Metadiscourse choices in EAP: an intra-journal study of JEAP

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Abstract
Interest in language variation is a staple of English for Academic Purposes research and underpins its distinctive character as a field of inquiry. It is the specific nature of language use which defines EAP, yet this definition has been established almost entirely on the basis of inter-discoursal studies, with comparisons of register, genre, discipline, first language, etc. dominating our understanding. In this paper we take a different approach and focus on variation within the field, and specifically within its flagship journal, JEAP. Categorising every paper between volume 1 and 52 as principally taking a textual, critical, contextual or pedagogical orientation, we explore writers’ preferences for metadiscourse use. The differences which emerge can be attributed to the argumentation preferences of sub-fields and their knowledge-making practices. The findings offer evidence of intra-disciplinary variation in discoursal preferences and hopefully contribute to our understanding of both the journal and our field.

Keywords: metadiscourse, academic writing, intra-disciplinary variation, intra-journal variation.
1. Introduction

Central to the characterisation of English for Academic Purposes as a field of inquiry and practice is the importance of inter-discoursal studies (Author 1, 2018; Author 1 & Other, 2016). Comparisons of register, mode, genre, discipline, first language, proficiency groups, etc. have played a key role in the emergence of the field’s descriptions of language use and disciplinary practices. Less studied, however, are the discoursal differences within disciplines. Only rarely do we find studies of the ways that individuals of different theoretical, professional or methodological hues vary the tacit knowledge of disciplinary expectations in communicating with peers. EAP itself has also escaped this kind of scrutiny. Yet the considerable range of interests and approaches in EAP, as showcased in compendia such as Charles and Pecorari (2015) and Author 1 and Other (2016), may conceal considerable rhetorical variations.

Such diversity, then, has rarely been the subject of empirical research. In fact, Ding and Evans have recently suggested that the focus of EAP has been too outward-facing, arguing that:

What needs to be added to this is an inward-facing orientation to the texts, cultures, values, practices and epistemologies of the field and discipline of EAP. Practitioners need to understand their own field as well as they strive to understand the fields and disciplines of their students. (Ding & Evans, 2022: 4)

Ding’s own work (Ding & Bruce, 2017) has taken a step in this direction by focusing on the impact of neoliberalism on the roles and identities of EAP practitioners. Similarly reflexive, although taking a different perspective, Author 1 and Author 2 (2021) used bibliometric techniques to track changes in EAP research and reveal the most influential topics, authors and publications over the last 40 years.

We extend this reflexivity here by exploring the discourse of the field and the extent to
which topic foci influence the argument patterns and interactional preferences of
writers. To do so we take the main themes contained in the flagship publication of the
field: The Journal of English for Academic Purposes. Categorising every paper since
its beginning 20 years ago as taking either a textual, critical, contextual or pedagogical
orientation, we explore how writers employ metadiscourse to present their ideas and
engage with their readers in these different areas. Our purpose is to explore JEAP as a
rhetorical domain and determine linguistic variation in EAP. We believe evidence of
intra-disciplinary variation in discoursal preferences can contribute to our
understanding of both the journal and the field.

2. EAP: Homogeneity and heterogeneity

While broadly concerned with research and instruction around the communicative
needs and practices of individuals in academic contexts (Author 1 & Other, 2016: 1),
English for Academic Purposes has always prided itself on a certain theoretical and
methodological eclecticism. It borrows, for example, from various genre models (e.g.
Swales, 1990; Evans, 2022), investigative approaches (e.g. Swales, 1998; Paltridge,
Starfield & Tardy, 2016) and theoretical perspectives (e.g. Kirk, 2022; Bruce, 2022).
We might, then, more accurately see EAP as a convenient umbrella term under which
like-minded people can gather and project a shared professional context.

Participation in the journals, conferences, classrooms and discourses of EAP, as well
as a general orientation to language use and the applied principles of the field is, to
some extent, underpinned by the professional, pedagogical and social proclivities and
experiences of active individuals. We all contribute to the daily re-construction of
something called EAP by gaining qualifications and teaching experiences, reading and
writing papers and materials, engaging in recognised social networks, enjoying shared
involvement in conferences, journals, learned societies and the other diversions of
academic activity.
But while this helps arrange knowledge and skills within the subject area and draw the boundaries of cooperative action among practitioners, we come to this conceptual edifice from different directions and with different interests and goals (e.g. Author 1, 2018). Like all fields of inquiry, EAP is a system in which multiple beliefs and practices overlap and intersect. Some of us are interested in the cultures and values of academic disciplines, some in the genres and discourses of these fields, some in students’ acquisition and use of specialised language, and others in the practical applications of this knowledge to create materials, fashion classroom tasks or plan further research. This rich mix comprises a diverse knowledge-base and motivations for EAP practitioners, so while the borders of the field may be clear enough for everyday purposes, there is considerable intra-disciplinary heterogeneity.

The plurality of interests and orientations in EAP allow sub-groups and individuals to innovate and combine within the margins of its practices without weakening its direction and common actions. One area in which differences can manifest themselves is in the preferred patterns of argument and language use which have been shown to characterize different disciplines (e.g. Author 1, 2005; Author 1 & Other, 2006). Writing as a member of a disciplinary group involves textualizing one’s work as biology or applied linguistics, for example, and oneself as a biologist or applied linguist. As Foucault (1972) observed, there are disciplinary constraints on discourse which are both restrictive and authorizing, allowing one to create successful texts which display one’s disciplinarity, or tacit knowledge of its expectations, for the practical purposes of communicating with peers. Given the varied interests of those working in EAP, it might be surprising if work was not discussed and presented in different ways.

To minimize the effect of genre differences and journal proclivities, we have chosen to take the unusual step of focusing on the papers in a single journal, although an
important one for those working in EAP. This is a forum where, for over 20 years, theorists, researchers, practitioners, students, administrators and policy makers have gathered to share ideas and shape a discipline. While not a picture of the field itself, the input of a JEAP editorial team of some 60 of the world’s leading EAP figures, hundreds of reviewers, countless submissions and over 450 published articles, reviews and editorials, has contributed to the ways we understand, and write, EAP. In the next section we briefly offer a short profile of JEAP and outline the different strands of work within its pages.

3. JEAP and focal diversity

The Journal of English for Academic Purposes, like many good things, was conceived in the back of a taxi. Liz Hamp-Lyons suggested the idea to Author 1 crossing the Johor Bharu causeway to Singapore in 2001, having first gained the support of the publisher Elsevier. The journal was launched the following year with an invited first issue of five papers, an editorial overview of the field, and a book review. The journal was an almost inevitable outcome of a field which had by then outgrown its established home in the journal of English for Specific Purposes.

In a recent overview of published research in EAP, Author 1 and Author 2 (2021) suggest this growth is the result of two main social changes: the increasing complexity and diversity of EAP contexts with the commercial globalisation of academic activity, and the efforts of practitioners to professionalise the field. Practitioners now find themselves working with undergraduates, PhD students, academics writing for publication and a myriad of other learners and situations, needing to understand these contexts and students while working in environments which offer them little respect or resources. By providing a professional forum for internationally recognised research in the most prestigious indexing databases, JEAP has helped to establish professional respectability for practitioners and academic credibility for the field. The most recent
figures, for example, show the journal as having an Impact Factor of 2.17 and ranked in the first quartile of the Scimago journal rankings with a healthy average of 2.7 citations per paper. Another indication of the quality of a journal is the papers which don’t make it to publication, and here JEAP has an acceptance rate of only 14%, which is less than many other social science journals (Herbert, 2020).

JEAP, then, has become a major force in the expansion and growth of EAP as a disciplinary field, enabling practitioners and researchers to keep abreast of developments and contribute to its continued updating. It has, moreover, contributed to a movement away from an exclusive focus on discourse features to understand the social practices of disciplines and of teaching and learning. It is this applied nature of the journal, emerging out of concerns with revealing the constraints of academic practices and how these might be used in classrooms, which helps account for the diversity of interests found in the journal. Moreover, in 2016 the journal explicitly sought to encourage the submission of more pedagogically-oriented papers by introducing the ‘Research into practice’ section together with the Liz Hamp-Lyons award for papers “judged to have the greatest potential to positively influence EAP curricula, materials, or assessment at the classroom and programme level”.

This diversity of the field has been described in various ways. Charles (2013) distinguished three approaches to EAP, namely, “corpus-based work, genre analysis, and investigation of the social context” (p. 137). In a recent study of JEAP papers, Riazi et al (2020) classified articles according to a rather unwieldy 24 categories of research focus and 9 of ‘theoretical orientation’. This level of specification, however, seems to risk overlap (e.g. ‘features of discourse’ vs ‘discourse across disciplines’, or ‘L1 and L2’ vs ‘intercultural rhetoric’). In an earlier discussion, Author 1 (2009) summarised EAP research as encompassing three broad areas: a textual orientation, focusing on language choices and textual patterns; a contextual orientation,
encompassing wider situational aspects, such as the sociology of science, ethnography and sociohistorical perspectives; and a critical orientation which brings an attitude of scepticism and challenge to these contexts, embracing critical discourse analysis and academic literacies.

In this paper we add another category, embracing the pedagogical orientation that JEAP has often sought to champion. This comprises papers addressing teaching and learning issues, classroom methods, feedback and review, assessment, materials, engagement and attitudes, etc. So, in all, we characterise the research published in JEAP as primarily having a textual, contextual, pedagogical or critical orientation. We are, of course, aware of likely overlap among these categories but sought to discern the main focus of each paper. While these areas comprise a coherent sum of EAP endeavour, it is possible that they are composed and consumed by distinct groups within the community. As a way into this issue, we explore how these different interests are rhetorically elaborated through writers’ choices of metadiscourse.

4. Metadiscourse and academic interaction in writing

Metadiscourse is now an established approach to the discourse analysis of academic texts (e.g. Consonni, D’Angelo & Anesa, 2020; Author 1, 2017; Author 1 & Author 2, 2018). Successful writing rests on the assumptions writers make about the ability of their audience to see arguments as coherent, intelligible and persuasive. Metadiscourse assists our understanding of how this is accomplished by offering a model of the resources available to writers to organise their texts and help readers interpret, evaluate, and react to propositional information (Ädel & Mauranen, 2010; Author 1, 2005). Informed by the idea of ‘recipient design’ (Author 1, 2017), it allows us to see how communication is shaped to guide readers to recognise the writer’s stance, see connections between ideas and feel involved in what is being discussed.
While understood in different ways, we take a broad, integrative view of metadiscourse here, seeing metadiscourse as a coherent set of interpersonal options (Author 1, 2005). This means identifying both the ways writers organise a cohesive text and convey their attitudes to what is discussed. Thus:

an awareness of the reader not only involves assisting their grasp of cohesive connections but also the effect that their evaluation and assessments of material might be understood. (Author 1 & Author 2, 2018 p.19).

Author 1 (2005) therefore distinguishes interactive and interactional resources (terms adapted from Thompson, 2001). The former refers to what the writer believes should be made explicit to organise the discourse and guide readers’ interpretation of the text. The latter concerns the writer’s efforts to control the level of personality in a text and establish a suitable relationship to arguments and audience, marking the degree of reader involvement and the expression of attitude and commitment. These purposes, together with example realisations, are:

**Interactive resources** allow the writer to manage the information flow to establish his or her preferred interpretations. They include:

- **transitions** - devices (mainly conjunctions) used to mark additive, contrastive, and consequential relations (*in addition, but, thus, however*).

- **frame markers** - refer to text boundaries or structure, including items used to sequence, label stages, announce discourse goals and indicate topic shifts (*finally, to conclude, my purpose is*).

- **endophoric markers** - make additional material salient to help the reader recover the writer’s intentions by referring to other parts of the text (*noted above, see Fig, in section 2*).
• **evidentials** - indicate the source of information from outside the text, mainly citations (*Smith argues*) and evidential markers (*according to*).

• **code glosses** - restates information (*for instance, in other words*).

**Interactional resources** focus on the participants of the interaction and display the writer’s persona and a tenor consistent with community norms. They include:

• **hedges** - withhold the writer’s full commitment to a statement (*might, perhaps, possible, about*)

• **boosters** - express certainty and emphasise propositional force (*in fact, definitely, it is clear*)

• **attitude markers** - state the writer’s attitude to propositions, conveying surprise, agreement, importance, etc (*unfortunately, I agree, surprisingly*)

• **engagement markers** - explicitly address readers to focus their attention or include them in the text through second person pronouns, imperatives, questions and asides (*you, consider, note that*)

• **self-mentions** - explicit reference to authors (*I, we, our, my*)

Essentially, the model captures the interpersonal character of communication, so that more features are found in soft than hard disciplines (Author 1, 2005), in the work of higher than lower proficiency students (Author 2, 2015) and in some spoken than written modes (Other & Author 1, 2022). Here we examine intra-journal differences to determine if metadiscourse use diverges in the presentation of topic areas.

5. **Data and analysis**

We created a *JEAP* corpus by gathering all empirical articles published in the journal from volume 1 in 2002 to volume 52 in July 2021. The collection included papers in all regular and special issues but excluded editorials, book reviews and brief reports. This produced a corpus of 441 articles of over 3 million words. As noted above, we
followed Author 1 (2009) in identifying 4 groups, textual, critical, pedagogical and contextual orientations, each embracing a variety of methods. The key themes in these areas are:

- textual – discourse, text, linguistic, grammar, lexis
- critical – CDA, academic literacies, power, ideology, identity
- pedagogical – teachers, materials, tasks, learning, students, assessment
- contextual – context, sociohistorical, institution, community, university

We identified the primary research focus of the paper through a close reading of the article title, abstract and keywords, giving priority to the author(s)’ perception of their principal approach. Where there was any uncertainty we turned to the research questions and then to the content of the paper itself. Where there was overlap we categorised the paper according to the predominant focus of the text as a whole. Both authors worked independently on all the papers and coded examples according to the 4 categories, achieving a high inter-rater agreement of 97% before resolving disagreements through discussion. The outcome of this process is shown in Table 1.

Table 1 JEAP articles in different strands of research

| Orientation          | Texts | Words      | Words per Text |
|----------------------|-------|------------|----------------|
| Textual orientation  | 164   | 1,157,413  | 7057.4         |
| Critical orientation | 124   | 871,535    | 7028.5         |
| Pedagogical orientation | 112 | 740,736    | 6613.7         |
| Contextual orientation | 41   | 304,707    | 7431.9         |
| **Total**            | **441** | **3,074,391** | **6971.5**    |

JEAP, then, is predominantly a journal which addresses textual issues, with 37% of papers concerned with the discourse and grammar of EAP texts. This concurs with Riazi et al.’s (2020) recent review of JEAP. It is interesting to note that pedagogically-oriented papers are generally shorter than the average, while contextually focused ones tend to require far more elaboration.
Using the concordance software *AntConc* (Anthony, 2019), we searched each of the four sub-corpora for the items in Author 1’s (2005) list of most common metadiscourse words and phrases in academic writing. As Author 1 observes, this is not an exhaustive list. Metadiscourse is an open category which allows the use of additional items according to need, while insider understandings mean that not all intended metadiscoursal meanings are transparent to the analyst. These 500 items, then, are the most explicit textual devices and provide a solid basis for examining variations across research practices. It is also worth mentioning that metadiscourse signals can stretch to clause or, occasionally, sentence length, so that frequency counts are merely indicative of cases and are principally a way of comparing patterns of occurrence of metadiscourse in different corpora.

Following Author 1 and Author 2 (2018), we omitted both *and* and *or* from the counts of transitions, since these are typically default options of marking conjunctive relations of addition and alternation rather than rhetorical strategies and produce thousands of examples. We then manually checked each concordance line to ensure that the items were functioning as metadiscourse as *first* and *second* in (1) and exclude extraneous examples as *first, second, third* and *fourth* in (2).

(1) **First**, despite its macrostructure, the RA should have a separate Discussion section. **Second**, the first available drafts had to have been written by the students (the first authors) on their own.

(2) the sample encompassed the first, second, third, and fourth year candidates along with graduate students.

Both authors worked independently and achieved an inter-rater agreement of 97% on interactive and 96% on interactional metadiscourse before resolving disagreements. We then normalised the raw frequencies of to 10,000 words so that the use of metadiscourse could be compared across the four corpora of different sizes. We used
Rayson’s spreadsheet\(^1\) to calculate log-likelihood (\(LL\)) value to determine whether the differences of normed frequency were statistically significant. The spreadsheet allows a comparison between more than two corpora, so the raw frequencies and total words of each corpus were entered with the resulting \(LL\) and significance (\(p\)) values as output indicating whether the differences were significant.

6. An overview of metadiscourse use in JEAP

We identified 201,232 metadiscourse markers overall, averaging 654.5 cases per 10,000 words or about 456.3 cases in each paper. There were 103,751 interactive devices (337.5 per 10,000 words) and 97,484 interactional devices (317.1 per 10,000 words). The distribution aligns with Author 1 and Author 2’s (2018) findings for applied linguistics overall, which showed a substantial decline in interactional metadiscourse in recent years so that frequencies are now dominated by interactive forms. The papers in JEAP, of course, cover a 20 year period and so our figures may disguise this trend, but it is clear that interactional devices, which convey the writer’s stance and strength of engagement with readers, continue to play a hugely significant role in these articles.

Turning to the use of these metadiscourse choices across the different topic foci, we find that the authors of textually oriented papers make considerably more use of metadiscourse overall, and particularly of interactive forms. Both the pedagogical and contextual groups show a similar preference for cohesion constructing interactive forms, but the critical papers have a remarkably low figures for interactive functions (Table 2).

\(^1\) http://ucrel.lancs.ac.uk/llwizard.html
Table 2 Metadiscourse use across article topics (per 10,000 words)

| Metadiscourse type | Textual   | Critical  | Pedagogical | Contextual |
|--------------------|-----------|-----------|-------------|------------|
| Interactional      | 329.7     | 323.9     | 284.9       | 327.8      |
| Interactive        | 373.9     | 310.1     | 309.2       | 346.1      |
| **Total**          | **703.6** | **633.0** | **594.1**   | **673.9**  |

We were surprised at the extent of the variation in the use of metadiscourse types as we had assumed there would be greater similarities in such an apparently homogeneous field. One possibility which occurred to us was the potential influence of NNS authorship on the use of metadiscourse as Author 1 and Author 2 (2021a), for example, found that most papers in EAP are authored by Asian and European authors and these may favour textual papers. However, there is little evidence for this and reviewing and editing processes involved in a paper’s journey to publication appear to rule out the influence of NNS authorship on rhetorical choices (Englander, 2006; Author 1, 2015). The journal itself is relatively non-directive in its recommendations regarding style, with the guide to authors simply specifying the need for inclusive language. But while writers have a certain leeway in creating their connections between ideas and with readers, their choices appear to be constrained by the topics they select, most obviously in the difference between textual and pedagogical papers. In the following sections we explore these choices in more detail.

7. Interactional metadiscourse in different strands

Interactional metadiscourse represents the writer’s intrusion into the text to comment on what is being discussed or directly address the reader. It concerns the participants of the interaction. Table 2 shows that frequencies were very similar with three of the strands close to an average of 32.5 per 100 words. The importance of these features can be seen in this example:
What varieties of accent are used? It can be argued that the introduction of multiple varieties into testing at lower levels should be avoided because it deprives listeners of a major set of phonetic cues. At an advanced level, however, we might argue that inclusion of accented varieties is desirable …

(Critical)

The use of a question helps to directly involve the reader in the text and encourages engagement with the issue which is then presented from a point of view which readers might accept or consider reasonable. This is then challenged as the author offers his personal view. The use of a question, modal verbs, inclusive we and an expression of attitude all combine effectively to hook the reader and carry the argument forward.

7.1 Expressing stance

Table 3 shows that epistemic markers dominate the expression of stance in JEAP articles, with hedges heavily predominating in every strand and all differences statistically significant. These figures broadly reflect practices in applied linguistics articles more generally (Author 1, 2005; Author 1 & Author 2, 2019).

|                | textual | critical | pedagogical | contextual | LL   | p       |
|----------------|---------|----------|-------------|------------|------|---------|
| hedges         | 140.00  | 138.57   | 114.56      | 124.09     | 276.52| <0.0001 |
| boosters       | 54.87   | 46.29    | 43.98       | 47.65      | 132.23| <0.0001 |
| attitude       | 30.14   | 35.28    | 29.43       | 28.29      | 64.93 | <0.0001 |
| Self-mention   | 50.90   | 53.49    | 42.11       | 71.54      | 354.60| <0.0001 |
| **Totals**     | **275.92** | **273.63** | **230.08** | **271.57** | **435.69** | **<0.0001** |

We also see in the table that textual and critical papers, which typically offer tentative, and often even speculative, explanations for the language patterns they report in texts,
are most heavily hedged. Thus trying to explain the decline of a language feature over
time can involve relatively tortuous prose:

(4) This suggests that writers may have less confidence in their readers’
ability to recover background knowledge about experimental practices.
Possibly as a result of changing audiences with less knowledge of specialist
techniques.

Reporting pedagogical research, on the other hand, allows for greater assurance in
explaining results:

(5) Indeed, the answers to questions prompting the participants to
elaborate on measures they took to enhance validity showed that most
were unfamiliar with the validity evidence they needed to attend to in
order to address the types of validity that concerned them most.

Pedagogical papers also contain significantly fewer self-mentions. This was surprising
as we had assumed that many of these studies would involve the writers’ personal
experiences of classroom practice, but this does not seem to be the case. Instead, we
find discussions of textbook materials, tasks, programmes, curricula and classroom
methods which are not directly related to the reporting authors’ experiences. This can
be illustrated by these brief extracts from two presentations of methods:

(6) A content analysis method was used to study the feedback comments.
Each sampled feedback comment was coded into a set of evaluative
statements relating to the Task Fulfilment and Organisation category, with
each coded evaluative statement assigned to a sub-category. All coding
was performed by the author, using Microsoft Excel.

(7) We adapted the original survey instrument and only incorporated two
further questions in Section A, as we found it of interest to identify the
multilingual background of the respondents... We also deemed it of interest
to know their future publication plans in international English-medium
journals. It was also our purpose to elicit perceptions on possible language
burden…

Attitude was most frequently expressed by writers presenting work from a critical
perspective. Here the writers’ affective assessments contribute to a general evaluative
tone or, as here, can play an important role in establishing a critical context for the
study:

(8) The undeniable shortcomings of EAP education in Iran, from
unformed policies to uninformed choices of materials based on
unverified assumptions to flawed methodologies and haphazard
practices by unqualified teachers, has hitherto piqued the interest of
several EAP specialists and researchers. (Critical)

Attitude markers seem to have been falling steadily over the past 50 years in applied
linguistics (Author 1 & Author 2, 2019), but clearly they continue to play an important
role. This is particularly the case where writers bring a more reflective and evaluative
stance to texts and practices, as in critically-oriented papers.

Interestingly, boosters are most frequent in the textual papers, where they assist writers
to ensure readers get the bottom line message of the study:

(9) The study has shown that local grammars can be a valid alternative to
explore discourse acts in academic texts and that such research has
significant pedagogical implications for EAP teaching. (Textual)

(10) This study exhibits the additional value of exploring epistemic stance
more narrowly through the investigation of specific phenomena beyond
more general investigations. (Textual)
Our study also concurs with Author 1 and Author 2’s (2016) findings that boosters conveying objective, data-supported assurances, like show, demonstrate and find, greatly exceeded those expressing personal beliefs, such as believe and know. The need to convey epistemic judgements with some caution and reserve, as shown by more hedges, perhaps indicates a risk-averse academic culture in which strong commitments and definitive judgements might be counter-productive.

7.2 Expressing engagement

Engagement, the features writers use to rhetorically acknowledge the presence of their audience, tends to be less studied than stance and is always far less frequent in research articles. Despite this, it is a key means by which writers present themselves as sharing, or perhaps failing to share, attitudes with readers and how they manage solidarity and affiliation. Table 4 shows, once again, significant differences across topic strands in JEAP, with reader mention, knowledge appeals and directives dominating the frequencies.

### Table 4 Engagement features across research strands (per 10,000 words)

|                  | textual | critical | pedagogical | contextual | LL     | p       |
|------------------|---------|----------|-------------|------------|--------|---------|
| asides           | 0.03    | 0.60     | 1.03        | 1.18       | 138.33 | <0.0001 |
| directives       | 14.26   | 15.19    | 19.16       | 15.49      | 69.53  | <0.0001 |
| knowledge appeals| 21.63   | 14.88    | 13.55       | 15.95      | 214.93 | <0.0001 |
| questions        | 0.56    | 3.17     | 2.03        | 0.82       | 228.68 | <0.0001 |
| reader mention   | 17.28   | 16.48    | 19.09       | 22.74      | 54.84  | <0.0001 |
| **Totals**       | **53.77** | **50.31** | **54.85**  | **56.19**  | **23.32** | **<0.0001** |

Explicitly referring to the reader is the clearest signal that the writer is considering the presence of an active audience, and while second person you and your are the most explicit demonstration of this, inclusive we is the most common reference. In (11) we see it used in a contextual study to ensure readers are on board with the writer’s
interpretation and seeing things in the same way. In (12) the pronoun shows an attempt
to create a strong persuasive bond with readers in a pedagogical text.

(11) *We* can see that there is less variety in the NNES group. If *we* consider
the total occurrences, shown in Table 2, NNES used 269 connectors fewer
than NES. (Contextual)

(12) *We* need teaching materials to raise awareness of key features of
academic discourse for teachers and learners alike. But *we* cannot rely on
most textbooks to do this to an acceptable standard at present. However,
this is not to say *we* should abandon the textbook altogether. Rather, *we*
should strive to raise the quality of textbooks being produced. (Pedagogical)

Another feature which stands out in Table 4 is the high use of appeals to shared
knowledge in the textual papers. These devices are explicit ways of asking readers to
recognise something as familiar or accepted, seeking to position readers within the
seemingly unproblematic boundaries of disciplinary understandings. But while they
mark what might be considered implicitly agreed, the notion of ‘sharedness’ is
problematic and open to manipulation. Writers may misjudge or, more often,
deliberately exploit what is controversial for rhetorical ends.

This appears to be a particularly attractive option for textual analysts seeking to create
a connection with readers in order to prepare them for the argument to come:

(13) *Of course*, analysing a semi-technical list will only give a partial view
of a disciplinary field's epistemology. (Textual)

(14) COCA-Academic is *of course* just part of the larger Corpus of
Contemporary American English (COCA)… (Textual)
A more rhetorically incisive appeal to shared knowledge helps to influence readers’ perceptions of the argument itself, seeking to persuade readers of their interpretation of discourse patterns:

(15) *Obviously*, these different types of ethos respectively correlate with a higher use of hedges on the one hand, and a higher use of attitude markers on the other hand. (Textual)

(16) Some situations *obviously* require writers to combine both rhetorical steps in the same introduction without disrupting the logical flow in establishing research niches. (Textual)

While jargon, familiar acronyms, etcetera all foreground a common frame for seeing the world, these forms more directly help finesse reader agreement and solidarity.

Directives are the third most common type of engagement marker in the JEAP corpus and are particularly popular among writers of pedagogically-oriented texts. These papers often instruct readers not only what they should attend to in the argument (17), but often to accept that what is being advocated is worth pursuing in their own classrooms.

(17) *It is important to note* that reading speed was not a diagnostic subcomponent in the CAEL. (Pedagogical)

(18) *We must acknowledge* that our students face social, economic, and educational pressures to compose in SWE. (Pedagogical)

(19) In addition, more effort *should* be given to designing motivational strategies for students of lower academic motivation and EFL proficiency. (Pedagogical)

Because directives seek to engage and position readers, they carry strong connotations of unequal power, claiming greater authority for the writer (Author 1, 2001). This seems to be most apparent with necessity modals which seem to impose far more on
the reader than imperatives, yet despite this, modals remain a common rhetorical option in our corpus.

Asides and questions are far less common in JEAP papers, although questions do crop up in critical and pedagogical papers. Questions, of course, are at the heart of all academic inquiry, but only occasionally surface in research papers. Their appearance invites readers into the text by addressing them as having an interest in an issue and the good sense to follow the writer’s response to it (Author 1, 2016).

The use of questions seems to be particularly attractive to those working in critical and pedagogical areas. In the former questions not only help capture readers’ curiosity (Chang & Schleppegrell, 2011), but also provide an orientation for them; a frame where they can be led to the writer’s viewpoint (Author 1, 2002).

(20) Are language studies journals therefore accepting the use of we as a means for single author self-reference? Should they do so? How about sentences such as “This paper thinks/believes?” (Critical)

In pedagogical papers, the questions posed appear to be more involving, posing issues that readers might ask when considering their own classroom practices:

(21) How do participants in advanced academic writing courses learn to analyze genre examples when they are introduced to the genre analysis framework outlined in Swales (1990)? The answer to this question seems unclear in Swales (1990). (Pedagogical)

So questions, while relatively rare in these JEAP papers, can play a useful rhetorical role for writers in some areas.

8. Interactive metadiscourse use in different strands

Interactive features are those which organise a text to help readers recover the writer’s intentions, creating surface cohesion and influencing understandings of propositional
material. They function to link material, offer elaborations, signal text stages and refer to information elsewhere in the text. As such, they not only help glue the text together but also represent an internal dialogue with readers, reflecting the writer’s assessment of what needs to be done to present information in the most comprehensible and convincing way for particular readers.

Table 2 shows significantly different frequencies of interactive features across the strands, with critical and pedagogical papers containing substantially fewer forms. Writers of the textual papers, it seems, often go to considerable lengths to spell out the connections between ideas when trying to explain reasons for their findings:

(22) The last reason why Persian writers overused 6-word lexical bundles may be because Persian writers often tended to avoid, or modify, the structures of particular lexical bundles which result in awkward use of them. In other words, Persian writers conveyed a particular function (i.e., structuring signal), using an unnatural structure. For instance, the 6-word lexical bundles in examples (10), (11) are modified versions of as can be seen in table in extract 9, which English writers did not choose.

(Textual)

Here we see the authors pressing frame markers, transition signals, code glosses and endophorics into service to account for their results.

In contrast, this extract of similar length taken from an interpretive passage in a critical paper presents an argument with a sparse use of interactive forms. We see only an endophoric ‘here’ referring back to a previously discussed student text, a contrastive marker and an evidential.

(23) Zohra’s writing decisions here do not stem from a critical incident or serve as an example of linear transfer often highlighted by studies that consider the role of students’ prior knowledge in transfer. Instead,
she gives us an insight into the uptake that guided her ultimate transfer:
offering an expanded example of the metaphor for transfer that
**Alexander et al. (2016)** define as literacy linking, for Zohra works
toward expertise only by reshaping multiple literacies in a process of
“adaptive remediation” *(p. 35).* *(Critical)*
Clearly this is a very different kind of discussion with less reflexive signalling and overt
structuring. The interpretation is focused on a single case supported by a reference without
the need for greater elaboration.

We find similarly low frequencies of interactive forms in the pedagogical papers,
which, like many of the critical papers, are focused on particular case study subjects,
as here:

(24) Lee joined a group with two NSE students due to seating proximity.
She was a little nervous as she knew at least Diane was a very strong
student. “She's very serious to her study, and always has great points.”
*(weekly chat)* Lee's group decided to write a listening test for level III
students at the ELI. The entire test consisted of two parts focusing on
improving listening skills *such as* paraphrasing, inferencing,
understanding the main idea and listening for details. *(Pedagogical)*

This narrative-style account of a student’s participation in a teacher education writing
group contains just one evidential, citing the ‘weekly chat’ record as the source of the
quote and a code gloss expanding ‘listening skills’. Despite the lack of reader
assistance, however, the extract is readable and easy to follow.

What many of the pedagogical and critical papers have in common is a shared
methodological orientation. While some of the critical papers are text focused, taking a
broadly Critical Discourse Analytic viewpoint, the majority adopt an academic
literacies stance. This generally involves exploring the perspectives of writers and
readers in a particular context, with issues of identity, power and authority central. As
with a great deal of pedagogical research, this employs qualitative methods, focusing
on the observation of individuals or groups and structured around interviews.

This may help explain the variations in our data as Cao and Hu (2014) found clear
cross-paradigmatic differences in the incidence of five types of interactive
metadiscourse in 120 research articles. They explain their findings in terms of the
contrasting epistemologies underlying qualitative and quantitative research paradigms,
So, because it takes a more positivist stance in uncovering generalisable statements,
quantitative research tends to employ more interactive metadiscourse which signpost
logical relationships and statistical links between hypothesized causes and effects. In
contrast, qualitative research is underpinned by a more interpretivist epistemology that
prioritizes participant meanings in order to develop contextualized understandings of
experience. As a result, there are fewer opportunities, and less need, to compare results
with prior expectations, while its analysis of examples, excerpts, and episodes requires
fewer references to tables or numeric structuring devices (Cao & Hu, 2014: 26-7).

The differences in individual interactive features can be seen in Table 5. While all
differences are significant, we note that textual and contextual papers contain more
code glosses, frame markers and transitions and that writers of critical and contextual
papers used fewer endophorics and evidentials.

Table 5 Interactive metadiscourse across strands (per 10,000 words)

| Interactive forms   | textual | critical | pedagogical | contextual | LL  | p      |
|---------------------|---------|----------|-------------|------------|-----|--------|
| code gloss          | 65.4    | 46.9     | 47.7        | 53.1       | 399.3| <0.0001|
| endophoric          | 47.2    | 25.7     | 31.0        | 29.9       | 731.2| <0.0001|
| evidentials         | 42.5    | 30.1     | 36.2        | 30.4       | 244.0| <0.0001|
| frame markers       | 53.0    | 46.5     | 46.9        | 57.6       | 90.0 | <0.0001|
| transition markers  | 166.0   | 160.9    | 147.4       | 175.1      | 142.3| <0.0001|
| Totals              | 374.1   | 310.1    | 309.2       | 346.10     | 825.7| <0.0001|
Table 5 suggests that writers of textual and contextual papers are more likely to use code
glosses, devices which help explicate or reformulate material for readers. This finding
might be explained in terms of the often more technical and abstract nature of these
papers. Concepts are sometimes clarified by the use of examples (25) or,
overwhelmingly more often, by reformulations to spell out a technical term (26):

(25) Factive verbs such as ‘hold’, ‘state’, ‘note’ and ‘require’ were
prevalent for courts and legislation while non-factive verbs such as ‘claim’
and ‘comment’ were used to report academics’ views. (Textual)

(26) Quoted segments consisting of less than a one T-unit were marked as
“phrasal” and then coded according to their phrasal structure: “verb phrase,”
(defined as one or more inflected verbs plus any modifiers, objects or
complements accompanying them), “noun phrase,” (defined as one or
more nouns plus any modifiers accompanying them) or “adjective phrase”
(defined as one or more adjectives plus any modifiers accompanying them).

Such highly theoretical, technical knowledge often requires elaboration to assist
comprehension, but is far less common in the generally more accessible critical and
pedagogical papers.

Endophoric and evidential markers are also more highly represented in the textual
papers. Endophorics aid comprehension of detailed arguments by directing readers
around the text, pointing them towards examples or other parts of the discourse:

(27) Consider the italicized expressions of attitude in example 6, which
were flatly declared and thus presented as “not at issue.” (Textual)

(28) Table 13 below shows the frequency of the two semantic motives
disclosed above across the four sub-corpora. (Textual)
Nursing and agriculture journals, as noted earlier in this paper, often have required sections. (Textual)

Argument and interpretation in the other strands, however, seem to involve less redirection of this kind, with more linear structuring and fewer tables and visual data presentations. This example is typical of such papers:

Although ‘local’ knowledge may refer to anything from key course information to incidental facts, it is evident from these interviews that international students want to know more about what is going on around them so that they can successfully complete the tasks required of them and at the same time, feel they can contribute to general discussions. It is therefore important that lecturers and students try not to assume local knowledge which may exclude overseas students. (Pedagogical)

Similarly, textual papers make greater use of citational support with evidential markers. This is the key way in which writers integrate their claims into current knowledge and signal their disciplinary credentials:

A key interest of many of the studies cited above is how authors adopt various “roles” (Ivanič, 1998, Tang and John, 1999, p. 25) such as a meta-textual guide, who directs the reader through the text, and a conductor of research, who outlines methodological procedures (e.g. Harwood, 2005b, Hyland, 2001, Hyland, 2002a, Starfield and Ravelli, 2006). (Textual)

In this textual extract we see considerable rhetorical effort invested in establishing the significance of author roles, drawing on six sources to support the point. This kind of evidential backing is far less a feature of critical, pedagogical and contextual papers, again, perhaps because of a greater focus on less generalisable local contexts.
The often narrative style of contextually-oriented papers, however, means that these often contain a greater number and range of transition markers, particularly those signalling addition and contrast. We see this in the extracts below:

(32) Genres produced include book chapters, journal articles and conference proceedings; however, none of the five informants produced a journal article in Swedish, whereas all have written journal articles in English. The linguists are also less visibly active than historians in terms of outreach genres; nonetheless, English and Swedish have been used in this domain by at least one informant. On the other hand, they have been more active than historians in using digital media such as blogs, which have appeared in both English and Swedish. (Contextual)

(33) Additionally, awareness-raising activities led by writing professionals were found to effectively reduce instances of text-based plagiarism in students' writing (Huang, 2014). However, writing professionals sometimes encounter difficulties in teaching discipline-specific EAP courses. In addition, writing in such EAP courses taught by language instructors may lack authenticity. (Contextual)

We can see here a very different argument style than that in (31). Instead of pointing outside the text for supporting testimony for an argument, these writers lay out an account of connected events in a linear way. In both cases information is presented almost as a story. In (32) concessive connectives predominate as the writer holds our interest by confounding our expectations while in (33) there is a preference for additive markers with a concessive used to shift the focus of the argument.

Finally, frame markers. These extend transitions by helping to organise the text and reduce the readers processing effort by explicitly marking the structure of the argument and labelling boundaries. Cao and Hu (2014) found that frame markers
served similar functions in their quantitative and qualitative RAs and, once again they
are most frequent in contextual papers and least common in pedagogical ones. Table 6,
however, shows there are some variations in this broad generalisation.

Table 6 Categories of frame markers across strands (per 10,000 words)

|                | textual | critical | pedagogical | contextual | LL   | p     |
|----------------|---------|----------|-------------|------------|------|-------|
| state goals    | 14.0    | 13.9     | 14.9        | 14.7       | 539.1| <0.0001|
| label stages   | 5.3     | 4.8      | 5.3         | 8.2        | 214.4| <0.0001|
| sequencing     | 22.6    | 23.3     | 26.2        | 21.8       | 1119.9| <0.0001|
| shift topics   | 11.1    | 4.4      | 0.5         | 13.0       | 836.9| <0.0001|

Announcing the goal of the research is a function used in all four areas of study, an
unsurprising finding as the need for clear objectives is crucial to encourage readers to
engage with the paper and evaluate its effectiveness.

(34) The **aim** of this study is to shed some light on whether it is
beneficial to devote classroom time to the explicit teaching of a limited
number of academic FS and how this might be best achieved.

(Pedagogical)

(35) In order to address the issues outlined in the introduction, **the study**
**aimed to** uncover the processes through which the three writers
completed their assignments.

(Contextual)

Sequencers are also heavily used by writers irrespective of the topic orientation of
their paper with pedagogical authors making particular use of them. These devices act
like transitions in explicitly linking steps in the argument or clarifying points. As can
be seen, they are particularly useful in setting out the organisation of the paper, or part
of it (36), or to summarise key findings (37):

(36) **In this section** we **first** describe the student participants' reports of
their experiences and their perceptions of their EAP classes, and **then** the
teachers' perceptions.

(Pedagogical)
First, a supportive online environment should enable learners to take charge of their online actions...Second, resonating with previous findings ...Finally, to increase students’ engagement and motivation, online writing tools could incorporate popular gaming elements.

(Pedagogical)

Our data show that authors of critical papers rarely indicate that they are shifting topics during the course of their discussion and pedagogical authors almost never do so. While the numbers are relatively small, this may indicate something of the preferred argument patterns taken by the different authors. The contextual and textual papers often address multiple issues and authors take considerable pains to lead their readers through the complexities of different topics:

(38) Returning to the more frequent referential discourse function, normalized mean per-text counts of the subfunctions between sub-corpora are displayed in Table 7.

(Textual)

(39) We now look at our results in more detail, beginning with moves.

(Contextual)

Finally, the contextual papers contained substantially more frame markers which serve to label stages in the unfolding discourse or mark particular pragmatic acts. Once again, these assist readers to follow the discussion by providing explicit signposts of the writer’s direction:

(40) To summarize, the concept of parallel language use is not transparent.

(Contextual)

(41) Overall, we believe that the concepts of linguistic capital and performative competence complement each other by allowing us to see how professional capabilities and practices are construed in discourse.

(Contextual)
The pervasiveness of these features in the contextual papers perhaps suggests a sense among writers that their topic, or argument form, requires more explicit elaboration than normally found in JEAP papers.

9. Conclusions

This study has taken a novel approach to discourse variation by exploring the intra-journal use of metadiscourse in the *Journal of English for Academic Purposes*, the flagship journal of EAP. Classifying every one of the 441 papers published between volume 1 and 52 as taking a textual, critical, contextual or pedagogical orientation, we have identified significant differences in the preferences for metadiscourse use.

We found that textually-oriented papers contained the highest density of metadiscourse markers with both interactive and interactional types exceeding the frequencies in the other areas. Pedagogical papers, of which there are substantially fewer, contained the least metadiscourse per 10,000 words. Stance markers were broadly similar across three areas but significantly fewer in the pedagogical papers, indicating, perhaps, a more descriptive and less argumentative style of discussion. Writers of pedagogical and contextually-oriented papers, however, appear to make greater efforts to engage their readers, with significantly more directives in the former and reader mentions in the latter. Both invite readers to share the writer’s experience of the situation observed and accept the interpretation offered. Regarding interactive metadiscourse, which help smooth readers’ experience and comprehension of a text, we found critical and pedagogical papers contain substantially fewer forms. We attribute this to the often qualitative approaches of these papers and the more narrative style they adopt.

These differences in metadiscourse practices, then, are more than the proclivities of individual authors but can be seen as representing different methodological and epistemological practices. They indicate that while we can identify a broad
disciplines. There are clear strands of interests within this community and that these interests are characterised by discoursal variations. We believe that these findings help to reveal the rich complexity of our field and something of the range of interests and discourses which the journal represents. We hope also to have pushed metadiscourse research into a new direction and encourage further work in intra-disciplinary metadiscourse variation. Finally, this evidence of intra-disciplinary differences may raise the awareness of students and teachers of EAP regarding variability within even a single journal and reinforce their efforts to reveal and teach specific forms of language use.

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Metadiscourse choices in EAP: an intra-journal study of JEAP

Dear Zak,

Thank you for the comments and for taking the trouble to get a third reviewer. I know how hard it is to get people to read papers so we appreciate this. Thanks to for the opportunity to resubmit.