

# A plea for radical contextualism

Minyao Huang<sup>1</sup>

Received: 4 June 2015 / Accepted: 27 November 2015

© The Author(s) 2015. This article is published with open access at Springerlink.com

**Abstract** Extant contextualist theories have relied on the mechanism of pragmatically driven modulation to explain the way non-indexical expressions take on different interpretations in different contexts. In this paper I argue that a modulation-based contextualist semantics is untenable with respect to non-ambiguous expressions whose invariant meaning fails to determine a unique literal interpretation, such as ‘lawyer’ ‘musician’ ‘book’ and ‘game’. The invariant meaning of such an expression corresponds to a range of closely related and equally basic interpretations, none of which can be distinguished as the literal interpretation. Moreover, what counts as a literal interpretation as opposed to a non-literal one is arguably vague. The nonuniqueness of the literal interpretation and the vagueness in the literal/non-literal divide doubly challenge a modulation-based semantics, for modulation is supposed to operate on a unique literal interpretation to generate a clearly non-literal interpretation. Lastly I contend that non-ambiguous expressions which lack determinate literal interpretation are amenable to a Radical Contextualist semantics, according to which the invariant meaning of such an expression directs its interpretation to congruent background information in context. Thereby, these expressions exhibit semantically driven context sensitivity without displaying indexicality.

**Keywords** Contextualism · Modulation · Literal interpretation · Context sensitivity

---

✉ Minyao Huang  
mh538@cam.ac.uk  
<https://sites.google.com/site/minyaohuang/>

<sup>1</sup> Department of Theoretical and Applied Linguistics, Faculty of Modern and Medieval Languages, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DA, UK

## 1 Background

According to [Recanati \(2004, 2010\)](#), contextualism is the tenet that “in general (i.e. not only in the special case of indexicals<sup>1</sup>), the propositional contribution of an expression is not fully determined by the invariant meaning conventionally associated with the expression type but depends upon the context” (2010: 17). In the logical space of contextualism, there are two ways to understand the relationship between the invariant meaning of a non-indexical expression and its propositional contribution in a context. According to what I call ‘Moderate Contextualism’, which has been extensively developed ([Recanati 2004, 2010](#); [Sperber and Wilson 1986](#); [Carston 2002](#), etc.) and criticised ([Borg 2004, 2012](#); [Cappelen and Lepore 2005](#), etc.) in the literature, the invariant meaning of a non-indexical expression type corresponds to the literal interpretation of its token in a context, whereas its propositional contribution is often a pragmatically modulated interpretation of that token ([Recanati 2010](#): 10). According to what I call ‘Radical Contextualism’, which is less explored in the literature ([Travis 2008](#); [Recanati 2004](#): 140, [2010](#): 21; [Carston 2012](#)), the invariant meaning of a non-indexical expression type is too unspecified and/or too rich to render a literal interpretation of its token in any context. Consequently, contextual adjustment is required in every context to determine its propositional contribution.

At first glance, Moderate Contextualism appears to be more plausible than Radical Contextualism for associating a literal interpretation with a non-indexical expression, which is modulated into various intended interpretations in contexts. (Throughout this paper I will use ‘intended interpretation’ and ‘propositional contribution’ interchangeably, *ditto* ‘interpretation’ and ‘content’). In the following well-known examples, it is intuitively clear what the literal interpretation of the italic expression in (a) is. Roughly, ‘something’ literally means A THING THAT IS UNSPECIFIED OR UNKNOWN; ‘raw’ means UNCOOKED; ‘the ham sandwich’ literally denotes a contextually salient ham sandwich.

- (1) a. *Something* has happened ([Carston 2002](#): 324).  
b. SOMETHING NOTEWORTHY HAS HAPPENED.
- (2) a. The steak is *raw* ([Carston 2002](#): 328).  
b. THE STEAK IS VERY UNDERCOOKED.
- (3) a. *The ham sandwich* is sitting at table 20 ([Nunberg 1979](#): 149).  
b. THE CUSTOMER WHO HAS ORDERED THE HAM SANDWICH IS SITTING AT TABLE 20.

To get from the literal interpretation to a different yet contextually relevant interpretation such as that underlined in (b), what is involved is arguably not a matter of filling in any contextual variable(s) encoded in the invariant meaning of the italic expression,<sup>2</sup>

<sup>1</sup> The term ‘indexical’ here refers to expressions whose context sensitivity is encoded in their invariant meaning and is closely related to their cognitive significance in terms of the speaker’s first-person access to their referents ([Kaplan 1989](#), see Sect. 4.2). The typical examples are ‘I’ ‘here’ and ‘now’.

<sup>2</sup> *Contra* Moderate Contextualism, a number of authors have posited covert variables in the invariant meaning of apparently non-indexical expressions to account for their context-sensitivity, especially for quantifier domain and colour adjectives, see [Stanley \(2000\)](#), [Stanley and Szabó \(2000\)](#),

but that of adjusting its literal interpretation in accordance with the speaker's communicative intentions (Recanati 2010: 182). The adjustment may consist in making the literal interpretation more specific, as in (1), making it looser, as in (2), or mapping it to another interpretation on the basis of some contextually salient relation(s) between the two, as in (3) (Carston 2002: 353; Recanati 2004: 24–26). After Recanati (1989: 304), such pragmatically driven adjustment is generally known as *modulation*,<sup>3</sup> whereas the semantically driven filling-in of contextual variables is called *saturation*.

In contrast with Moderate Contextualism, Radical Contextualism rejects the idea of there being a literal interpretation to be modulated in contexts. That is, the invariant meaning of a non-indexical expression type is considered to be too abstract and/or contain too much encyclopaedic information to determine a unique set of conditions under which the expression is used literally, which would serve as its literal interpretation (Recanati 2004: 140; Carston 2012: 607). Instead, the invariant meaning is taken to interact directly with contextual information to determine interpretations in contexts.

While authors in the contextualist camp have touched upon Radical Contextualism (Recanati 2012; Carston 2012), the consensus seems to be that the context sensitivity exhibited by non-indexical expressions is suitably handled by Moderate Contextualism, leaving Radical Contextualism an underexplored possibility (but see Travis 2008; Rayo 2013; Jaszczolt 2014). My aim in this paper is to argue that Moderate Contextualism fails to handle cases wherein short of stipulation, there is no principled way to determine *the* literal interpretation assumed by a non-indexical expression in every context, which would serve as the input for pragmatic modulation. Such cases also show that the distinction between a literal interpretation and a non-literal interpretation is vague. Therefore, they motivate a form of Radical Contextualism that extends semantically driven context sensitivity beyond indexicality, or so I will argue.

The structure of the paper goes as follows. Section 2 presents some generalizable cases wherein the literal interpretation of an expression is indeterminate. Section 3 further illustrates that the distinction between literal interpretations and non-literal interpretations is vague, and explores the implications of the indeterminacy and vagueness of literal interpretation for the debate on the semantics/pragmatics interface. Section 4 contends that expressions which lack determinate literal interpretation exhibit semantically driven context sensitivity without displaying indexicality. Section 5 concludes.

---

Footnote 2 continued

Szabó (2001), Rothschild and Segal (2009), Hansen (2011) and Vicente (2012). I propose a form of Radical Contextualism that recognises a third possibility between saturation and modulation in Sect. 4.

<sup>3</sup> While 'modulation' is sometimes used narrowly to denote contextual adjustment of the literal interpretation, and the term 'unarticulated constituent' is used to denote contextual enrichment which introduces new material into the logical form, here I follow Borg's (2012) suggestion that unarticulated constituents could be subsumed under cases of modulation, because enrichment can be regarded as making more specific the literal interpretation, which is a kind of modulation.

## 2 Indeterminacy of literal interpretation

In this section I present cases in which the literal interpretation of a non-indexical, non-ambiguous expression is indeterminate. The argument strategy is as follows. Firstly, I construct examples to show that the intended interpretations of a non-indexical, non-ambiguous expression in various contexts are *equally literal*. Thus, in principle any one of these interpretations can be taken as the literal interpretation, while the rest would be generated by modulation. In other words, there is no backward route from these interpretations and the mechanism of modulation to *the* literal interpretation which is supposed to be the input for modulation. Secondly, in order to determine which interpretation is the literal one, I examine the invariant meaning of the expression by reference to its lexical entry in a standard dictionary. Here I make the reasonable assumption that lexical entries in reputable dictionaries are formulated on the basis of careful empirical examination of the prevailing linguistic conventions associated with an expression, and hence provide reliable data for its conventional, context-independent, invariant meaning.<sup>4</sup> Thereby I observe that the invariant meaning fails to single out a literal interpretation. Crucially, without an independently motivated method to determine the literal interpretation, modulation cannot get off the ground. Granted, one can stipulate what the literal interpretation is and define modulation as the mechanism that takes us from it to the intended interpretations, but such stipulation provides no justification for modulation.

Here come the examples. Consider the word ‘lawyer’. An individual may be called a lawyer at various stages of her professional development in the legal field. To start with, suppose 5 years ago Emma was a student at Murray Edwards College, Cambridge, reading a bachelor’s degree in Law. As students in a college are studying in different departments, it is common practice among tutorial officers in the college to refer to them by the occupational terms typically associated with their departments. Hence, a student in Law is called a lawyer, a student in Physics a physicist, a student in Chemistry a chemist, and so on. The occupational terms used in this kind of language game are not intended to be ironic, hyperbolic, or figurative, but merely an efficient way to categorise students by their departments.<sup>5</sup> Thus, 5 years ago an utterance of (4a) by a tutorial officer to convey Emma’s status would express the proposition in (4b).

(4) a. Emma is a lawyer.

<sup>4</sup> To theoretically assess the context sensitivity of an expression, one needs empirical data regarding its context-independent meaning and its intended interpretation at a context. However, while one plausibly has reliable intuition on the intended interpretation (Recanati 1989), one’s intuition on the context-independent meaning can be tenuous. My solution here is to appeal to reputable dictionaries to have some grasp of the conventional meaning in order to set off the theoretical assessment. To the best of my knowledge, this is not an uncommon strategy in the theoretical discussion on the semantics/pragmatics interface. It is advantageous over the (also common) strategy of using a theorist’s own intuition to state what an expression literally means independently of context.

<sup>5</sup> In a similar vein, I have heard lecturers in Law calling themselves ‘lawyers’ ‘commercial lawyers’ ‘criminal lawyers’, etc. in order to convey their research interests. Again such uses are hardly figurative, as the speakers need not and (as far as I can tell) do not have the intention to compare themselves to qualified, working lawyers.

- b. EMMA IS A STUDENT IN LAW.
- c. EMMA IS LEARNED IN LAW.
- d. EMMA IS A LEGAL PRACTITIONER.
- e. EMMA IS A QUALIFIED BARRISTER.

Over the period of 5 years, Emma was increasingly learned in law and engaged in practicing law, firstly giving sound legal advice to family and friends, then drafting legal documents as an intern in a law firm, and finally representing clients in legal negotiations and court proceedings. At different stages of her career path, several utterances of (4a) can be truthfully made, with the word ‘lawyer’ associated with different intended interpretations, as in (4c)–(4e). For example, after frequently receiving her sound legal advice, Emma’s father asserts (4a), expressing approximately the proposition in (4c). Upon watching Emma’s strong abilities in drafting legal documents and advising clients, her boss introduces her by saying (4a), expressing roughly the proposition in (4d). After Emma receives her qualifications, her mother utters (4a), expressing the proposition in (4e).

It seems that the use of ‘lawyer’ to describe a student who has just started her BA in Law involves a modulated interpretation. If so, what is the literal interpretation of ‘lawyer’ that is being modulated? A common way to decide whether a given interpretation is the literal one is to see if it corresponds to a literal use, for a literal use reflects (null modulation on) the literal interpretation whereas a deviant use involves modulation on the literal interpretation. With respect to (4b), it is clear that ‘lawyer’ is used in a deviant way, which indicates that its interpretation in (4b) is not identical to the literal interpretation. However, apropos (4c)–(4e), it is not obvious that the uses of ‘lawyer’ are deviant, or the one of them is more literal than the others. While the intended interpretations of ‘lawyer’ in (4c)–(4e) differ in how strictly they impose on its application criterion, the strictest one need not be the literal one. If the uses of ‘lawyer’ in (4c)–(4e) are equally literal, it follows that the interpretations of ‘lawyer’ in (4c)–(4e) are equally identical to the literal interpretation. Thus, any one of them can be taken as the literal interpretation, while the rest would be generated by modulation in the form of appropriate specification or loosening. If so, from certain intended interpretation and modulation, there seems to be no way to work out backwards what the literal interpretation is.

To determine the literal interpretation independently, one may turn to the definition of ‘lawyer’ in a trusted dictionary. For instance, according to *Black’s Law Dictionary*, ‘lawyer’ means “A PERSON LEARNED IN THE LAW; AS AN ATTORNEY, COUNSEL OR SOLICITOR; A PERSON WHO IS PRACTICING LAW” (1979: 799). Assuming that the dictionary definition captures the conventional, context-independent understanding of ‘lawyer’, it does not spell out a particular literal interpretation, for it merely lists three related senses: (a) A PERSON LEARNED IN THE LAW, (b) A PERSON WHO IS PRACTICING LAW, and (c) AN ATTORNEY, COUNSEL OR SOLICITOR.

Since the senses are closely related, with (c) normally implying (b), which in turn usually implies (a), they do not correspond to three distinct literal interpretations of ‘lawyer’. That ‘lawyer’ is not three-way ambiguous is supported by the fact that in (5), ‘three lawyers’ could refer to a newly graduated student in Law, an intern practising law, and a qualified working solicitor. To compare, the fact that in (6) ‘two banks’

cannot refer to a financial bank and a river bank (unless it is intended as zeugma) suggests that ‘bank’ is two-way ambiguous.

- (5) There are three lawyers in the family.
- (6) There are two banks around the corner.

To determine the literal interpretation among the related senses, one may ask (i) whether one of them is more basic or central than the others, or (ii) whether they are underlain by a more abstract interpretation. An answer to (i) typically relies on intuitions. For example, given a natural-kind term, intuitions appear to privilege a chemistry textbook style definition as its basic meaning. Thus the interpretation of ‘water’ in terms of the substance’s chemical makeup and physical properties appears to be basic whereas other related interpretations (e.g. A WATERY FLUID FORMED OR CIRCULATING IN A LIVING BODY) strike our intuitions as derivative. Similarly, if an expression harbours related but more or less metaphorical senses, intuition-wise the metaphor-free sense is more likely to be taken as basic. Hence in the case of ‘raw’, the sense of NOT COOKED strikes us as more basic than the metaphor-prone sense of IN A NATURAL STATE: NOT TREATED OR PREPARED. A discussion on why our meta-semantic intuitions bias towards naturalist and/or non-metaphorical construals of basic interpretation will take us afar, but taking these intuitions at face value, it suffices to note that for ‘lawyer’, a parallel intuition is not forthcoming. Is learnedness in law more central to the interpretation of ‘lawyer’ than the fact that one is practising law, or that one is qualified to do so? It depends on the context, especially on the background information about the interlocutors’ interests (see Sect. 4.1). If the interest lies in hiring a legal representative for a lawsuit, ‘lawyer’ will naturally be interpreted as A QUALIFIED BARRISTER. If the interest is in seeking legal advice, what matters is whether the person is learned in law. Should the interest be counting family members with legal expertise, the interpretation would probably encompass all three senses. Such context dependency suggests that none of the senses commonly associated with ‘lawyer’ stands out as more basic or central than the others. Accordingly, they are equally good candidates for being the literal interpretation of ‘lawyer’.

Secondly, is there a more abstract sense of ‘lawyer’ which underlies the senses listed in its lexical entry? To compare, while ‘cut’ may be said to harbour related senses corresponding to different ways of cutting such as making an opening, an incision, or a wound, it is possible to abstract over such difference and identify a more abstract interpretation for ‘cut’, roughly “EFFECT A LINEAR SEPARATION AFFECTING THE INTEGRITY OF (SOME OBJECT) BY MEANS OF AN EDGED INSTRUMENT” (Recanati 2010: 40).<sup>6</sup> However, the same strategy of abstraction does not work for ‘lawyer’, for the related senses are complementary to each other in such a way that it is implausible to abstract over the differences among them. That is, a qualified barrister or solicitor is usually, but not necessarily, a person practicing law, and vice versa; a person practicing law is typically, but not necessarily, learned in law, and vice versa. In this respect,

<sup>6</sup> Carston (2002: 361) remarks that even if one can associate an abstract sense with a verb like ‘open’ by abstracting away the differences among the more specific senses of ‘open’ in, say, ‘open the mouth’ ‘open the window’ ‘open the can’ and ‘open the discussion’, the abstraction seems to result in a sense that is too non-representational to be grasped.

they are unlike the senses commonly associated with ‘cut’, which represent diverging ways of making specific an underlying basic interpretation. The common denominator among the senses associated with ‘lawyer’, roughly A PERSON RELATED TO LAW IN SOME WAY, is too weak to serve as its basic interpretation, for it fails to account for the intuition that the use of ‘lawyer’ for a student in Law is deviant. Moreover, if one pursues a suitably abstract interpretation of ‘lawyer’ that encompasses only the related senses, one may end up with an inherently context-sensitive one, such as A PERSON WHO HAS COMPLETED A CERTAIN REQUIRED TRAINING IN THE LAW.<sup>7</sup> As the required level and type of legal training implied by a use of ‘lawyer’ varies from context to context, the abstract interpretation seems to turn ‘lawyer’ into an inherently context-sensitive expression, on a par with an indexical. That is, it implies that when ‘lawyer’ is used, context is *always* invoked to fix a certain level and type of legal training pertinent to the present use. Provided that “modulation takes place in some contexts and not others, while saturation, being linguistically mandated in virtue of lexical properties of the expression type, is bound to take place in all felicitous uses of the expression” (Recanati 2010: 57–58), an inherently context-sensitive sense of ‘lawyer’ calls for saturation, rather than modulation, for resolving at least some of its context sensitivity. Furthermore, the saturated information pertaining to the required level and type of legal training may be *all* that is required to map ‘lawyer’ onto a contextually relevant interpretation, leaving modulation superfluous.<sup>8</sup> For instance, in the case of ‘lawyer’ meaning A STUDENT WHO HAS JUST STARTED HER BA IN LAW, the required level and type of legal training may be set to a suitable minimum.

More generally, while it is logically possible, as one reviewer suggested, that the contextual interpretation of a non-indexical expression is arrived at through *both* saturation of an abstract, context-sensitive meaning to derive a literal interpretation *and* modulation of the literal interpretation thus derived, in practice, such a dual picture is difficult to maintain. By Occam’s razor, why not simply say that the relevant interpretation is derived by saturation alone, with the contextual variable suitably construed to reflect the required context sensitivity (see footnote 2)? Moreover, how does one decide what counts as saturation and what as modulation? For example, a relative adjective such as ‘wide’ has context-sensitive interpretations, depending on the type of entities it is used to modify. Thus, what counts as a wide wound differs dramatically from what counts as a wide chair, which in turn differs significantly from what counts as a wide canal. Of course, the context sensitivity does not end here. What count as wide *seating* space, wide *sleeping* space and wide *dining* space likewise differ. By the same token, ‘wide’ takes on different interpretations when its application in a context concerns seating space *for young children*, seating space *for teenagers* or seating space *for adults* (cf. Cappelen and Lepore 2005, Chapter 5). Now if ‘wide’ harbours a contextual variable in its inherent meaning for saturation, which in turn renders a literal interpretation for modulation, at what level of granularity should the contex-

<sup>7</sup> I thank an anonymous reviewer for suggesting this interpretation.

<sup>8</sup> In Sect. 4 I show that we do not need to posit a covert variable in the meaning of ‘lawyer’ to handle its context sensitivity, by recognising a third possibility between saturation and modulation. The reason for resisting a saturation-based analysis is that it is implausible to justify a covert variable on the basis of certain abstract interpretation of ‘lawyer’ proposed ad hoc to encompass its related senses.

tual variable be construed? Does it denote a broadly construed entity type, leaving the further specification of its interpretation to modulation, or does it denote a more finely grained type, viz. a type of activity-relative entities? Why not cut the variable even more finely, to do with a type of entities that are individual- and activity-relative? The more finely grained the variable is construed, the more of the context-sensitivity would be handled by saturation, and the less of it by modulation. My aim here is not to delve into the complex issues surrounding the context sensitivity of relative adjectives (see [Recanati 2010](#), Chapter 2 for discussion), but to illustrate that if one associates a context-sensitive meaning with a non-indexical expression, one may open the floodgates to pervasive saturation and thus undermine modulation.

Returning to ‘lawyer’, without a suitably abstract, context-insensitive interpretation that would encompass (only) the senses listed in its entry, these senses seem to jointly constitute the invariant meaning of ‘lawyer’. It then follows that the invariant meaning does not determine a unique literal interpretation for ‘lawyer’ as the input for modulation.

Cases in which the invariant meaning of a non-ambiguous expression consists of several closely related, equally literal interpretations are common among occupational terms, to witness also ‘musician’ (A PERSON WHO PLAYS A MUSICAL INSTRUMENT, ESPECIALLY (ALTHOUGH NOT NECESSARILY) AS A PROFESSION, OR IS MUSICALLY TALENTED), ‘chemist’ (AN EXPERT IN CHEMISTRY OR A PERSON ENGAGED IN CHEMICAL RESEARCH OR EXPERIMENTS) and ‘analyst’ (A PERSON WHO ANALYZES OR WHO IS SKILLED IN ANALYSIS). They can also be found in adjectives such as ‘silky’ (MADE OF SILK OR OF MATERIAL THAT IS SOFT, SMOOTH, AND SHINY LIKE SILK) and ‘homemade’ (MADE IN THE HOME, ON THE PREMISES, OR BY ONE’S OWN EFFORTS).<sup>9</sup> They constitute a category of expressions that lack a unique literal interpretation.

To illustrate the indeterminacy of literal interpretation with a different set of examples, consider what [Nunberg \(1979\)](#) called “pragmatically polysemous” expressions such as ‘book’ and ‘game’. As Nunberg remarked,

[T]here are many cases of multiple use for which we can’t have clear intuitions that one or another use is prior. Take the use of *game* to refer to activities or sets of rules; of *window* to refer to holes or the things that go in them; of *book* to refer to inscriptions or contents; of *gossip* to refer to a kind of activity or a kind of information; of *captain* to refer to a rank or to the people who hold that rank. (1979: 166)

These expressions are pragmatically polysemous in that while they are associated with different equally literal interpretations and in this respect count as polysemous, the difference among the interpretations does not amount to lexical semantic ambiguity ([Nunberg 1979](#): 150). Firstly, dual interpretations are often possible within one occurrence of the expression without inducing any zeugmatic effects. For example ‘book’ in (7) is interpreted both as a physical object which is thick and a body of content which carries information.

<sup>9</sup> The lexical meanings of ‘musician’ and ‘chemist’ are taken from Wikipedia whereas those of ‘analyst’ ‘silky’ and ‘homemade’ are from the Merriam Webster Online Dictionary.

(7) The first chapter of this thick book is about the countryside.

Moreover, dual interpretations can be distributed over an occurrence of the expression and a pronoun anaphorically linked to it. In (8) ‘chess’ is interpreted as game activity whereas the anaphoric ‘it’ is interpreted as the rule of the game.

(8) I have played chess a couple of times and I am slowly getting the hang of it.

The availability of dual (or multiple) interpretations shows that the expression is not two-way (or multiple-way) ambiguous.

Importantly for the present purpose, a pragmatically polysemous expression lacks a unique literal interpretation. In principle, any one of the interpretations commonly associated with it can be taken as the literal interpretation, while the rest would be generated by modulation in the form of property transfer based on some common, salient, or intended relations between the taken literal interpretation and the others. For instance, one could take the literal interpretation of ‘book’ to be A WRITTEN OR PRINTED WORK CONSISTING OF PAGES GLUED OR SEWN TOGETHER ALONG ONE SIDE AND BOUND IN COVERS,<sup>10</sup> and derive its interpretation in terms of A LITERARY COMPOSITION CONTAINED IN A WRITTEN OR PRINTED WORK by modulation in virtue of the containment relation between a physical work and its content. Yet in equal measure, one could take the content-based interpretation as the literal one and derive the object-based interpretation by modulation in view of the same containment relation.

Note that the more concrete interpretation need not be the basic one. For one thing, it is contentious whether one is disposed to think of an abstract entity in terms of a (more) concrete one (cf. Lakoff and Johnson 1980). For another, even if the object-based interpretation is the basic interpretation of ‘book’, for many other pragmatically polysemous expressions, the interpretations commonly associated with them are about similarly concrete objects (e.g. window frame versus window glass for ‘window’) or similarly abstract entities (e.g. activities vs. rules for ‘game’). Insofar as the interpretations are equally literal and intuitively basic to the same extent, there is no way of deciding which one is *the* literal interpretation. If the interpretations commonly associated with a pragmatically polysemous expression constitute its invariant meaning in equal measure, its meaning does not determine a unique literal interpretation.

To sum up, in this section I have contended that in some cases, the invariant meaning of a non-indexical, non-ambiguous expression fails to determine a unique literal interpretation. As the invariant meaning corresponds to a range of closely related and equally literal interpretations, it is indeterminate which one of them is *the* literal interpretation. Any one of them can be taken as the literal interpretation, while the rest would be generated by modulation in the form of (i) specification or loosening when the interpretations are more or less strict, as in the case of ‘lawyer’, or (ii) property transfer when the interpretations pick out different aspects of an entity, as in the case of ‘book’. If there is no way to adjudicate among equally literal interpretations, then to mimic Russell, *there is no backward road from them and the mechanism of modulation to the literal interpretation.*

<sup>10</sup> The interpretations of ‘book’ in this paragraph are taken from the Oxford Dictionary of English.

Crucially, the indeterminate nature of literal interpretation renders modulation—arguably the centrepiece of Moderate Contextualism—ill-justified. When the invariant meaning of a non-ambiguous expression encodes a range of related interpretations, none of which appears to be more basic than the others, it is implausible to speak of *the* literal interpretation that the expression assumes in every context, on which modulation operates to deliver various interpretations in contexts. In other words, if the notion of a unique literal interpretation is independently suspicious, there would be no independently motivated basis for modulation. Granted, one can *stipulate* that a certain interpretation is the literal one and *define* modulation as the mechanism that generates other interpretations from the stipulated literal one. However, insofar as modulation is construed as a robust hypothesis of the way expressions are interpreted in contexts, it turns out to be non-operant in cases where the invariant meaning fails to determine a unique literal interpretation in the first place. On this score, these cases go against Moderate Contextualism.

In the next section I address some possible replies to the above argument and argue that vagueness in the distinction between literal and non-literal interpretations impugns Moderate Contextualism and undermines the debate between it and Semantic Minimalism.

### 3 Vagueness in the literal/non-literal divide

To start with, friends of modulation may reply that the above examples present only a *mild* challenge for modulation. On a more charitable reading of Moderate Contextualism, modulation operates on *some* literal interpretation determined by the invariant meaning of a non-indexical, non-ambiguous expression. If ‘some’ is read as an existential quantifier, modulation is compatible with there being more than one literal interpretation associated with the expression. Thus construed, intended interpretations in contexts would be generated by two mechanisms. On the one hand, modulation operates on a literal interpretation (it doesn’t matter which one it is if there is more than one) to generate an intended non-literal interpretation. On the other hand, if the intended interpretation is a literal one, it would result from pragmatically driven selection over the related senses commonly associated with the expression.

For this line of reply to go through, it requires an independently justified method of deciding when an intended interpretation counts as literal. However, just as interpretations can be equally literal, as argued in Sect. 2, they can be *more or less* literal, which precludes a clear-cut distinction between literal and non-literal interpretations.

For example, while the use of ‘lawyer’ to describe a person learned in law involves a literal interpretation, and its use to describe a student who has just started her BA in Law demands a non-literal interpretation, it is easy to imagine a series of individuals who are more or less learned in law and to whom ‘lawyer’ can be applied in suitably different contexts. Given such a series of contexts, it is unclear in which contexts the interpretations of ‘lawyer’ count as literal and in which contexts the interpretations count as non-literal. Intuitively, the more learned in law an individual is, the more literal the use of ‘lawyer’ in the context would be. If so, it would be implausible to draw a clear-cut distinction between literal and non-literal interpretations of ‘lawyer’.

Or consider ‘musician’. On the one hand, ‘musician’ can be applied, with a non-literal interpretation, to a child who has started her piano lessons, in such a context that the child is the only one in the house who can play some music and her parents call her “our in-house musician”. On the other hand, the application of ‘musician’ to a professional pianist involves a literal interpretation. In-between these two extremes, one can envisage a series of individuals who are more or less competent in playing the piano and to whom ‘musician’ can be applied in suitably different contexts. Thereby, it is unclear at which point the use of ‘musician’ ceases to be associated with a non-literal interpretation and takes on a literal one.

Note that vagueness in what counts as a literal (or non-literal) interpretation is a kind of meta-linguistic vagueness *orthogonal* to linguistic vagueness standardly observed with expressions such as ‘bald’ or ‘heap’. Linguistic vagueness concerns the *applicability* of an expression *relative to a particular interpretation*, whereas the meta-linguistic vagueness concerns the *literalness* of a contextually plausible *interpretation* of the expression, irrespective of whether the applicability of the expression under this interpretation is vague or precise.

For example, relative to the interpretation of (i) HAVING A SCALP WHOLLY OR PARTLY LACKING HAIR, the applicability of ‘bald’ exhibits linguistic vagueness, as there is no obvious boundary between the application and the non-application of ‘bald’ under this interpretation. Nonetheless, in addition to (i), ‘bald’ has a second common interpretation, namely (ii) NOT HAVING ANY EXTRA DETAIL OR EXPLANATION, as in ‘The bald statement in the preceding paragraph requires amplification’.<sup>11</sup> A use of ‘bald’ under (i), linguistically vague as it is, seems clearly literal, whereas a use of ‘bald’ under (ii), linguistically vague or not, appears to be non-literal. In other words, the two *interpretations* of ‘bald’ do not exhibit meta-linguistic vagueness, while under at least one of them, the *applicability* of ‘bald’ manifests linguistic vagueness.

To compare, the contextually plausible interpretations of ‘lawyer’ manifest meta-linguistic vagueness, in that it is unclear which ones of them count as literal and which are non-literal. For instance, the interpretation of ‘lawyer’ in terms of (a) A PERSON WHO IS PRACTICING LAW is clearly literal whereas its interpretation in terms of (b) A PERSON WHO IS STUDYING LAW is clearly non-literal, albeit plausible in a suitable context. How about the interpretation of ‘lawyer’ in terms of (c) A LEGAL INTERN WITH A DEGREE IN LAW? While one can easily imagine a context in which a use of ‘lawyer’ under (c) is felicitous, is such a use literal or non-literal? A person who satisfies (c) is likely to be learned in law, yet precisely because of the likelihood, the literalness of (c) is not a clear-cut matter. More generally, we lack sharp intuition or a crisp theoretical criterion for deciding which contextually relevant interpretations are literal and which are not. However, such meta-linguistic vagueness is independent of linguistic vagueness. The applicability of ‘lawyer’ under (a), (b) or (c) is quite precise. A person either is, or is not, practising Law. Thereby, the applicability of ‘lawyer’ under (a) is relatively crisp. *Mutatis mutandis* for (b) and (c). Crucially, such crispness does not bear on the literalness of the interpretation. Conversely, an interpretation of ‘lawyer’ in terms of (d) A PERSON LEARNED IN LAW renders a vague application

<sup>11</sup> The two senses of ‘bald’ and the example are taken from the Oxford English Dictionary.

criterion, for there is no clear division between individuals who are learned in law and those who are not. Yet such linguistic vagueness in the applicability of ‘lawyer’ under (d) does not impinge on the literalness of (d).

It could be that virtually all expressions are meta-linguistically vague, with interpretations that are neither clearly literal nor clearly non-literal, *and* linguistically vague, with imprecise application criteria under this or that interpretation. Be that as it may, insofar as the two kinds of vagueness are independent, our immediate concern is the metalinguistic vagueness in the literalness of certain interpretations of an expression, rather than the linguistic vagueness in the applicability of an expression under a particular interpretation. The metalinguistic vagueness is well-observed in the literature. For instance, Carston (2002: 333) remarks that the difference among strictly literal uses, loose uses and metaphorical uses is a matter of degree. For example, consider the more or less metaphorical uses of ‘door’ in (9a)–(9c):

- (9) a. Harrods opens the door at 10 a.m. Monday–Saturday.  
 b. Harrods opens the door to shoppers eager for luxurious designer footwear with the addition of a new Shoe Salon.  
 c. Harrods opens the door to criticism for selling real animal fur.

The interpretation of ‘door’ in (9a) is literal whereas that in (9c) is non-literal. However, with respect to (9b), the interpretation appears to be partly literal and partly non-literal, which makes it a borderline case for the literal/non-literal divide.

Or consider the uses of ‘religiously’ in (10a)–(10c):

- (10) a. James follows Buddhism religiously.  
 b. James follows a Zen lifestyle religiously.  
 c. James follows the Atkins diet religiously.

As the uses of ‘religiously’ represent lesser or greater departure from its central meaning (BELIEVING IN A GOD OR A GROUP OF GODS AND FOLLOWING THE RULES OF A RELIGION), they involve more or less literal interpretations. Crucially, the existence of intermediate cases such as (10b) makes it impossible to draw a clear-cut distinction between literal and non-literal interpretations.

Without a clear-cut distinction between literal interpretations and non-literal ones, one cannot save modulation by saying that modulation outputs an intended non-literal interpretation whereas selection over related senses outputs an intended literal interpretation. Given what we have exemplified so far, not only is it indeterminate what the literal interpretation is that serves as the input for modulation, but it is also indeterminate what counts as a non-literal interpretation that is supposed to be the output of modulation. For modulation to do serious explanatory work, its *explanandum* has to be robust, which consists of (i) there being an independently identifiable literal interpretation and (ii) there being a clear-cut distinction between the literal interpretation and other intended interpretations. In typical examples cited by friends of modulation, such as (1)–(3), the *explanandum* is robust, hence the viability of modulation. However, in the examples discussed above, what with the indeterminate nature of the literal interpretation, and what with the vagueness in the literal/non-literal divide, the *explanandum* is arguably tenuous, hence the untenability of modulation.

The above arguments against modulation not only impugn Moderate Contextualism, but also undermine Semantic Minimalism. Thereby, the cases discussed above

shall best be handled in a Radical Contextualist framework within which semantically driven context sensitivity is extended beyond the small set of indexicals discussed in *Demonstratives* (Kaplan 1989) (cf. footnote 2), with the proviso that indexicality is a special case of semantically driven context sensitivity which does extra explanatory work for the “ego-orientation” (Kaplan 1989: 531) of indexical thoughts (i.e. thoughts whose expression requires the use of standard indexicals).<sup>12</sup>

To start with, one of the central issues that divide Moderate Contextualism and Semantic Minimalism is whether modulation is relevant to semantic content, given certain desiderata of what semantic content is for. According to Semantic Minimalism, the semantic content of a sentence (relative to a context) corresponds to a minimal proposition (Borg 2004, 2012; Cappelen and Lepore 2005) or sub-proposition (Bach 1994), which is derived on the basis of lexical meaning and syntactic structure. As semantic content is supposed to reflect the systematicity and stability of semantic understanding, it shall be immune to the pervasive contextual fluctuation brought by pragmatically driven modulation.

More often than not, the minimal proposition or sub-proposition is construed in terms of the literal interpretation of the sentence, which is composed out of the literal interpretations of its constituents. Thereby, the minimal proposition or sub-proposition is taken to be what competent speakers can (and would) fall back on when the sentence is taken out of context (Cappelen and Lepore 2005: 185), or when the relevant contextual information that affects the literal interpretation is abstracted away (Soames 2002: 109).<sup>13</sup>

Now if the notion of literal interpretation is both indeterminate and vague, it will be *both* indeterminate what the minimal proposition or sub-proposition is, for there may be equally good candidates for being the literal interpretation of its constituent, *and* vague whether a sentential content counts as the minimal proposition or sub-proposition, for it is unclear whether an interpretation of its constituent counts as literal or non-literal. Consequently, in some cases there would be no clear, determinate minimal proposition or sub-proposition that competent speakers could fall back on. Furthermore, if the invariant meaning of an expression fails to determine a unique literal interpretation in the first place, no propositional content would remain when

<sup>12</sup> I have brushed off Semantic Relativism (MacFarlane 2005; Laserson 2005; Stephenson 2007, etc.) as a possible avenue to account for the lexical context-sensitivity discussed in this paper, for the cases that motivate Semantic Relativism seem to be the exact opposite of the cases that motivate Radical Contextualism (but see Predelli’s 2005 relativist treatment of Travis’s 1997 ‘green leaf’ case). The former cases typically involve expressions such as taste predicates and knowledge predicates whose uses can generate so-called faultless disagreements. While the status of a faultless disagreement is highly debatable (see Cohnitz and Marques 2014 for a recent overview), for those who view it as a substantial (i.e. not merely verbal) disagreement that involves a clash of doxastic attitudes, the disagreement would concern a sentential content that is held constant among the disagreeing parties. According to this view, the invariant meaning of the critical expression involved, such as ‘know’ or ‘tasty’, determines a constant interpretation. In this respect, they are the antitheses of the expressions discussed above, whose invariant meaning seems unable to determine a constant literal interpretation.

<sup>13</sup> Proponents of Moderate Contextualism have long argued that a minimal proposition or sub-proposition seldom tracks pre-theoretical truth-conditional judgements (Recanati 2004) and plays no prominent role in utterance interpretation (Carston 2002). Thus, for them modulated interpretations are part and parcel of semantic content.

contextual adjustment is abstracted away. Thus construed, indeterminacy and vagueness in the literal interpretation challenge Semantic Minimalism. In fact, if there is no clear-cut distinction between literal interpretation and modulated interpretation, it would be spurious to debate whether the one or the other should figure in semantic content. In this respect, the argument against modulation undermines the debate between Semantic Minimalism and Moderate Contextualism.

#### **4 Between modulation and saturation: semantically driven context sensitivity without indexicality**

In this section I argue that the context sensitivity exhibited by expressions that lack determinate literal interpretation instantiates a third possibility between modulation and saturation. That is, instead of fixing a determinate literal interpretation, the invariant meaning of an expression such as ‘lawyer’ seems to *direct its interpretation to congruent background information* in a context, so that the invariant meaning and the background information jointly (and often sufficiently) determine its interpretation. In Sect. 4.1 I submit that the context sensitivity in question is primarily semantically driven, hence resisting a modulation-based analysis. In Sect. 4.2 I contend that the context sensitivity does not amount to saturation, for saturation involves an egocentric conception of the contextual variables (to be saturated) that helps explain the cognitive significance of standard indexicals. Thus construed, saturation is a special case of semantically driven context sensitivity relevant to indexicals but not to ‘lawyer’ and the ilk.

##### **4.1 Semantically driven context sensitivity**

To start with, context is understood as a situation that accompanies a speech act (cf. Recanati 2010: 184), which is often, but not necessarily, identical to the situation in which the speech act takes place (see e.g. Predelli’s 1998 improper contexts relative to which recorded messages and post-it notes are interpreted). An expression is semantically context-sensitive if its invariant meaning directs its interpretation in a context to congruent contextual information, i.e. information from the context that agrees with information encoded in the meaning (more on this below). Semantically driven context sensitivity gives rise to what King and Stanley (2005) called “weak pragmatic effects”,

A weak pragmatic effect on what is communicated by an utterance is a case in which context (including speaker intentions) determines interpretation of a lexical item *in accord with the standing meaning of that lexical item*. A strong effect on what is communicated is a contextual effect on what is communicated that is not merely pragmatic in the weak sense. (King and Stanley 2005: 118–119, my emphasis)

In other words, strong pragmatic effects arise when the invariant meaning of an expression does not constrain its interpretation in a context. Instead, the interpretation is primarily determined by the speaker’s communicative intention. If the interpretation

of an expression exhibits strong pragmatic effects, I call it “pragmatically context-sensitive”.

When an expression is semantically context-sensitive, its invariant meaning plays a central role in determining its interpretation by directing the interpretation to contextual information that accords with the meaning. This does not mean that the speaker’s intention plays no role at all in fixing the interpretation. Rather, speaker’s intention can, and often does, play a subsidiary role in specifying the interpretation in accordance with the invariant meaning. Take standard indexicals for example. While the meaning of ‘now’ or ‘here’ (*qua* indexical) directs its interpretation to the temporal or locative feature of a context, as various stretches of time or space can be identified as the time or place of utterance, the interpretation of ‘now’ or ‘here’ is usually specified in relation to the speaker’s intention. For example, when a visitor utters (11) in the garden of Newnham College, Cambridge, she could mean that she has been in the garden, in Newnham College, or in Cambridge before.

(11) I have been here before.

The interpretation of ‘here’ is specified in relation to her referential intention. Similarly, when one is given permission to speak or write for someone else, as when one is asked to pen a note for one’s mother to congratulate one’s niece but at the same time also has a plan to write a congratulatory note oneself, the token of ‘I’ in (12) would invite two possible interpretations.

(12) I am writing to congratulate you on your graduation from Bristol University.

Here the situation that accompanies the act of writing appears to contain two possible authors, depending on whose hat the writing agent is putting on. In this and similar cases, while the invariant meaning of the indexical directs its interpretation to a contextual feature, access to the speaker’s intention is required to identify that feature in order to fix the interpretation.

In contrast, when an expression is pragmatically context-sensitive, the speaker’s intention plays a central role in determining the interpretation, while the invariant meaning plays at best a subsidiary role in facilitating the inference to the intended interpretation. Take a standard case of modulation for example. In (1) (repeated below), the invariant meaning of ‘something’, roughly A THING THAT IS UNSPECIFIED OR UNKNOWN, does not by itself direct its interpretation to anything in the context that is noteworthy. Rather, it is the fact that ‘something’ is uttered, together with the Gricean presumption that the speaker’s utterance is intended to be informative and relevant, that leads to the interpretation of ‘something’ as A THING THAT IS NOTEWORTHY in accordance with the speaker’s communicative intention.

- (1) a. *Something* has happened.  
 b. SOMETHING NOTEWORTHY HAS HAPPENED.

As far as context sensitivity is concerned, an expression devoid of determinate literal interpretation seems to pattern with a standard indexical. Its invariant meaning would direct its interpretation to *background information in the context that fits with the meaning*. Background information is broadly understood as what has been established so far that is available for interpreting the speech act (Stalnaker 1998: 5), in terms of

the interlocutors' interests, shared assumptions, etc. The background information that concurs with the invariant meaning often determines the interpretation in a relatively automatic manner. When it fails to fully fix the interpretation, access to the speaker's intention would be required to identify the interpretation.

By the invariant meaning of an expression, I mean the semantic information it encodes, which reflects how it is normally used. For instance, the invariant meaning of 'lawyer' seems to encode the information that it normally applies to (i) a person learned in law, (ii) a person who is practising law, or (iii) an attorney, counsel or solicitor.<sup>14</sup> Importantly, while the lexical information comprises a constellation of related senses, since the senses are closely related, it is not implausible to hypothesise that the information is *not* mentally organised in terms of a simple list. In other words, the *organisation* of the lexical information associated with a pragmatically polysemous expression, such as 'lawyer' and 'book', is likely to differ from that of a semantically ambiguous expression, such as 'bank'. While the latter may be organised in a list-like fashion, the former might well be organised more holistically, akin to what Rayo (2013) describes as a "grab-bag model".

With each expression of the basic lexicon, the subject associates a 'grab bag' of mental items: memories, mental images, pieces of encyclopedic information, pieces of anecdotal information, mental maps, and so forth. ...A grab-bag will typically not be enough to determine a range of application for the relevant lexical item independently of the subject's general-purpose abilities. But, by exercising sensitivity to context and common sense, the right kind of subject in the right kind of context might be in a position to use the grab bag to come to a sensible decision about what to treat as the expression's range of application for the purposes at hand. (Rayo 2013: 648)

For instance, the lexical information about the normal ranges of application of 'lawyer' in terms of (i), (ii) and (iii) might be organised as semantic memory, encyclopaedic and anecdotal information about learnedness in law, holdings of relevant professional qualifications, professional profiles, and even average salaries and lifestyles of lawyers in one's society. While this baggage of lexically encoded information can be conveniently spelt out, theoretically or lexicographically, as a list of related senses, it need not be, and is probably not, mentally organised through listing those senses.

Thereby, the interpretation of 'lawyer' in a context may not be arrived at via selection from a list of related senses, for one may have no such list in mind when one activates the lexical information associated with 'lawyer'. Instead, the baggage of lexical information regulates the interpretation of 'lawyer' by directing the interpretation to background information that concurs with it. Take (13) for example.

(13) Simon is a lawyer.

In a context where the interlocutors have been discussing the prospect of using a legal letter to speed up a slow refund, the meaning of 'lawyer' would direct its interpretation to such background information as the interlocutor's interest in finding someone with the legal expertise to help them, for this piece of background information dovetails

<sup>14</sup> The 'or' that disjoins (i)–(iii) is understood as inclusive disjunction.

with some of the semantic memory associated with ‘lawyer’, namely that it is normally applied to a person learned in law. Thereby, A PERSON LEARNED IN THE LAW becomes the interpretation of ‘lawyer’.

Consider another context where the interlocutors are discussing the prospect of dating a rich bachelor and considering who might be suitable. Here the meaning of ‘lawyer’ directs its interpretation to the background information that an attorney, counsel or solicitor usually earns good money, for such background information agrees with (i) the semantic memory that ‘lawyer’ is normally applied to an attorney, counsel or solicitor, and (ii) encyclopaedic information about typical salaries and lifestyles of such a person. Thereby, ‘lawyer’ is interpreted as AN ATTORNEY, COUNSEL OR SOLICITOR WITH A GOOD SALARY.

In yet another context where the interlocutors are finding out the departmental affiliation of a student, the meaning of ‘lawyer’ directs its interpretation to the background information that a student studying Law has some degrees of learnedness in Law, and often intends to become a legal practitioner, for this piece of background information fits with (a) the semantic memory that ‘lawyer’ is normally applied to a person learned in law or a person practising law, and (b) anecdotal information about the prospect of becoming a legal practitioner with a degree in Law. In turn, the congruent background information renders the interpretation of ‘lawyer’ as A PERSON STUDYING LAW.

To sum up, on the one hand, the ‘grab bag’ of lexically encoded information dictates which background information in the context is relevant to interpreting ‘lawyer’. Only the background information that fits with the meaning would make the cut. Hence, ‘lawyer’ cannot be interpreted as A POLITICIAN, even if Simon’s being a politician is among the background information available for interpreting (13) in a context. On the other hand, background information can concur with various kinds of information encoded in the meaning, such as semantic memory, encyclopaedic and anecdotal information, to determine a suitable interpretation.

The above exemplification reflects at best a crude hypothesis on how the interpretation of a pragmatically polysemous expression is determined. Such a hypothesis stands or falls with psycholinguistic and neurolinguistic research into the semantic processing of these expressions. Nonetheless, it implies an important difference in the resolution of semantic ambiguity versus pragmatic polysemy in context. Given semantic ambiguity, background information selects a suitable interpretation from a list of distinct senses, whereas with pragmatic polysemy, background information delivers a suitable interpretation through its concurrence with a portion of the ‘grab bag’ of lexically encoded information. Thereby, the interpretations delivered by congruent background information may depart, to various extents, from the related senses abstracted from the lexically encoded information for lexicographical or theoretical purposes, to witness the interpretations of ‘lawyer’ in the above examples. Such departure indicates that the determination of interpretation by congruent background information is not simply a matter of sense selection.<sup>15</sup>

<sup>15</sup> Special thanks to an anonymous reviewer for prompting me to clarify the difference between semantic ambiguity and pragmatic polysemy. Granted that one can use the term ‘ambiguity’ to cover both cases, terminological difference aside, I hope to have stressed that the two phenomena involve different mechanisms of contextual resolution.

Might it not be a matter of sense selection plus modulation, as one reviewer suggested? Arguably not, for at least two reasons. First, a one-level explanation of the determination of context-bound interpretations, involving a direct interaction between the inherent meaning and congruent background information, is more parsimonious than a two-level explanation, involving sense selection over the inherent meaning *and* modulation over a selected, purportedly literal interpretation (see Sect. 2). Second, just as it is implausible to single out the literal interpretation to be modulated, it is difficult to identify *the* list of related senses to be selected. For different purposes of lexicographic or theoretical description, different lists of senses may be abstracted from the lexically encoded information. Thus, a list of related senses may best be viewed as a meta-theoretical construct that facilitates certain meta-linguistic description, rather than a robust theoretical construct that stands to be selected.

Moreover, congruent background information seems to determine interpretation in a relatively autonomous, non-intentional manner. For example, in a context where the interlocutors are discussing the prospect of hiring a legal representative, ‘lawyer’ is thereby naturally interpreted as A QUALIFIED LEGAL PRACTITIONER. If, by uttering (13) in such a context, the speaker intends to convey that Simon is learned in law, although it is uncertain whether he has qualified, the utterance would be misleading, because the interpretation of ‘lawyer’ determined by the congruent background information pre-empts the otherwise intended interpretation. Or in a context where the interlocutors are finding out the departmental affiliation of a student, the congruent background information naturally endows ‘lawyer’ with the interpretation of A PERSON STUDYING LAW. If, by uttering (13) in such a context, the speaker intends to convey that Simon is a qualified barrister who is reading a degree in Philosophy, the utterance would be confusing, again because the interpretation of ‘lawyer’ is primarily fixed by the congruent background information that establishes the usage of occupational terms to convey departmental affiliations.

Even when an interpretation of ‘lawyer’ departs significantly from its central senses, as in the use of ‘lawyer’ to catalogue kindergarten children by their aspiring careers in the future, the interpretation seems to be mainly fixed by congruent background information. In this case, it is determined in relation to the background information that the children themselves use ‘lawyer’ to describe their aspiring future persona. The latter use concurs with the meaning of ‘lawyer’, for it agrees with one’s memories about what lawyers do, mental images about lawyers in one’s society, etc. Thus, the background information concurs with the meaning of ‘lawyer’, albeit in a somewhat metalinguistic way. It is such concurrence that makes the use of ‘lawyer’ palpable. Otherwise, were the interpretation of ‘lawyer’ mainly fixed by the speaker’s intention, it should be equally palpable to use ‘lawyer’ to catalogue children who aspire to become anything but a lawyer.<sup>16</sup>

<sup>16</sup> I thank an anonymous reviewer for suggesting the use of ‘lawyer’ for cataloguing children as a potential counter-example to my proposal. The same reviewer also suggests the case of using ‘lawyer’ to describe an actor who plays the role of a lawyer in a play as a potential case of modulation. However, I think the use of the occupational term in a play or a fiction trades on its literal interpretations. In the context of the play, ‘lawyer’ retains a literal interpretation, which can be any (combination) of the common senses associated with it. It is the truthfulness of the application of the literal interpretation to the actor that is at stake. In this case, I do not see any modulation of the literal interpretation.

In general, the speaker normally intends, and is expected to intend, her utterance with ‘lawyer’ to be interpreted in such a way that conforms to the interaction between its encoded meaning and the congruent background information that is mutually salient. In this sense, the encoded meaning and the congruent background information regulate what the speaker can sensibly and recognisably mean by ‘lawyer’. My claim here is that such regulation features prominently in the interpretation of pragmatically polysemous expressions such as ‘lawyer’, and thereby sets them apart from expressions whose interpretation involves relatively little lexical regulation, such as ‘something’ and ‘John’s book’. The latter expressions rely heavily on intention-based modulation to determine their context-bound interpretations, such as SOMETHING NOTEWORTHY/UNUSUAL/... or THE BOOK JOHN BORROWS/PUBLISHES/..., with the encoded meaning serving merely as a template for the freely enriched interpretations.<sup>17</sup>

Therefore, the effect of congruent background information on interpretation is importantly different from that of modulation. The former *governs* what the speaker intends to convey whereas the latter *is governed by* what the speaker intends to convey. Granted that one could *call* the effect of congruent background information a kind of ‘modulation’, for the interpretation it delivers often amounts to selecting and/or adjusting part of the lexically encoded information. Yet terminological dispute aside, such a use of ‘modulation’ does nothing to tame the crucial difference between the lexically constrained adjustment of the meaning of ‘lawyer’ and the free pragmatic adjustment of the meaning of ‘something’.

Of course, just like standard indexicals, there are plenty of contexts in which the interpretation of ‘lawyer’ requires specification in relation to speaker’s intention, as the background information falls short of determining a suitably specific interpretation. For example, in a context where no relevant background information has been established, when Simon is introduced as a lawyer, the interpretation of ‘lawyer’ would be specified in relation to the speaker’s intention, e.g. whether she intends to draw attention to Simon’s learnedness in law, to his occupation, to his good salary, etc.

To consider another pair of comparative examples, supposed the invariant meaning of ‘homemade’ implies that it is normally used to describe food that is (i) made in the home, (ii) on the premises, or (iii) by one’s own efforts (cf. its related senses given in the Merriam Webster Online Dictionary). If a package of food is described as ‘homemade’ in a farm shop, the meaning of ‘homemade’ would direct its interpretation to such background information that the food is made on the premise of the farm shop from its produces. The congruent background information suffices to fix the interpretation of ‘homemade’ used in the description, by foregrounding part of the encoded information. By comparison, if I reply that I like homemade food when asked about my food preferences, the background information in the context may fail to foreground any part of the invariant meaning to deliver a suitably specific interpretation. In this case, access to the speaker’s intention is required to specify whether I mean food made in the home, food purchased from a farm shop that is made on its premises, food that is handmade, or any suitable disjoint or conjoint combination thereof.

<sup>17</sup> Thanks to an anonymous reviewer for suggesting the comparison between ‘lawyer’ and expressions that carry lesser lexical constraint, e.g. ‘John’s book’.

For an expression bereft of determinate literal interpretation, access to the speaker's intention is often needed to fix a suitably specific interpretation vis-à-vis a range of potential interpretations presented by the invariant meaning and the congruent background information. Hence, similar to the case of standard indexicals, speaker's intention plays a subsidiary role in pinning down a suitably specific interpretation. Crucially, in these cases the invariant meaning does not direct the interpretation straight to the speaker's intention. For otherwise, had the speaker's intention been directly invoked by the invariant meaning of 'lawyer' or 'homemade', one should have been able to use 'lawyer' felicitously to mean A POLITICIAN, or 'homemade' to mean PRODUCED NEXT TO ONE'S HOME, simply by making manifest one's intention to do so.

The interaction among invariant meaning, congruent background information and speaker's intention discussed above plausibly applies to expressions whose invariant meaning is relatively well-defined but does not correspond to a determinate literal interpretation. For expressions devoid of a determinate literal interpretation but with a less well-defined invariant meaning, it is possible that congruent background information invoked by the meaning *never* suffices to fix a suitably specific interpretation. Thereby, access to speaker's intention would *always* be needed. In this case, it may be tempting to claim that, *as a matter of course*, the invariant meaning directs interpretation not only to congruent background information but also to speaker's intention. Here I leave open whether there are expressions whose invariant meaning directly invokes, *inter alia*, speaker's intention for their interpretations, or whether invoking speaker's intention in the invariant meaning is ruled out on a priori grounds because it is "philosophically cheating" (cf. Recanati 2004: 57).<sup>18</sup>

Be that as it may, the main point of this sub-section is that just because the speaker's intention is involved in specifying the interpretation of an expression, and however pervasive the involvement of speaker's intention is in such specification, it does not follow that the interpretation is unconstrained by the invariant meaning, or that the interpretation is determined primarily by the speaker's intention. For an expression bereft of a determinate literal interpretation, the pragmatic effects on its interpretation seem to be weak, because (i) the effects brought by the background information are constrained by the invariant meaning so that only background information that concurs with the meaning is relevant to determining the interpretation, (ii) the effects brought by congruent background information are relatively autonomous from the speaker's communicative intention, and (iii) access to the speaker's intention is required only when congruent background information fails to determine a suitably specific interpretation. For these reasons, the context sensitivity of such an expression seems to be as semantically driven as that of a standard indexical.

However, this does not mean that an expression without determinate literal interpretation *is* an indexical. In the next sub-section, I argue that indexicality is a

<sup>18</sup> Even in the case of demonstratives, had the speaker's intention been directly invoked by the invariant meaning, one should have been able to use 'that' (*qua* a demonstrative) to pick out whatever one intends to refer to, regardless of whether it is (related to anything) in one's vicinity. However, consider a context in which it is obvious to my interlocutor that I am looking for my key. If I ask her 'Where is that?' she is likely to be puzzled by the use of 'that' and seek clarification by asking e.g. 'Do you mean your key?', even if she knows what is on my mind.

special case of semantically driven context sensitivity, because the context sensitivity associated with standard indexicals, construed in terms of Kaplan's famous character/content dichotomy, is credited with the task of grounding the cognitive significance of (thoughts expressed by) standard indexicals in terms of the speaker's first-person access to their referents (Kaplan 1989: 530). Hence, insofar as (thoughts expressed by) expressions without determinate literal interpretation do not enjoy the cognitive significance that standard indexicals do, they would be semantically context-sensitive without being indexicals.

In a nutshell, the present proposal is that expressions such as 'lawyer' instantiate a form of Radical Contextualism that generalises semantically driven context sensitivity. Nevertheless, as mentioned above, if the invariant meaning of an expression is less well-defined and lends itself to intention-driven specification in every appropriate use, as many Travis cases seem to suggest, it may instantiate a form of Radical Contextualism that *neutralises* the difference between semantically driven and pragmatically driven context sensitivity (Recanati 2010: 19). Radical Contextualism is understood here as a broad position that rejects a unique literal interpretation and advocates pervasive contextual adjustment of lexical meaning. Different forms of Radical Contextualism would adopt different views on the nature of such adjustment. Indeed, different kinds of context-sensitive expressions may be amenable to different forms of Radical Contextualist or Moderate Contextualist treatments. My modest aim here is to put forward a case for a form of Radical Contextualism that recognises pervasive, indexical-free, yet still weak pragmatic effects on interpretation, which has been perhaps the least explored option in the literature.

#### 4.2 Indexicality is a special case of semantic context sensitivity

Kaplan's (1989) two-dimensional semantics for indexicals such as 'I' 'here' and 'now' are designed to address two semantic features that purportedly characterise the uses of these expressions: (i) direct reference and (ii) cognitive significance in terms of the speaker's first-person access to the referent. For example, the occurrence of 'I' in Lim's utterance of (14) is directly referential, in that it contributes its referent at the context of utterance, namely Lim, to the proposition expressed.

(14) Lim: I am a guitarist.

Moreover, 'I' in (14) yields a first-person access to its referent for the speaker, so that Lim cannot fail to recognise that he himself is a guitarist, whereas such a failure of self-identification is possible if Lim refers to himself by another term such as his name or a description he uniquely satisfies (Perry 1979). Consequently, Lim's 'I'-thoughts directly inform his actions, whereas *ceteris paribus*, his thoughts about himself expressed in other co-referential terms may fail to elicit those actions. Immunity to self-misidentification and the ensuing immediate connection to the self's actions are generally attributed to the cognitive significance of 'I'. *Mutatis mutandis*, immunity to present-time-misidentification and immunity to present-place-misidentification are associated with the cognitive significance of 'now' (*qua* indexical) and that of 'here' (*qua* indexical) respectively.

Kaplan captures the directly referential status and the cognitive significance of ‘I’ and other indexicals in terms of the content/character dichotomy. Roughly, the content of an indexical is an element at a context of utterance, whereas the character encodes the conceptual role played by that element at the context. Consider ‘I’ again. On the one hand, the content of an occurrence of ‘I’ is just the individual speaker at a context, hence satisfying direct reference. On the other, that individual plays the role of the speaker at the context (cf. Perry 1998). In general, the role of a speaker is such that when one is speaking, unless one is unconscious or insane, one cannot mistake anyone else as the speaker. Hence, filling in the role of the speaker normally implies having first-person access to oneself. By specifying that an occurrence of ‘I’ refers to the individual that fills in the speaker role, the character of ‘I’ yields a first-person access to its referent that guarantees immunity to self-misidentification. *Mutatis mutandis* for ‘now’ and ‘here’.<sup>19</sup>

Thus construed, the character of ‘I’ is *not just* the semantic rule which dictates that a (non-quotational) occurrence of ‘I’ refers to the speaker or writer (Kaplan 1989: 505), and thereby directs its interpretation to the speaker or writer at a context. In so directing, the character ensures that whoever is the referent of ‘I’ (normally knowingly) plays the role of the speaker or writer at a context, and thereby has first-person access to the referent of ‘I’. In this way, the character grounds the cognitive significance of (a thought expressed by) ‘I’. As Kaplan remarks,

The character of ‘I’ provides the acknowledged privileged perspective, whereas the analysis of the content of particular occurrences of ‘I’ provides for (and needs) no privileged pictures. (1989: 534)

In the same vein, the characters of the indexicals ‘here’ and ‘now’ provide the speaker’s first-person, ‘privileged’ perspective on their referents at a context, by specifying that occurrences of ‘now’ and ‘here’ refer respectively to the time and place that play the role of the present time and place.

Thus construed, the contextual variable encoded in the meaning (i.e. character) of an indexical not only directs its interpretation to the congruent element in a context, but also implies the conceptual role played by that element in the thought tokened by the indexical. It is the latter implication that grounds the essential indexicality of standard indexicals. In this respect, indexicality can be regarded as a special case of semantically driven context sensitivity.

So far I have followed Kaplan’s view on indexicals to distinguish them from expressions that are arguably semantically context-sensitive but clearly non-perspectival, such as ‘lawyer’. My main point is that if (i) indexicals give rise to cognitive significance in terms of first-person access to their referents, and (ii) such cognitive significance is rooted in their semantically driven context sensitivity, there should be

<sup>19</sup> It has been argued that indexicals do not always behave in the way Kaplan envisaged, to witness ‘here’ and ‘now’ in recorded messages (e.g. Predelli 1998), first-person indexicals in languages such as Amharic (e.g. Schlenker 2003), ‘I’ embedded in attitude reports (e.g. Stalnaker 2011; Jaszczolt 2013a), ‘I’ in quotation (Jaszczolt and Huang 2015), etc. The non-conforming behaviours of indexicals are tangential to the present discussion. My main point is that Kaplan’s semantic framework for indexicals (which may or may not be absolutely correct for indexicals in natural languages) attributes to the indexicals a special kind of semantically driven context sensitivity.

room for a category of expressions that are semantically context-sensitive but non-indexicals in the sense of (i) and (ii). In this paper I argue that expressions bereft of determinate literal interpretation instantiate such a category.

However, (i) and (ii) are disputable. First, notions such as ‘first person’ ‘the self’ and ‘the present’ may be rather obscure or difficult to define in a non-circular way. Consequently, we may not yet have a firm grasp on what a *first-person* access to the referent amounts to, and how such access differs from, say, one’s cognitive access to the referent presented by ‘Hesperus’ vis-à-vis by ‘Phosphorus’. Similarly, immunity to *self*-misidentification and to *present* time/place-misidentification is in need to clarification vis-à-vis immunity to misidentification of, say, the referent of ‘Hesperus’ as presented by ‘Hesperus’. Scepticism on the nature of the cognitive significance attributed to indexicals has led some to question whether indexicals are cognitively *sui generis*, distinct from other referential expressions (Cappelen and Dever 2013, Magidor forthcoming). Second, even if the cognitive significance of indexicals can be suitably characterised to justify their *sui generis* status, it may not be grounded in their semantically driven context sensitivity, or in their context sensitivity in the way Kaplan describes (cf. Perry 2001).<sup>20</sup> Third, even if the cognitive significance is linked to the context sensitivity, it may be neither sufficient nor necessary for indexicality. On the one hand, it may not exhaust the semantic functions assumed by indexicals (Kratzer 2009; Jaszczolt 2013a, b; Jaszczolt and Huang 2015); on the other, it may permeate the use of seemingly non-indexical expressions (Jaszczolt 2013b).

While I have embraced Kaplan’s account to argue for the cognitive underpinning of the semantically driven context sensitivity of indexicals, in virtue of which they are distinguished from merely semantically context-sensitive expressions such as ‘lawyer’, my point that indexicality is thereby a special case of semantically driven context sensitivity is compatible with other accounts on indexicals which appeal to their context sensitivity to explain their cognitive significance. However, if the sceptics are right to think that indexicals enjoy nothing like the ‘special’ cognitive significance commonly attributed to them, I would concede that as far as context sensitivity is concerned, indexicals are not importantly different from other semantically context-sensitive expressions.<sup>21</sup> Even so, the onus of proof may still rest on the sceptics to

<sup>20</sup> Special thanks to an anonymous reviewer for suggesting these two points.

<sup>21</sup> One may suggest that the meaning of an indexical directs its interpretation to a concrete, objective feature in context, whereas the meaning of an expression such as ‘lawyer’ directs its interpretation to background information, which is abstract and subjective. However, such a suggestion does not hold up to scrutiny. Firstly, by what criterion is the present time or place more concrete than background information? More importantly, from the perspective of discussing how meaning interacts with context, it should not matter whether a contextual feature is objectively or subjectively realised, any more than from the perspective of discussing the meaning of a two-place predicate, it should matter whether the relation being denoted is objectively or subjectively realised. For example, just because the hugging relation denoted by ‘hug’ is objectively realised in terms of physical movements whereas the loving relation denoted by ‘love’ is subjectively realised in terms of intangible emotions, it does not follow that ‘love’ is not on a par with ‘hug’ as far as its semantic status (*qua* two-place predicate) is concerned. By the same token, just because present time or place is physically trackable whereas background information is inter-subjectively traceable, it does not follow that the latter is not on a par with the former as far as its semantic status (*qua* contextual feature) is concerned.

explain away the intuitive difference between seemingly perspectival expressions like indexicals and non-perspectival ones such as ‘lawyer’.

## 5 Conclusion

To conclude, in this paper I have argued that non-ambiguous expressions whose invariant meaning does not determine a unique literal interpretation defy a Moderate Contextualist semantics in terms of pragmatic modulation. As their invariant meaning directs interpretation to congruous background information in a context, they motivate a form of Radical Contextualism that generalises semantically driven context sensitivity beyond indexicality.

To start with, it is observed that for some expressions such as ‘lawyer’ and ‘book’, the invariant meaning of the expression corresponds to a range of closely related, equally literal and basic interpretations, none of which can be distinguished as the literal interpretation of the expression.

Not only is the literal interpretation indeterminate, but the distinction between a literal interpretation and a non-literal one is also vague, as shown by examples such as ‘lawyer’ ‘musician’ and ‘open the door’. The non-uniqueness of the literal interpretation and the vagueness in the literal/non-literal divide doubly challenge a modulation-based contextualist semantics, for it presupposes that (i) the invariant meaning of a non-ambiguous, non-indexical expression determines a unique literal interpretation in every context, and (ii) the literal interpretation is distinguishable from contextually relevant interpretations generated by modulation.

Lastly, I outlined a Radical Contextualist semantics for expressions devoid of determinate literal interpretation. The gist of the present account is that the interpretation of such an expression is primarily determined by background information at a context that is congruent with the invariant meaning. As a result, the context sensitivity of such an expression is primarily semantically driven, yet it does not amount to indexicality.

**Acknowledgments** I would like to thank Kasia Jaszczolt for her inspiration, support and many hours of discussion on this and related topics. Special thanks are also due to Emma Borg, Hsiang-Yun Chen, Jamie Douglas, Chi-hé Elder, Eleni Kapogianni, Stefano Predelli, Luca Sbordonè and two anonymous reviewers of this journal for their comments on earlier versions of the paper. This work was presented at the Third International Conference on Philosophy of Language and Linguistics (University of Lodz) and the Investigating Semantics: Empirical and Philosophical Approaches Conference (Ruhr-University Bochum). I thank the organisers and the audience for helpful responses. This research was supported by a Leverhulme Research Project Grant for the ‘Expressing the Self: Cultural diversity and cognitive universals’ project (RPG-2014-017), and by a BP Centenary Studentship at Murray Edwards College.

**Open Access** This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

## References

- Bach, K. (1994). Conversational implicature. *Mind and Language*, 9(2), 124–162.  
 Black, H. C. (1979). *Black’s law dictionary* (5th ed.). St. Paul: West Publishing Co.

- Borg, E. (2004). *Minimal semantics*. Oxford: Oxford University Press.
- Borg, E. (2012). *Pursuing meaning*. Oxford: Oxford University Press.
- Cappelen, H., & Dever, J. (2013). *The inessential indexical*. Oxford: Oxford University Press.
- Cappelen, H., & Lepore, E. (2005). *Insensitive semantics*. Oxford: Blackwell.
- Carston, R. (2002). *Thoughts and utterances: The pragmatics of explicit communication*. Oxford: Blackwell.
- Carston, R. (2012). Word meaning and concept expressed. *The Linguistic Review*, 29(4), 607–623.
- Chomitz, D., & Marques, T. (2014). Disagreements. *Erkenntnis*, 79, 1–10.
- Hansen, N. (2011). Color adjectives and radical contextualism. *Linguistics and Philosophy*, 34, 201–221.
- Jaszczolt, K. M. (2013a). Contextualism and minimalism on de se belief ascription. In N. Feit & A. Capone (Eds.), *Attitudes de se: Linguistics, epistemology, metaphysics* (pp. 69–103). Stanford: CSLI Publications.
- Jaszczolt, K. M. (2013b). First-person reference in discourse: Aims and strategies. *Journal of Pragmatics*, 48, 57–70.
- Jaszczolt, K. M. (2014). Delimiting lexical semantics: A radical contextualist view. In K. Burridge & R. Benczes (Eds.), *Wrestling with words and meanings: Essays in honour of Keith Allan* (pp. 359–380). Monash: Monash University Publishing.
- Jaszczolt, K. M., & Huang, M. (2015). *Monsters and I. Manuscript*. University of Cambridge. [https://www.academia.edu/12278591/Monsters\\_and\\_I\\_with\\_Min Yao\\_Huang\\_2015\\_](https://www.academia.edu/12278591/Monsters_and_I_with_Min Yao_Huang_2015_).
- Kaplan, D. (1989). Demonstratives: An essay on the semantics, logic, metaphysics, and epistemology of demonstratives and other indexicals. In J. Almog, J. Perry, & H. Wettstein (Eds.), *Themes from Kaplan* (pp. 481–563). New York: Oxford University Press.
- King, J., & Stanley, J. (2005). Semantics, pragmatics, and the role of semantic content. In Z. Szabó (Ed.), *Semantics versus pragmatics*. Oxford: Oxford University Press.
- Kratzer, A. (2009). Making a pronoun: Fake indexicals and windows into the properties of pronouns. *Linguistic Inquiry*, 40, 187–237.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Laserson, P. (2005). Context dependence, disagreement and predicates of personal taste. *Linguistics and Philosophy*, 28, 643–686.
- MacFarlane, J. (2005). The assessment sensitivity of knowledge attributions. *Oxford Studies in Epistemology*, 1, 197–233.
- Magidor, O. (Forthcoming). The myth of the de se. Philosophical Perspectives. [http://users.ox.ac.uk/~ball1646/Research/papers%20and%20abstracts/The%20Myth%20of%20the%20De%20Se%20\(July%202014\).pdf](http://users.ox.ac.uk/~ball1646/Research/papers%20and%20abstracts/The%20Myth%20of%20the%20De%20Se%20(July%202014).pdf).
- Nunberg, G. (1979). The non-uniqueness of semantic solutions: Polysemy. *Linguistics and Philosophy*, 3(2), 143–184.
- Perry, J. (1979). The problem of the essential indexical. *Noûs*, 13, 3–21.
- Perry, J. (1998). Myself and I. In M. Stamm (Ed.), *Philosophie in syntheischer Absicht*. Stuttgart: Klett-Cotta.
- Perry, J. (2001). *Reference and reflexivity*. Stanford: CSLI Publications.
- Predelli, S. (1998). Utterance, interpretation and the logic of indexicals. *Mind and Language*, 13, 400–414.
- Predelli, S. (2005). *Contexts: Meaning, truth, and the use of language*. Oxford: Oxford University Press.
- Rayo, A. (2013). A plea for semantic localism. *Noûs*, 47(4), 647–679.
- Recanati, F. (1989). The pragmatics of what is said. *Mind and Language*, 4, 295–329.
- Recanati, F. (2002). Unarticulated constituents. *Linguistics and Philosophy*, 25(3), 299–345.
- Recanati, F. (2004). *Literal meaning*. Cambridge: Cambridge University Press.
- Recanati, F. (2010). *Truth-conditional pragmatics*. Oxford: Clarendon Press.
- Recanati, F. (2012). Contextualism: Some varieties. In K. Allen & K. M. Jaszczolt (Eds.), *The Cambridge handbook of pragmatics* (pp. 135–150). Cambridge: Cambridge University Press.
- Rothschild, D., & Segal, G. (2009). Indexical predicates. *Mind and Language*, 24, 467–493.
- Schlenker, P. (2003). A plea for monsters. *Linguistics and Philosophy*, 26, 29–120.
- Soames, S. (2002). *Beyond rigidity: The unfinished semantic agenda of 'naming and necessity'*. Oxford: Oxford University Press.
- Sperber, D., & Wilson, D. (1986). *Relevance: Communication and cognition*. Oxford: Blackwell.
- Stalnaker, R. (1998). On the representation of context. *Journal of Logic, Language, and Information*, 7, 3–19.
- Stalnaker, R. (2011). The essential contextual. In J. Brown & H. Cappelen (Eds.), *Assertion: New philosophical essays* (pp. 137–151). Oxford: Oxford University Press.
- Stanley, J. (2000). Context and logical form. *Linguistics and Philosophy*, 23, 391–434.

- 
- Stanley, J., & Szabó, Z. (2000). On quantifier domain restriction. *Mind and Language*, 15, 219–261.
- Stephenson, T. (2007). Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy*, 30, 487–525.
- Szabó, Z. (2001). Adjectives in context. In R. Harnish & I. Kenesei (Eds.), *Perspectives on semantics, pragmatics, and discourse* (pp. 119–146). Amsterdam: John Benjamins.
- Travis, C. (1997). Pragmatics. In B. Hale & C. Wright (Eds.), *A companion to the philosophy of language* (pp. 87–107). Oxford: Blackwell.
- Travis, C. (2008). *Occasion-sensitivity: Selected essays*. Oxford: Oxford University Press.
- Vicente, A. (2012). On Travis cases. *Linguistics and Philosophy*, 35, 3–19.