



From Semantic Underdetermination to Contextual Resolution: A Layered Framework for the Semantics–Pragmatics Interface in English

Bsma Alamouri Alshirwi Said Abu Nawwas

English Department/Faculty of Education – Yefren /University of Zintan

Email: bsma.abunawwas@uoz.edu.ly

<https://orcid.org/0009-0003-4061-8913>

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Abstract

The relation between linguistically encoded meaning and contextually interpreted content remains a central problem at the semantics–pragmatics interface. English utterances routinely communicate contents that are more determinate, contextually restricted, or conceptually adjusted than their overt lexical and syntactic forms alone appear to specify. The difficulty is not simply that context matters, but that competing theories assign context different representational roles: value assignment to encoded parameters, completion of underspecified structure, optional enrichment, lexical modulation, implicature, or selection among conventional senses. This article develops a critical conceptual analysis, supported by a concept-led review of foundational and recent scholarship, to clarify these operations and their evidential consequences. It proposes a Layered Contextual Resolution Framework (LCRF) comprising six analytical layers: encoded semantic content, linguistic under specification, contextual parameter resolution, pragmatic enrichment or modulation, inferential stabilization, and occasion meaning. The framework is applied to English cases involving predicative incompleteness, weather predicates, gradable adjectives, possessives, temporal interpretation, scalar strengthening, loose use, and polysemy. Its contribution is diagnostic rather than merely taxonomic: each layer is associated with distinct evidential questions concerning linguistic mandate, conventionality, contextual value assignment, conceptual adjustment, alternative structure, and processing. The analysis argues that context dependence is heterogeneous and that no single semantics–pragmatics boundary is likely to explain all cases. A constrained layered account preserves a substantive role for semantic structure while allowing pragmatically developed explicit content where independent evidence supports it. The article concludes with testable predictions for experimental, corpus, and cross-linguistic work and identifies conditions under which a phenomenon should be reclassified across layers as evidence changes.

Keywords: semantic underdetermination; contextual enrichment; semantics–pragmatics interface; semantic minimalism; contextualism; truth-conditional pragmatics; lexical pragmatics; occasion meaning; pragmatic inference; English semantics

من عدم التحديد الدلالي إلى الحلّ السياقي: إطار طبقي لواجهة الدلالة–التداولية في اللغة الإنجليزية

الملخص: تُعد العلاقة بين المعنى المشفّر لغويًا والمحتوى المفسّر سياقيًا من القضايا الأساسية في واجهة الدلالة–التداولية. فالمفردات الإنجليزية كثيرًا ما تنقل مضامين أكثر تحديدًا أو تقييدًا بالسياق مما تسمح به بنيتها المعجمية والتركيبية الظاهرة وحدها. ولا تتمثل الإشكالية في مجرد تأثير السياق، بل في اختلاف النظريات بشأن الدور الذي يؤديه في إسناد القيم، واستكمال البنية غير المحددة، والإنشاء التداولي، والتعديل المعجمي، والاستلزام، أو اختيار المعنى.

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تقدم هذه الدراسة تحليلًا مفاهيميًا نقديًا مدعومًا بمراجعة موجهة بالمفاهيم للأدبيات التأسيسية والحديثة، وتقتح إطار الحل السياقي الطبقي، الذي يتكون من ست طبقات: المحتوى الدلالي المشفّر، وعدم التحديد اللغوي، وحلّ المعلمات السياقية، والإثراء أو التعديل التداولي، والتثبيت الاستدلالي، ومعنى المناسبة التواصلية. ويُطبّق الإطار على أمثلة إنجليزية تشمل عدم الاكتمال الإسنادي، ومستندات الطقس، والصفات المتدرجة، والملكية، والتفسير الزمني، والتقوية السُّلَمِيَّة، والاستعمال المرن، وتعدد المعنى.

وتشير الدراسة إلى أن الاعتماد على السياق ظاهرة غير متجانسة، وأن حدًا واحدًا بين الدلالة والتداولية لا يكفي لتفسير جميع الحالات. ويحافظ الإطار على دور أساسي للبنية الدلالية، مع السماح بمحتوى صريح مطوّر تداوليًا عندما تدعمه أدلة مستقلة، كما يقدم تنبؤات قابلة للاختبار في الدراسات التجريبية والمدرّجات اللغوية والدراسات المقارنة بين اللغات.

الكلمات المفتاحية: عدم التحديد الدلالي؛ الإثراء السياقي؛ واجهة الدلالة التداولية؛ الحد الأدنى الدلالي؛ السياقية؛ التداولية المشروطة بالصدق؛ التداولية المعجمية؛ معنى المناسبة التواصلية؛ الاستدلال التداولي؛ دلالة اللغة الإنجليزية.

1. Introduction

The relation between sentence meaning and utterance interpretation has long constituted one of the central problems in semantics and pragmatics. A linguistic expression contributes conventionally encoded information, yet ordinary communication typically requires hearers to integrate that information with assumptions about speakers, discourse history, physical surroundings, shared knowledge, communicative intentions, and the purposes of the ongoing interaction (Carston, 2002; Grice, 1975; Recanati, 2004; Sperber & Wilson, 1995). The theoretical issue is therefore not simply whether context influences interpretation, but how far contextual information penetrates the determination of what is explicitly communicated and how its contribution should be represented within a theory of meaning (Cappelen & Lepore, 2005; Jaszczolt, 2016; Recanati, 2010).

Classical Gricean pragmatics established a foundational distinction between what a speaker says and what a speaker communicates indirectly through conversational implicature (Grice, 1975). On this view, conventional linguistic meaning provides an important basis for interpretation, while pragmatic reasoning explains how hearers recover additional speaker-intended contents that go beyond what is literally said (Grice, 1975; Levinson, 2000). Subsequent approaches, however, have questioned whether the proposition explicitly communicated can itself be recovered without substantial inferential contribution from context. Relevance theory distinguishes linguistically decoded logical forms from pragmatically developed explicatures and maintains that linguistic encoding substantially underdetermines the propositions speakers explicitly communicate (Carston, 2002; Sperber & Wilson, 1995; Wilson & Sperber, 2012). Truth-conditional pragmatics similarly argues that optional pragmatic processes such as modulation and enrichment may contribute directly to intuitive truth-conditional content rather than merely generating post-propositional implicatures (Moeschler, 2022; Recanati, 2004, 2010).

The problem becomes evident in apparently simple English sentences. An utterance such as *John is ready* generally invites the question *ready for what?*, while *Mary has eaten* may be understood relative to a contextually relevant meal, interval, or practical concern. Similarly, *It is raining* is normally evaluated relative to a contextually salient location even though no overt locative constituent appears in the surface sentence. Gradable predicates such as *tall*, *expensive*, or *fast* depend on standards or comparison classes that vary with context, while possessive constructions such as *John's book* leave open whether the relevant relation is ownership, authorship, borrowing, reading, or some other contextually accessible connection (Carston, 2002;

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Hall, 2008; Recanati, 2004, 2010). Such cases motivate the general thesis of semantic underdetermination: the conventional meaning of a sentence often does not, by itself, determine the complete occasion-specific content that competent speakers take an utterance to communicate (Bach, 1994; Carston, 2002; Drożdżowicz, 2022).

The extent of this underdetermination remains disputed. Semantic minimalism seeks to preserve a relatively stable level of semantic content determined primarily by linguistic conventions and a restricted class of context-sensitive expressions, while allowing speech acts to convey multiple richer contents pragmatically (Borg, 2004, 2012; Cappelen & Lepore, 2005). Contextualist approaches challenge this separation by arguing that context sensitivity is substantially more pervasive and that pragmatic processes frequently contribute to what competent speakers intuitively judge to have been said (Recanati, 2004, 2010; Travis, 2008). Moderate positions attempt to retain a principled semantic core while allowing a wider range of contextually mediated contents than strict minimalism permits (Jaszczolt, 2016; Rahman & Xu, 2023).

The debate is further complicated by disagreement about the classification of particular interpretive phenomena. Some cases treated as pragmatic modulation may instead reflect conventional polysemy or lexical disambiguation. Devitt (2021), for example, argues that many apparent cases of pragmatic modification are better understood as selection among semantically encoded lexical senses, while Löhr (2024) cautions that polysemy does not straightforwardly favour radical contextualism over minimalism. These arguments show that a difference between dictionary-like meaning and occasion-specific interpretation does not automatically establish a pragmatic process; a satisfactory theory must distinguish semantic ambiguity, polysemy, indexical resolution, saturation, and genuinely free enrichment (Devitt, 2021; Löhr, 2024).

Contemporary work also shows that underdetermination is not solely a philosophical problem concerning truth conditions. Psycholinguistic evidence indicates that comprehenders often operate with representations that remain relatively shallow, underspecified, or imprecise rather than constructing maximally detailed interpretations at every stage of comprehension (Drożdżowicz, 2022; Noveck, 2018). Experimental research on scalar implicature further demonstrates that pragmatic strengthening varies across expressions and contexts and depends on the activation and exclusion of alternatives rather than following a single uniform inferential route (Bade *et al.*, 2025; Nys *et al.*, 2024). These findings complicate theories that assume successful communication always requires a fully specified proposition to be computed immediately.

Recent formal-pragmatic work has therefore sought to constrain enrichment rather than treating context as an unrestricted source of supplementary meaning. Dobler (2023) proposes an inquisitive account in which occasion meaning emerges through the resolution of contextually relevant issues and the narrowing of alternative interpretations in relation to domain goals. Similarly, research within relevance-theoretic lexical pragmatics has examined the construction of ad hoc concepts while asking how linguistic, contextual, prosodic, and cognitive cues constrain that process (Leclercq, 2023; Padilla Cruz, 2022, 2023; Piskorska & Padilla Cruz, 2023). The continuing question is not whether enrichment occurs, but how a theory can explain its selectivity, limits, and representational status.

The encoded–inferred distinction is therefore central but cannot be represented adequately as a simple binary. Neo-Gricean pragmatics, relevance theory, minimalism, contextualism, and truth-conditional pragmatics assign different roles to linguistic coding, hidden structure, inferential enrichment, lexical adjustment, truth conditions, explicature, and speaker

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meaning (Belligh & Willems, 2021; Carston, 2002; Recanati, 2010). Apparent disagreement may sometimes reflect genuinely competing predictions and sometimes differences in how levels of content are individuated. A framework that distinguishes the major interpretive operations is consequently needed before the substantive theoretical disagreements can be evaluated fairly.

The present paper addresses this problem by shifting the analytical question from whether meaning is *semantic* or *pragmatic* to which interpretive operation occurs at which level between linguistic encoding and occasion-specific understanding. It develops a Layered Contextual Resolution Framework (LCRF) that distinguishes encoded semantic content, linguistic under specification, contextual parameter resolution, pragmatic enrichment, inferential stabilization, and occasion meaning. The framework does not assume that these are temporally discrete psycholinguistic stages. Rather, they are analytical levels intended to identify what information is encoded, what remains unresolved, what context contributes, and how candidate interpretations are constrained by grammar, discourse, common ground, and communicative goals (Carston, 2002; Dobler, 2023; Recanati, 2010).

English provides a productive testing ground because structurally simple constructions exhibit multiple forms of context dependence. Gradable adjectives require contextual standards; possessives invite relational interpretation; weather predicates raise questions about implicit location; quantifiers interact with discourse domains and alternatives; lexical items permit narrowing, broadening, and loose use; and apparently complete clauses may acquire additional temporal, spatial, or event-related specification in context (Bach, 1994; Carston, 2002; Hall, 2008; Noveck, 2018). The goal is not to claim that English is uniquely underdetermined, but to use a controlled set of English constructions to distinguish theoretically different routes from encoded meaning to interpreted content.

Three unresolved problems motivate the present analysis. First, the same surface interpretation can be described as ambiguity, hidden indexicality, saturation, free enrichment, lexical modulation, or implicature depending on the theoretical architecture adopted (Bach, 1994; Hall, 2008; Stanley, 2000). Second, accounts that permit optional enrichment face a constraint problem: they must explain why some contextually plausible additions are routinely recovered while indefinitely many others are not (Cappelen & Lepore, 2005; Dobler, 2023; Recanati, 2010). Third, psycholinguistic evidence raises the possibility that successful comprehension can remain strategically underspecified, making it important to distinguish underdetermination in linguistic representation from incompleteness or shallowness in online processing (Drożdżowicz, 2022; Noveck, 2018).

The contribution of the article is therefore not another global verdict for minimalism or contextualism. It is a diagnostic architecture for locating the specific operation at issue before competing explanations are compared. The LCRF distinguishes value assignment from conceptual adjustment, and both from the later stabilization of an interpretation among contextually available alternatives. This distinction matters because resolving a comparison standard, supplying a salient possessive relation, constructing an ad hoc lexical concept, and deriving a scalar inference need not involve the same representational mechanism or processing profile (Bade *et al.*, 2025; Carston, 2002; Ronai & Xiang, 2024).

The article addresses four connected questions: how far linguistically encoded material determines occasion-specific content; which forms of contextual contribution must be distinguished; how major semantic and pragmatic theories distribute explanatory work across those forms; and whether a layered analysis yields empirical predictions that are sharper than a single semantic–pragmatic divide. The argument proceeds from theoretical foundations to recent

empirical developments, then develops and applies the LCRF before deriving comparative and testable consequences.

2. Theoretical Landscape and the Unresolved Gap

2.1 Encoded meaning, speaker meaning, and the semantics–pragmatics boundary

The modern semantics–pragmatics debate inherits Grice’s distinction between sentence meaning, what is said, and what is conversationally implicated, but later theories have revised both the location and the richness of explicit content (Grice, 1975; Levinson, 2000). Bach (1994) introduced *conversational implicature* to capture material that is not linguistically articulated yet appears to belong to an expanded or completed version of what is said. Relevance theory instead distinguishes a decoded logical form from an inferentially developed *explicature*, thereby treating substantial pragmatic development as part of explicit communication (Carston, 2002; Sperber & Wilson, 1995). These approaches agree that conventional sentence meaning underdetermines total speaker meaning but disagree about which intermediate contents should be recognized.

The code–inference distinction is also theory-relative. Belligh and Willems (2021) show that Neo-Gricean pragmatics and relevance theory differ in the assumed degree of code under specification, the criteria for distinguishing coded from inferred content, and the role of truth conditions. Consequently, describing an interpretation as “pragmatic” is insufficient unless the theory specifies whether the process resolves a linguistically mandated variable, develops an underspecified representation, creates an ad hoc lexical concept, derives an implicature, or selects among conventionally encoded senses (Belligh & Willems, 2021; Devitt, 2021).

2.2 Semantic underdetermination

Semantic underdetermination is broader than lexical or syntactic ambiguity. Ambiguity conventionally provides more than one linguistic representation or sense, whereas underdetermination arises when the available linguistic representation does not itself settle the occasion-specific content (Carston, 2002; Recanati, 2004). The distinction is important because an ambiguous word may be resolved by selecting a conventional sense, while an underdetermined expression may require a contextually supplied parameter or an inferentially constructed meaning not stored as a discrete lexical entry (Devitt, 2021; Löhr, 2024).

Underdetermination also varies in depth. Some cases are familiar and linguistically anticipated, as with indexical whose values depend on context; others concern implicit domains, standards, relations, events, or locations that are not overtly represented (Kaplan, 1989; Stanley, 2000). Still others involve lexical adjustment, loose use, or ad hoc concept construction in which the communicated concept differs from the encoded lexical concept (Carston, 2002; Leclercq, 2023; Liu, 2023). Treating these phenomena as a single undifferentiated class conceals both descriptive and theoretical differences.

2.3 Semantic minimalism and indexicalist constraints

Semantic minimalism attempts to preserve a level of complete, stable semantic content that depends on context only through a limited set of conventionally context-sensitive expressions (Borg, 2004, 2012; Cappelen & Lepore, 2005). Its attraction lies partly in explanatory discipline: compositional semantics should not be made dependent on unrestricted judgments about speaker intentions, conversational relevance, or locally salient purposes. Minimalist approaches therefore separate minimal semantic content from the richer contents speakers may assert, suggest, or otherwise communicate in context (Cappelen & Lepore, 2005).

A related strategy is to explain apparently free contextual contributions by positing syntactically represented variables or hidden indexicals. Stanley (2000) argues that truth-

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conditional effects of extra-linguistic context are traceable to elements in logical form, thereby restricting pragmatic influence on truth conditions to the assignment of values to linguistically represented material. This approach preserves compositionality and constrains contextual intrusion, but it faces challenges from cases in which the hypothesized hidden structure is difficult to motivate independently (Hall, 2008; Recanati, 2010).

Recent work continues to defend more constrained accounts of context sensitivity. Bowker (2024) argues that some apparent context-sensitive truth-value judgments may reflect non-semantic psychological heuristics rather than shifts in semantic content, while Devitt (2024) challenges accounts that relocate demonstrative interpretation wholly into discourse-coherence rules. These studies show that the minimalist impulse remains theoretically active: contextual variation in judgments is not itself decisive evidence for context-sensitive semantics (Bowker, 2024; Devitt, 2024).

2.4 Contextualism and truth-conditional pragmatics

Contextualism rejects the assumption that a narrow inventory of conventional indexicals exhausts the contextual contribution to explicit content. On radical contextualist views, occasion-specific truth conditions may depend on pragmatic modulation across a much wider range of expressions and constructions (Recanati, 2004, 2010; Travis, 2008). Context is not merely a device for assigning values to pre-existing slots; it helps determine how words and predicates apply on particular occasions.

Truth-conditional pragmatics provides a systematic version of this idea by distinguishing linguistically mandated saturation from optional processes such as free enrichment and modulation (Moeschler, 2022; Recanati, 2004, 2010). A sentence may thus receive an intuitively complete truth-conditional interpretation only after pragmatic processes supply a location, relation, event specification, temporal restriction, or adjusted concept. Hall (2008) defends free enrichment against attempts to reduce all truth-conditional contextual effects to hidden indexicals, while also acknowledging the need to explain how enrichment is constrained.

The contextualist program is nevertheless vulnerable to overgeneration if any pragmatically plausible addition is allowed to count as part of what is said. Cappelen and Lepore (2005) object that intuitions about context-shifting contents may reflect speech-act variability rather than semantic instability, while more recent work has continued to investigate whether context-sensitive judgments can be explained without corresponding semantic shifts (Bowker, 2024). The critical issue is therefore not whether context matters, but which contextual effects require a change in represented content and which belong to reasoning about use.

2.5 Relevance theory and lexical pragmatics

Relevance theory treats utterance interpretation as an inferential process guided by expectations of optimal relevance. Linguistic decoding yields an incomplete logical form that is pragmatically developed through disambiguation, reference assignment, enrichment, and lexical adjustment until an interpretation satisfying relevance expectations is reached (Carston, 2002; Sperber & Wilson, 1995; Wilson & Sperber, 2012). Explicit and implicit contents are mutually adjusted rather than computed in strictly serial independence.

Lexical pragmatics extends this account to word meaning. A lexically encoded concept may be pragmatically narrowed, broadened, or otherwise adjusted to yield an occasion-specific ad hoc concept (Carston, 2002, 2010). Recent work has refined this view by examining how linguistic and paralinguistic cues may trigger or constrain lexical adjustment. Padilla Cruz (2022) argues that free enrichment is not always wholly free from linguistic guidance, and Leclercq (2023) questions how systematic ad hoc concept construction can be reconciled with least-effort

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processing assumptions. Piskorska and Padilla Cruz (2023) therefore situate current relevance-theoretic research around the interaction of conceptual representation, contextual information, and inferential accessibility.

The existence of ad hoc concepts remains contested, however. Devitt (2021) argues that regularities attributed to pragmatic modulation may support semantic polysemy instead, and Liu (2023) notes that ad hoc-concept analyses raise methodological challenges for experimental investigation because participants' concepts may already be contextually constructed. These debates reinforce the need for a framework that does not treat lexical modulation as the default explanation whenever a word receives a context-sensitive interpretation.

2.6 Processing evidence and pragmatic variability

Experimental pragmatics has shown that pragmatic enrichment is sensitive to processing conditions, lexical scales, alternatives, and discourse context (Noveck, 2018). Scalar implicatures offer a particularly well-studied example: *some* may be interpreted semantically as compatible with *all* or pragmatically strengthened to *some but not all*, and the availability and cost of the strengthened interpretation vary across tasks and populations (Noveck, 2018; Nys *et al.*, 2024). A recent systematic review concludes that the cognitive effort associated with scalar implicature is heterogeneous across scales rather than captured adequately by a single literal-first or default model (Nys *et al.*, 2024).

Recent experiments further suggest that pragmatic strengthening can depend on both lexical and contextually constructed alternatives. Bade *et al.* (2025) report evidence that alternative activation and alternative exclusion are distinguishable mechanisms and that transfer across contextual and lexical alternatives depends on salience conditions. Such findings support a multi-operation view of enrichment rather than a unitary pragmatic mechanism. They also motivate caution in projecting conclusions from one phenomenon, such as scalar implicature, onto all forms of semantic underdetermination.

Psycholinguistic work on underdetermined comprehension adds a complementary point. Drożdżowicz (2022) argues that language users may routinely operate with imprecise or sketchy representations and only increase precision when communicative circumstances demand it. If so, successful understanding need not correspond to maximal semantic specification. This possibility is important for any theoretical framework that aims to connect the structure of meaning with actual comprehension processes.

2.7 Recent developments and the unresolved theoretical gap

Recent research has expanded rather than closed the minimalism–contextualism debate. Del Pinal (2022) argues that a constrained contextualist architecture may be required to account for patterns arising from the logicity of language, suggesting that context sensitivity can be structurally limited rather than either minimal or unrestricted. Fisher (2021) similarly reassesses the common assumption that the dispute turns simply on whether minimal propositions are truth-evaluable. Rahman and Xu (2023) propose a moderate semantic minimalism intended to preserve an intermediate level of asserted propositional meaning while recognizing richer context-sensitive interpretation. These contributions indicate that current work increasingly seeks graded rather than binary architectures.

At the lexical level, research has challenged both simple semantic and simple pragmatic explanations. Devitt (2021) defends semantic polysemy as an explanation of systematic lexical variation, whereas Löhr (2024) argues that polysemy does not provide an uncomplicated victory for either radical contextualism or minimalism. Leclercq (2023) and Padilla Cruz (2022) instead focus on the mechanics and constraints of ad hoc concept construction within relevance theory.

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The resulting picture is theoretically fragmented: the same interpretation may be attributed to lexical storage, contextual modulation, or dynamic concept construction depending on assumptions about lexical representation.

At the discourse and cognition levels, newer work emphasizes goals, alternatives, and heuristics. Dobler (2023) models pragmatic enrichment through contextually relevant issue resolution and domain goals. Bowker (2024) argues that apparent context sensitivity can sometimes arise from judgment heuristics without semantic context sensitivity, whereas Almotahari (2024) develops a contextualist account of generics grounded in properties of generic cognition. Beevers (2024) argues for broader covert context sensitivity in vague language. These studies collectively show that context sensitivity cannot be treated as a single homogeneous phenomenon; different domains may require different mechanisms and evidential criteria.

Experimental work also makes it increasingly difficult to equate pragmatic enrichment with one processing profile. Nys *et al.* (2024) show substantial heterogeneity in the relation between working memory and scalar implicature, and Bade *et al.* (2025) distinguish mechanisms involved in constructing and excluding alternatives. Drożdżowicz (2022) adds that underdetermination can persist in successful comprehension. The empirical literature therefore favours a theory that allows different contextual operations to vary in cost, obligatoriness, representational depth, and degree of resolution.

Despite these advances, the literature lacks a shared analytical map capable of locating these findings relative to one another. Minimalist, contextualist, relevance-theoretic, lexical-semantic, and experimental approaches often investigate different objects under overlapping labels. The unresolved gap is not merely the absence of another theory choosing one side of the semantics–pragmatics boundary. It is the absence of a framework that first differentiates the major operations between linguistic encoding and occasion-specific interpretation, and only then asks which theoretical tradition best explains each operation. The LCRF is developed to address this gap.

The recent experimental literature also strengthens the need to separate alternative generation from alternative exclusion. Ronai and Xiang (2024) show that discourse context and focus reduce distinct sources of uncertainty in scalar inference, while Bade *et al.* (2025) find partially shared but threshold-sensitive mechanisms for enrichment over contextual and lexical alternatives. These findings are difficult to represent in a framework that treats pragmatic enrichment as a unitary post-semantic operation; they instead motivate a layer at which candidate interpretations are selected and stabilized after the relevant representational alternatives have become available.

Table 1

Comparison of major approaches to context-sensitive interpretation

Approach	Primary semantic commitment	Role of context	Main strength	Main pressure point
Semantic minimalism	Stable minimal content; restricted context sensitivity	Primarily resolves conventional indexicals; richer contents belong to speech acts	Strong constraints and compositional discipline	Whether minimal content captures what speakers intuitively assert
Indexicalism	Context effects are represented in logical form	Assigns values to overt or covert variables	Explains contextual truth-conditional effects compositionally	Independent motivation for hidden variables
Truth-conditional	Truth-conditional	Saturation plus	Fits occasion-	Risk of

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Approach	Primary semantic commitment	Role of context	Main strength	Main pressure point
pragmatics	content may be pragmatically modulated	optional enrichment and modulation	sensitive judgments	unconstrained enrichment
Relevance theory	Decoded form systematically underdetermines explicit content	Inferential development of explicature and ad hoc concepts	Integrated cognitive account of explicit/implicit communication	Specification of representational and processing constraints
Lexical-semantic/polysemy accounts	Many context-varying readings are conventionally encoded	Context selects among stored senses	Explains regularity without excessive pragmatic construction	Risk of multiplying lexical senses

3. Methodology

3.1 Design and conceptual strategy

This article is a critical conceptual analysis supported by a critical, concept-led literature review. Conceptual articles are methodologically strongest when they make explicit how theories are selected, compared, and reconstructed, rather than presenting synthesis as an unstructured narrative (Jaakkola, 2020). The present design primarily combines theory synthesis with model development: it brings competing accounts of the semantics–pragmatics interface into a common analytical space and then reconstructs their points of disagreement as a layered diagnostic framework. Because the aim is conceptual differentiation and theory building rather than exhaustive effect estimation, the review is integrative and critical rather than systematic in the meta-analytic sense (Snyder, 2019).

3.2 Literature orientation and source selection

The review was organized around five domains: (a) semantic minimalism and indexicalism; (b) contextualism and truth-conditional pragmatics; (c) relevance theory and lexical pragmatics; (d) semantic underdetermination, polysemy, and context sensitivity; and (e) experimental work on pragmatic enrichment and underspecified comprehension. Search terms were iteratively combined around semantic underdetermination, contextual enrichment, semantic minimalism, contextualism, truth-conditional pragmatics, free enrichment, lexical pragmatics, ad hoc concepts, polysemy, scalar implicature, context sensitivity, and English interpretation. Searches were updated through September 2026, and backward and forward citation tracing was used to connect recent work with foundational sources.

Sources were retained when they met at least one of four criteria: they introduced or substantially reformulated a core construct; defended or criticized a major theoretical position; supplied empirical evidence bearing directly on enrichment, alternatives, or processing; or provided methodological guidance relevant to conceptual synthesis. Peer-reviewed journal articles and scholarly monographs were prioritized. Foundational works were retained where later debates still depend on their distinctions, including Grice’s account of implicature, Kaplan’s account of indexicality, Bach’s implicature, and major minimalist, contextualist, and relevance-theoretic formulations (Bach, 1994; Grice, 1975; Kaplan, 1989; Sperber & Wilson, 1995). Recent scholarship was emphasized for the current state of the debate (Almotahari, 2024; Bade *et al.*, 2025; Bowker, 2024; Dobler, 2023; Ronai & Xiang, 2024). Works were excluded when the relevant construct appeared only incidentally, the source could not be bibliographically verified, or the argument did not bear directly on the framework’s distinctions.

3.3 Analytical procedure

Analysis proceeded recursively rather than as a one-pass coding exercise. First, the central constructs—encoded content, underdetermination, saturation, free enrichment, modulation, explicature, implicature, polysemy, alternative-based strengthening, and occasion meaning—were defined comparatively across theoretical traditions. Second, each account was examined along six dimensions: the proposed locus of contextual contribution, whether the contribution is linguistically mandated, the representational mechanism invoked, the status of the resulting content, the constraint mechanism, and the type of evidence offered. Third, recurrent English constructions were used as diagnostic cases to test whether the same labels concealed different operations. Fourth, the distinctions were reconstructed into the six-layer LCRF and re-applied to the cases to identify where rival analyses genuinely diverge.

The reconstruction was explicitly stress-tested against four forms of overgeneration: semantic overgeneration through unconstrained hidden structure, pragmatic overgeneration through unrestricted enrichment, lexical overgeneration through excessive sense multiplication, and psycholinguistic overcommitment through assuming that comprehension always produces maximal specification (Devitt, 2021; Drożdżowicz, 2022; Hall, 2008; Stanley, 2000). Disconfirming positions were retained rather than treated as noise; for example, polysemy-based and non-semantic explanations of apparent context sensitivity are used as competing hypotheses, not as peripheral objections (Bowker, 2024; Devitt, 2021; Löhr, 2024).

3.4 Quality, reflexivity, and scope

The review does not claim exhaustive coverage of the semantics–pragmatics literature, and no prevalence estimate is inferred from the selected bibliography. The English examples are theory-diagnostic cases rather than new behavioural data, corpus frequencies, or experimentally validated judgments collected for this study. To reduce confirmation bias, the framework is formulated so that evidence can relocate a phenomenon across layers: a reading initially analyzed as online modulation should move toward encoded content if conventionality, distribution, and processing evidence support lexicalization; conversely, a putatively encoded variable requires independent linguistic motivation rather than being inferred solely from an intuitively enriched interpretation. The LCRF should therefore be read as a falsifiable analytical proposal, not as a validated processing model.

4. The Layered Contextual Resolution Framework

4.1 Rationale

The Layered Contextual Resolution Framework (LCRF) begins from a deliberately moderate assumption: linguistic encoding places substantive constraints on interpretation, but encoded content frequently fails to determine a unique occasion meaning without contextual contribution. This position is compatible with the minimalist demand for representational discipline and the contextualist observation that intuitive communicated content often exceeds what is overtly articulated (Borg, 2012; Carston, 2002; Recanati, 2010). The framework therefore separates operations instead of assigning the entire interpretive burden to either semantics or pragmatics.

The six levels are analytical rather than obligatorily serial. Some processes may interact in parallel during real-time comprehension, as relevance theory explicitly proposes, and some utterances may require little work at particular levels (Sperber & Wilson, 1995; Wilson & Sperber, 2012). The value of the framework lies in asking a stable set of questions: What does linguistic form encode? What remains unspecified? Which parameters are contextually resolved? Is additional conceptual material introduced or adjusted? Why is one interpretation preferred

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over competitors? What occasion-specific content is ultimately treated as relevant for the communicative act?

4.2 Layer 1: Encoded semantic content

The first level consists of information licensed by lexical conventions, morphosyntax, and composition, including conventional context sensitivity where it is grammatically encoded. This level does not require commitment to a rich minimal proposition. It merely recognizes that interpretation begins under linguistic constraints and that not every aspect of occasion meaning is freely inferred (Borg, 2004; Cappelen & Lepore, 2005; Kaplan, 1989). Distinguishing encoded content prevents pragmatic theories from treating linguistic form as an optional cue among otherwise unconstrained contextual possibilities.

The level also accommodates lexical ambiguity and conventional polysemy. If an interpretation is best explained by selection among stored senses, it should not automatically be redescribed as pragmatic modulation (Devitt, 2021; Löhr, 2024). Empirical tests of lexical access and distributional regularity can therefore inform whether a phenomenon belongs primarily at Level 1 or at later levels.

4.3 Layer 2: Linguistic under specification

The second level identifies dimensions left open by the encoded representation. Under specification may involve a missing comparison standard, an unresolved relation, a discourse domain, an implicit event parameter, or another variable whose exact value is not fixed by linguistic form (Bach, 1994; Carston, 2002). This level is diagnostic: it marks a representational gap without yet deciding whether the gap is filled by saturation, hidden syntax, lexical choice, or pragmatic enrichment.

Separating under specification from its resolution is theoretically useful because competing accounts often agree that an interpretation is incomplete while disagreeing about why. A minimalist or indexicalist account may posit a linguistically represented variable; a contextualist may regard the same content as an unarticulated constituent; a relevance theorist may describe its recovery as part of explicature development (Hall, 2008; Stanley, 2000). LCRF records the common problem first and the explanatory mechanism second.

4.4 Layer 3: Contextual parameter resolution

Level 3 covers context-sensitive value assignment where the interpretive task is primarily to resolve a parameter rather than construct a substantially new concept. Paradigmatic cases include reference assignment for indexicals and demonstratives, but the level can also include selection of salient domains, standards, times, locations, or relations when the representational need for such a parameter is independently motivated (Kaplan, 1989; Stanley, 2000). The defining feature is constrained choice among values, not unrestricted content addition.

This level provides a middle category between narrow semantics and free enrichment. It allows the framework to recognize that context may be indispensable without assuming that every contextual contribution is pragmatically creative. It also creates a clearer empirical target: contextual parameter resolution should often be sensitive to salience, accessibility, and discourse structure in ways distinguishable from lexical concept construction.

4.5 Layer 4: Pragmatic enrichment and modulation

Level 4 covers cases in which context supplies or adjusts conceptual material beyond straightforward parameter assignment. This includes free enrichment, loose use, lexical narrowing or broadening, and ad hoc concept construction when these analyses are independently justified (Carston, 2002, 2010; Hall, 2008; Padilla Cruz, 2022). The category is

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intentionally narrower than “all pragmatic inference”; implicatures that do not contribute to occasion-specific explicit content need not be represented here.

The framework imposes three constraints on Level 4. First, enrichment must be locally anchored in the linguistic material or the communicative issue rather than being an arbitrary proposition compatible with the context (Hall, 2008). Second, it must improve the explanatory fit between encoded material and the interpretation speakers actually treat as explicit or truth-conditionally relevant (Recanati, 2010). Third, competing semantic explanations such as conventional polysemy should be considered before positing a new pragmatic concept (Devitt, 2021; Löhr, 2024).

4.6 Layer 5: Inferential stabilization

Level 5 concerns why one candidate interpretation becomes sufficiently preferred for the communicative task. Relevance theory explains this through expectations of optimal relevance and mutual adjustment, while Dobler (2023) emphasizes issue resolution and domain goals. Experimental work on alternatives shows that salience and contextual support affect which pragmatic strengthening becomes available (Bade *et al.*, 2025). LCRF uses *inferential stabilization* as a theory-neutral label for these constraint processes.

Stabilization need not produce maximal precision. In ordinary interaction, an interpretation may be adequate once it supports the relevant inference, action, or discourse continuation even if some details remain unresolved (Drożdżowicz, 2022). This makes LCRF compatible with evidence for good-enough or strategically underspecified comprehension. The level therefore distinguishes communicative sufficiency from complete representational specification.

4.7 Layer 6: Occasion meaning

The final level is the contextually stabilized content relevant to the communicative act on a particular occasion. It corresponds broadly to the level at which interlocutors evaluate what is being asserted, questioned, requested, denied, corrected, or otherwise negotiated. The notion is deliberately neutral among competing labels such as explicature, enriched proposition, primary meaning, or occasion-specific truth-conditional content (Carston, 2002; Jaszczolt, 2016; Recanati, 2010).

Occasion meaning is not assumed to be a single exhaustive representation of everything a speaker intends. An utterance may simultaneously support implicatures, affective attitudes, presuppositions, or non-propositional effects. The framework focuses specifically on the content required to explain how an underdetermined linguistic form becomes sufficiently determinate for the local communicative purpose.

4.8 Diagnostic criteria and boundary conditions

The six layers are differentiated by evidential questions rather than by intuition alone. A candidate Level 1 analysis requires evidence of conventional encoding, stable lexical or constructional distribution, or grammatically licensed composition. Level 2 is justified when linguistic form leaves a dimension open but does not itself determine its value. Level 3 applies when context supplies a value for a dimension that the linguistic representation independently makes relevant, such as a referent, comparison class, relation, domain, or location. Level 4 requires stronger evidence that interpretation introduces or adjusts conceptual material beyond straightforward value assignment. Level 5 concerns the competition and selection among available interpretations, including relevance-based, goal-based, or alternative-based mechanisms. Level 6 records the content treated as sufficient for the local communicative act; it does not imply that every latent parameter has been fully resolved.

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These criteria make reclassification possible. If processing and distributional evidence show that an apparently modulated interpretation is rapidly and stably accessed across contexts, a lexical-semantic analysis at Level 1 becomes more plausible. If a proposed covert variable lacks syntactic, semantic, or cross-constructional support, a Level 3 indexicalist analysis loses motivation. If an enriched interpretation varies with discourse goals or alternative structure while the encoded contribution remains constant, later-layer analysis gains support. The framework is therefore deliberately non-monotonic: theoretical location should change when the evidence changes.

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Table 2

The Layered Contextual Resolution Framework (LCRF)

Level	Core question	Typical operation	Illustrative English case
1. Encoded semantic content	What does linguistic form conventionally contribute?	Lexical meaning, morphosyntax, compositional structure	some, ready, tall, possessive construction
2. Linguistic under specification	What remains unresolved by encoded form?	Open standard, relation, domain, event, location, interval	ready for what? John’s book in what relation?
3. Contextual parameter resolution	Which contextually accessible value fills the relevant dimension?	Reference assignment, standard/domain/relation selection	tall for a house; raining at the stadium
4. Pragmatic enrichment/modulation	Is new or adjusted conceptual material required?	Free enrichment, narrowing, broadening, loose use	empty meaning empty-for-current-purpose
5. Inferential stabilization	Why is one candidate interpretation preferred?	Relevance, domain goals, salience, alternative management	some interpreted as some-but-not-all in a contrastive context
6. Occasion meaning	What content is sufficient for the communicative act?	Contextually stabilized explicit interpretation	the locally understood proposition used for assertion or response

5. Applying the Framework to English Constructions

5.1 Predicative incompleteness: *John is ready*

The sentence *John is ready* provides a standard example of apparent incompleteness. Its lexical and syntactic structure contributes a predication of readiness, yet ordinary uses normally involve readiness for some action, event, or situation. A contextualist analysis treats the relevant complement as part of enriched occasion meaning, whereas a more syntactically oriented account may posit an implicit variable associated with the adjective (Carston, 2002; Recanati, 2004; Stanley, 2000). LCRF represents the encoded predicate at Level 1, marks the relevant activity or goal as underspecified at Level 2, resolves a salient value at Level 3 when the adjective is analyzed as containing a contextual parameter, or treats the contribution as Level 4 enrichment when no such linguistic variable is independently motivated. Level 5 then explains why, in a departure lounge, *ready* may stabilize as *ready to board* rather than *ready to eat dinner*.

This analysis avoids deciding the hidden-indexical debate by terminology alone. The theoretical question becomes empirical and representational: is there evidence that English *ready* conventionally introduces a parameter requiring saturation, or is the relevant content constructed pragmatically in response to the discourse issue? The framework thereby localizes the disagreement instead of treating both analyses as indistinguishable instances of “context dependence” (Hall, 2008; Stanley, 2000).

5.2 Weather predicates: *It is raining*

Weather predicates have been central to debates about unarticulated constituents because an utterance of *It is raining* is normally assessed relative to a location even though no overt locative phrase is required. Stanley-style approaches seek a linguistically represented location variable, whereas contextualists have used such cases to motivate optional pragmatic contribution to truth conditions (Recanati, 2010; Stanley, 2000). LCRF classifies the location requirement as Level 2 under specification and leaves its grammatical status open to theoretical evidence.

The framework also explains why the relevant location need not be the speaker’s physical location. During a telephone call about a football match, *It is raining* may concern the stadium;

during travel planning, it may concern tomorrow’s destination. This variation supports the importance of discourse goals and salient issues in Level 5 stabilization rather than a simple rule mapping weather predicates to speaker location (Dobler, 2023; Recanati, 2010).

5.3 Gradable adjectives: *The building is tall*

Gradable adjectives require standards that are sensitive to comparison class and conversational purpose. A building can be tall relative to houses in a historic district but not tall relative to modern skyscrapers. This is a comparatively constrained form of contextual dependence because the lexical semantics of the adjective already makes scalar comparison relevant, even though the threshold is not fixed across occasions (Borg, 2012; Recanati, 2010). LCRF therefore places the gradable scale at Level 1 and the relevant standard or comparison class at Levels 2–3.

This case illustrates why not all contextual interpretation should be classified as free enrichment. The context does not introduce an arbitrary proposition; it selects or calibrates a dimension anticipated by the adjective’s lexical semantics. The distinction supports a graduated architecture in which semantic structure can mandate a type of contextual resolution without fixing its value.

5.4 Possessives: *John’s book*

English possessives encode a relation between possessor and possessed expression but frequently leave the nature of that relation underdetermined. *John’s book* may refer to a book John owns, wrote, borrowed, selected, reviewed, or is currently holding, depending on context. The construction therefore provides a clear example of relational under specification (Carston, 2002; Jaszczolt, 2016). At Level 1, the possessive construction introduces a relational dependency; at Level 2, the relation remains open; Level 3 selects a salient relation when discourse and lexical knowledge make one accessible.

The possessive also demonstrates the role of background knowledge in stabilization. In a conversation among publishers, authorship may dominate; in a library, borrowing may dominate; in a household inventory, ownership may dominate. LCRF treats these differences as contextually constrained parameter resolution rather than automatically as lexical ambiguity. This reduces unnecessary sense multiplication while retaining a strong role for conventional constructional meaning.

5.5 Temporal enrichment: *Mary has eaten*

An utterance of *Mary has eaten* can answer different practical questions: whether she needs dinner, whether medication may be taken, whether a meal event has occurred within a relevant interval, or whether a socially expected activity is complete. The perfect construction encodes temporal relations, but the pragmatically relevant interval and event framing may remain underdetermined (Carston, 2002; Jaszczolt, 2016). LCRF separates the grammatically encoded temporal structure at Level 1 from the contextually relevant interval and practical construal at Levels 2–5.

This example also illustrates why occasion meaning may be more useful than a single notion of literal truth conditions. Two utterances with the same sentence type can guide different inferences without requiring the encoded semantics itself to change arbitrarily. Context stabilizes the temporal and practical interpretation needed for the discourse goal, while the grammatical contribution of tense and aspect continues to constrain the available readings.

5.6 Quantification and scalar strengthening: *Some students passed*

The quantifier *some* is semantically compatible with *all* in standard logical analyses, yet it often gives rise to the scalar inference *some but not all*. This phenomenon has become a major

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test case in experimental pragmatics because the strengthened interpretation varies with context, lexical alternatives, cognitive resources, and task design (Levinson, 2000; Noveck, 2018; Nys *et al.*, 2024). LCRF places the existential contribution of *some* at Level 1 and treats scalar strengthening as a later inferential operation whose status depends on the theory.

The framework is especially useful here because scalar implicature need not be assimilated to the same process as locative enrichment or lexical narrowing. Bade *et al.* (2025) provide evidence that alternative activation and exclusion are distinct mechanisms and that contextual and lexical alternatives may share some, but not all, computational properties. Scalar enrichment therefore illustrates how Level 5 inferential stabilization can generate a strengthened interpretation without implying that every such inference becomes part of Level 4 explicit enrichment.

5.7 Loose use and lexical modulation: *The bottle is empty*

Ordinary speakers may describe a bottle as *empty* even when it contains negligible residue that is irrelevant for the current purpose. Relevance-theoretic accounts explain such cases through lexical broadening or the construction of an ad hoc concept adjusted to the occasion (Carston, 2002, 2010). The communicated concept is not necessarily identical to a maximally strict encoded concept but is constrained by the communicative purpose and accessible contextual assumptions.

LCRF locates the lexical contribution at Level 1, identifies the mismatch between strict application and communicative use at Level 2, and places the context-sensitive adjustment at Level 4 when a modulation analysis is warranted. Level 5 then explains why a cooking context, a laboratory context, and a hazardous-materials context may stabilize different thresholds for *empty*. The framework simultaneously permits an alternative semantic account if evidence supports conventionalized polysemy rather than online modulation (Devitt, 2021).

5.8 Polysemy versus modulation: *The newspaper fired its editor*

Metonymic and polysemous uses show the importance of not treating every contextual shift as pragmatic enrichment. Expressions such as *the newspaper* may denote a physical object, an institution, or its organizational agents depending on context. A sense-enumeration account can treat some of these readings as lexicalized, whereas a pragmatic account may derive them through contextual modulation or conceptual transfer (Devitt, 2021; Löhr, 2024). LCRF therefore requires an explicit decision about whether the relevant interpretation is already licensed at Level 1 or is constructed at Level 4.

This diagnostic discipline is one of the framework's main advantages. Theoretical parsimony does not always favour fewer lexical senses, nor does it always favour more pragmatic inference. The appropriate analysis depends on conventionality, productivity, distribution, processing, and speaker judgments. LCRF provides a location for the dispute without prejudging its outcome.

Recent scalar-diversity experiments further support this separation. Ronai and Xiang (2024) found that making the Question Under Discussion explicit reduces uncertainty about which stronger alternative is relevant, while focus manipulations affect the exclusion step; the combination reduces variability most strongly. This pattern fits an LCRF analysis in which the lexical semantics of the scalar item, the activation of alternatives, and the stabilization of the strengthened interpretation are distinguishable explanatory targets rather than one undifferentiated enrichment process.

6. Comparing Competing Accounts Through the LCRF

Semantic minimalism maps most strongly onto Level 1 and seeks to restrict truth-conditional contextual dependence to Level 3 processes licensed by a limited set of context-sensitive expressions. Richer occasion-specific effects are assigned to speech-act content or pragmatic communication outside minimal semantics (Borg, 2004, 2012; Cappelen & Lepore, 2005). From the LCRF perspective, the strength of minimalism is its resistance to explanatory overgeneration; its pressure point is whether all empirically compelling cases of explicit contextual dependence can be relegated to later speech-act interpretation without weakening the explanatory relevance of minimal content.

Indexicalist approaches extend the reach of Level 3 by positing hidden variables in logical form. This strategy explains context dependence while preserving compositionality, but its success depends on independent evidence for the relevant structure (Stanley, 2000). Hall's (2008) critique is important here because if hidden variables are introduced solely to mirror intuitively enriched interpretations, the theory risks replacing pragmatic overgeneration with syntactic overgeneration. LCRF treats the existence of Level 2 under specification as neutral between these analyses until linguistic evidence supports one.

Truth-conditional pragmatics gives a larger role to Level 4, allowing optional enrichment and modulation to contribute to intuitive truth conditions (Moeschler, 2022; Recanati, 2004, 2010). Its strength is descriptive fit with occasion-sensitive judgments. Its principal burden is constraint: the theory must explain why certain additions count as part of explicit content while others remain implicatures or background assumptions. LCRF responds by requiring local anchoring, discourse relevance, and competition with alternative semantic explanations.

Relevance theory spans Levels 2–5 most explicitly. Decoded logical form is underdetermined; contextual assumptions support disambiguation, saturation, enrichment, and lexical adjustment; candidate interpretations are mutually adjusted until relevance expectations are satisfied (Carston, 2002; Sperber & Wilson, 1995; Wilson & Sperber, 2012). LCRF adopts the insight that explicit content can be inferentially developed but remains neutral about whether relevance is the sole or best general mechanism of stabilization. Dobler's (2023) domain-goal account and recent alternative-based experimental findings indicate that other formal descriptions of constraint may complement or compete with relevance-theoretic explanation.

Lexical-semantic accounts such as Devitt's (2021) warn against assigning too much to Level 4. If regular context-sensitive readings are stored or semantically conventionalized, interpretation may involve Level 1 sense selection rather than pragmatic concept construction. This challenge is valuable because a layered framework should not become a contextualist taxonomy by default. Instead, it should force explicit evidence about where a representation belongs.

The resulting comparison suggests that the traditional question "Is the meaning semantic or pragmatic?" is too coarse. The more productive questions are whether a representational slot is linguistically mandated, whether a context supplies a value or new conceptual material, whether the interpretation is conventionally stored or constructed online, and which constraints make one candidate communicatively sufficient. These questions expose the precise locations at which competing theories differ.

The LCRF is thus not neutral in the sense of treating every analysis as equally adequate. It rejects two shortcuts: inferring covert linguistic structure solely from an enriched judgment, and inferring free pragmatic enrichment solely from the fact that context changes an interpretation. Both moves require independent evidence. The framework instead privileges

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explanations that minimize representational commitments while preserving empirically motivated distinctions among conventional encoding, parameter resolution, conceptual adjustment, and inferential competition. In this respect, its theoretical commitment is constrained pluralism rather than boundary relativism.

7. Theoretical Implications and Testable Propositions

The first implication is that semantic underdetermination should be treated as a family of problems rather than a single phenomenon. Indexical resolution, relational under specification, comparison-class selection, lexical modulation, and scalar strengthening differ in linguistic mandate, inferential structure, and processing profile (Bade *et al.*, 2025; Hall, 2008; Nys *et al.*, 2024). A theory that explains one successfully should not be assumed to explain the others without further evidence.

Second, the framework separates *need for context* from *degree of pragmatic creativity*. A context-sensitive interpretation may be highly constrained because the grammar specifies the type of parameter to be resolved, or it may require more open-ended conceptual adjustment. This distinction preserves a substantial role for semantic structure while recognizing that linguistic encoding can be systematically incomplete (Carston, 2002; Kaplan, 1989; Stanley, 2000).

Third, communicative success need not require maximal interpretive resolution. If comprehension can remain functionally underspecified, Level 5 stabilization may terminate once the interpretation is sufficient for the discourse purpose rather than once every conceivable parameter is fixed (Drożdżowicz, 2022). This predicts that tasks demanding explicit truth-value judgment or paraphrase may yield richer specification than ordinary interaction, a methodological point relevant to experimental semantics and pragmatics.

Fourth, the framework predicts that Level 3 and Level 4 phenomena should differ in cue dependence. Parameter resolution should be strongly guided by structurally anticipated dimensions and discourse salience, whereas lexical modulation should show greater sensitivity to conceptual knowledge, communicative purpose, and graded contextual fit. The distinction can be tested through time-sensitive processing measures, priming, contextual manipulation, and paraphrase judgments (Noveck, 2018; Padilla Cruz, 2022).

Fifth, the framework predicts that inferential stabilization will vary with the structure of alternatives. When a salient lexical scale exists, as with *some/all*, strengthening may depend on alternative activation and exclusion; where no conventional scale exists, contextual goals may dominate the selection of an occasion meaning (Bade *et al.*, 2025; Dobler, 2023). This predicts measurable differences between scalar inference and open-ended enrichment even when both are labelled pragmatic.

Sixth, the framework predicts that some apparent cases of pragmatic modulation will become lexicalized or conventionalized over time. If a reading becomes distributionally stable, rapidly accessed, and relatively insensitive to context, evidence may favour relocation from Level 4 toward Level 1. This proposition connects synchronic semantic–pragmatic analysis with diachronic processes of conventionalization and provides a principled way to understand why the semantics–pragmatics boundary may shift historically.

Seventh, the framework predicts an evidential asymmetry in reclassification. A shift from Layer 4 to Layer 1 should be supported by convergence across conventionality, distribution, and processing evidence, whereas a shift from Layer 1 or Layer 3 toward free enrichment requires evidence that the interpretation remains productive and strongly dependent on local discourse conditions. This proposition makes the framework vulnerable to data rather than allowing theoretical labels to be preserved regardless of empirical outcome.

8. Limitations and Directions for Future Research

The framework is intentionally theory-comparative and therefore does not provide a complete formal semantics for each construction. Formal implementation would require explicit representational commitments about logical form, type structure, alternatives, and contextual parameters that differ across theoretical traditions. Future work should formalize selected LCRF transitions rather than treating the present descriptive architecture as a substitute for formal theory (Dobler, 2023; Stanley, 2000).

The framework also requires psycholinguistic validation. Experimental studies should test whether the proposed distinctions correspond to differences in processing cost, timing, error patterns, or sensitivity to contextual cues. Scalar implicature research demonstrates the value of such tests but also warns that one pragmatic phenomenon may not generalize to another (Bade *et al.*, 2025; Noveck, 2018; Nys *et al.*, 2024). Comparative experiments involving possessive relations, weather locations, gradable standards, and lexical modulation would be particularly informative.

Corpus evidence is another priority. Large corpora can identify the contexts in which candidate enrichments become conventional, frequent, or genre-specific and can help distinguish stable polysemy from online pragmatic adjustment. Such work would directly address the dispute between lexical-semantic and lexical-pragmatic accounts (Devitt, 2021; Löhr, 2024).

Finally, cross-linguistic research is needed. The framework has been illustrated with English, but languages differ in how overtly they encode relations, evidentiality, argument structure, reference, and discourse information. A contextual contribution that appears pragmatically free in English may be grammatically marked elsewhere. Cross-linguistic comparison would therefore test whether the six analytical levels are general while allowing the division of labour among them to vary by language.

A further limitation concerns the evidential status of constructed examples. Classic minimalism–contextualism debates often rely heavily on expert intuitions about truth, saying, or felicity. Such judgments are theoretically informative but can be influenced by task framing and metalinguistic reflection, as non-semantic and experimental accounts of apparent context sensitivity emphasize (Bowker, 2024; Noveck, 2018). Future tests of LCRF assignments should therefore triangulate controlled judgments with online processing and naturally occurring usage rather than relying on a single evidential source.

9. Conclusion

The semantics–pragmatics interface cannot be captured adequately by a binary opposition between literal sentence meaning and unrestricted contextual interpretation. Decades of research have shown that linguistic form constrains interpretation while frequently underdetermining the occasion-specific content required for communication (Bach, 1994; Carston, 2002; Recanati, 2010). At the same time, recent work cautions against treating every context-sensitive interpretation as evidence for semantic instability or pragmatic modulation; polysemy, hidden structure, processing heuristics, and incomplete comprehension provide genuine alternatives in particular cases (Bowker, 2024; Devitt, 2021; Drożdżowicz, 2022).

The Layered Contextual Resolution Framework responds by distinguishing six analytical levels: encoded semantic content, linguistic under specification, contextual parameter resolution, pragmatic enrichment, inferential stabilization, and occasion meaning. The framework does not claim that comprehension unfolds as six discrete temporal stages. Its purpose is diagnostic: to specify what kind of representational problem an utterance presents and what kind of contextual operation is proposed to solve it.

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Applied to English gradable adjectives, possessives, weather predicates, temporal interpretations, quantifiers, and loose lexical uses, the framework shows that context dependence is heterogeneous. Some interpretations involve value assignment to linguistically anticipated dimensions; others involve richer conceptual adjustment; still others may be better explained by conventional polysemy or by inferences that remain outside explicit content. Treating these as separate analytical possibilities allows theoretical disagreement to become more precise.

The broader conclusion is therefore one of constrained pluralism. Semantics retains an indispensable role in delimiting interpretive possibilities, but pragmatic inference is often required to transform linguistically encoded material into communicatively sufficient occasion meaning. The most productive future research will not ask whether semantics or pragmatics “wins” the boundary dispute. It will determine which linguistic and cognitive mechanisms operate in particular constructions, what evidence distinguishes them, and how context guides interpretation without making meaning theoretically unconstrained (Bade *et al.*, 2025; Dobler, 2023; Nys *et al.*, 2024).

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