Précis of Imagination and Convention

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We give an overview of the arguments of our book Imagination and Convention, and explain how ideas from the book continue to inform our ongoing work. One theme is the challenge of fully accounting for the linguistic rules that guide interpretation. By attending to principles of discourse coherence and the many aspects of meaning that linguistically encoded but are not truth conditional in nature, we get a much more constrained picture of context sensitivity in language than philosophers have typically assumed. Another theme is the heterogeneous nature of interpretive processes, as illustrated by the distinctive interpretive profile of metaphorical and poetic language. Such effects remind us that the suggestions and connotations of an utterance are often best explained in terms of the hearer's experiential engagement with language, without appeal to propositional content that the speaker somehow signals either semantically or pragmatically.

Imagination and Convention is a response to recent work in the cognitive science of language—work which has deepened philosophers' understanding both of the rules of language and of the processes of interpretation by exploring in new detail the fine-grained distinctions that characterize the interpretation of utterances in context.

One tradition we engage with is that of formal semantics. While this research once focused on the truth-conditional meanings delivered by sentence-level grammar, in the tradition inaugurated by Montague (1974), recent work is much broader in scope. There are now a variety of formal theories of presupposition (e.g., van der Sandt 1992, Beaver 2001), expressive meaning (e.g., Potts 2005), projective and not-at-issue

meaning (e.g., Tonhauser et al 2013), and the interpretive links that connect multi-sentence discourse (e.g., Asher and Lascarides 2003). If such developments in formal semantics pan out, philosophers will need new conceptual tools to get clear on the relationship between grammar, meaning, interpretation and communication. The received constructs that philosophers have used to frame intuitions about meaning, like Grice's 'what is said', don't capture what language encodes or how grammar shapes interpretation.

The second tradition we engage with is a psychological one, which explains how language users make sense of utterances and their speakers. A common suggestion is that interpretations are often constructed creatively (Atlas 1989, 2005), for example, by taking words to signal new 'ad hoc' concepts (Carston 2002), by understanding phrases to be implicitly 'enriched' to more specific interpretations (Recanati 2004), and by loosening and transferring literal interpretations in light of inferences that matter in context (Sperber and Wilson 1986, 2008). Other researchers attribute interpretive effects to our empirical understanding of others' choices (e.g., Pinker, Novak and Lee 2008), or to open-ended processes of imaginative engagement (e.g., Camp 2008). Again, these diverse models require us to refine philosophers' received constructs for characterizing pragmatic inference, notably, of course, Grice's notion of 'conversational implicature'.

Synthesizing the perspectives of current research in semantics and pragmatics brings further challenges. Pragmatic theories have not yet come to grips with the heterogeneous nature of linguistic meaning as hypothesized in current formal semantics (see Simons et al 2016 for some of the challenges involved). Conversely, the interpretive variability exposed by pragmatic research is often understood to undermine the assumptions and framework of formal semantics (Atlas 2005, Travis 1997).

Imagination and Convention offers our take on this new intellectual landscape. In this précis, we give a brief overview of the philosophical positions that make our view distinctive and highlight some of the research directions that our new view affords. First, in §1, we draw some lessons about the linguistic rules that guide interpretation. Our contention is that context sensitivity is much more closely governed by linguistic rules than is often appreciated. However, these rules appeal to more diverse principles than figure in traditional conceptions of semantics. Most importantly, we argue that the rules are sensitive to principles of *discourse coherence*, which we think of as linguistic conventions that connect and structure sequences of linguistic expressions within, and across, sentences, and encode implicit inferential relationships among their contents. In particular, the rules that link context-sensitive expressions to their semantic values can only be stated in terms of the overall organization of coherent discourse.

Moreover, we believe that a broad characterization of linguistic structure and meaning is crucial for philosophers to correctly diagnose

the interplay between semantics and pragmatics. A particularly fruitful but neglected case is intonation, which linguists model as a level of grammar that helps to signal the information structure of sentences in context, via the abstract meanings it encodes. As an illustration of the untapped implications of these principles, we close §1 with a brief survey of some developments since *Imagination and Convention* that we have pursued partly in collaboration with Una Stojnic (Lepore and Stone 2017a, Stojnic, Stone and Lepore 2013, Stojnic, Stone and Lepore 2016), on semantic models of discourse coherence and context-dependent meaning.

Next, in §2, we draw some lessons about the interpretive mechanisms involved in appreciating the points that speakers have in using utterances. On our view, the insights that we gain from an utterance often come from thinking about it in specific, creative ways. We briefly sketch our account of metaphor as a quintessential example of such imaginative engagement. We see metaphor as a distinctive way of thinking of one thing as another—one whose effects can differ from person to person and from occasion to occasion, and cannot be fully characterized just in terms of propositional content. This broadly Davidsonian view, which we elaborated already in Lepore and Stone (2010), was in many ways the impetus for our critical take on implicature in *Imagination and Convention*. Interpreting a metaphorical utterance, on our view, requires the hearer to engage in this process of metaphorical thinking, and to appreciate the insights this thinking engenders. In some cases, on our account, listeners can perhaps gain a deeper understanding into the of a speaker's intentions in using a metaphor, as a side effect of their own metaphorical thinking. Note that this explanation flips the direction of explanation often suggested in pragmatic accounts of metaphor, such as Searle's (1979) Gricean account, or Sperber and Wilson's (2008) in terms of relevance theory, which attempt to show how general reasoning about a speaker might prompt a listener to pursue associated or enriched interpretations which theorists might characterize retrospectively as metaphorical. Poetry is another case that we have begun to explore (Lepore and Stone 2016) but which did not make it into *Imagination and Convention*. We close this section with a brief overview of our approach to poetic interpretation: on our view, it involves exploring the articulation of a linguistic expression for added insight into its meaning.

We close in §3 with some reflections on the limits of knowledge of language. Our view invites theorists to capture a wide range of conventional information within a broad overarching framework for linguistic meaning: this includes not only the truth conditional content that is at issue in the use of a sentence, but also content that is encoded yet not at issue, for example, because it is marked as presupposed background, or because it is attached to a form as a matter of conventional implicature. However, a key part of our view is that the insights that the imagination prompts don't have the status of linguistic meanings. Again, the consequences

of this suggestion are largely unexplored. For example, in Lepore and Stone (2017b), we explore the idea that such insights are nevertheless an integral part of speakers' ear for the tonality of language—following up the influential suggestion of Frege that words can carry tone that does not contribute to the thoughts that sentences express.

1. *The Interpretive Effects of Linguistic Rules*

It often seems, intuitively, as though the interpretation of utterances is much stronger than the linguistic meanings of the expressions we use. In the book, we give (1–3) as illustrations of these effects.

1.   Can I have the French toast please?
2.   Oil prices doubled and demand for consumer goods plunged.
3.   Well, it looked red.

Example (1) is a question about ability that's easily interpreted as making a request. Example (2) offers a pair of event descriptions; the speaker's point seems to be that the events happened in succession and were perhaps even causally related. Example (3) describes the appearance of an object—but we take the speaker also to suggest that things were not as they appeared.

On our view, these interpretations will normally count as cases of successful communication. The speaker has a particular interpretation in mind, and the listener succeeds in recovering that interpretation. The question is what knowledge enables the coordination between speaker and listener: it can be hard to see intuitively how closely, if at all, the interpretations we derive in these cases are associated with the linguistic forms the speaker uses. Part of the traditional appeal of pragmatic explanations, we think, is that they promise to explain how linguistic meaning gets enriched or amplified here, without reference to unsuspected encoded meaning.

In *Imagination and Convention,* however, we argue that these interpretations *are* encoded—despite appearances. To do so, we argue for a richer conception both of linguistic form and of linguistic meaning than philosophers have traditionally entertained.

To start, we suggest—following work of Asher and Lascarides (2003), Grosz and Sidner (1986), Hobbs (1979), Kehler (2001), and Webber et al (2003)—that linguistic form crucially includes a level of discourse structure that gives an organization to linguistic expressions that can extend beyond an individual clause. In particular, discourse structure groups sentences together hierarchically into segments that are interpreted as a coherent whole, much as sentence syntax unites constituents together by structural and interpretive connections (Grosz and Sidner 1986; Webber et al 2003). Elements in discourse structure play specific roles in underwriting hearers' interpretive inference. These interpretive connections are known as *coherence relations,* and they have a range of interpretive effects. For one thing, coherence rela-

tions mark the commitments that arise when speakers use utterances indirectly to signal reactions to previous discourse; this means they make many kinds of alleged implicatures explicit. For another thing, coherence relations put particular discourse entities at the center of attention, making them the most prominent values for resolving context-dependent expressions. Because coherence relations give qualitatively different structures to discourse and dictate the formal dynamics of context, we argue that they must be represented in the logical form of discourse. Thus, we arrive at a picture where many alleged implicatures are actually a consequence of logical form. Although these features of interpretation are still derived by the operation of abstract principles, the principles in question are linguistic rules rather than rational or psychological generalizations; they are ultimately continuous with the abstract operations of formal compositional semantics.

We take (1) as a characteristic example of the role of coherence relations in underpinning apparently indirect interpretations. *Imagination and Convention* makes the case informally, but we offer an extended, formal treatment of cases like (1) in Lepore and Stone (2017a). This was the subject of our presentation at the 2015 workshop on linguistics and philosophy in Dubrovnik.

The challenge of (1) is to formalize the differences among declarative, interrogative and imperative meanings. We model these differences, following Starr (2010), in terms of different roles information can play in moving conversation forward. Declaratives convey information; interrogatives raise questions; imperatives express preferences. Starr's formalism gives a dynamic model of the state of a conversation that can distinguish among contributions of each of these kinds, and can also predict certain inferential relationships among them—thus, for example, conveying the right information can settle an open question. We also need to be able to combine different moves compositionally. Starr lets us combine two contributions into a single overarching move that starts by making the first contribution and proceeds by making the second; he lets us make a contribution conditionally, depending on the results of some other one.

With these tools, we can represent (1) as ambiguous between two logical forms at the level of discourse. One, the simple question interpretation, just raises a question: here, the question whether it is possible for the speaker to have the French toast. The second, the "indirect" interpretation, raises that same question, then further expresses a conditional preference: here, the indirect interpretation raises the question whether it's possible for the speaker to have the French toast, then expresses the preference that the speaker should have the French toast, assuming the answer is yes and it is possible. We show that such alternations in meaning are characteristic of a kind of polysemy Horn (1984) calls 'autohyponymy'—often found in verb meanings—where words carry overlapping specific and general senses. We offer some

suggestions about capturing this polysemy, at an appropriate level of granularity, by a suitable linguistic rule.[1]

We think that representing these two interpretations of (1) in logical form shows the advantages of conventionalized coherence relations in giving a theory of interpretation. In particular, as *Imagination and Convention* considers in detail, there is ample evidence that the two interpretations are separately specified by speakers' knowledge of language, and, moreover, that the conventional indirect interpretation is visible to other grammatical rules.

We explain (2), meanwhile, by a different set of resources in linguistic meaning—the grammar of *discourse reference*. When we produce extended descriptions, narratives and explanations—including the one in (2)—grammar allows the interpretation of later elements to co-vary with the interpretations of earlier ones. Formally, this can be modeled by representing both elements with a common variable in logical form; however, to implement it correctly, we also need to set up an appropriate logical system so that we can assign values to variables across an entire discourse (this suggestion goes back to Heim 1982 and Kamp 1981—see Cumming 2008 for a broader defense and philosophical explanation of the idea).

We can think of a grammar of discourse reference in terms of two components. One set of grammatical rules determines where variables occur (we call these 'rules for anaphora' in *Imagination and Convention*); the second set of grammatical rules says how the selection of a suitable variable is determined in context (we call these 'rules for presupposition' in *Imagination and Convention*). The idea of capturing dependent interpretations via variables that are subject to constraints is common to diverse approaches to formal semantics and pragmatics, including not only van der Sandt (1992) but also the very different Hobbs et al. (1993).

We can illustrate this idea through an explanation of the understood temporal relationship in (2). Following Lascarides and Asher (1993), Partee (1973) and Webber (1988), we assume that the tense of past tense English verbs can trigger a dependent temporal interpretation. That is, a past tense verb describes an event or state as located within a specific temporal interval, its reference time. In (2), then, 'plunged' has a meaning similar in content to 'then plunged'. The reference interval is taken from context in a way that gives it an interpretation that can depend on previous discourse. In (2), the reference time for 'plunged' is derived from the event time for 'doubled'. Importantly, these intervals progress in a discourse as a function of the coherence relations that

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[1] The idea is to use lexical rules—defaults that apply across general classes of words, with exceptions—to transform basic meanings into related, derived meanings. Such rules are needed quite independently, for example, to stipulate that the names of animals are also used as the names of meat, with a few marked exceptions including 'beef' and 'pork'. This strategy for capturing conventional indirect speech acts was originally proposed by Asher and Lascarides (2001).

implicitly connect the discourse together: in *Narrative* discourse, for example, event verbs update the most prominent reference interval to a period immediately after the event took place, when its consequences continued to hold. That's what happens in (2). Thus, overall, we explain the interpretation of (2), that the plunge follows the doubling, because we represent the meaning of the form 'plunged' (in particular, its tense and aspect) as locating that event within a reference interval *after* the doubling, a reference interval that is made prominent by the preceding use of the form 'doubled' as part of an extended discourse organized by the *Narration* relation.

Researchers have developed a range of different formal models of presupposition and anaphora. Since completing the book, we have been exploring a particularly strict conception of the rules for context dependence, in our collaborative work with Una Stojnic (Stojnic, Stone and Lepore 2016). Our proposal is that the state of the discourse completely determines which variable should be used to interpret a dependent, context-sensitive element. For example, just as 'I' picks out a distinguished semantic value in any context—namely, the speaker of the utterance—just so, 'he' picks out a distinguished semantic value—a variable that has been established by discourse coherence as the representation of the most prominent male with respect to the place of the current clause within the organization of discourse.

This approach depends on a synthesis of our approaches to discourse coherence and discourse reference. Many researchers have noticed that when the interpretation of pronouns and other anaphoric elements seems to be ambiguous, there are also corresponding ambiguities in the overall coherence of discourse (see Kehler et al 2008 for review). Take (4), originally studied by Smyth (1994) and discussed extensively by Kehler et al (2008).

4.   Phil tickled Stanley and Liz poked him.

The speaker here might mean Phil by 'him', but in this case the speaker is describing Liz's action as a sequel to, and perhaps even as a retaliation for, Phil's tickling. Alternatively, the speaker might mean Stanley by 'him', but in this case the speaker's point is to draw an analogy between Phil's and Liz's attacks on Stanley; this interpretation doesn't seem to involve any commitments about whether the poking preceded, followed or was simultaneous with the tickling. In short, the discourse in (4) is organized either via a kind of *Narration* or via a kind of *Resemblance* relation, and this relationship gives us the value of the pronoun.

In Stojnic, Stone and Lepore (2016), we offer a formalization of this idea that makes precise the effects that coherence relations have on the prominence of candidate interpretations, and makes good on the intuitive idea that pronouns are interpreted simply by retrieving the most prominent candidate interpretation in context. In her (2016a), Stojnic develops an analogous approach to the context dependence of modal vocabulary, and in her (2016b) she even proposes to handle quanti-

fier domain restriction and incomplete definite descriptions with these techniques.

The last of our motivating examples, (3), is a reminder that natural language utterances generally have a more complex linguistic structure than orthography alone captures. Nevertheless, all of the grammatical components of an utterance can carry encoded meanings. What matters for (3) is *intonation*. When we imagine (3) used, as Kripke (1978) does, to challenge a previous speaker's contention that the handkerchief in a magic act was not red, we tend to imagine the utterance delivered in a particular way. The speaker will emphasize 'looked' rather than 'it' or 'red'; the speaker will perform the utterance with a particular tune (or 'pitch contour') with a rise on 'looked', followed by a fall, so that 'red' comes with a rise of its own at the end. These aspects of the performance of the utterance are meaningful—they figure in the English grammar of information structure, which characterizes the different roles of linguistic material in making contributions to discourse.

We give a comprehensive survey of information structure in the book, focusing on intonation and drawing particularly on the work of Steedman (2000). But you can already explain the distinctive interpretation of (3) with reference to Ward and Hirschberg's (1985) theory of the rise-fall-rise contour. They suggest that this tune is associated with limited agreement in discourse, while the placement of accents signals a point of contrast relevant to that limited agreement. In other words, the intonation of (3) encodes the fact that the speaker cannot completely agree with the prior suggestion that the handkerchief was red: although the handkerchief did look red, there can be a contrast between how something looks and how something actually is. This meaning is signaled by the grammar of (3), not derived by implicature. Information structure in its full generality, we suggest, has far-reaching consequences for many other cases of alleged implicature as well.

In hindsight, we would draw a broader message from the discussion of information structure and intonation in *Imagination and Convention*. A full treatment of the logical form of utterances may have to incorporate the contributions of a wider range of communicative actions than philosophers of language typically consider. Take deictic gestures, for example, which normally accompany demonstrative noun phrases (like 'this' or 'that' in English). The received view from Kaplan (1989) is that gestures are nonlinguistic cues that let a speaker provide evidence about the referent they intend. However, many cognitive scientists—including McNeill (1992) and Kendon (2004)—see gesture and language as part of a single, integrated system for making our ideas public. That suggests that we can and should represent the interpretation of speech and gesture in a single formalism (Lascarides and Stone 2009), and even derive the interpretation of speech and gesture compositionally (Alahverdzhieva and Lascarides 2011, Giorgolo 2010).

When we adopt such theories, we may be led to significant departures from traditional views of context sensitivity in philosophy. For

example, in Stojnic, Stone and Lepore (2013), we provide a formalism where even the demonstratives 'this' and 'that' turn out to get their values directly as a function of the context—just like pure indexicals. The tools we use are parallel to those in Stojnic, Stone and Lepore (2016). We give a grammatical analysis of pointing gestures; their meanings update the context in which a subsequent demonstrative is interpreted by putting particular entities and situations at the center of attention. In the resulting context, the demonstrative automatically gets its correct, context-dependent semantic value.

In sum, we encourage readers to regard the case studies of discourse coherence anaphora and presupposition, and information structure that we consider in *Imagination and Convention*—as exhibited in the interpretations of (1–3)—merely as an indication of the diversity and importance of linguistic semantics in guiding utterance understanding. We think many more rules remain to be uncovered, and correspondingly, that there is much more to say about the linguistic knowledge that underpins interpretation. We encourage students of language to appreciate the ways in which appeals to Gricean reasoning—the idea that the audience simply constructs whatever interpretation makes sense, purely by intuition and common sense—forecloses inquiry that could expose and characterize such knowledge. The effect, we think, is both tempting and insidious.

We know that utterances make sense, and accordingly, that we can resolve ambiguities in part by considering what we know about the speaker. As Blackstone (1765) says, in describing the considerations of jurisprudence that should go into the interpretation of the language of a statute:

> The fairest and most rational method to interpret the will of the legislator, is by exploring his intentions at the time when the law was made, by signs the most natural and probable. And these signs are either the words, the context, the subject-matter, the effects and consequence, or the spirit and reason of the law. (Blackstone 1765: I, Introduction, §2)

When we read the alleged 'derivations' of Gricean pragmatics, we find they often hint, retrospectively, at plausible reasons why interpreters might prefer an attested reading from other candidate interpretations. In these informal accounts of disambiguation, however, Grice tends simply to proffer the correct interpretation without explanation, so it's easy to lose track of the principles that derive and license the possible interpretations in the first place. Our experience is that—at least when utterances have a specific, clear interpretation—the relevant principles are always principles of grammar.

2. *Varieties of Interpretive Reasoning*

A different line of argument in *Imagination and Convention,* meanwhile, makes the case that researchers have often been too quick to distill the *points* that speakers make with utterances, and the *insights*

that hearers derive from them, in terms of propositional content. On our view, audiences approach utterances through diverse kinds of imaginative engagement, which, we think, philosophers and cognitive scientists must describe in diverse and generally non-propositional terms.

We give a number of examples of such effects in the book. Perhaps the deepest and most persuasive is the case of metaphor. The discourses that best illustrate our thesis are extended, novel metaphors that call for active engagement on the part of the audience. The example we like to cite is (5).

5.   Love is a snowmobile, racing across the tundra. It flips over, pinning you underneath. At night the ice weasels come. (Matt Groening, given as (1) in Lepore and Stone 2010 and as (177) in *Imagination and Convention.*)

Many discussions—particularly those in the tradition of Lakoff and Johnson (1980)—claim that semantics is rife with metaphor. They posit active spatial metaphors at work in the grammar of change (e.g., 'the light *went from* green *to* yellow'), the grammar of mental states (e.g., 'I can't *get* that idea *out of* my mind'), etc. This contrasts with a more conservative view in formal semantics: that such locutions really involve abstract meanings that apply across semantic domains (see Hobbs 2011). Focusing on examples like (5) enables us to sidestep this controversy about the pervasiveness of metaphor.

Similarly, it's clear that many word senses have metaphorical origins that audiences need not activate—and usually do not activate—as part of understanding them (Glucksberg 2001). For example, experienced speakers probably understand 'family tree' directly in terms of their concepts of genealogy, 'syntax tree' directly in terms of their concepts of grammatical derivation, or 'binary tree' directly in terms of their knowledge of algorithms and data structures, and not by entertaining a biological metaphor. Such cases, of course, are generally described as 'dead metaphors'. There may be philosophically interesting things to say about dead metaphors.[2] However, our arguments in *Imagination and Convention* focus just on (5) and other cases where metaphor is used productively and creatively. We think there's no way to account for their interpretation by postulating conventional semantics or by Gricean pragmatics that somehow delivers a 'metaphorical meaning'. We describe what's happening in these cases in a different way.

We start from the suggestion—originally due to Black (1955) but recently defended in detail by Camp (2003, 2008, 2009)—that appreciating a metaphor involves a distinctive kind of imaginative effort. One

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[2] For example, in Lepore and Stone (2017b) we consider the possibility that one aspect of the connotation and Fregean tonality of words arises from the ability of a perceptive reader or listener to redeploy and draw insights from metaphors that other speakers might ignore as dead or dying.

key component of this effort is perspective taking: thinking of one thing as another. More precisely, metaphorical perspective taking requires an audience to construct a wide-ranging correspondence between entities in a source domain and entities in a target domain. Thus, for 'love is a snowmobile', we must not only imagine love as a snowmobile, but see the lovers as passengers, see the motion and mishaps of the vehicle as placeholders for the events that unfold in the course of a typical relationship, and—most importantly—appreciate the similarity in feeling between the lovers' experience of their affair and the snowmobile passengers' experience of their ride.

Moreover, as Camp (2008) describes it, metaphorical perspective taking involves a specific direction of fit. The point of a metaphor is not just to blend ideas together, or to remap the world in pretense: we don't interpret (5) just by imagining or pretending that lovers are riding a snowmobile. Instead, we draw on our knowledge of snowmobiles, selectively and judiciously, to find features that help us to appreciate corresponding aspects of the experience of love.

Once we characterize the workings of metaphor this way, we are led to a position similar to Davidson's (1978) about the philosophical status of metaphorical interpretation. Metaphor is not a case of Gricean reasoning: the insights of metaphor come not from working out what the speaker must have intended, but from engaging metaphorically with the text itself. Metaphorical insights are a product of the audience's private psychology in confrontation with challenging imagery. (Davidson memorably—though in our view not entirely accurately—compares the effects of a metaphor to those of a dream or even those of a bump on the head!)

The insights of metaphor need not even be propositional in nature. As with Wittgenstein's duck-rabbit figure, which viewers can see as one thing or as another, what matters in metaphor is the dynamics of experience—such factors as attention, memory and inference, as they are deployed in real time to organize and explain things around us. To try to boil this active process down to some specific information that the speaker of a metaphor intends to convey and that the audience aims to reconstruct is to miss what's really going on in this kind of language use.

In the book, we describe other literary effects in similar terms. We describe sarcasm as an invitation to appreciate an utterance framed in familiar terms as an inversion of what circumstances actually demand. We describe irony as an invitation to derive insights from engaging with the imagined speaker of an utterance exhibited in pretense. We describe humor as the appreciation of the potential of an utterance simultaneously to sustain two perspectives with opposed affective import. We describe hinting as an invitation for the hearer to formulate her own reactions to the theme of the utterance—perhaps guided by the associations of apparently incongruous or irrelevant detail.

We emphasize that these forms of imaginative engagement are neither mutually exclusive nor exhaustive. In fact, we have followed up this part of the book (Lepore and Stone 2016) by using the framework to explicate one particular ingredient in the interpretation of poetry.

Poets, of course, recruit all the expressive resources at their disposal. We often find that metaphorical language, in particular, can be particularly poetic. But, we suggest, something special happens when interpreters approach the articulation of language as poetry—regardless of the semantic content it has or the other components of their imaginative engagement with it.

In a poem, articulation itself is a meaningful part of the experience of understanding. The reader of poetry can attend to the sound, rhythm, lineation and even typography of the work, as a prompt to better understand it and to draw richer insights into the experience it affords. These cues can add sensual qualities that heighten the imagery of a poem, call attention to formal relationships within the poem that take on a corresponding importance, or help to attune the reader to the dynamic consciousness behind the poem, giving voice to a distinctive flow of perception, emotion and judgment. In describing poetic interpretation this way, we draw on a range of antecedents—from Pope (1711) through the New Critics of the mid 1900s (e.g., Brooks 1947) up to present-day scholars such as Longenbach (2008). All of these authors highlight similar aspects of what can happen when an audience appreciates a poem. However, critics have often been too ready to blur together the appreciation of a poem and its meaning. We maintain that poetic language retains its ordinary meanings—we think that this conclusion is philosophically inescapable. Nevertheless, we can appeal to the particular imaginative practice poetic language recruits in order to talk about the special effects of poetic language. In doing so, we discover that poetry involves a form of engagement which is distinct not only from the forensic project of reconstructing a speaker's communicative intentions, but also from the many other imaginative practices that speakers can invite that we already survey in *Imagination and Convention*.

Here, then, as in our account of the conventions of grammar, we hope that research is just beginning: there's room to address new kinds of data and to develop correspondingly refined accounts of the strategies that our psychology and culture gives us for enriching the experience of making sense of language.

3. *Theorizing Semantics and Pragmatics*

Theories of meaning have represented one of the most vital contributions of philosophy to cognitive science. Clear thinking and good examples have been instrumental in helping researchers to get clear on the ways that speakers exploit knowledge of language, knowledge of other people, and common sense in order to get their ideas across to

one another and to carry out joint projects together. The phenomena are so challenging precisely because such wide-ranging knowledge is implicated in every episode of communication.

We think the contemporary debate about the meanings of slurs is indicative of the difficulty that is involved (Lepore and Stone 2017b). As we noted in our introduction here, and survey in *Imagination and Convention,* the results of formal semantics offer many ways to associate words with evaluative content, including at-issue content, presupposed content, projective and not-at issue content, and expressive contents. These resources can be crucial for getting clear on the meanings of some words. But there are also good reasons not to regard all differences of nuance and tone as differences in conventional meaning. Words can still invite metaphorical thinking and other kinds of perspective taking, they can still prompt us to think of others who have used them, and they are subject to prohibitions and other social constraints that—regardless of how the taboos arise—endow their use with a special charge. Especially for problematic terms such as slurs, only a close look at their interpretive profile—in light of the full range of theoretical possibilities—can reveal what amounts to encoded meaning, as distinct from mere suggestions and connotations.

Encoded meaning itself is just the starting point for much of our interactions with one another. People use language intentionally, and people work hard to understand one another as people—not just to understand the language they use. Scientifically, there's ample evidence that intention recognition shapes the choices that interlocutors make in dialogue (Grosz and Sidner 1986), that it helps them avoid and recover from failures in communication (Brennan 2005), and that it's crucial for enabling infants to learn language in the first place (Bloom 2000).

Nothing we say undermines these obvious realities—nor do they undermine anything we say. The book offers an extended discussion of the cognitive architecture of collaborative language use in support of this claim. But the general lines of argument will be familiar; other semantic minimalists, such as Borg (2004), have presented similar lines of thinking.

This précis has emphasized the polemical side of our book and its implications. But we also wrote the book as a survey of the important theories, data and arguments that are relevant to mapping the relationships between semantics and pragmatics. We expect that few, if any, readers of the book will agree with us in all its particulars. But we are optimistic that readers will come away from our book with a feeling for how broad the phenomena are that bear on the interface of semantics and pragmatics, a deeper appreciation for the kinds of facts that seem to distinguish most strongly among the theoretical alternatives, and a road map to the open problems where future work is likely to bring challenges that all current theories must respond to. We hope you agree with us at least that the papers in this special issue illustrate these possibilities!

Acknowledgments

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