want to introduce the model of incomplete intentions which applies to empirically unstable contexts. My account is based on three issues:

- (1) psychological models of the diachronic stability of agents,
- (2) the idea of partial intentions (Holton 2008),
- (3) the distinction between the *abandonment* and *rational revision* of a propositional attitude.

My stipulation is that this model is capable not only of supplementing the one which has been commonly accepted in action theory, but also of refining the overall picture of the psychology of an agent behind it.

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BENJAMIN MARSCHALL & LUKAS LEWERENTZ

Referential Intentions and the Metasemantics of Demonstratives

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Demonstratives like 'this' or 'that' are powerful expressions: Given the right circumstances, they can be used to refer to basically anything. This raises the following metasemantic question: What determines the referent of a demonstrative in a conversational situation? According to a prominent family of views, the following principle holds: An occurrence of a demonstrative d refers to an object o only if the speaker intends to refer to o with d (Åkerman 2010, King 2014a, 2014b, Montminy 2010, Perry 2009, Predelli 2002, Stokke 2010). Despite its popularity, this *Intentional Constraint* faces two important objections that, in our opinion, have not yet been addressed satisfactorily: Firstly, the Circularity Worry, and, secondly, the Problem of Conflicting Intentions. In our paper, we will propose strategies for defending the Intentional Constraint against these objections.

The Circularity Worry is the worry that the Intentional Constraint is circular. Invoking referential intentions in order to explain what determines the referent of a demonstrative seems at least dubious (Gauker 2008, 2010). Although this concern is intuitively compelling, it is far from clear that the apparent circularity is malignant. This depends on the goals of metasemantic theorising, on the one hand, and on what referential intentions are, on the other hand. We will argue that if metasemantics is the project of explaining which facts ground semantic facts (Burgess and Sherman 2014), it is unproblematic to use the semantic notion of reference in order to characterise the grounding facts. And even if it were impermissible to invoke semantic notions at all, there would nonetheless be a reading of the Intentional Constraint which is, in our opinion, not viciously circular. Drawing on a suitable notion of speaker reference, as opposed to semantic reference, the Intentional Constraint can play an explanatory role in the metasemantics of demonstratives.

The *Problem of Conflicting Intentions* is the problem that speakers can have several conflicting referential intentions without noticing it. Referential

intentions conflict if they are directed at different objects. When uttering a demonstrative, a speaker can intend to refer to o and intend to refer to u without realizing that o and u are different objects. What should someone who endorses the Intentional Constraint say about such cases? On the face of it, it might seem necessary to single out one of the intentions as decisive for determining the referent. However, the prospects for finding a nonarbitrary distinction between those referential intentions that do determine a referent and those that do not seem grim (Speaks forthcoming). On the other hand, the view that demonstratives always fail to refer in cases of conflicting intentions has also been criticised as counterintuitive (Speaks ms). In order to avoid these problems, we want to expound and defend an alternative that is underexplored in the literature: Multiple Reference Intentionalism. (Siegel (2002) briefly considers such a view without endorsing it.) According to Multiple Reference Intentionalism, demonstratives have several referents if the speaker's intentions conflict. When supplemented with pragmatic principles, Multiple Reference Intentionalism provides an attractive explanation of demonstratives' role in communication, or so we will argue.

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FILIPE MARTONE Context and Cognitive Value

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The indexical version of Frege's Puzzle is, at least at first sight, quite amenable to a solution in terms of meaning. Once David Kaplan distinguished between character and content, an explanation for the differences in cognitive value that coreferential indexicals might exhibit followed more or less naturally: it is the character, not the content, that accounts for variations in their epistemic profile. However, Kaplan's solution to Frege's Puzzle was not unchallenged. Nathan Salmon argued that differences in the cognitive value of indexicals arise not in virtue of a difference in character, but in virtue of a difference in the context in which those indexicals occur. Even though I agree with Salmon's general assessment of Kaplan's solution to the Puzzle, in this presentation I argue that differences in cognitive value cannot be accounted for by features of the context either, at least not under the semantically relevant notion of context. If we conceive contexts as sets of whatever parameters are necessary for the semantic evaluation of expressions, i.e., as things that should figure in the machinery of formal semantics, then none of these parameters is able to track differences in cognitive value adequately. This becomes particularly clear when we consider examples in which we have more than just one addressee in the same context and vet the cognitive values of the indexicals occurring in that context are not the same for all those addresses. Moreover, I ague that, if we want to include the sort of thing that does explain cognitive value as a parameter of the context, then either this parameter turns out completely otiose for semantic purposes or we step on a slippery slope towards semantic internalism, and a very implausible internalism at that.

The structure of the presentation is as follows. I first briefly introduce the indexical version of Frege's Puzzle and the sort of solution in terms of meaning that Kaplan offered. I then mention Salmon's objections to it and explain his purported solution in terms of some features of the context, namely, demonstrations. He claims that we should include demonstrations in the context rather than in the expressions themselves, as Kaplan's theory requires. I argue that, even if we do this, we are unable to explain some cases where the same demonstrations are at play and even so the cognitive

values that accompany them are distinct. I then consider other candidates for explaining cognitive value, such as times and directing intentions, and conclude that none of them is satisfactory: they are either semantically implausible or not fine grained enough. If I am right, then no objective feature of the semantically relevant notion of context is adequate for solving the Puzzle. We must appeal to what Ben Caplan called the *natural notion of context*, i.e., the actual real world situation in which a given utterance occurs, not to the formal one. This seems to show that cognitive value is much more subjective and idiosyncratic than usually believed.

DANIEL M. MASSEY Relativity, Indexicality, and Inferential Barriers

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I show that a relative truth can only be a deductive consequence of a non-relative truth if the non-relative truth is expressed using indexicals—and even then only under one conception of consequence¹.

I begin with a puzzle motivating the investigation of the logic of relativism: Relative truths are those the truth of which varies not only with the contexts in which they are asserted but also the contexts from which assessments of assertions are made. A non-relative (absolute) truth then is one whose truth does not vary with such contexts of assessment. (I set aside the possibility that all truths are relative.) There is strong reason then to think that no set of absolute truths could ever deductively entail a relative truth. If such a set did entail a relative truth, the relative truth would need be true at all contexts of assessment that the absolute truths are true, i.e., at all contexts of assessment. On the other hand, we clearly make inferences from absolute truths to relative truths. For example, when I find something pleasant tasting, I conclude that it is tasty. A solution to the puzzle then would show what underwrites such inferences.

In the next section, I show that a simple and obvious solution is not fully satisfying. On this solution, we need only construct a conditional whose antecedent is an absolute truth and consequent a relative one. Such a conditional would itself count as a relative truth and could also justify our inferential practices. The proper formulation of the conditional, however, is more complex than initial appearances suggest. Inspired by John Perry's work on essential indexicals, I argue that any such conditional must contain indexicals as a part of its antecedent. This suggest a second look at inferences from indexically expressed absolute truths to relative truths.

In the third section, I lay out the necessary tools for such a second look. I rely on John MacFarlane's distinction between absolute and diagonal notions of logical consequence as well as work on inferential barriers by Greg Restall and Gillian Russell to prove the following claims.

¹There is one trivial exception discussed in the paper.

- 1. There is an inferential barrier such that no absolute truths absolutely entail relative truths.
- 2. There is an inferential barrier such that no indexical-free absolute truths diagonally entail relative truths.
- 3. Indexically expressed absolute truths can diagonally entail relative truths.

The practical significance of these results is that assessors may not infer relative truths from the assertion of absolute truths in contexts other than their present one but may draw such inferences from assertions of indexically expressed absolute truths made from their present context (or relevantly similar contexts). The puzzle then is solved in a way that respects both the need for an inferential barrier and our actual inferential practices while at the same time revealing an important inferential connection between indexicals and relative truths.

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MARK P. McCULLAGH Distributed Utterances

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I propose and defend an apparatus for handling intrasentential change in context. The most prominent semantics of context-sensitivity, David Kaplan's Logic of Demonstratives, does not handle such changes: in that system there is only one context used to evaluated an entire sentence. As has been recognized (starting with Kaplan himself), this creates problems interpreting sentences with multiple occurrences of the same demonstrative or indexical. Suppose that a speaker changes position—from near the fireplace to near the window—while saying "It's warm here, but here it's quite a bit cooler." In this case each occurrence of "here" is to be interpreted as denoting a different location. Yet a Kaplanian context supplies only one location for the evaluation of location-indexicals in the sentence.

My proposal involves the idea that contexts can be complex. Complex contexts are built out of ("simple") Kaplanian contexts by ordered pairing: $\langle c_1, c_2 \rangle$ is a complex context (where c_1 and c_2 may themselves be complex). Complex contexts allow us to revise the clauses of Kaplan's Logic of Demonstratives so that each part of a sentence is taken in a different component of a complex context. For example, concerning conjunctions, we write:

$$\models_{\langle c_1, c_2 \rangle ftw} \phi \wedge \psi$$
 iff $\models_{c_1 ftw} \phi$ and $\models_{c_2 ftw} \psi$

In English: a conjunction is true at $\langle\langle \text{context}_1, \text{context}_2\rangle$, assignment, time, world \rangle iff its first conjunct is true at $\langle \text{context}_1, \text{assignment}, \text{time, world}\rangle$ and its second is true at $\langle \text{context}_2, \text{assignment}, \text{time, world}\rangle$.

I discuss how revisions to other clauses in the Logic of Demonstratives should go. The revised system has one implication that Kaplan's original system does not: it is no longer the case that each context is suitable for the evaluation of each expression. I argue that this is not an objectionable implication. I also consider possible objections to the revised system, and compare the proposal with an account offered by David Braun (1996).

As for applications, beyond the simple sort of case discussed above we can handle utterances made by multiple agents (as in the "shared utterances" investigated by Ruth Kempson $et\ al.$) and the idea of intrasentential change in context can also be deployed in an account of scare-quoting.

ANDREI MOLDOVAN

The Fregean vs. the Strawsonian Theory of Definite Descriptions

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It is common to find in the literature on definite descriptions reference to the "Frege-Strawson" theory of definite descriptions, (e.g., Kaplan (1970: 279), Kripke (1977: 269), Garcia-Carpintero (2000: 132), Salmon (2007: 69), Pelletier and Linsky (2005: 203), Elbourne (2013: 2), Schoubye (2013)), or to the "Frege-Strawson" theory of presuppositions (e.g., Beaver and Geurts (2013: §4.1)). I wish to argue that the differences between the Fregean and the Strawsonian theories are sufficiently important so as to motivate a separate treatment of the two theories. Although both theories introduce a presupposition of existence, these presuppositions are of different kinds. In particular, the two theories are different with respect to the role of the context in determining the denotation of the description: on the Strawsonian theory definite descriptions are indexicals and rigid singular terms, the denotation being the speaker referent, provided it fulfils certain contextual conditions; on the Fregean theory definite descriptions are non-rigid terms, such that the sense (intension) might determine a different reference (extension) for different possible worlds. In the latter case, the denotation is not the speaker referent with respect to the world of the context, but needs not be the same relative to a different world. I present the difference between the two theories in the standard framework for truth-conditional semantics developed in Heim and Kratzer (1998), for extensional contexts, and Fintel and Heim (2011), for intensional contexts.

In the second part of the paper I compare the predictions that the two theories make with respect to the interpretations of sentences that contain DDs embedded in intensional contexts. I consider *de dicto* readings of non-doxastic propositional attitudes ascriptions, such as the *de dicto* reading of 1:

1. Hans hopes that the ghost in his attic will be quiet tonight.

Sentences of this kind have been used to develop an argument against the Russellian theory of DDs in Heim (1991) and developed in Kripke (2005: 1023), Elbourne (2005: 109–112; 2010, 2013: 150-171) and Schoubye (2013).

Elbourne identifies in the above quote two intuitions concerning what the utterance of 2 says or implies in the given scenario:

- i) the utterance of 2 does not say or imply that Hans hopes that there is a unique qhost in his attic and
- ii) the utterance of 2 says or implies that Hans assumes (or believes) that there is a unique ghost in his attic.

The Russellian de dicto truth-conditions for 1 are such that 1 is true iff Hans hopes that there is a unique ghost in his attic and it is quiet tonight. But these truth-conditions are incorrect as they fail to fulfil (i) and (ii). The Fregean and the Strawsonian theories are in better position to account for this data than the Russellian theory is, as both of them introduce a presupposition of existence and uniqueness. This presupposition translates in a claim of what Hans assumes or presupposes. However, as I argued above the role these presuppositions play in the two theories is very different. I consider the different predictions that the two theories make and argue that the Fregean theory is in a better position to account for the data than the Strawsonian theory.

ELEONORE NEUFELD

Making the Case for Strict Compositionality

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According to the principle of compositionality, the meaning of a complex phrase is determined by the meaning of its parts, the way they are combined, and nothing else besides. The principle offers a computationally plausible model of linguistic competence adequately accounting for productivity and systematicity. However, compositionality is challenged by the phenomenon of semantic flexibility. Lexical items seem to change their meanings according to the context they occur in, which suggests that general beliefs, and not only the literal meaning of the parts, intrude into the determination of the meaning of phrases. To overcome this challenge but keep the explanatory advantages of compositionality, many theorists have adopted a 'weak' version of compositionality. These accounts usually introduce complexity into the combinatorial operations by allowing them to be sensitive to context and general beliefs. Taking the influential proposal of François Recanati as a representative of this approach, I will show that it is able to successfully deal with cases of semantic flexibility commonly used as objections against a strict version of compositionality. However, his account runs against serious shortcomings: It can only account for semantic flexibility at the cost of overpredicting meanings that are, as a matter of fact, not available. Taking into account recent developments in the psychology of concepts, I will then suggest an alternative approach, according to which we keep the combinatorial operations of our linguistic competence strictly compositional, but allow lexical items to store rich arrays of information. This will provide us with a psychologically realistic model that successfully reconciles compositionality with semantic flexibility and does not fall prey of over-predicting nonavailable meanings.

HYUNGRAE NOH

Biocommunication

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Shannon quantifies the amount of information transferred in communication by the receiver's freedom in selecting a message according to the given signal. Shannon shows that in linguistic communication the probabilistic space of a receiver's freedom is statistically biased: about 50% of information in the use of linguistic signals is redundant. Such structural aspects of a signal are considered as less important than semantic aspects in theories of intentionality. Dretske argues that informational content of a signal must be anchored to the things in the world prior to the use of the signal because signals exist independently of agents. However cases in animal signalingcommunication show that the informational content (or the understanding of it) ontologically and epistemologically depends on the structural aspects of a signal. This sort of primitive forms of communication shows how natural selection gives a rise to structural aspects (i.e. statistical biases in the probabilistic space) that are embedded in the use of a biological signal. In Central America, the dorsal coloration of poison frogs is the signal of alarm to birds. Given the traditional view on the meaning of a signal, the minimal condition for the frog coloration-signal communication can be put as follows: a bird interprets the signal of coloration of a frog (i.e. s) as the alarm (e.g. the frog, f, is toxic, T) only if s reliably correlates with the state of affairs that f is T. Godfrey-Smith, in terms of the signal detection theory, shows that the reliability of a signal not only underlies the correlation but also the epistemic space of the consumer (or receiver). When a bird learns to use the coloration-signal, for instance, the naïve bird's mortality after attacking a potentially dangerous prey influences the decision-making. These sorts of principles of generalization and discrimination of the learning mechanism have been built into the system by natural selection: i.e. a bird has been evolved to be epistemologically-intrinsically biased in learning to use the coloration-signal. Moreover in virtue of such biases in its epistemic space, a bird can learn to use the coloration-signal regardless to the statistical frequency of the correlation—given that some conspicuous frogs are highly toxic, a bird avoids all conspicuous frogs including mimics. Recent studies in biology show that the correlation requires phenotypic, not genotypic, explanation like predator selection (e.g. the correlation accords only with the tetrachromatic visual system, namely avian predators). This implies that the coloration-signal is the result of coevolutionary history between the producer and consumer. The coevolutionary thesis has been announced by teleosemantics. Millikan argues that a biological sign can only contingently correlate with the signed because the coevolution between the producer and consumer must be prior to whatever states of affairs that are denoted by the sign. The probabilistic correlation is determined by the coevolutionary history: e.g. like the case of batesian mimicry, the way that consumers appropriate the sign influences the way that producers produce the sign. By combining structural aspects embedded in the epistemic space of the consumer (e.g. the statistical probability of the intrinsic epistemic biases of avian predators in hunting conspicuous preys) with structural aspects of the producer (e.g. the statistical probability that a conspicuous frog is toxic) we can in principle get the biases in the statistical probabilistic space of the use of the coloration-signal. Given coevolutionary thesis, the correlation (or a bird's understanding of the correlation) cannot be prior to structural aspects of the signal in both the epistemological and ontological senses. Ontologically the correlation depends on the phylogenetic traits of the producer and consumer, which are the result of coevolutionary history. Epistemologically a bird's ontogenetic learning of the use of the signal requires statistical probabilistic biases in the use of the signal (e.g. a bird can interpret the coloration-signal as the alarm only if it's internal epistemic space is adequately biased towards the purported message). Therefore the animal signaling demonstrates the case of which the informational process in communication is primarily grounded in terms of the structural aspect rather than the semantic aspect of the signal.

JOANNA ODROWĄŻ-SYPNIEWSKA The Content of Sub-sentential Speech Acts

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The most commonly given examples of sub-sentential speech acts are expressions such as "Nice dress", "Under the table", "From Spain", "Two black coffees", "Where?" etc. uttered in such circumstances in which speakers uttering them are regarded as "making moves in a language game", e.g. stating, asking, requesting, promising etc. The defenders of sub-sentential speech acts argue that in the right circumstances a sub-sentential utterance may constitute a speech act even though it cannot be regarded as a case of ellipsis.

When Recanati argues for moderate relativism he distinguishes two levels of content: narrow and broad. The narrow content ("lekton") is the content that we evaluate with respect to circumstances of evaluation (situation), whereas the broad content consists of the narrow content and the relevant circumstances of evaluation with respect to which the narrow content is to be evaluated (Recanati 2008). In many cases the former content is semantically incomplete in Fregean sense: it cannot be evaluated as true or false as such. It can only be so evaluated relative to particular circumstances of evaluation. Recanati argues for a strong version of moderate relativism according to which each sentence, no matter whether complete or incomplete, has such narrow and broad contents and may be true relative to one situation and false relative to another.

I would like to argue for the view according to which semantically complete sentences have only one (classical, propositional) level of content, whereas sub-sentential speech acts have two levels of content. Thus I will try to show that in the case of sub-sentential utterances we might distinguish narrow, non-propositional, non-truthevaluable content and broad propositional content enriched with elements from the relevant circumstances of evaluation. In cases in which there is one univocal salient way of enriching the narrow content of a sub-sentential utterance and there is no doubt which illocutionary force such utterance is meant to possess we may speak of sub-sentential speech acts.

Sub-sentential speech acts might be regarded as an important argument in the debate between minimalism and contextualism. For instance, Stainton

argues that the existence of genuine sub-sentential assertions proves that contextualism is true (see Stainton 2006; 227). I will try to argue however that such speech acts are not an argument in favour of contextualism.

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MACIEJ OGRODNICZUK & MAGDALENA ZAWISŁAWSKA

The Significance of Broad Context in Coreference Resolution

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The paper aims at presenting the importance of broad context in the resolution of coreference in Polish language which can serve as an example of a rich morphology language. This is a part of the research made within the project *Unified theory of coreference in Polish and its corpus-based verification*. The main research objectives of the project are: putting forward a broad, unified, computable theory of Polish coreference, carrying out its corpus-based verification and implementing and evaluation of a prototype computational-linguistic resolution models going beyond the Polish state-of-the-art.

Nominal phrase coreference means that words or phrases indicate identity of reference, i.e. that two or more linguistic elements in the text points to the same extralinguistic referent. Although it doesn't seem to be a hard task, quite often the recipient can't decide if the phrases are coreferent or not because of grammatical, semantical or pragmatic reasons. There are no articles in Polish, therefore it is difficult to distinguish difference between definite and indefinite objects. Polish verbs contain information about person, number and grammatical gender therefore we often use zero-subject sentences, e.g. Nominacja **Tadeusza Matusiaka** wywołała poruszenie. Na poczatku tej kadencji samorządu został prezydentem Łodzi . Kiedy w ubiegłym roku nie otrzymał wotum zaufania, podał się do dymisji. [The nomination (S) of Tadeusz Matusiak (antecedent of the coreference chain) caused a stir. On the beginning of this term of the municipal government [zero-subject] became the mayor of Lodz. When [zero-subject] didn't get the vote of confidence last year, [zero-subject] handed in resignation.]. Another problem is that phrases referring to the same object can differ in grammatical gender, cf.: katastrofa budowlana (nf) [construction disaster], zdarzenie (nn) [event], wypadek (nm) [accident]. In many cases reader have to go far beyond grammar and semantics and activate his knowledge about a very broad context, e.g. Ruch Chorzów zarobił na czysto aż 5,5 mln zł [...] Wiadomość o zysku Niebieskich na pewno ucieszy jego kibiców. [Ruch Chorzów netted as many as 5.5 milion złotych. [...] The news about the profit of the Blues would for sure please his supporters.]. To understand this example and establish the coreference link between Ruch Chorzów team and the Blues, we need to know that football players from that club wear blue shirts.

Considering all those problems, it is obvious that traditional rules of simple grammatical or shallow semantics resolution of coreference must be adjusted for Polish. The formal approach needs taking into account much broader semantic, pragmatic and also encyclopedic information. The method that offers such approach is the semantics of understanding by Fillmore (1982). This methodology is explored by Ziem (2014) who emphasizes the fundamental role of frames in the reference: "a linguistic expression refers to a cognitive unit by evoking a frame which then opens a potential reference area [...] Evocation of a frame corresponds to the cognitive act of referentialization. Frames—as units in the 'projected world'—serve as projection areas for referentiality" (Ziem 2014: 251).

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JAMES OPENSHAW

Singular Content and the Anchoring Role

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I start by recovering a desideratum on a theory of intentionality which can be seen as a fundamental part of what motivates the doctrine that there is a *sui generis* category of *singular* representation. This desideratum, which I call the *anchoring* role, can be brought out using the following thought-experiment:

Suppose that somewhere there is a region at which everything in your environment, on a scale as encompassing as you care to imagine, is qualitatively duplicated. Since all and only the qualitative properties instantiated in your local environment are instantiated at this 'twin' region, any qualitative description satisfied by your local environment is also satisfied by its twin. What makes it the case that your system of thought is about your immediate surroundings and not its cosmic duplicate? If the truth-values of our thought and talk at such a world are to be determined by the portion of reality they are intuitively determined by, there must be some non-descriptive kind of intentionality.

The presentation will focus on examining accounts which characterize the 'non-descriptive kind of intentionality' by carving a distinction at the level of semantic content – e.g. by admitting *indexical contents*.

In the first part I argue that there are representational systems which fail to express singular/indexical content(s) but which nevertheless succeed in playing the anchoring role. On a natural semantics for Prior's (1968) Egocentric language (which consists wholly of subject-less predicates such as 'Working'), for example, the job of selecting an individual with respect to which Egocentric sentences can be evaluated is delegated to the truth-predicate. Sentences are to be evaluated for truth only relative to a set of contextually-determined parameters. The truth-at-c-values of Egocentric sentences are determined by how things are at the point of evaluation initialized at the context of use (a process at the stage of postsemantics); that the qualitative properties instantiated at those coordinates are instantiated

elsewhere is simply *irrelevant*. Given the Kaplanian thesis that the semantic values of sentences are *contents*, the result is that there is no need to invoke any notion of singular content in order to explain how creatures which might use a language like Egocentric.

In the second part of the paper I reflect on what the availability of this framework really tells us about the nature of intentionality. First, I present an argument which suggests that we ought to divorce the notions of sentential semantic value and content. The effect of this divorce is that, just because the semantic values of Egocentric must evaluated with respect to an index does not mean that the contents expressed cannot be evaluated for truth simpliciter. Finally, I argue that, whilst it is a contingent matter whether a representational system which accommodates the anchoring role will do so on the model of Egocentric, such systems lend cognitive advantages to their users, and Nature is more likely to endow creatures with such apparatus.

ESBEN NEDENSKOV PETERSEN Moorean Paradoxes, Assertion, and Certainty

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Moorean paradoxes play a central role in the discussion about the epistemic requirements on appropriate assertion. It is commonly assumed that these norms are the key to explaining why Moorean paradoxes are infelicitous (DeRose 2003; Kvanvig 2009; Turri 2011, 2013; Unger 1975; Weiner 2005; Williamson 2000, 2009). Among these infelicitous constructions Moorean paradoxes with 'know' usually receive the most attention:

(1) p but I don't know that p.

For example, 'Paris is the capital of France, but I don't know that Paris is the capital of France.'

Assertions of this type sound wrong, but are clearly not contradictory. So their infelicity seems to have a pragmatic source. And since the infelicity is not limited to specific contexts it is a plausible assumption that it reflects a general norm governing the practice of assertion.

Assertions with 'knows', meanwhile, are not the only Moorean paradoxes of relevance to accounts of assertion. The considerations which suggest that the infelicity of (1) owes to the presence of a general norm of assertion apply with equal strength to analogous constructions with the context-sensitive term 'certain':

(2) 'p but it is not certain that p.' For example, 'Scipio Africanus died in Liternum, but it's not certain that Scipio Africanus died in Liternum.'

So the challenge for an account of assertion is not only to explain why Moorean paradoxes with knowledge denials are infelicitous but to account for the infelicity of Moorean paradoxes with 'certain' as well.

In this paper, I discuss how this question might be answered. First, I consider a proposal by Jason Stanley (2008) based on his certainty account of assertion. According to Stanley, his Epistemic Certainty Norm of Assertion accounts for the infelicity of both (1) and (2), but I argue that his account

of the infelicity of (1) does not succeed. In particular, Stanley's proposal depends on a questionable assumption about the relation between certainty and knowledge.

The paper then proceeds to discuss the treatment of (1) and (2) proposed by Timothy Williamson (2000; 2009) as part of his influential defence of a Knowledge Account of Assertion, KA. But while KA easily explains the infelicity of (1), Williamson's proposal fails to explain why (2) is infelicitous. The approach is not apt to explain why assertions of (2) are always infelicitous, although, according to KA, appropriate assertion does not generally require one to satisfy the contextual standards for certainty.

Finally, after discussing the explanations proposed by Stanley and Williamson, the paper proposes that Stanley's epistemic certainty norm of assertion might be modified to offer an account which explains the infelicity of (1) and (2) based on a single epistemic norm. Since this modified norm is another certainty norm it implies that the level of evidence or justification required for epistemically appropriate assertion varies with shifting contexts.

STELLAN PETERSSON

Context-sensitive Phenomena in Compositional Event Semantics

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A tension in truth-conditional frameworks is that between 'indexicalism', which explains context-sensitive phenomena in terms of covert syntax, and 'contextualism', which explains context-sensitive phenomena in terms of richer meta-language statements and context-sensitive interpretation functions but no covert syntactic structure. In this talk, I start by formulating the differences between indexicalism and contextualism within the framework of compositional event semantics recently developed by Lucas Champollion. The framework, which accommodates a generative grammar and translations into expressions in a typed lambda calculus (which in turn are given modeltheoretic interpretations), allows for a precise comparison of indexicalism and contextualism with respect to a linguistic fragment. I argue that several central linguistic examples, for instance color adjectives, binding phenomena and meaning litigation, could be accounted for by both indexicalist and contextualist variants of the framework. The result stands in sharp contrast to earlier discussions, where these kinds of data have been argued to be problematic for contextualism or indexicalism. The conclusion is that the data underdetermines the choice between contextualist and indexicalist formalism, in these cases.

JOEY POLLOCK

Communication and Context

University of Edinburgh

Traditional accounts of communicative success are binary in nature: when a speaker attempts to communicate with a hearer by uttering a sentence, this communicative attempt succeeds only if the hearer understands the speaker's utterance or, alternatively, grasps the same content that the speaker expressed. Such accounts have been assumed in objections to theories of content which cannot posit shared meaning (Newman 2005); they also often underpin accounts of how we gain knowledge from the speech of others (Burge 1993, Goldberg 2007). These traditional accounts offer a rather coarse-grained picture of communication: there is no space for the idea that communication can be more or less successful. More recently, some authors have suggested that communicative success might be graded (Bezuidenhout 1997); that is, communication succeeds to the degree that the hearer understands the speaker's utterance. I think this graded account of communication is on the right track. However, both traditional views and graded views fail to take into account that, when attempting to communicate, speakers can have a wide variety of aims and interests: when we communicate, it is always for a particular purpose (for example, to ask our interlocutor to pass the salt, or to warn our interlocutor that it is raining). Relative to these purposes, it may not matter whether a hearer perfectly understands the speaker's utterance; it may not even matter if the hearer's understanding is quite poor overall. In this paper, I will argue for an account of communicative success which takes this interest-relativity into account. I will demonstrate that what matters to communication is that the hearer's understanding of the speaker's utterance is similar in certain relevant respects to the speaker's understanding of this utterance. For example, if I ask you to pass the salt, it may not matter if your understanding of my utterance is coloured by all kinds of weird and wonderful beliefs about the nature of salt. What matters is that your understanding allows you to identify which object I am requesting.

On my account, what determines which aspects of an individual's understanding are relevant in a particular exchange are the communicative aims of the speaker. These aims, in conjunction with the beliefs possessed by both interlocutors, determine contexts with respect to which the success of the exchange should be judged. These contexts can be understood in roughly the way that Stalnaker (2002) understands 'common ground'. The role of context in the processes by which hearers recover interpretations of utterances has been explored by relevance theorists (Sperber and Wilson 1986). However, authors have not investigated how context might figure in the success relation itself. What is distinctive of my view is that it allows us to say both (a) that communication can succeed even when the hearer's understanding of the speaker is quite poor overall and (b) that communication can fail even when the hearer's understanding is very good. Competing accounts do not have this flexibility. I will argue that such flexibility is an attractive feature of an account of communicative success.

KRZYSZTOF POSŁAJKO

Semantic Deflationism, Public Meaning and Contextual Standards of Correctness

Jagiellonian University

Semantic deflationism is currently oft interpreted as a thesis according to which the semantic notions, such as truth, meaning, and reference should be considered as denoting "thin" or "non-substantial" properties. The notion of non-substantiality in play here is the following: "non-substantial" properties are those which do not play any genuine explanatory role. One consequence of deflationism understood in such a way is that it leads to the denial of the thesis that the notion of linguistic meaning is of relevance when it comes to explanation of human behaviour. Stephen Schiffer in his *Deflationist Theories of Truth, Meaning, and Content* (forthcoming) takes it to be a fatal objection for deflationism. According to him semantic properties are perfectly legitimate in making everyday explanations of behaviour and there is no principled reason to deny the validity of normal psychological explanations.

In my talk I would like to argue that there is some room for skepticism about the idea that public language meaning plays any genuine role in psychological explanations. The skepticism stems from the following observation: although the thesis that meaning is normative is widely regarded as controversial, what is universally accepted is the fact that expressions of public language have some standards of correctness. I'd like to argue that these standards of correctness should be understood as context-involving in a broad sense. Even on a strongly internalistic reading, the fact that a speaker S means something by an expression involves reference to her past mental states (like previous meaning intentions). On the other hand, the mental states that are relevant to the explanation of behaviour are strictly local.

This leads to the conclusion that one should distinguish two kinds of facts: the semantic fact that some expression in the language used by a speaker means something and a psychological fact that this language user is in a certain psychological-functional state that explains her behaviour. One we remind ourselves that these two facts are distinct, then we should have no qualms about accepting deflationary approach to the semantic.

ADAM PRZEPIÓRKOWSKI

Obligatory Adjuncts: in Support of Contextualism

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Linguists generally accept the validity of the argument–adjunct distinction (AAD) and widely agree that the locative phrase on the table is an argument in (1) but an adjunct in (2).

- (1) John put the book on the table.
- (2) John read the book on the table.

However, while generally accepted, the nature of this dichotomy is far from clear (to what extent is this a syntactic, semantic or pragmatic phenomenon?) and there are no fully reliable tests for distinguishing arguments from adjuncts.

The received wisdom is that the syntactically obligatory dependents, like the book in (1) (cf. the ungrammaticality of *John put on the table), are overt manifestations of semantic arguments, but the status of syntactically optional dependents is less clear. In particular, it not clear whether such normally two-argument predicates as EAT or NOTICE express binary relations or perhaps unary properties when they are used without the direct objects:

- (3) John has eaten.
- (4) John has noticed.

Recanati (2002, 2007), together with much of the linguistic literature dating back to Fillmore 1969, 1986 on one hand, and Panevová 1974, 1978 and Sgall et al. 1986 on the other, distinguishes examples like (3) from examples like (4): the "unarticulated constituent" (to use Perry's term; Perry and Blackburn 1986, 138) is understood existentially (indefinitely) in (3), and contextually (definitely) in (4). Recanati (2002, 2007) goes further and argues that only the contextually understood unarticulated constituents, as in (4), are present in the semantic representation of such sentences (i.e. that the verb expresses a binary relation), while existentially understood unarticulated constituents as in (3) are missing from semantic representations altogether

(i.e., the verb expresses a property). If (3) is understood as involving eating something, it is only because real world events referred to with the verb EAT normally involve ingesting some food, just as John is dancing is understood as involving a location simply due to the spatial nature of events referred to via DANCE, etc.; it's a matter of metaphysics, not linguistics. Now, the main point of Recanati 2002, 2007 is that, while weather predicates such as RAIN pattern with DANCE in not representing the location in the semantic representation when it is missing on the surface (as in It is raining or John is dancing), i.e. there is no bottom-up saturation process at play here, this location is usually contextually understood in case of RAIN due to the top-down process of pragmatic enrichment. The purported existence of such a top-down process of contextual pragmatic enrichment adds direct support to a contextualist – rather than a minimalist – position.

The primary aim of this paper is to inject another argument into the minimalism vs. contextualism debate that seems to support the latter stance. Consider the following examples first discussed in Grimshaw and Vikner 1993, 143:

(5) This house was built *(yesterday / in ten days / in a bad part of town / only with great difficulty / by a French architect).

What is special about (5) is that, while *This house was built* alone is not an acceptable utterance in most contexts, adding almost any adjunct (yesterday, in ten days, etc.) makes it acceptable. Grimshaw and Vikner (1993) provide a syntactico-semantic analysis of such cases (in terms of event structure requirements), but this analysis is convincingly refuted in Jung 1997 and in Goldberg and Ackerman 2001, who show that such "obligatory adjuncts" are added via a purely pragmatic process, related to Grice's (1989, 26) Maxim of Quantity. If this analysis is right, this is a prima facie case of top-down pragmatic enrichment with impact on truth-values, lending support to Recanati's version of contextualism.

The secondary aim of this paper is to clear some terminological confusion creeping into the minimalism vs. contextualism debate concerning the term "obligatory adjuncts". In recent work originating at the University of East Anglia (Collins, 2013; Davies, 2013), this term is used for a very different class of dependents, such as *on the table* in (1) and the emphasised phrases in the following two examples:

(6) John militates for contextualism.

(7) John behaves well to minimalists.

As shown e.g. in Goldberg 2004, 437–440, the relevant phrases in (1) and (6)–(7) are obligatory irrespective of context, unlike (5), where other ways of adding information, e.g. contrastive stress (*The HOUSE was built (not the garage)*), appropriate tense (*The house will be built*) or negation (*The house wasn't built*), may make the sentence acceptable. For such reasons, the relevant dependents in (1) and (6)–(7) are usually called – in the linguistic literature – (adverbial) arguments, with obligatory adjuncts reserved to cases such as (5); it would be reasonable to preserve this linguistic terminological distinction also in the philosophy of language debates.

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JESSE RAPPAPORT

Unrepresented Constituents in Thought and Language

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A major debate in contemporary philosophy of language centers around the notion of unarticulated constituents. If a speaker utters, "It's raining," and thereby means that it's raining in New York City, then she has expressed a thought about New York, even though nothing in the sentence appears to refer to New York – New York is an unarticulated constituent. Some theorists (e.g., Jason Stanley) argue that unarticulated constituents are represented at a deeper level of syntax, while others (e.g., Stephen Neale), claim that although New York is represented in the thought that is communicated, it is not represented at any linguistic level – instead, it is communicated "pragmatically." However, a view articulated by John Perry (1986), in his seminal article on this topic, is that an utterance of "It's raining" can mean that it's raining in New York, even if New York is not represented at all, in thought or language. On this view, a sentence or thought may have truth conditions that "depend on" some entity, even though that entity is nowhere represented.

In this paper, I defend Perry's view and argue that the possibility for truly unrepresented unarticulated constituents (what we might call "unrepresented constituents") is not given its proper place in the debate. Drawing on Ruth Millikan's work on natural conventions, I argue that the possibility of unrepresented constituents must be acknowledged, since they are pervasive in animal signaling systems. For instance, vervet monkeys have alarm calls that indicate the presence of specific types of predators. If a vervet issues a *leopard* alarm call, then the truth conditions of the call depend on the presence of a leopard *here* (near the location of the call itself), although clearly no part of the signal refers to the location. Nor is the location represented in the monkey's thought, for it is doubtful that the alarm call is the expression of a thought at all, or that monkeys are even capable of the concept of *here*.

Once the possibility of such unrepresented constituents is accepted, their application to human speech and thought must be properly considered. Indeed, there is good reason to think that such forms of representation do, and indeed, must make use of unrepresented constituents. First, by way of

example, I argue that although many speakers are aware that ascriptions of weight must be relativized to a particular planet (typically, Earth), it is implausible to suppose that the concept *Earth* is tokened every time a speaker thinks about how much something weighs. This suggests that weight-thoughts may depend on Earth for their truth conditions, even though no representation of Earth is tokened. Second, I argue that John Searle's work on "the background" suggests that the constituents upon which the truth conditions of our thoughts and utterances depend can never be made fully explicit, and thus unrepresented constituents are inevitable. This raises difficult questions about how to identify the presence of unrepresented, as opposed to merely unarticulated, constituents.

ANDRÉS SORIA RUIZ

Another Nail in the Contextualist Coffin?

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This abstract presents yet another argument against contextualism. In a slogan: contextualism fails to distinguish between truth and assertion conditions for the claims that it purports to analyze. Consider these two very quotidian stories:

- (i) I loved my strawberry-flavored toothpaste; I thought it was so tasty. But that's not true: it's so cloying it'll give you diabetes.
- (ii) I thought my sister might be in the beach. As it turned out, not true: she was in a traffic jam on the road to the beach.

Contextualism has trouble making sense of these stories. Let's begin by making two assumptions. The first concerns assertibility conditions for propositions:

(AC): a proposition p is assertible at a context c iff it is rational for a speaker to accept, at c, a speech act with p as its content (Yalcin 2011).

A reasonable development of (AC) is:

(AC+): it is rational for a speaker to accept, at c, a speech act with content p iff the relevant parameters at c sanction an utterance expressing p.

The second assumption concerns the characterization of "contextualist" propositions, that is, the kind of proposition that contextualism will say that is expressed by an utterance of one of their targeted sentences at a context. Call S one such sentence. According to contextualism, two utterances of S in contexts in which the relevant contextual parameters are different express different propositions. Thus, an utterance of S in context c expresses one "contextualist" proposition; and an utterance of S in a relevantly different context c expresses a different "contextualist" proposition. We can characterize the content of one such proposition (call it [S-c]) as follows:

(CP): [S-c] is true iff the relevant parameters of c sanction an utterance of S.

With these assumptions in place, the argument runs as follows:

- (1) Suppose that [S-c] is assertible at c.
- (2) If [S-c] is assertible at c, then it is rational for a speaker to accept, at c, a speech act with [S-c] as its content (by AC).
- (3) It is rational for a speaker at a context c to accept a speech act with [S-c] as its content iff the relevant parameter of c sanctions an utterance of S (by AC+).
- (4) The relevant parameter of c sanctions an utterance of S iff [S-c] is true (by CP).
- (\models) Hence, if [S-c] is assertible at c, then [S-c] is true.

The aftermath is that in our stories we are no longer allowed to say that our utterances were rational and that they were untrue: if the proposition expressed by an utterance of 'my strawberry-flavored toothpaste is so tasty' was assertible for me, then by (\models) it is true. If it was false, then by (\models) and modus tollens it was never assertible. Similarly, if the proposition expressed by my utterance of 'my sister might be in the beach' is assertible for me, then by (\models) it is true. If it is false, then by (\models) and modus tollens it is not assertible.

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LUCA SBORDONE

Don't Be Standard! Two-dimensional Contextualist Semantics for Gradable Adjectives

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Relative gradable adjectives (GAs) in the positive construction (1) express properties whose truthful predication intuitively depends on a contextual standard of comparison (SoC).

(1) Sue is rich.

I present a novel two-dimensional semantics for relative GAs such as tall, rich and religious. I suggest that the standard-dependence of relative adjectives distributes over two interdependent sources of context-sensitivity. This conceptual decomposition provides the basis for constructing a successful model of the semantics of relative GAs. In the first part, I criticise the mainstream degree-semantic proposal of postulating a null morpheme POS – supposedly marking the positive construction – in order to implement compositionally the standard-relativity of GAs (Kennedy 2007).

- i. I argue that the instrumental focus on the gradability properties of adjectives translates into the assumption of an implausibly abstract interpretive process for the positive construction (Moltmann 2009). Particularly, truth-conditions making direct reference to cognitively inaccessible numerical entities (degrees) prove unrealistic in light of the underdetermined dimensionality of most adjectival properties.
- ii. I show that, on POS account, the standard-selecting function s is designed as a typical indexical. I discuss grammatical arguments supporting the idea that the SoC is in fact *not* an indexical (e.g. co-reference under VP-ellipsis). Finally, I suggest that such indexicalist approach automatically construes the SoC as a fully articulated propositional constituent. I dispute this conclusion: considerations concerning intuitions of 'faultless disagreement' as well as optionality of SoC suggest that articulating the standard results in redundancy of parameters of evaluation.

In the second part, I propose an alternative semantics for GAs and for standard-relativity: this is based on a two-dimensional framework and it dispenses of degrees in the positive constructions. The account builds on the idea that skeletal properties contributed by adjectives in isolation convert into fully-fledged properties only when restricted to well-individuated categories of individuals (kinds). Adjectives, on this view, express properties but they differ from, for example, nominal properties in that the latter sort individuals irrespective of any antecedent categorisation, whereas adjectives sort individuals relative to some antecedent (either implicit or explicit) categorisation.

- i. I propose to construe the kind-dependence of adjectival preproperties as a form of (broad) indexicality. The rationale is the observation that kind-based restriction of adjectival preproperties is a mandatory process. Isolated adjectives express no property that is suitable to be assigned an extension, unless the context contributes an appropriate kind-restrictor (virtually, irrespective of the category of the modified noun). I discuss the apparent counter-example of intersective adjectives and conclude that entailment patterns pinpoint uses of adjectives in context, rather than adjective types.
- ii. In light of the unarticulated role of the SoC, I construe standard-dependence as a form of circumstance relativity. While contributing a kind-restrictor, the context of use initialises an exemplar that works as a situational parameter of membership for adjectives. Taking the opposite explanatory route of degree-semantics and considering the positive form as primitive (Klein 1980), I use the apparatus of variadic function (Recanati 2002) to explain how degrees are introduced in the comparative and other degree-constructions.

HENRY I. SCHILLER.

Intention, Demonstration, and the Common Ground

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It is standardly assumed that deictic uses of demonstrative pronouns require extra-linguistic supplementation in order to secure reference. Intentionalist theories of demonstrative reference are theories that take a speaker's *intention* to play a role in securing demonstrative reference. plays this role. There are significant issues associated with intentionalism, roughly defined, and as a result several philosophers (Kaplan 1989, King 2013, Reimer 1991, Speaks 2014) have narrowed down the criteria for what should count as intention of the correct kind. In this paper, I identify a new class of problems for intentionalist theories of reference, and then argue in favor of a particular solution to these problems.

There are two distinct types of intentionalist theories. Single intention theories identify a specific type of intention, and then privilege that type of intention over all other types as the relevant intention for determining reference. This is most famously found in Kaplan (1989). Following Speaks (2013) I show that single intention theories are untenable, due to intuitions that arise in various instances of conflicting intention. On the other hand conflicting intention theories, like King's (2014) coordination account, allow that a speaker may have multiple, conflicting intentions that are all potentially semantically relevant. However, due to some condition of salience only one intention determines a semantic referent.

I introduce a set of problems that arise for intentionalist theories in cases where a speaker utters a demonstrative expression but - because they have a false belief that some object they see is the object they have in mind - has conflicting intentions to refer to different objects. Following from Speaks' (2014) characterization of the problem of conflicting intentions, I show that in these cases even the most robust form of intentionalism will predict multiple referents for one demonstrative utterance. Rather than reject intentionalist theories altogether, however, I conclude by making the case that multiple semantic referents are a feature of communication that ought to be accounted for by a theory of reference.

CEM ŞIŞKOLAR On Asserted Content

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In "Assertion" Stalnaker argues that assertions' role is to reduce the extent of the possibilities open relative to the shared presuppositions of the conversing parties — namely, the context set. Each assertion, if accepted, reduces the size of the context set by discarding the worlds that are not compatible with the asserted content. According to Stalnaker, normally the asserted content is the standard semantic content (the set of worlds in which the utterance is true). But in certain special cases Stalnaker claims that the asserted content will rather be the so called 'diagonal proposition': the set of possible worlds w where the same assertion (or an epistemic counterpart) takes place and its semantic content as uttered in w is true in w. This shift in the type of asserted content is explained by the conversing parties' following conversational maxims, which according to Stalnaker are independently motivated.

In the projected paper I discuss the pros and cons of taking asserted contents to be diagonal propositions in the case of all assertions. The pros. This move will yield an information exchange dynamic which is equivalent to the one envisaged by Stalnaker, and will avoid two problems that challenge Stalnaker's account. (i) When the participants in a conversation share an erroneous presupposition about the identity of the bearer of a name Stalnaker's maxims will not prompt a diagonal reinterpretation of the assertions involving that name, although intuitively in such cases the content relevant for information dynamics is the diagonal content (Stanley, 2010). (ii) One maxim which Stalnaker invokes to explain the shift to the diagonal, that the asserted content be the same relative to all the worlds in the context set, demand questionable assumptions regarding the transparency of presuppositions (Hawthorne & Magidor, 2009). The cons. (i) The envisaged all-diagonal account will have to drop the uniformity principle, but according to Stalnaker when the uniformity does not obtain the audience cannot gather the message of the speaker and all-diagonal account cannot guarantee that it will always obtain. (ii) The all-diagonal account seems to reduce the significance of the semantic content implausibly (Hawthorne & Magidor, 2009). In response to first point I argue that Stalnaker's concern

about uniformity is unwarranted unless it is plausible to think that the theoretical apparatus aims to model how the participants in a conversation think rather than what happens when they converse. In response to the second point I acknowledge that the semantic content from a cognitive point of view is causally inert in a conversation setting, but I argue that it is the genuine non-perspectival representational content and that the intelligibility of the very notion of verbal information exchange depend on it.

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DANIEL SKIBRA

Context, Modals, and Contextual Parameters

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On what I henceforth call the Standard Account of the semantics of modals, context supplies values to parameters that serve as inputs to semantic interpretation. (Cf. Kratzer [1977], Kratzer [1981]) One of the virtues attributed to the Standard Account is that both the inter- and intra-flavor differences in meaning are accounted for via the conversational background. This allows the Standard Account to maintain that the differences in interpretation a given modal can receive do not oblige us to think of modals as ambiguous. It advocates something like UNIFORMITY.

UNIFORMITY: Modal words in natural language have a uniform lexical entry, in spite of their ability to be used to express different types of modality.

The second relevant feature of the Standard Account is that value-setting role of context is rather powerful. Absent idiosyncratic lexical features, the values of the parameters are simply resolved pragmatically. Short certain hard-wired restrictions, nothing in principle constrains context in its setting the value of the parameter. This feature is captured by PRAGMATIC RESOLUTION.

PRAGMATIC RESOLUTION: The contextual parameters introduced by modals exhaustively determine the meaning of the modal along the flavor dimension through the pragmatic assignment of values to the parameters.

The joint assumption of UNIFORMITY and PRAGMATIC RESOLUTION comprises a view that I will call **strong lexical contextualism** about modals. The present paper disputes strong lexical contextualism. Formally, the Standard Account construes modal sentences as having the the underlying form below.

 $\lceil MOD(R)(\phi) \rceil$

The modal operator, 'MOD,' takes two arguments, 'R', the restrictor, which determines the domain the modal quantifies over, and ' ϕ ', the nuclear scope, which is the sentence the modal scopes over, commonly known as the prejacent. We can then think of the sentence *John must be the murderer* as having the following form:

$$\lceil MOD(R)$$
(John be the murderer) \rceil

According to Kratzer [1981], two conversational backgrounds comprise R, the modal base (f), and the ordering source (g), both of which are functions from worlds to sets of propositions, whose contextual resolution jointly determine the meaning components along the flavor-dimension of the modal.

Here's where we encounter trouble. Consider (J).

J John must go to the store.

According to strong lexical contextualism, context alone would settle the flavor of 'must' in (J). However, this is not the case: 'must' with a prejacent containing an eventive predicate cannot have an epistemic interpretation. This spells trouble for strong lexical contextualism, since the latter predicts that context can conspire to produce values for f and g such that $[\![(J)]\!]^{c,f,g}$ is epistemic on an eventive reading of 'go to the store'.

The paper finds that the generalization can be accommodated if we adopt Hacquard [2010]'s insight that modals are relative to events, and make note of an independently motivated principle concerning the behavior of present tense eventive predicates. The solution allows us to keep UNIFORMITY, but qualifies PRAGMATIC RESOLUTION in an interesting way. I conclude that contextualist views can accommodate the generalization provided they relax some assumptions about the role of context in determining the meaning of modals.

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IZABELA SKOCZEŃ

The Law of Fiction, or the Fiction of Law? A Study of What Language Can Reveal About Mixed Inferences

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It is a fact that people sometimes carry inferences that have a mixed semantic character. Namely, they mix factual, descriptive content with fictional or prescriptive content. However, all of these contents seem to have in common a feature of what John Perry calls incremental content (a content that is at least partly about the actual world, that at least aspires to refer to it) (Perry, 2012, p. 185)

Consider the following inference:

- (I) Sherlock Holmes lived at 221B Baker Street, London.
- (II) The building at 221B Baler Street, London is a bank.
- (III) Sherlock Holmes lived in a bank. (Marmor, 2014, pp. 77–78)

It is clear that the inference is incorrect. Now consider the following reasoning:

- (IV) It is a misdemeanor punishable by a fine up to 100 USD, to use a wireless telephone while driving a motor vehicle without a hands-free device.
- (V) John was talking on his wireless telephone, without a handsfree device, while driving his car.
- (VI) John committed a misdemeanor punishable by a fine up to 100 USD. (Marmor, 2014, p. 78)

The above inference seems intuitively correct. Judges carry similar inferences innumerable times during their careers. Even if the two inferences intuitively differ in correctness, they seem to have a similar semantic structure. The similarity is that while the major premise involves a non-standard semantic category, such as fiction or a prescription, the minor premise is a fact. The conclusion is the result of mixing the two categories. Consequently, what is the reason for the second inference being correct in contrast to the first one?

Andrei Marmor claims it is because in the second inference the minor premise is prefixed. Just as in fiction some facts are incorporated by the author, the law also needs to incorporate facts. Consequently, he claims that 'we must assume that the law incorporates by implication all the actual facts of the world'. (Marmor, 2014, p. 82) However, this claim seems highly counterintuitive. Are they still the same facts? Or some kind of a twin incorporated to the legal fiction – identical facts, yet not the same facts?

While the above solution seems to blur more than it explains, two different possible answers to the riddle will be assessed in the paper.

First, the hypothesis will be that prescriptive content of the kind found in (IV) aims at describing a possible state of the actual world. In other words, if incrementality was gradable, it is more incremental than the content of (I). This entails that the inference is sane and can be safely carried out. Moreover, the major premise in (I) contains empty names. Thus, the first inference contains additional semantic issues that are not present in the latter inference. Second, even if the higher incrementality of (IV) proves to be explanatorily insufficient, it is possible to treat (IV) as descriptive content of 'what the law is at t in s'.

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JAKUB SZYMANIK & SHANE STEINERT-THRELKELD & GERT-JAN MUNNEKE

Context May Influence Cognitive Representations of Meaning: A Case Study of Quantifiers

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Semantic theories for natural languages typically provide a compositional assignment of truth-conditions to sentences. Such assignments are used to predict competent speakers' judgments of entailment and the truth of sentences in context. This level of generality, however, leaves open exactly how a specification of truth-conditions integrates with context and cognition to generate these judgments. There are at least two natural views to take on this issue. The relationship may be permissive: once a specification of truth-conditions is 'exported? to general cognition, anything goes. There is no systematic connection between the ways that truth-conditions are specified and judgments of truth in context are made. On the other hand, the relationship may be constrained: the ways in which truth-conditions are specified correlates with and constrains the methods of verification of sentences in context.

A number of philosophers of language, developing ideas rooted in Frege, have argued that knowing the meaning of a sentence consists in having 'internalized' an algorithm for computing the truth-value of that sentence in a context (see, e.g., Dummett, 1978; Suppes, 1982; Moschovakis, 2006; Horty, 2007). This line of thought has been put to experimental test recently by psychologists and linguists (see, e.g. Hackl, 2009; Pietroski et al., 2009; Lidz et al., 2011). These experiments have led the theorists to argue that the relationship between specifications of truth-conditions and verification procedures is in fact constrained. The evidence comes in two forms. In one case, subjects are asked to verify the truth of a single sentence against visual scenes that differ in how amenable they are to different verification procedures. Pietroski, Lidz, and colleagues find that in the case of sentences

involving 'most', such manipulations do not affect verification accuracy. This suggests that the specification of truth-conditions for 'most' constrains in some way the verification procedures available. In another case, subjects are asked to verify two truth-conditionally equivalent sentences against visual scenes in the same experimental paradigm. Hackl finds that there are differences in the way subjects perform self-paced counting tasks when verifying sentences containing 'most' and 'more than half'. Since the sentences are truth-conditionally equivalent, this suggests that the two quantifiers possess different specifications of the truth-conditions, which constrain the methods of verification. In this paper, we contribute to the growing body of evidence for a constrained relationship by exploring the impact of different presentations of a visual scene on working memory load in proportional quantifier sentence verification. First, we present a computational model for quantifier meanings that has made empirically verified predictions about working memory in sentence verification (Szymanik, 2016). Then, we show how to extend that framework to handle different representations of the visual scene. This extension motivates a prediction that how a visual scene is presented will effect working memory involvement. We then present experimental results that make good on this prediction. The results also indicate that 'most' and 'more than half' are affected differently by the visual scene manipulation, providing further evidence for a constrained relationship between truth-condition specifications and verification procedures. For more details (see Steinert-Threlkeld et al., 2015).

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VICTOR VERDEJO

The Challenge of Public Action for the Fregean View of Indexical Thought

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Even if certainly debated, a general Frege-inspired view has prevailed in the literature at least since Frege's own discussion of the topic (1918). According to this view, first-person thought involves a special way w such that, for any thinker x, only x can employ or access the first-person way w of thinking about x. Let us call this the Fregean View of first person thought. Many authors of different persuasions have been guided by this view, which receives strong support from insightful analyses of admittedly peculiar and ineliminable first-personal phenomena (e.g. Castañeda 1966, Evans 1981, Higginbotham 2003, Peacocke 1981, 2014, Perry 1979). While the explanation of action has typically fuelled this standpoint, it is not at all certain that, in its rather canonical interpretation, the Fregean View has so far come to terms with a plausible account of public and shareable intentional action. In this piece, I argue that this view forces us to jeopardize our intuitive conception of public action, according to which, for any subjects, S_1 and S_2 , and context c, it is generally possible for S_1 and S_2 to perform the an intentional action of the same type ϕ at c.

In order to see this, we only need to appreciate that (i) at least in central cases, agents get represented in the content of their intentions, be it because (ia) for S to intend to ϕ is for S to intend that S himself ϕ ; or, somewhat less contentiously, (ib) for S to intend to ϕ should be interpreted as S intends PRO to ϕ ; and that (ii) it is only plausible that the content of one's intention to ϕ is at least partially constitutive of the individuation of ϕ , considered as an intentional action. From this, together with the Fregean View, it follows that, for the cases in which (i) and (ii) holds and for any pair of subjects S_1 and S_2 which intend to perform an instance of action ϕ_1 and an instance of action ϕ_2 (and eventually do ϕ_1 and ϕ_2), it cannot be that $\phi_1 = \phi_2$.

The challenge of public action might be surmounted by propounding a revision of our intuitive conception of action. However, it also might lead us to reconsider the merits of naïve conceptions. What I propose is a substantial amendment of the Fregean View according to which special ways of thinking about oneself do not determine kinds of thought and action.

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GERALD VISION Truth and Context

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Correspondence seems the one generic truth theory that withstands close scrutiny: a proposition is true if and only if it conforms to some state(s) of the world. Details are wanted, and qualifications and corollaries are possible. But nothing that deviates very far from this core principle survives careful examination, not even a fashionable deflationary replacement. However, what counts as 'conforming' is heavily context dependent. Austin noted as much when he wrote

Suppose that we confront 'France is hexagonal' with the facts, in this case, I suppose, with France, is it true or false? Well if you like up to a point; of course I can see what you mean by saying that it is true for certain interests and purposes. It is good enough for a top-ranking general, but not for a geographer (*How to Do Things with Words*, p. 142).

Putting that temporarily aside, consider a recent book by Tim Crane in which he begins with an under-appreciated point: in thought we (as distinct from our words) refer to (viz., think about) figures that don't exist. No subtle quasi-existences intrude, purely fictional characters don't exist, period! It is plainly obvious that we can not only *think about* Edmund Dantes or Sherlock Holmes but also believe, say,

(S) Sherlock Holmes is a detective.

However, for Crane being a detective and most ordinary predicates are existence-entailing predicates/properties. So (S) is false. All similar cases can never be used to express truths because subjects that don't exist cannot possess such physically-involving properties. (Crane lists a number of other shortcomings of ascribing truth to those propositions-cum-sentence; they cannot be enumerated in this brief outline.) Here I note only two points about this:

- (1) It is plausible to suppose that whatever contents/meanings attach to spoken sentences of natural language derive from that of our cognitive states.
- (2) For his last line of defense Crane adopts a series of deflationary views, including one for truth.

Against (2) and the rest of this view I argue

- (3) The appeal to the existence-entailment of ordinary predicates is a weak argument, even granting its empirical credentials.
- (4) Deflationary truth theory (as noted above) is, at a minimum, in dire need of strong support, which is not likely to be forthcoming.
- (5) Crane's effort to show why (S) is false, independently of other issues concerning non-existents, by comparing Holmes to actual detectives is bound to fail because of the contextuality of truth.

Crane's compromise thesis is a valiant attempt to resolve long-standing difficulties regarding reference in thought and speech to non-existents without throwing the baby out with the bathwater. The problem he confronts is genuine, but, given his other suppositions, he fails not by going too far, but by not going far enough. I cannot offer a comprehensive account of how to proceed on a firmer footing, but I shall provide some suggestions for trimming the background conundrum that has stymied so many down to more manageable size.

PIOTR WILKIN What Context Do We Need?

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Following the rise of contextualist approaches to semantics and pragmatics, the question of how to describe context itself gains new import. It is not enough to determine to what degree context should or should not be included in the semantics and pragmatics of natural language – the question is moot without answering the question of what context itself is.

First of all, the approaches to context differ in what entities are allowed therein. If we treat context functionally as a black box with accessor functions allowing us to extract various entities, then two approaches to context can be drawn: that of the **rich context** and **narrow context**. Narrow context approaches are those where the results of the accessor functions are elements of a strict set of non-semantic entities (e.g., a set of epistemic standards or comparison classes). An example of such an approach to contextualism is the classical relative-terms contextualism as well standards-based contextualist approaches to knowledge. Rich context approaches are those that allow the results of the accessor functions to be semantic entities (e.g. propositions) themselves. An example of such a rich context approach is Stalnaker's context set notion or possibly Lewis' scorekeeping solution.

The second division lies in the question whether context needs to be, by its nature, objective. Most existing approaches to context place it within the shared area of natural language semantics or pragmatics, demanding that the context be accessible to all users (at least the context pertinent to semantic processing). However, since language processing is a specific case of cognitive processing, one could instead allow for special contexts shared only among specific members of the competent speakers set that feature certain cognitive prerequisites (common world knowledge, preconceptions, presuppositions etc.). This approach seems to be somewhat shared by various strongly contextualist solutions, especially with linguistic roots, such as Sperber and Wilson's relevance theory or Jaszczolt's default semantics. These two approaches to the objectivity of context can be dubbed the **objective context** and **relativized context**, respectively.

The main aim of this talk is to provide a sketch of a notion of context that takes into account the two scales described by the abovementioned divisions. Rich context generally seems to provide more power to the semantics than narrow context, but at the expense of the complexity of the semantic theory. On the other hand, objective context narrows the scope of the theory to a clearly delineated world of linguistic phenomena, while relativized context requires us to take into account cognitive phenomena, which might needlessly widen the scope of the theory and risk falling into the trap of a holistic "theory of everything". Nevertheless, there are cases of various (reported speech, emotive content, manipulative language) areas of natural language in which both relativized context and rich context seem to be desirable. In the talk, some of the problematic cases will be analyzed among the abovementioned two-scale division, culminating in a series of postulates for the notion of context that strives for a middle ground between broad scope and theoretical viability.

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MACIEJ WITEK

Forensic Element and Public Record

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In Critical Pragmatics Kepa Korta and John Perry (2011) claim that the way we use the concepts of what is said and what is referred to is affected by a forensic element: our ordinary judgements about what the speaker says and refers to are influenced by our judgements about her responsibility for the way the hearer interprets her utterance. In other words, there are two factors - the speaker's communicative intention and the hearer's uptake - that play parallel and sometimes conflicting roles in determining what is said. To avoid a theoretical mess, Korta and Perry argue, we should explicate the ordinary concepts of textitwhat is said and what is referred to and replace them with refined notions of what is located and what is determined by the speaker's directing intention, respectively.

In this paper I offer a critical discussion of Korta and Perry's account of the forensic element and the role it plays in determining what the speaker says and refers to. I also consider an alternative explication of the ordinary concepts of saying and reference, drawing on the idea of what the speaker contributes to the public record of the ongoing conversation.

I start by discussing a number of examples of the forensic aspect: (a) cases of inept demonstrations that determine objects that speakers do not intend to refer to (e.g., the careless professor case discussed by Korta and Perry and the officemate's keys case discussed in Reimer 1991), (b) cases of referring to objects that do not fit the referential constraints (Bach 1987, 2001) conventionally associated with the referential expressions used (e.g., using "he" to refer to a female person), (c) cases of ambiguities that cause misunderstandings (e.g., a situation in which the speaker utters "John is turning red" meaning that John's face is turning red from eating a hot paper, but the audience takes her to mean that John is becoming a communist), (d) cases of malapropism (e.g., uttering "I like the illusive style of baroque poetry" to communicate that one likes the allusive style of baroque poetry). Next, I draw a distinction between two types of the forensic element: the misuse-based forensic element, which is exemplified by cases (b) and (d), and the ambiguity-based forensic element, which is exemplified by cases (c). Contrary to what Korta and Perry tacitly assume, I argue that cases (a) are

of the former rather than of the latter type and, as such, reflect theoretically important aspects of our conventional linguistic practice. Finally, I offer an alternative explication of the ordinary concepts of saying and referring. I claim that what the speaker says and refers to should be analysed in terms of what her utterance contributes to the public record of the ongoing conversation, i.e., to a "scoreboard" (Lewis 1979, cf. Lepore and Stone 2015) whose function is to track public commitments of the interacting agents; I also argue that the misuse-based forensic element reflects a key aspect of the mechanism responsible for updating the public record.

JULIA ZAKKOU

In Defense of the Cancellability Test for Conversational Implicatures

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Grice famously held that all conversational implicatures (henceforth: implicatures) are (explicitly) cancellable, i.e.:

(Imp) For all contexts c: If, at c, the speaker of c uses a sentence s and thereby implicates that p, then p is cancellable.

Explicit cancellability, many people assume, Grice took to be the following claim:

(Can1) A proposition p that has been conveyed by a speaker's use of s at a context c is cancellable iff there is a context c' that resembles c in all respects except that, at c', the speaker of c' uses but not p or but I don't mean to imply that p as a follow-up to s, such that:

- (i) at c', the speaker's use of s, but not p or s, but I don't mean to imply that p is felicitous and,
- (ii) at c', the speaker of c' is not committing herself to p.

Unfortunately for Grice and his followers, it seems that, given (Can1), (Imp) is false. For as Huitink and Spenader (2004) and Weiner (2006) have argued, there seem to be contexts c, such that the speaker of c uses s and thereby implicates that p, where there is no context c of the kind required that meets (ii).

In an attempt to rescue Grice, Blome-Tillmann (2008) has suggested to take cancellability to be a claim along the following lines:

(Can2) A proposition p that has been conveyed by a speaker's use of s at a context c is cancellable only if there is a context c' that resembles c in that, at c', the speaker of c' uses s and thereby implicates that p, but differs from c in that, at c', the speaker of c' uses but not p or but I don't mean to imply that p as a follow-up to s, such that: (i) and (ii)

Unfortunately for both Grice and Blome-Tillmann, it seems that, even given (Can2), (Imp) is false. Burton-Roberts (2010) and Capone (2009) have argued that there cannot be any contexts c' where the speaker of c' uses s and thereby implicates that p such that, at c', the speaker of c' is not committed to p. Furthermore, Åkerman (2015) has argued that there seem to be contexts c, such that the speaker of c uses s and thereby implicates that p, where there is no context c' of the new kind required that meets (i).

I shall argue that all attacks against (Imp) are spurious. For even (Can2) poses a too strict constraint on the contexts we are allowed to test our intuitions in. More precisely, I shall suggest the following:

(Can3) A proposition p that has been conveyed by a speaker's use of s at a context c is cancellable iff there is a context c that resembles c in that, at c, the speaker of c uses s, but differs from c in that, at c, the speaker of c uses but not p or but I don't mean to imply that p as a follow-up to s, such that: (i) and (ii).

Given this criterion for cancellability, I shall argue, none of the objections raised in the debate poses a problem for (Imp).

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MAGDALENA ZAWISŁAWSKA Metaphor and Context

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There is a considerable number of theories of metaphor — the classical substitution and simile theory, the reinterpretation theory (Searle 1993), the interaction theory (Richards 1936), the theory of metaphor as predication (Bogusławski 1971, Dobrzyńska 1984, Arutjunowa 1981, Sedivy 1997), the theory of metaphor as categorization (Glucksberg, Keysar 1993), the conceptual metaphor theory (Lakoff, Johnson 1988), the conceptual integration theory (Fauconnier, Turner 2002). The problem is that the majority of these proposals (the older ones in particular) are usually highly theoretical, and either almost deprived of illustrative material, or else based on few lexicalized metaphorical expressions. In consequence, researchers study metaphors taken out of context or set in a very limited context, whereas studies of metaphorical expression in discourse have clearly shown the importance of very broad context in metaphor interpretation. Quite often, if we consider just the very limited context we might even overlook a metaphor, e.g. in the expression Jak to się robi, żeby ludziom zasmakowała coca-cola [How to make people develop taste in cola] no syntactic or semantic restrictions of the verb are violated and we can understand the example literally. But the broader context changes the picture, cf.: Jak to sie robi, żeby ludziom zasmakowała coca-cola prozy, a hamburger poematu nie stanał ościa w gardle. Umberto Eco wie, qdzie są konfitury. [How to make people develope taste in cola of a prose and to avoid sticking in their throat a hamburger of a poem. Umberto Eco knows where are the preserves.].

Obviously, the appropriate approach to metaphor needs taking into account much broader semantic and pragmatic information. Recent works on metaphor have employed the Fillmorean frame semantics in order to account better for metaphor's both cognitive and linguistic properties (Dancygier, Sweetser 2014; Dodge et al. 2015; Sullivan 2015). However, these studies are typically restricted to lexicalized (dead; cf. Müller 2008) metaphors. The paper aims at presenting applications of the Fillmore's frames in semantically and gramatically annotated corpus of Polish synesthetic metaphors—SYNAMET. The synesthetic metaphors in analyzed discourse are highly complex, coalesced; they form long chains of clusters evoking different kinds

of perceptions at the same time. Moreover, a metaphor cluster does not necessarily coincide with the utterance's borders. Thus, the texts need to be analyzed holistically and we have to consider not just the verb valence patterns but also all knowledge facets that are relevant for the metaphor interpretation.

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DAN ZEMAN & AGUSTIN VICENTE

Some Solutions to the Multi-Perspectivality Problem for Relativism

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In responding to the argument from binding employed against relativism about predicates of taste, Lasersohn (2008) has claimed that contextualism about such expressions is in trouble due to the fact that allows certain ("multi-perspectival") readings of doubly quantified sentences with two predicates of personal taste (PPTs) like

(1) Every man gave a woman a fun ride and a tasty dish.

According to Lasersohn, (1) "does not have (...) a reading in which the hidden argument for fun is bound to every man, but the hidden argument for tasty is bound by some woman." (2008: 325) Contextualism postulates hidden arguments for perspectives in PPTs that can take any value, and thus allows a reading that, according to Lasersohn, doesn't exist. Relativism, on the other hand, is not beset by this problem, due to the fact that "truth assessment is always done from a particular perspective" (2008: 326) – an idea we spell out as the

Uniqueness of Perspective Constraint (UPC): A sentence is evaluated for truth at one and only one perspective.

Recently, Kneer (2014, 2015) and [author] have shown that, contrary to Lasersohn's claim, multi-perspectival readings are available both for simple sentences with two PPTs and for doubly-quantified sentences similar to (1). First, they show that such a reading is available for sentences like

(2) Johnny played a silly prank and got a lot of tasty licorice.

(Imagine the sentence uttered by Johnny's mother describing what he did for this year's Halloween.) The most natural interpretation of (2) is

such that the licorice was tasty for Johnny, but the prank was silly for the speaker (or the victim). Similarly, a multi-perspectival reading is available for a doubly quantified version of (2) (as uttered in the same context, talking about what the kids in the neighborhood did for Halloween):

(3) Every kid played a silly prank on some neighbor and got a lot of tasty licorice,

whose most natural interpretation is such that the licorice was tasty for each kid in the range of "every kid", but the prank was silly for the speaker (or for each of the neighbors). Not only does the availability of such readings render Lasersohn's objection to contextualism powerless, but, given **UPC**, it raises a serious issue for relativism itself.

In this paper we survey a number of possible relativist solutions for the problem raised by the multi-perspectival readings of sentences like (2) and (3). The first solution scrutinized is implicit in MacFarlane (2014) and consists in giving a non-unitary semantics for various uses of PPTs (egocentric, exocentric and bound). This solution preserves UPC, but, absent any substantial reasons for treating such uses differently, it is highly ad-hoc. The second strategy is what in [author] is called "the paraphrasing strategy", according to which the problematic sentences are paraphrased for purposes of evaluation into sentences with only one PPT, with each of them being evaluated at a different, unique perspective. This solution preserves the spirit of **UPC**, but is problematic from a syntactic point of view. The final solution investigated consists in the introduction of a sequence of parameters for perspectives in the circumstances ("multiple indexing"), each parameter being indexed to an occurrence of a PPT in a sentence. This solution rejects **UPC**, but is a significant departure from orthodoxy. We discuss both the advantages and disadvantages of each of these possible solutions.

ADRIAN ZIÓŁKOWSKI

Experimental Philosophy, Contextualism, and Data Reliability

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Experimental approach has recently played an important role in many disputes in philosophy of language including the debate between contextualists and invariantists. Although there are many different ways to delineate between these competing views, here the criterion is usually the prevalence of context-dependence in natural language — while contextualists claim that it is a widespread phenomenon, invariantists argue that it is restricted to simple and well-known cases such as indexicals.

Empirical studies concerning contextualism are usually based on the socalled 'context-shifting experiments' - scenarios describing different contexts of utterance of a certain sentence. According to contextualists, these contexts affect the meaning of the sentence in question. Majority of the studies on the topic concerned epistemic contextualism, seeking for context-dependence of knowledge attributions, but there were also experiments investigating other expressions.

The results of studies carried out so far seem to partly depend on the adopted experimental design. If the between-subject design is used (subjects evaluating different contexts are distinct groups) the data lends no (or very little) support to contextualism. On the other hand, experiments conducted in within-subject design (subjects are acquainted with all contexts) seem to support contextualism.

Some experimental philosophers claim that the within-subject design is superior and allows collecting more reliable data than the between-subject design. For instance, Nat Hansen and Emmanuel Chemla believe that perceiving differences between contexts helps the subjects understand the given task appropriately. On the other hand, I argue that the within-subject design can be a source of differences in judgments that are merely a product of an interaction between that design and subjects' beliefs concerning the aims of the experiment. I expect that the subjects confronted with similar yet different contexts and questions within one study will try to differentiate their judgments because they assume that those slight differences would not have been presented, if they were not important. This may result in

differences in subjects' judgments which, contrary to Hansen and Chemla, should not be interpreted as contextualist effects.

To support my doubts, I have conducted a series of experiments that include both within- and between-subject design (certain contexts are evaluated separately or primed with another context). Let us call the context in which, according to contextualists' predictions, subjects should reject the uttered sentence, the Context of Rejection. By analogy, the opposite context shall be called the Context of Acceptance. The data shows that subjects' judgments for those two contexts are strongly affected by priming. In particular, it turns out that for a given scenario contextualists' predictions may be supported only for the within-subject design but not for the between-subject design. In the second study I have introduced a third kind of context – the Context of Uncertainty, in case of which a strong disagreement between subjects' judgments was expected. The data shows that this kind of context may be judged differently depending on whether it is evaluated separately, primed with the Context of Acceptance, or primed with the Context of Rejection.

The abovementioned phenomena were observed for laypersons' judgments. Currently, I am collecting data to establish whether similar biases can be found in judgments made by professional philosophers.

MARIÁN ZOUHAR

Contextualism and Disputes about Taste

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It is sometimes argued that contextualist theories cannot do full justice to the disputes concerning personal taste. Since the predicates of personal taste ('tasty', 'funny', 'scary', 'beautiful', etc.) are viewed as context-sensitive, contextualism is claimed to fail in explaining disagreements (as well as agreements) about taste. According to contextualism, when speaker A utters 'Spinach is tasty' and speaker B responds with 'Spinach is not tasty', the former expresses the proposition that spinach is tasty to A while the latter expresses the proposition that spinach is not tasty to B. Since the two propositions are perfectly compatible, no disagreement between A and B arises. This conclusion is in stark contrast to the pre-theoretical intuition that B does disagree with A. The above argument parallels the one according to which no disagreement arises provided A utters 'I like spinach' and B responds with 'I dislike spinach'. A suitably modified version of this argument can be applied also to situations in which one speaker expresses agreement about taste with another speaker.

My aim is to weaken the above case against contextualism. It will be shown that the argument is unsuccessful and that contextualist theories may provide for disagreements (agreements) about matters of personal taste.

My departure point consists in an observation that people do sometimes express their disagreements (or agreements) about taste by using indexical sentences such as 'I like spinach' or 'Spinach does not taste me'. In particular, there is a sense in which B may utter 'I like spinach too' to express her agreement with A's utterance of 'I like spinach' and there is a sense in which B may utter 'I dislike spinach' to express her disagreement with A's utterance of 'I like spinach'. This observation motivates the idea that this notion of disagreements (or agreements) differs from the one employed in the anti-contextualist argument sketched above. More precisely, the latter notion is based on the idea that the responding speaker disagrees (or agrees) with the proposition her interlocutor has expressed; the former notion, however, is based on the idea that the responding speaker disagrees (or agrees) with the attitude her interlocutor has presented.

It is argued that, armed with the propositional vs. attitudinal disagreement (agreement) distinction, the contextualist may accommodate the disagreement (agreement) phenomena stimulating the above anti-contextualist argument. She may do that by claiming that when people disagree (agree) about matters of personal taste, they are involved in the attitudinal disagreement (agreement) rather than in the propositional disagreement (agreement). So, when A's utterance of 'Spinach is tasty' expresses the proposition that spinach is tasty to A and B's utterance of 'Spinach is not tasty' expresses the proposition that spinach is not tasty to B, they may be interpreted as disagreeing with one another in the attitudinal sense. Similarly, for the case in which B agrees with A. This claim can be understood quite generally as saying that all disagreements (agreements) about personal taste are of the attitudinal variety.

ZSOFIA ZVOLENSZKY

A Common Problem for Possible-Worlds Analyses of Deontic and Fictional Discourse

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In my presentation, I will bring together considerations from formal semantics and philosophy of language about two seemingly very different types of discourse. The first type, exemplified in (1) and (2) is *deontic modal* discourse (about what is necessary and possible according to a certain set of rules, e.g. rules of etiquette). The second type, exemplified in (3) and (4) is discourse about fiction:

Uttered in the context of Justin Bieber's infamous arrest for speeding while driving drunk (in January, 2014):

- (1) Justin Bieber must (given U.S. traffic laws) face charges. (plausibly true)
- (2) Justin Bieber must (given U.S. traffic laws) be driving drunk. (plausibly false)
- (3) Anna Karenina is Russian. (true when prefixed by an "In/According to the relevant work of fiction" operator, but not true simpliciter)
- (4) Anna Karenina is a fictional character. (not true when prefixed with an "In/According to the relevant work of fiction" operator, but true simpliciter)

My aim is to show, through the following steps, that a common problem affects benchmark possible-worlds-based accounts of deontic and fictional discourse. Accounting for various contextual effects (like those in parentheses in 1–4 above) calls for an alternative operator-based approach.

(i) My starting point is a highly influential contextual-parameter-based account of modality proposed by Kratzer (1981, 1991, 2012). Her

proposal builds on the following biconditional analysis of modality: 'It must be that p' is true iff in all of a certain set of possible worlds, p is true. In the case of (1)–(2), this set of possible worlds is restricted to those that make true certain (contextually salient) circumstances of the actual world (here: that Bieber is driving drunk), and (within that set) are closest to deontic ideality (here: maximally obey U.S. traffic laws).

- (ii) Extending my previous results about deontic conditionals (2002, 2006, discussed in Kratzer 2012), I will argue that the Kratzerian analysis yields a broad range of unwanted truths, including the plausibly false (2), thereby creating a thorny problem, one whose culprit is the 'if'-direction of the biconditional analysis (universal truth across the most ideal worlds is *insufficient* for the truth of 'must p').
- (iii) This result motivates positing (instead of the biconditional analysis) a special "according to the contextually relevant corpus or rules" operator (corpus operator, for short) when accounting for deontic modality. This operator bears key parallels with the widely discussed "in/according to the work of fiction" operator (fiction operator, for short, e.g. Thomasson 2009, Sainsbury 2010).
- (iv) But there is a twist: for the corpus operator to allow for a genuine alternative to the Kratzerian account, it cannot be modeled on a fiction operator that involves quantification over possible worlds, a view proposed by David Lewis (1983, see also Hanley 2004). I will argue that the parallels between the corpus and fiction operators run deep; indeed the thorny problem for the Kratzerian account helps pinpoint an analogous objection to the Lewisian fiction operator, one that is more effective against it than recent objections (e.g. in Sainsbury 2013).

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