Research Article

# Embedded Metaphor & Subsentential Pragmatics: Revisiting the Scope Argument

Chris Genovesi<sup>1</sup>

1. Institute for Philosophical Research, Universidad Nacional Autónoma de México, Mexico

The so-called 'scope argument' challenges Gricean theories of metaphor by claiming that metaphorical readings are directly expressed. That is, because metaphorical readings survive under the scope of logical and intensional operators, they figure in what is said/explicitly communicated. In this article, I resist that conclusion. I show that other putative implicatures pass the scope test to motivate the idea that *at least* some implicated content arises within embedded contexts while resisting the claim that such content is what is said. To deal with such content, I argue that local, pragmatically inferred content is truth-conditionally relevant without thereby being a part of what is said. This move carries important consequences for how to draw the boundary between semantics and pragmatics. It raises two additional challenges for a theory of metaphor: the calculation and compositionproblem. I address these challenges by sketching a subsentential Gricean model whereby embedded metaphor is treated as a local implicature triggered by pressures on Gricean maxims, compositionally integrated by type, whose meaning is predictably indeterminate and defeasible, unlike said content. Building on work on embedded implicatures, this model preserves Grice's cooperative architecture while explaining metaphor's truth-conditional 'effects'. The result is a lean semantics with a principled account of embedded metaphorical meaning.

**Correspondence:** <u>papers@team.qeios.com</u> — Qeios will forward to the authors

Grice confined his attention to one particular type of illocutionary act, namely assertions, and his choice of maxims mirrors this limitation...However, it is equally obvious that Gricean pragmatics extends not only to other illocutionary acts, but also to such linguistic

acts as the production and interpretation of words, grammatical constructions, and intonation contours (...)

Geurts & Rubio-Fernández, p.[1]

## 1. Introduction

The so-called scope argument challenges Gricean approaches to metaphor which treats it as a conversational implicature (hereafter: CI or, simply, implicature). It does so by appealing to the behaviour of metaphorical readings in embedded contexts. One of the most explicit advocates of deploying the scope argument to support a contextualist account of metaphor is Catherine Wearing<sup>[2]</sup>. Wearing claims that because metaphorical readings persist under the scope of logical and intensional operators—appearing in antecedents of conditionals, disjunctions, and the complements of attitude reports—they seem to contribute directly to the truth conditions of the sentence. From this, she, and other contextualist and relevance theorists, infer that metaphor is part of what is directly or explicitly communicated.<sup>1</sup>

I resist this conclusion: A metaphor is meant, not said. That is, the persistence of metaphorical readings does not entail that they are explicitly communicated. Similar scope effects arise for other pragmatic phenomena, such as scalar enrichment, irony, and paradigmatic CIs—most of which are not plausibly part of what is said, regardless for which side of the context wars you draw arms. These cases indicate that some pragmatic inferences can occur within embedded structures, influencing the evaluation of complex sentences without altering their explicit content. These cases motivate the idea that at least some implicatures can arise within embedded contexts qua implicatures. The scope test, I argue, shows only that some content is relevant for the truth conditions of an utterance, not that it is semantically encoded, nor explicitly communicated. Truth-conditional relevance and communicative explicitness, as I refer to them, are orthogonal dimensions. Certain expressions (e.g., contrastive uses of but, temporal uses of and) are explicitly expressed yet do not affect truth-conditions. Others, by contrast, involve pragmatic enrichments that do contribute directly to the truth-conditional proposition/explicature (e.g., relativized adjectives, it's cold [for a summer day]).<sup>2</sup> Its interpretation can affect how an utterance is truth-evaluated while remaining outside the domain of explicit content. Recognizing this distinction between truthrelevance and explicitness is essential to assessing what the scope argument demonstrates and what it does not.

The positive task, then, is to explain how such locally inferred meaning operates. I contend that metaphorical meaning can be generated through local pragmatic inference, guided by Gricean maxims, and compositionally integrated by semantic type. According to my view, metaphorical meaning arises through ordinary Gricean reasoning extended to the subsentential level. When a literal interpretation of a constituent violates the maxims of Quality or Relation, for example, the hearer performs a minimal local repair, selecting contextually salient properties that preserve maxims of rational communication. This process draws on the speaker's and hearer's background knowledge. At the linguistic and conceptual level, metaphors activate meaning postulates—inferential links between lexical concepts and associated properties. The resulting content is pragmatically inferred, context-sensitive, and defeasible, yet formally well-typed and therefore composable. The resulting interpretation is a local implicature: a piece of pragmatic content compositionally integrated by semantic type yet remaining outside what is explicitly communicated, for its interpretation is variable/indeterminate and defeasible<sup>3</sup> in ways that explicit or explicature-level content is not.

This move has important theoretical consequences for how we draw the boundary between semantics and pragmatics. It reframes the debate about metaphor around two interrelated challenges: (i) the calculation problem: how metaphor is triggered, and (ii) the composition problem: how pragmatic processes interact with the semantics of the utterance to produce metaphorical meaning.

To address these issues, I sketch a subsentential Gricean model that treats embedded metaphor as a local implicature triggered by maxim pressures, compositionally integrated by type, and predictably variable and defeasible. This model preserves Grice's cooperative architecture while accounting for metaphor's truth-conditional relevance through pragmatic reasoning alone. The result is a lean semantics paired with a principled account of embedded figurative meaning.

Here's the plan: Section 2 reconstructs the scope argument and clarifies why it fails to establish that metaphor belongs to what is said. Section 3 shows that other putative implicatures behave analogously under embedding. Section 4 develops the local Gricean account of embedded metaphor in detail, addressing the calculation and composition problems. Section 5 outlines the model's diagnostics and predictions. Section 6 concludes by considering the broader methodological implications for theories of meaning.

## 2. The scope argument

To illustrate the argument, consider the following disjunctive example borrowed from Wearing, [2]:

1. He'll shy away from the idea or I'm a six-toed sloth.

Wearing observes that the first disjunct is a literally false metaphor<sup>4</sup> and the second disjunct is straightforwardly false: "the only way it can be true is if the first disjunct is interpreted metaphorically, which…requires embedding the content of the metaphorical implicature within the scope of the disjunction" [2]. What is important about Wearing's observation was made explicit by Recanati a decade earlier:

[i]mplicatures are generated via an inference whose input is the fact that the speaker has said that p. Hence no implicature can be computed unless something has been said, some proposition expressed. In particular, no implicature can be computed at a sublocutionary level. We have to compute the truth-conditions first, so as to ascribe a definite content to the speaker's speech act, before we can infer anything from that speech act. [3]

On this view, no implicature can be generated below the level of a complete assertion. Wearing follows this reasoning and concludes that, since metaphorical readings emerge under operators, they cannot be implicatures. From here, she infers the additional claim that metaphors must therefore be part of "what is asserted (or otherwise directly expressed)" [2].

I regiment Wearing's use of the scope argument to show what's happening under the hood and clarify my own position:

P.1 Metaphors are CIs. (Gricean assumption)

P.2 CIs cannot arise in embedded contexts. (The 'Scope Principle')<sup>5</sup>

P.3 Metaphorical meaning arises in embedded contexts. (Observation from empirical data)

C.1 Therefore, metaphors are not CIs.

The contextualist infers C.2 from C.1.

C.2 Metaphorical meaning is what is said/asserted.

P.1 reflects the classical Gricean assumption; P.2, the scope principle invoked by contextualists. P.3, the empirical observation. P.2 is the critical premise. The force of the scope argument turns on whether one

accepts the restriction of Gricean pragmatics at the level of full utterances. If that restriction is lifted, the conclusions drawn from the argument no longer follow straightforwardly. The embedding of metaphorical readings could be indicative of implicatures being calculated at a structural depth below an asserted proposition. It does not show, I contend, that metaphorical content is what is said. In other words, if implicatures can occur locally, the inference to C.2 fails.

I resist C.2. I demonstrate that other putative pragmatic phenomena are embeddable to motivate the need for Gricean machinery at this level.<sup>6</sup> I partially accept C.1, i.e., that metaphors are not CIs in the classical Gricean sense (if that means that they can only be derived on the basis of an act of saying).<sup>7</sup> I argue that live metaphors are implicatures whose meaning can be inferred locally.<sup>8</sup>

Two ideas often get run together: (i) compositional visibility and (ii) explicitness. Scope shows visibility: a clause contributes something evaluable to the larger structure. It does not independently tell us whether that contribution is part of what is said. The key is that truth-evaluation can depend on material that is not explicit content. Even within an orthodox semantics, operators are type-driven rather than source-sensitive: they combine whatever well-typed input they receive. If a phrase ends up denoting a property of type  $\langle e, t \rangle$  or a proposition of type t, the system composes with it regardless of whether that content was lexically supplied or pragmatically inferred.

# 3. Subsentential implicatures

This section turns to phenomena that independently demonstrate the same point I am making about embedded metaphors. What unites these cases is their structure: a local point of tension between literal meaning and rational communicative intent triggers an inference that restores cooperativity. The adjustment occurs at the smallest domain where coherence is threatened, and the repaired meaning composes with the rest of the sentence in the ordinary way. Subsentential implicatures thus represent a general mechanism by which pragmatic reasoning interacts with semantic composition. The following subsections examine three kinds of data that illustrate this mechanism: scalar implicatures<sup>10</sup>, irony, and conversational implicatures.

## 3.1. Scalar implicatures

Scalar expressions such as *some* contrast with stronger alternatives like *all*. The conventional semantics of *some* provides a lower bound—that *at least one* individual satisfies the predicate—while conversational reasoning supplies an upper bound—that *not all* do. The strengthened interpretation *some but not all* 

emerges from the combination of these two constraints: a semantic lower limit and a pragmatic upper limit. This can be seen first in a simple declarative sentence:

2. Some representatives at the United Nations left the room when Netanyahu spoke.

Its literal meaning, at least one representative left, would make the statement true even if every representative left. Yet such a reading would be uninformative and would violate the maxim of Quantity. To preserve informativeness, the hearer infers that the stronger alternative, all, does not hold. The enriched interpretation some but not all results from this pragmatic restriction on an otherwise semantically open lower bound. The same reasoning operates within embedded clauses:

3. If some representatives at the United Nations left the room when Netanyahu spoke, then others stayed to listen.

Here the antecedent must be understood as *some*, *but not all representatives left* for the conditional to be coherent. A purely literal reading—at least one representative left—would make the antecedent compatible with absurd cases in which everyone left, contradicting the consequent's presupposition that others remained. The hearer therefore enriches *some* locally within the antecedent to maintain cooperativity and relevance. The operator *if* composes over this enriched value, so that the truth of the conditional depends on a pragmatic inference generated inside the clause.

In both cases, semantics provides the lower bound, pragmatic inference, the upper bound, and the resulting interpretation, *some but not all*, determines the truth conditions without becoming part of what is explicitly said. Scalar adjustment thus exemplifies a general mechanism by which local pragmatic reasoning interacts with semantic composition. As Chierchia explains, scalar implicatures are "introduced locally as soon as possible in the same order in which their trigger (the scalar terms) are (sic) introduced in the syntactic tree" [4].

## 3.2. Irony

In Grice's classic model, an ironic speaker makes as if to say something and thereby implicates its opposite while expressing a ridiculing attitude toward the literal content of the utterance. To ironically utter "brilliant" is to mean some contrasting alternative. The hearer resolves the contradiction between form and intent by inferring a contrastive meaning that restores coherence to discourse. Consider:

4. If you come up with another brilliant idea like that, you're fired!<sup>11</sup>

No rational employer threatens dismissal for good ideas. So, the hearer must reinterpret the utterance in a way that makes sense—perhaps as meaning that the addressee will be fired for producing another foolish idea. However, the classical model cannot generate this reading. According to the classical view, the target of irony is the entire proposition literally expressed and includes the speaker's critical attitude directed at that content.

If the whole conditional carries the irony, this means that the target of ridicule would be the belief expressed by the literal conditional— that employers fire employees if they have good ideas. Yet this is not what the speaker mocks; the ridicule is directed at the employee's supposed brilliance. Furthermore, the account leaves the conditional's inverted meaning indeterminate: is the contrastive meaning that foolish ideas go unpunished, or that good ideas are rewarded? Treating the entire conditional as ironic therefore misidentifies both the target and the content of the speaker's ironic intention. Finally, the model leaves unexplained why follow-up remarks such as Here she comes again, shining on us another brilliant idea! make use of the ironic antecedent, not the ironic inversion of the whole utterance.

The conditional thus expresses an implication from the ironic antecedent to the literal consequent. The irony occurs within the antecedent and yet contributes to the evaluation of the whole. This shows that irony can embed after all. If irony were only a global implicature, its usual commitments—the made as if to say and its inversion—would have to carry over into the larger utterance, but they do not. The irony is confined to the constituent.

## 3.3. Conversational implicatures

It seems paradigmatic CIs exhibit embeddability: 12

5. A: Will you ask Laura out?

B: She doesn't like me.

+> that Laura will say "no".

Now consider the following exchange. C, knowing that A and B are good friends, asks A if A knows whether Laura will go on a date with B. A reports (5) to C:

6. A: B<sub>i</sub> believes that Laura doesn't like him<sub>i</sub>.

+> that B believes that Laura will say "no".

To my ear, the implicature in (5) is carried by A's report in (6). Now consider one of Grice's classical examples:

7. A: I'm out of petrol.

B (dryly): There's a garage around the corner.

+> That the garage is open and it sells petrol.

Suppose A reports B's utterance to C in the following way:

8. A: Either he [B] is trying to get rid of me or there's a garage around the corner.

I read (8) as carrying the implicature that arises in (7) in the second disjunct. Although individual examples may be contentious and admit alternative analyses, the general phenomenon remains: implicatures can appear within embedded structures. This suggests that P.2 rests on a restriction inherited from an overly global conception of Gricean reasoning.<sup>13</sup>

## 4. Subsentential Gricean pragmatics & metaphor

Proponents of the scope argument maintain that because metaphorical readings survive under logical and intensional operators, they must belong to what is explicitly communicated, contributing to the sentence's truth-conditions. The classical Gricean view, by contrast, treats metaphor as a global implicature, an inference drawn from a literally false or semantically anomalous statement in the context of utterance. The challenge, then, for the Gricean is whether we can explain the apparent embeddedness of metaphor without inflating semantics or collapsing into contextualism.

This section develops a subsentential Gricean account of how live metaphorical meaning arises as a local implicature: A pragmatic inference is triggered by some sort of semantic anomaly at the level of a constituent phrase. The resulting content is truth-relevant—it constrains how the utterance is intelligibly evaluated—but it is not truth-conditional, nor does it form part of what is said. Composition is type-driven, while the content of a particular phrase or utterance is pragmatically adjusted. To explain how this process works, we distinguish two problems: calculation (i.e., how metaphor is triggered locally) and composition (i.e., how it composes into larger structures).

## 4.1. Local pragmatic inference

On my view, the lexicon remains fixed, and pragmatic reasoning does the interpretive work. In the basic case, when a literal interpretation fails, whether by producing a falsehood, irrelevance, or incoherence, the hearer performs a local repair guided by the Cooperative Principle and constrained by general norms of conversation: seek the smallest adjustment that preserves intelligibility and relevance, for example. The outcome is a contextually inferred property P—a truth-relevant predicate that fits the required semantic type that allows composition to proceed. To illustrate this point, consider the metaphor:

#### 9. Juliet is the sun.

The pragmatic repair does not modify the lexical meaning of *sun*; it activates associated meaning postulates<sup>15</sup> (section 4.2.1), which I take to be inferential relations stored in conceptual memory.

## 4.2. The calculation problem

The calculation problem concerns how a local pragmatic inference is computed when the expression that gives rise to it is embedded within a larger construction and is therefore not itself a full speech-act. According to P.2, implicatures are inferred from full assertions: the speaker asserts<sup>16</sup> a proposition, and the hearer reasons about why she asserted that proposition rather than another. But if an expression contributes a non-literal interpretation while embedded inside a conditional, disjunction, or attitude clause, then there is no independent assertion to serve as input. The challenge, then, is to explain how pragmatic inference can operate locally.

We can relax the requirement that implicatures depend on a full act of assertion and stipulate that subsentential constituents provide suitable input for implicature.<sup>17</sup> A hearer may therefore compute an implicature from an embedded phrase rather than from the whole utterance. Once the defective expression is identified, the hearer draws on background knowledge associated with the literal meaning of the term—its network of salient properties and inferential connections. These associations belong not to semantics, but to what we might call an associative field. For example, sun evokes a set of features: radiant, central, life-giving, constant, fiery, destructive, burning, etc. This field provides the inferential material from which a local interpretation can be constructed.

Consider the contrast between literal and metaphorical interpretation. In a literal statement such as *Juliet* is beautiful, the predicate beautiful straightforwardly denotes a property of type (e, t) (**Figure 1a**). The utterance is evaluated by applying that property to the individual **Juliet**. In (9), however, the literal reading

yields the absurd proposition *Juliet is the star at the center of the solar system*. Recognizing this, the hearer seeks a rational interpretation that preserves the speaker's cooperativity. The associative field for *sun* supplies a range of candidate properties. In a positively biased context (**Figure 1b**), the salient features might be *radiant*, *vital*, *life-giving*, and/or *central*; in a negatively biased context (**Figure 1c**), features might instead be *harsh*, *burning*, *destructive*. Both clusters are available, but pragmatic reasoning filters them according to the speaker's apparent aim.

The inferential process yields a locally adjusted predicate: is the sun  $\rightarrow$  has SUN-like properties {radiant, life-giving, vital}, or, in another context, is the sun  $\rightarrow$  has SUN-like properties {harsh, blinding, destructive}. Each inferred property is truth-relevant and of the appropriate type (e, t) yet remains non-explicit. The inference is defeasible and context-sensitive: the hearer can revise or refine the interpretation as additional information about the speaker's intention becomes available. In a neutral or indeterminate context, where no specific goal is salient, the hearer can still recognize that is the sun must denote some property/properties of the right type, but the particulars remain underspecified. The sentence is thus evaluable in principle, though pragmatically incomplete. This same mechanism explains embedding (**Figure 1d**).

#### 10. If Juliet is the sun, Romeo will fall in love with her.

the antecedent is first processed literally and found wanting. The hearer again detects a local defect: the literal meaning makes the antecedent trivially false and the conditional incoherent. Pragmatic reasoning then initiates a local repair, replacing the literal reading of *is the sun* with an inferred property that fits the perceived discourse purpose. The conditional can now be interpreted as *if Juliet is radiant and life-giving, Romeo will fall in love with her.* The antecedent remains metaphorical, but the conditional is truthevaluable, since the pragmatic enrichment supplies a property of the right semantic type to feed into the compositional machinery.

This process involves a continuous negotiation between local and global coherence. The hearer hypothesizes a property that would make sense of the problematic phrase, checks whether the resulting interpretation fits against the broader discourse goals, and adjusts if necessary. The calculation is therefore iterative and context-bound, but principled: the inferential path from literal failure to meaningful recovery is guided by general norms of rational cooperation.

The outcome is a pragmatic enrichment that restores interpretability at the phrase level while maintaining the integrity of the compositional system. The meaning derived is not semantically encoded

but inferred through a local search for coherence. The process is iterative, truth-relevant, and systematically variable. The calculation problem thus resolves once we allow that pragmatic inference can operate within the compositional structure, repairing local interpretive defects through a process of rational adjustment that is both predictable and contextually constrained.

## 4.2.1. Meaning postulates

Meaning postulates mediate between lexical stability and contextual variability to provide inferential access to contingent properties of objects (*the sun shines*, *radiates*, *warms*, *burns*, *destroys*, etc.). Lexical stability reflects a broadly Fodorian form of conceptual atomism<sup>[5]</sup>, on which lexical concepts are primitive and unstructured. On my view, the lexicon provides a stable inventory of semantic atoms that serve as fixed inputs to compositional semantics. Pragmatic reasoning, by contrast, exploits inferential relations among atoms to generate context–sensitive interpretations. Postulates articulate those relations: they are not definitional but synthetic, reflecting patterns of world knowledge, background associations and other contingencies that pragmatics can activate when literal interpretation is left wanting. So, with metaphor, postulates supply the inferential material that local pragmatic reasoning exploits. They relate lexical entries to a stored file of associations (e.g., SUN  $\rightarrow$  *bright*, *central*, *burning*) that can be locally activated to supply properties when literal interpretation fails. Pragmatic reasoning determines which subset of these inferences is relevant in a given context. The result is a division of labour between a minimal semantics and a richly inferential pragmatics.

The range of metaphorical interpretations—positive, negative, indeterminate—thus reflects the flexible activation of different associations rather than changes in lexical meaning. The compositional engine treats them alike, because each provides a property of the correct type.

## 4.3. The composition problem

Popa-Wyatt notes that the problem we now face "concerns the truth-conditional compositionality which precludes implicatures from undergoing compositional processes" and to "address this problem will require serious amendments" [6]. Let's see if our model is up to the task of addressing this problem modestly.

In semantics, when an expression contributes a different kind of value than its literal denotation, a typeshift allows composition to proceed. Pragmatic inference can trigger such a shift indirectly by supplying a property that fits the type required by the syntactic environment. The shift itself is a semantic accommodation; the selection of content that motivates it is pragmatic. In *Juliet is the sun*, pragmatic reasoning proposes that *the sun* should be understood as a property rather than as an individual. Type theory ensures that this property integrates compositionally; pragmatics determines what the property is. In this way, pragmatic enrichment and type shifting cooperate: the former provides the content, the latter guarantees that the adjusted content composes.

This interaction preserves the Gricean architecture. Gricean reasoning governs not only whole utterances but also the constituents that compose them. Pragmatic inference operates wherever literal meaning fails to yield a cooperative contribution—sometimes at the clause level, sometimes within a single phrase. The resulting content is truth-relevant and compositionally integrated, offering a bridge between Grice's rationalist framework and the fine-grained inferential mechanisms captured by meaning postulates and formal type theory. The lexicon remains lean, semantics remains compositional, and pragmatics supplies the inferential resources that keep communication rational and intelligible. Let's see how this works a bit more formally:

## Literal composition

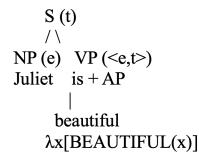


Figure 1a.

Note: Functional application:  $(\lambda P[\lambda x[P(x)]])$  $(\lambda x[BEAUTIFUL(x)])(j) \rightarrow BEAUTIFUL(j).A$  literal truth-conditional proposition. Metaphorical composition (Positive property cluster)

(9) Juliet is the sun.

```
S (t) \\ / \setminus \\ NP (e) VP (<e,t>) \\ Juliet is + NP \\ | \\ the sun \\ | \\ Meaning Postulates (Inferential Base) \\ \{bright, central, life-giving, radiant, warm\} \\ \downarrow \\ Contextual Selection: \{radiant, vital, central\} \\ \downarrow \\ Pragmatic Enrichment \\ \lambda x[P(x)]
```

## Inferential $\lambda$ -step:

$$[[sun]]_{lex} = \lambda x[x = sun] \text{Meaning Postulates(sun)}$$

$$= \{bright, central, radiant, life$$

$$- giving, warm, ... \} \text{Pragmatic Repair: } \lambda x[x = sun] \rightarrow \lambda x[P(x)]P \subseteq \{p: p \in \text{MeaningPostulates(sun)} \land p \text{ is relevant in context} \}$$

$$(\lambda P[\lambda x[P(x)]])(\lambda x[P(x)])(j) \rightarrow P(j)$$

#### Figure 1b.

*Note*: Local pragmatic repair at the predicate node. Context filters the meaning postulates associated with sun to yield a property P (e.g., {radiant, central, vital}) of type (e,t). Composition proceeds normally, producing a proposition of type t. The inferred content P(j) is truth-relevant but not explicitly asserted.

Metaphorical composition (Negative property cluster)

(9) Juliet is the sun.

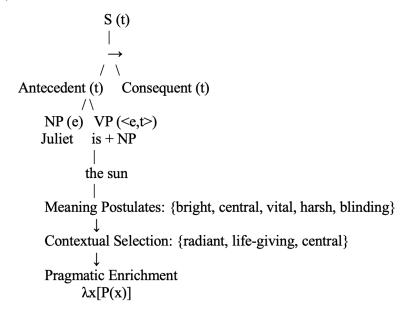
```
S(t)
/ \setminus
NP(e) VP(<e,t>)
Juliet is + NP
|
the sun
|
Meaning Postulates (Inferential Base)
bright, central, radiant, life-giving, harsh, blinding, destructive}
<math display="block">\downarrow
Contextual Selection: \{harsh, blinding, destructive\}
\downarrow
Pragmatic Enrichment
\lambda x[P'(x)]
```

## Inferential $\lambda$ -step:

```
[[sun]]_{lex} = \lambda x[x = sun] Pragmatic Repair: \lambda x[x = sun] \rightarrow \lambda x[P'(x)]P' \subseteq \{p: p \in Meaning Postulates(sun) \land p \text{ is contextually salient}\}(\lambda P[\lambda x[P(x)]])(\lambda x[P'(x)])(j) \rightarrow P'(j)
```

**Figure 1c**. *Note*: Variation in metaphorical interpretation arises from contextually distinct activation of meaning postulates. The lexicon remains constant; inference selects different subsets of the same inferential base. The resulting property *P'* yields a different truth-relevant content (e.g., {harsh, blinding, destructive}).

(10) If Juliet is the sun, Romeo will fall in love with her.



## Inferential $\lambda$ -step:

[if] = 
$$\lambda p_t . \lambda q_t . (p \to q)$$
 [Juliet is the sun] =  $P(j)$  [Romeo will love her]  
=  $LOVE(r, j)(\lambda p[\lambda q[p \to q]])(P(j))(LOVE(r, j)) \to (P(j) \to LOVE(r, j))$ 

#### Figure 1d.

*Note*: Local pragmatic repair occurs inside the antecedent: meaning postulates supply potential inferences; context filters them to produce P. Composition remains type-driven—operators combine t-type arguments regardless of whether their content is semantic or pragmatic in origin.<sup>19</sup>

# 5. Metaphor, scope, and the semantics-pragmatics interface

## 5.1. The scope argument reconsidered

The force of the scope argument turns on the assumption that if metaphorical content appears within the scope of an operator, it must belong to the truth-conditional core of what is said. This rests on a *source-driven* view of composition, in which explicit, proposition-level content can enter semantic evaluation. On the model developed here, composition is *type-driven*: the grammar requires expressions of the right semantic type but is indifferent to their inferential source. What matters is not whether a constituent's content is explicit or implicit, but whether it delivers a value that fits the compositional template.

In (10), the antecedent embeds a metaphor because the locally inferred property P—drawn from meaning postulates and contextual expectations—is of the right type (e,t) for composition. Operators such as if, not, or believe are blind to the origin of their arguments; they simply combine whatever satisfies the required type. The antecedent therefore contributes a truth-relevant proposition P(j) without that content being part of what is explicitly said. Metaphor's contribution lies in evaluation, not assertion. The fact that metaphors embed shows only that pragmatically derived material can feed composition, not that it constitutes explicit meaning.

The local implicature model preserves a sharp but dynamic boundary. Semantics furnishes the formal scaffolding of types, operators, and compositional rules. Pragmatics supplies the inferential content needed to make sense of the speaker's plan. Meaning postulates function as the cognitive link between the two: they store inferential associations that pragmatic reasoning can draw upon without encoding them semantically. The result is a unified picture of interpretation as rational cooperation across multiple levels of structure. Thus, it seems that our "amendments" to the purview of pragmatic machinery are rather modest.

## 5.2. Predictions and diagnostics

- 1. Variability: A range of readings of *Juliet is the sun* follow from different meaning postulates activated under contextual pressures.
- 2. Indeterminacy: In a null context, *P* is underspecified but type-correct; the utterance is evaluable but pragmatically vague.
- 3. Reinforceability and Cancellability: Metaphorical properties can be spelled out (Romeo means that Juliet is *radiant*, *central*) or withdrawn (*not in that sense—she will burn him*).
- 4. Live vs. Dead Metaphors: Repeated pragmatic repair leads to lexicalization (*the leg of the table*), predicting the shift from implicature to semantics.
- 5. Attitude Reports: *Romeo believes Juliet is the sun* attributes a belief about the embedded metaphor, not about the literal identity claim.
- 6. Complex Embeddings: Negation, disjunction, and conditionals compose normally once P is supplied.

## 6. Conclusion

Metaphor embeds not because it is semantically encoded, but because pragmatic reasoning supplies type-appropriate content that composition can process. The locally inferred property P is truth-relevant,

not truth-conditional; it makes the utterance intelligible without expanding what is said. The model integrates Gricean inference and the inferential role of meaning postulates into a coherent account of figurative meaning compatible with Fodorian lexical conceptual atomism.

Metaphor, on this view, is not an exception to compositionality but a demonstration of its flexibility. Operators are blind to the origins of content; the cooperative principle ensures that every node of a sentence can be rendered rational. Pragmatic inference, operating locally and globally, sustains the continuity between literal and non-literal meaning. The scope argument, properly understood, does not undermine the Gricean picture—it exemplifies it. It shows that the compositional engine and the inferential pragmatics of rational, communicative cooperation function together to make even metaphorical meaning systematically intelligible.

## **Footnotes**

- <sup>1</sup> That is, the contextualist notion of what is said/asserted. It is also referred to as what is directly expressed, or, in relevance-theoretic terms, the explicature. As I argue below, I don't dispute that there is some 'directness' involved; rather it is how we understand the term 'direct'. On the present view, directness records a fact about where interpretation matters for evaluation, not a verdict on truth-conditions. Embedded metaphor is direct in the sense that it must be resolved somewhere inside the clause for the larger structure to compute, but it is not part of the explicit content.
- <sup>2</sup> Bezuidenhout<sup>[7]</sup>, Carston<sup>[8]</sup>, Recanati<sup>[9][3]</sup>, Sperber & Wilson<sup>[10]</sup>, Wearing<sup>[11]</sup> among others, include metaphor in this category.
- <sup>3</sup> I view indeterminateness and defeasibility as gradable, not categorical. Some expressions, such as 'Juliet is the sun' are open-ended. Others are a bit more constrained and conventional: 'That lawyer is a shark' typically highlights aggressiveness. Likewise, some can be easily cancelled ('Juliet is the sun—but not literally'), while others prove to be more resilient to defeasibility ('the leg of a chair' or 'the mouth of a river').
- <sup>4</sup> Although I do not share this reading with her.
- <sup>5</sup> For discussion, see Recanati<sup>[12]</sup>.
- <sup>6</sup> In the interest of brevity, I keep examples and their discussion to a minimum. The selected examples give an intuitive idea about the kinds of cases where subsentential Gricean pragmatics has been motivated as an alternative to contextualist approaches. To this end, I rely on previous discussions of

subsentential pragmatics throughout section 3. Of course, much more work is required to see how far the proposed model can be extended. Further exploration is needed to determine the scope of the proposed model, but my aim here is simply to motivate the machinery through a representative case of *live metaphor*, taken to generalize across that class.

- <sup>7</sup> I suppose that my issue with C.1 is largely terminological. However, that does not render the matter trivial.
- <sup>8</sup> The broader moral is methodological. If what I argue for is plausible, then the scope argument does not reveal the failure of the Gricean framework but a limitation of the assumption that pragmatic reasoning applies only at the level of whole speech acts. Once the possibility of local inference is recognized, the scope data cease to threaten the Gricean distinction between saying and implicating. They show instead that Gricean reasoning can extend into the internal structure of sentences, providing a foundation for the account developed in the following sections.
- <sup>9</sup> Metaphor sharpens this distinction. In *If Juliet is the sun, Romeo will fall in love*, the conditional is intelligible only if the antecedent selects a suitable property/properties. That much the scope test reveals. But there are two routes to that property: (a) treat the property as part of what is explicitly conveyed, or (b) treat it as truth-relevant to evaluation yet non-explicit. The rest of the paper develops option (b).
- <sup>10</sup> The status of scalar implicatures is hotly debated. Several approaches have been canvassed to account for their putative locality. Some of these theories involve small departures from the Gricean doctrine (e.g., <sup>[13]</sup>). Others argue for more radical departures (e.g., <sup>[4][14]</sup>).
- <sup>11</sup> Example and discussion are from Popa-Wyatt<sup>[6]</sup>.
- <sup>12</sup> Examples (5)-(8) are from Yavuz $^{[15]}$ .
- $^{13}$  I refrain from Gricean exegesis in this article. Although see Genovesi $^{\underline{[16]}}$  for discussion.
- <sup>14</sup> Of course, there is a lot to be said here vis-à-vis what is a semantic anomaly and how it prompts reinterpretative processes. A detailed reflection would take us too far afield. Briefly, and admittedly, a bit clumsily: On the present view, the interpretation of a metaphor is triggered when a phrase or constituent resists straightforward integration into the speaker's apparent communicative plan. The hearer recognizes that the literal meaning yields an anomaly—syntactic, semantic, or pragmatic—and, assuming cooperativity, initiates a local search for an interpretation that would make the utterance intelligible. This search draws on background knowledge and salient associations linked to the literal

expression, selecting those features that would render the contribution coherent and relevant in context. Such adjustments need not be global or uniform: the pressure to restore interpretability may arise at any level of structure, prompting a localized inferential repair whose product becomes the metaphorical meaning.

- <sup>15</sup> This idea is inspired by Carnap<sup>[17]</sup>, although without the analyticity commitments of his theory.
- <sup>16</sup> I think this reasoning can be extended to non-assertive utterances, i.e., questions, promises, etc.
- <sup>17</sup> Several theorists have explored various strategies to this effect with other 'pragmatically intrusive' phenomena [18][6][19][20][21][22]. For example, by uttering a complex sentence, the speaker can thus make as if to say something with an embedded phrase or clause, and this pretense provides sufficient input for pragmatic reasoning. Alternatively, the speaker can perform a full-blown speech act with a complex sentence, where the embedded sentence is performed under a local speech act. I remain theoretically agnostic on this point.
- <sup>18</sup> This idea appears in Genovesi & Hesse<sup>[23]</sup>.
- In the formal semantics of conditionals, both the antecedent and the consequent denote propositions of type t (truth values). The operator if is a function that maps two t-type arguments onto a truth value:  $[if] = \lambda p_t \lambda q_t$ . ( $p \to q$ ). In If Juliet is the sun, Romeo will fall in love with her, the antecedent clause must therefore yield a proposition of type t. This requirement constrains the interpretation of t is the sun: its predicate must be of type (e,t), taking an individual as argument and returning a truth value. The literal predicate t is satisfies that type but fails pragmatically; the local repair introduces a property t such as t radiant, t central, or t vital—whose extension is also of type t. Applying t to Juliet again yields a proposition of type t, ensuring that the antecedent can combine compositionally with the consequent. The conditional therefore embeds the metaphor not by altering semantic structure, but because pragmatic reasoning restores the type needed for ordinary functional application.

## References

- 1. ^Geurts B, Rubio-Fernández P (2015). "Pragmatics and Processing." Ratio. **28**(4):446–469. doi:<u>10.1111/rati.12</u>

  113.
- 2. <sup>a, b, c, d</sup>Wearing C (2013). "Metaphor and the Scope Argument." In What Is Said and What Is Not, pp. 141–157.

  CSLI Publications.

- 3. <u>a</u>, <u>b</u>Recanati F (2003). "Embedded Implicatures." Nous-Supplement: Philosophical Perspectives. **17**(1):299–33 2. doi:10.1111/J.1520-8583.2003.00012.
- 4. a. b. Chierchia G (2004). "Scalar Implicatures, Polarity Phenomena, and the Syntax/Pragmatics Interface." St ructures and Beyond: The Cartography of Syntactic Structures: Volume 3. 3:39–103. doi:10.1093/OSO/978019 5171976.003.0003.
- 5.  $\triangle$ Fodor JA (1975). The Language of Thought: First Approximations. Harvard University Press.
- 6. a, b, cPopa-Wyatt M (2019). "Embedding Irony and the Semantics/Pragmatics Distinction." Inquiry (United Kingdom). **62**(6):674–699. doi:10.1080/0020174X.2018.1446048.
- 7. ≜Bezuidenhout A (2001). "Metaphor and What Is Said: A Defense of a Direct Expression View of Metaphor." Midwest Stud Philos. 25(1):156–186. doi:10.1111/1475-4975.00044.
- 8. ^Carston R (2002). Thoughts and Utterances: The Pragmatics of Explicit Communication. Blackwell Publis hing Ltd. doi:10.1002/9780470754603.
- 9. Arecanati F (2001). "Literal/Nonliteral." Midwest Stud Philos. 25(1):264–274. doi:10.1111/1475-4975.00048.
- 10. <sup>△</sup>Sperber D, Wilson D (2008). "A Deflationary Account of Metaphors." In The Cambridge Handbook of Metaphor and Thought, pp. 84–105. Cambridge University Press.
- 11. <sup>△</sup>Wearing C (2006). "Metaphor and What Is Said." Mind Lang. **21**(3):310–332. doi:<u>10.1111/J.1468-0017.2006.0</u> 0280.
- 12. Arecanati F (2003). Literal Meaning. Cambridge University Press. doi:10.1017/CB09780511615382.
- 13. <sup>△</sup>Simons M (2017). "Local Pragmatics in a Gricean Framework." Inquiry. **60**(5):466–492. doi:<u>10.1080/00201</u>

  <u>74X.2016.1246865</u>.
- 14. <sup>△</sup>Chierchia G, Fox D, Spector B (2012). "Scalar Implicature as a Grammatical Phenomenon." In Handbücher zur Sprach- und Kommunikationswissenschaft / Handbooks of Linguistics and Communication Science, p p. 2297–2332. De Gruyter. doi:10.1515/9783110253382.2297.
- 15. ∆Yavuz A (2018). The Phrasal Implicature Theory of Metaphors and Slurs. St. Andrews. <a href="http://hdl.handle.ne">http://hdl.handle.ne</a>
  t/10023/13189.
- 16. <sup>A</sup>Genovesi C (2023). "Grice's Café: Coffee, Cream, and Metaphor Comprehension." Front Commun. **8**. doi:<u>10.3</u> 389/fcomm.2023.1175587.
- 17. ^Carnap R (1965). "Meaning Postulates." In Meaning and Necessity: A Study in Semantics and Modal Logic, pp. 222–229. Chicago: The University of Chicago Press. <a href="https://press.uchicago.edu/ucp/books/book/chicago/M/bo3638630.html">https://press.uchicago.edu/ucp/books/book/chicago/M/bo3638630.html</a>.

- 18. <sup>△</sup>Mackie JL (1973). Truth, Probability and Paradox. Oxford: Clarendon Press.
- 19. △Simons M (2010). "A Gricean View on Intrusive Implicatures." In Meaning and Analysis: New Essays on Grice, pp. 138–169. London: Palgrave Macmillan. doi:10.1057/97802302821176.
- 20. <sup>△</sup>Stalnaker R (1999). "Pragmatic Presuppositions." In Context and Content: Essays on Intentionality in Spee ch and Thought, pp. 47–62. Oxford University Press. doi:10.1093/0198237073.003.0003.
- 21. <sup>△</sup>Stalnaker R (2011). "Conditional Propositions and Conditional Assertions." In Epistemic Modality, pp. 227–248. Oxford University Press. doi:10.1093/ACPROF:0S0/9780199591596.003.0008.
- 22. <sup>△</sup>Walker R (1975). "Conversational Implicatures." In Meaning, Reference, and Necessity, pp. 133–181. Cambri dge University Press.
- 23. △Genovesi C, Hesse J (2025). "Deviance and the Literal-Metaphorical Distinction Revisited." Inquiry. 1–25. d oi:10.1080/0020174X.2025.2458537.

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