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HEDGING AND AUTHORIAL STANCE IN ENGLISH-LANGUAGE RESEARCH ABSTRACTS: A PRAGMATIC FRAMEWORK

Abstract. The research abstract is a compressed scholarly genre in which authors must communicate findings without overstating their certainty. This paper develops a pragmatic framework for analysing hedging and authorial stance in English-language research abstracts. Drawing on genre analysis, metadiscourse theory and research on epistemic mitigation, it distinguishes the grammatical realization of a hedge from the rhetorical work it performs. The proposed model connects modal verbs, evidential expressions, approximators and attribution structures with the abstract moves in which they occur. Constructed examples illustrate how the same form may signal justified caution, a limitation of evidence or an attempt to manage a disciplinary audience. The contribution is a replicable coding procedure and a set of writing principles, not a claim to new corpus-based frequency results. The approach supports comparative philological analysis and the teaching of responsible academic writing.

Keywords: academic discourse; hedging; research abstracts; authorial stance; metadiscourse; pragmatics.

Introduction

The abstract is often the first and sometimes the only part of a scholarly article read by an international audience. It has to identify a problem, position a contribution and describe evidence within a restricted space. Such compression creates a pragmatic tension: decisive language may communicate relevance, whereas excessive confidence can attribute more authority to the evidence than it deserves. Hedging is therefore not ornamental vagueness. It is a means of negotiating the scope of a proposition and the relationship between writer, knowledge and reader. Swales and Feak (2009) demonstrate why the research abstract demands a distinct set of rhetorical choices; Hyland (1998) explains why qualified claims are fundamental to the social acceptance of scientific arguments.

This paper addresses a philological question: how can the relationship between linguistic form, rhetorical position and epistemic responsibility be described without reducing hedges to a list of words? Its aim is to offer an interpretive model applicable to English-language abstracts across disciplinary contexts. The contribution is a literature-grounded analytical proposal with explicitly constructed illustrations. No original corpus was collected, and the examples below should not be mistaken for quotations from published abstracts or for measured trends in any discipline. This distinction matters because a framework is useful only if readers can separate its conceptual assumptions from evidence that remains to be gathered.

Theoretical background: genre, stance and interaction

Genre analysis treats academic texts as responses to recurrent communicative purposes rather than as collections of isolated sentences. In an abstract, readers may expect a problem or gap, a purpose, an indication of method, an outcome and an implication, although the order and explicitness of these moves vary (Swales & Feak, 2009). A hedged claim must thus be interpreted relative to its location: a possibility in the introduction is not necessarily equivalent to a limitation attached to the concluding claim. An apparently small modal choice contributes to the kind of knowledge claim a particular move is licensed to make.

Hyland's (2005) distinction between stance and engagement offers a second lens. Stance encompasses the writer's presentation of attitudes, commitments and evaluations, whereas engagement concerns the way the text positions readers. Hedging belongs primarily to stance but can serve an engagement function when it opens an interpretive space for a disciplinary audience. A statement such as 'the pattern may indicate a change' performs more than a truth-conditional operation. It marks inference as conditional on available evidence and implicitly invites readers to evaluate the connection. The alternative 'the pattern proves a change' closes that space and is harder to defend when causal evidence is limited.

Salager-Meyer (1994) establishes the importance of rhetorical section for the distribution and functions of hedges in medical writing. Her findings should not be transferred mechanically to every academic field or to abstracts, which are separate genre realizations. They do, however, justify the hypothesis that form-function relationships are sensitive to communicative location. A cross-disciplinary analysis consequently needs two annotations: one for what the expression looks like and another for what it does. Without that separation, a count of modal verbs would obscure substantial pragmatic differences.

Forms and functions of epistemic mitigation

A useful first layer distinguishes lexical verbs of inference ('suggest', 'appear', 'seem'), modal auxiliaries ('may', 'might', 'could'), adverbs ('possibly', 'apparently'), approximators ('approximately', 'around') and grammatical attribution ('according to the interviews'). These are working categories, not fixed indicators of uncertainty. The auxiliary 'may', for example, can denote permission rather than epistemic possibility; 'around' can describe spatial arrangement rather than numerical approximation. The scope of the expression must therefore be established before it receives a hedge label. Local syntax and disciplinary semantics cannot be ignored.

The second layer assigns a pragmatic function. An evidence-limiting hedge restricts the warrant of a proposition; a generalization-limiting hedge confines a claim to a population or context; an inferential hedge distinguishes interpretation from direct observation; and a dialogic hedge anticipates reasonable disagreement. These functions can overlap. In the constructed sentence 'The interviews suggest that the change may be particularly relevant in small departments', 'suggest' indexes evidential mediation, 'may' qualifies the inference and 'particularly' limits breadth. Counting this as simply three hedges would not explain how the sentence directs an academic reader toward a restrained interpretation.

One further distinction separates calibrated caution from evasive wording. An abstract that says 'some outcomes could potentially be relevant' without specifying which outcomes and to whom is under-informative; it shelters an insufficiently developed proposition. By contrast, 'The intervention was associated with improved participation in this cohort' identifies an observed relation while withholding a causal claim. Responsible hedging must co-occur with adequate informational specificity. Precision is not the opposite of caution; it is the condition under which caution becomes meaningful. This principle follows from the interactional account of academic knowledge rather than from a preference for a particular grammar form (Hyland, 1998, 2005).

An integrated method for analysing abstracts

The proposed procedure has five operations. First, establish the abstract's communicative moves using sentence-level function rather than a rigid template. A sentence may, for example, present both a method and a result. Second, mark a minimal proposition: the content that would remain if a suspected hedge were removed. Third, identify the formal device and its syntactic scope. Fourth, assign one or more pragmatic functions, recording a short justification. Fifth, judge whether the resulting claim is proportionate to the reported evidence. The last step prevents linguistic annotation from becoming disconnected from the abstract's research logic.

Consider three invented contrasts. 'The survey proves that feedback raises motivation' asserts certainty and causality. 'The survey suggests that feedback is associated with higher self-reported motivation' differentiates measurement, association and interpretation. 'Feedback might have a positive effect' is cautious yet withholds information about measurement and setting. The analytical goal is not to reward whichever sentence has the most markers of possibility. It is to make explicit how evidential basis, causal force and pragmatic accessibility interact. Such examples are used only to demonstrate the classification procedure and do not report a survey performed for this paper.

A small comparative study based on the framework could choose abstracts from two journals per discipline, define a transparent time span and balance text types. The researcher would document inclusion rules, eliminate duplicates and report both the number of abstracts and the number of tokens. Two annotators could independently code a subset and discuss disagreements about scope and function. After a codebook revision, the remaining data could be annotated with a record of ambiguous cases. Normalized rates would be accompanied by contextual quotations and move-specific interpretations; raw counts alone would be a weak basis for explaining pragmatic behaviour.

Interpretation across disciplinary communities

The interpretive risk in cross-disciplinary comparisons is to treat more hedges as inherently better writing. Different fields construct evidence in different ways. A controlled experiment, a qualitative interview study and a close reading of a literary passage do not offer interchangeable standards of inference. Equally, a description of directly observed sample properties may justifiably contain fewer qualifications than a sentence proposing a mechanism. The coding model therefore relates hedging to the strength and type of evidence claimed, not merely to an arbitrary preferred frequency. Disciplinary norms may be investigated, but they cannot be assumed in advance.

An equally important risk arises from the conflation of caution and authorial weakness. An abstract with carefully delimited propositions can project considerable scholarly authority precisely because its writer appears to understand the limits of the design. Conversely, inflated certainty may undermine credibility when the methods support only association or a locally situated interpretation. Hyland (2005) characterizes academic writing as an interaction with readers; from that perspective, a well-placed hedge is an act of accountable communication rather than an admission that the writer lacks confidence. Reader expectations must also be considered: the same statement may seem cautious in one field and overconfident in another.

For teaching and editorial review, the framework can be turned into a practical audit. Writers should underline the main claims in each abstract move, identify which

claims are empirical observations and which are interpretations, and check whether causal verbs are warranted. They should then evaluate whether a hedge clarifies the strength of evidence or merely dilutes a vague statement. Finally, they can replace double or triple mitigation with one precise qualification where appropriate. This process encourages deliberate attention to research design, communicative purpose and lexical meaning at the same time.

Move-sensitive contrasts and difficult cases

A more demanding test of the framework involves cases where the same linguistic construction works differently across abstract moves. In a purpose statement, 'This study seeks to explore' normally signals the research objective rather than uncertainty about an observed outcome. In a results statement, however, 'The results appear to indicate' may restrict the interpretation of collected evidence. If both instances are tagged merely because they contain a tentative-looking verb, the procedure would produce a misleading profile of the writer's commitment. The annotator should therefore first specify the proposition being evaluated and then ask whether the expression weakens its asserted truth, limits its reference, or performs a different discourse action. Purpose verbs, conventional politeness and genuine epistemic attenuation require distinct labels.

Negation adds another layer of difficulty. 'The data do not establish a causal relation' expresses a firm negative claim about evidential insufficiency; it need not count as a hedge simply because its overall message is cautious. Similarly, 'No consistent improvement was observed' can be stated without qualification if the research design supports that observation. Hedges can coexist with strong statements, and a cautious interpretation can be communicated without canonical hedging forms. The relevant unit of analysis is not just the lexical trigger but the relation among proposition, evidence and asserted degree of commitment. Annotators should document such negative cases to demonstrate that their method is not designed to find hedges everywhere.

Attribution can also change the locus of responsibility. 'Previous research suggests that...' assigns a conclusion to a cited source; 'We suggest that...' assigns it to the present authorial voice. Both can express mitigation, but they do not offer identical evidence or accountability. An abstract that relies on attribution may be summarizing disciplinary debate rather than presenting new findings. It follows that a coding scheme should identify the proposition's holder and the origin of supporting evidence. This procedure makes it possible to separate the responsible reporting of others' claims from a hedged conclusion about one's own results, an important distinction in abstracts that combine background and contribution within a few sentences.

Reliability, revision and research transfer

A serious application would maintain an annotation manual with one positive example, one negative example and a typical ambiguity for each category. Annotators should record whether they classified a device primarily from its grammar, its rhetorical move or the wider context. Disagreement should not be discarded as mere noise: repeated confusion between evidential and inferential readings may reveal that categories need to be combined, defined more carefully or treated as nonexclusive. Transparent documentation of these decisions is more informative than presenting an

unqualified list of hedge frequencies. A compact adjudication log can preserve both the final judgment and the reason for it.

The resulting annotations can support targeted writing revision. A reviewer might identify an abstract in which the opening promises to 'prove' a general mechanism while the method concerns interviews in one institution. The solution is not automatically to replace 'prove' with 'might'. A stronger revision could specify that the paper 'examines perceived mechanisms in one institutional context', thereby aligning purpose, method and warranted claim. Another abstract may qualify every statement, including routine descriptions of sample composition. Here the revision might remove unnecessary modal language and reserve epistemic caution for interpretations. These cases illustrate the broader claim that rhetoric should follow research logic rather than compensate for unclear design.

Cross-language teaching brings an additional benefit and challenge. Writers working in English as an additional language may map conventional degrees of confidence from a familiar academic tradition onto English expressions that organize writer-reader relations differently. A teaching activity can present paired versions of a claim and ask students to identify exactly which inference each licenses. It is important not to teach any one national or disciplinary style as inherently superior. The more transferable skill is to recognize the evidential reach of a proposition, the audiences likely to evaluate it and the linguistic resources available to communicate that reach responsibly.

Limitations and implications

The present contribution is theoretical and pedagogical. Its categories have not been subjected here to inter-annotator testing, corpus-based validation or reader-response experiments. A future empirical study should test whether coders reliably distinguish inferential hedging from the limitation of generalization, and whether discipline-specific training improves agreement. Comparison of original and revised abstracts could investigate the interaction between grammatical choices and reader evaluations, provided those judgements are measured rather than assumed. The framework can also be adapted for multilingual comparisons, but direct equivalence between English modals and forms in other languages would require separate validation.

The broader implication is methodological. Philological research on academic discourse should keep lexical form, rhetorical function and epistemic adequacy analytically separate while observing their interaction in actual texts. An annotation spreadsheet is not an interpretation, and a sophisticated interpretation is not a substitute for reproducible coding. Bringing the two together would allow future studies to describe not simply how often authors hedge but how they make defensible knowledge claims within a constrained genre.

Conclusions

Hedging in English-language research abstracts is best understood as context-sensitive management of propositional commitment. A workable account combines move analysis, form-and-scope annotation, pragmatic function and evaluation of evidence strength. This paper offers that framework and demonstrates its operation through constructed contrasts without claiming new empirical findings. The practical principle is that academic writers should be as specific as the data allow and as cautious as inference requires. Such calibrated stance creates an abstract that is both informative to readers and responsible toward the knowledge it presents.

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