Introductions to research articles (RAs) have become an important site for the analysis of academic writing. However, analysts have apparently not considered whether RA introductions typically include statements of principal findings. In contrast, this issue is often addressed in the manuals and style guides surveyed, most advocating the desirability of announcing principal findings (APFs) in RA introductions. Therefore, a study of actual practice in two leading journals from two different fields (physics and educational psychology) was undertaken. In the Physical Review *45% of the introductions sampled contained APFs (with some increase in percentage over the last 40 years), while in the* Journal of Educational Psychology *the percentage fell to under 7%. These figures are at variance with the general trend of recommendations in primary and secondary sources. Thus preliminary evidence points to (a) a mismatch between descriptive practice and prescriptive advice and (b) diversity in this rhetorical feature between the two fields.*

The Writing of Research Article Introductions

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RESEARCH ON INTRODUCTIONS TO RESEARCH ARTICLES

Introductions to research articles or papers have become in the last few years an important proving ground for our current capacity to understand the process and product of specialized academic writing. The extensive case studies of Latour and Woolgar (1979), Knorr-Cetina (1981), and Gilbert and Mulkay (1984) provide solid evidence for the complexity of the compositional process at the introduction stage. All three studies show that writing an introduction to a research article is not simply a wrestling with words to fit the facts, but is also strongly modulated by perceptions of the anticipated

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reactions of peer-colleagues. Knorr-Cetina's analysis of the evolving drafts of a single paper is particularly revealing. She is able to show how the first draft's bold announcement of a new method ultimately becomes the reporting of a comparative analysis, how the early exuberance of the primary researchers turns into the careful understatement of a wider group.

Bazerman's studies of disciplinary variations in introductions, particularly Bazerman (1981), have also made a significant contribution to our understanding. According to Bazerman, in the "harder" sciences, author and intended readership are likely to share criteria for the judging of a new knowledge claim. In contrast, the social science researcher or humanities scholar may well address a situation in which there is little consensus—given the greater likelihood that the potential readership will approach the text with widely varying schemata and from diverse methodological and ideological viewpoints. In these areas, therefore, authors embarking upon introductions "have it all to do." They are wise to make the most of the opportunity the introduction provides to create a plausible context for the ensuing findings so that as many readers as possible are attracted to their perspective.

Introductions have also been a major context for debate about research methodology. Issues of the value of "subject specialist informants," their selection and their integration into a hermeneutical cycle have been sited in discussion of research article introductions (Huckin & Olsen, 1984; Selinker, 1979). This type of text has also figured prominently in the quest for the identity and boundary criteria required to establish textual subdivisions of a discoursal or rhetorical character (Bley-Vroman & Selinker, 1984; Crookes, 1986; Swales, 1981). In addition, certain studies of particular linguistic features of research writing have either concentrated on introductions or compared the function and distribution of selected features across introduction, method, result, and discussion sections. In the former case, there have been investigations into the in-text creation of complex noun phrases (Dubois, 1982) and of tense and citational form and function (Oster, 1981; Swales, 1983); in the latter case, of *that*-nominals (West, 1980), tense (Heslot, 1982), first person pronoun versus the passive (Tarone, Dwyer, Gillette, & Icke, 1981), and authorial comment (Adams Smith, 1984).

The nature of the preferred types of informational and rhetorical structure in research article introductions and of the best ways of

characterizing that structure are also lively contemporary issues. A common approach is to opt for some version of a problem-solution model (Hoey, 1979). Zappen (1983) will serve as an illustration of this type of analysis—and Zappen's analysis of his first text can be seen in Figure 1. Zappen argues, following Toulmin (1972), that the researcher continuously needs to address the context of the intellectual discipline wherein he or she is located; or to put it another way, research writing needs to be audience sensitive. More specifically, "The researcher addresses the goals, current capacities, problems, and criteria of evaluation that derive from and operate within that discipline" (Zappen, 1983, p. 130). And, as we might expect, Zappen's analysis follows this series of subcontexts: *goal* in the first paragraph, *current capacity* (the best we can do at the moment), *problem* (However, . .), *solution* (In the present work, . .), and *criteria for evaluation.* However, this type of analysis runs into a number of problems. In general terms, it runs counter to the broadly held perception that there is neither a simple nor a close relationship between discovery as a cognitive and experimental activity and the formal "empiricist" statement of how that discovery came about. More directly relevant is a sense that the Toulmin-Zappen model with its emphasis on a disciplinary audience, on the researcher addressing the *external world,* fails to account sufficiently for the authors' rhetoric as it pertains simultaneously to research *content* and to the authors' *own* research career. For example, one striking feature of the introduction Zappen discusses is that it is firmly embedded within the highly localized field of the researchers' own previous work. All the four references in the opening paragraph are to Neelakantaswamy, and only one reference overall (8) is to the work of others. Further, there is a fair amount of comment that (with one exception) evaluates positively the authors' work and less positively the work of others. For instance, the text opens with a broad claim that the authors have developed not "a number" or "a series" but "*a class*" of microwave radiators. These are "compact," "simple," and have "practical utility"; indeed they are "more practical" than other types. Toward the close, one of their apparent defects is said to be "relatively minimised." The exception to the positive evaluation of their own work lies in the *problem* section, where the authors need both to motivate their present work and to justify its publication by showing that their contribution to the discipline, while previously established as significant and reference worthy, is as yet incomplete. Therefore,

GOAL	In the recent past, Neelakantaswamy et al. (1 -4) developed a class of microwave radiators termed as "Gaussian-beam launchers" to produce a focused exposure field in biological experiments for partial-body irradiations. These compact and simple structures with their ability to focus the microwave energy in a very small region indicate their practical utility, in the areas of biological researches and medical applications of microwaves, such as for selective heating of diseased/cancerous tissues. These launchers can also be used in noninvasive beam-wave reflectometric and spectrometric instrumentations for measuring complex permittivity of biological material at microwave frequencies, as indicated by Neelakantaswamy elsewhere (5 -7).
CURRENT CAPACITY	When compared to the microwave beam-launching system described in (8), which consists of a plane-wave irradiated dielectric sphere (lens), the launcher formed by combining a scalar horn and dielectric sphere (1) is a more practical source of microwave Gaussian beam. However, the use of a dielectric
PROBLEM	sphere as the focusing lens results in significant amount of spherical aberrations in the focal field, as indicated by Neelakantaswamy et al, in (9) ....
SOLUTION	In the present work, a Gaussian-beam launcher is formed by placing a dielectric hemisphere (instead of a full sphere) at the aperture end of corrugated circular waveguide (scalar horn). This enables a reduction in the path length of the ray in the lens-
CRITERIA OF EVALUATION	medium, and hence the spherical aberration effects are relatively minimized. Further, by using a hemisphere in the place of a full sphere, the launcher structure becomes less massive and smaller.

SOURCE: Neelakantaswamy & Hong (1979). Reprinted from Zeppen, J. P. (1983). A rhetoric for research in sciences and technologies. In P. V. Anderson, R. J. Brockman, & C. R. Miller (Eds.), **New essays in technical and scientific communication.** Farmingdale, NY: Baywood. Used by permission.

Figure 1: A Problem-Solution Model of Article Introductions (Zappen, 1983)

even in Zappen's own example, there seems to be more "going on" than an audience-sensitive problem-solution model can easily admit—and one of those things is a quasi-contingent account of the relevant research history.

An alternative to problem-solution models is the create-a-research space model, which attempts to capture rather more of "the dark side" (Swales, 1981, 1984). At the outset, the writer of an introduction has

the option of trying to establish that his or her particular area of research is of some significance. This is most commonly done by claiming that the area is nonperipheral; authors may claim that there is interest in it, or that it is important or relevant, or that it has been widely investigated, or that standard procedures have evolved (Move 1). This done, Move 2 summarizes selectively the relevant previous research. The rhetorical role of Move 3 is to show that the reported previous research is not complete. This is principally achieved by indicating a gap in the previous work, by raising a question or by indicating that a new explanation is needed. Sometimes the onset of Move 3 will be marked by a contrastive connector like *however,* and often Move 3 will contain some negative element. Sometimes negation will occur at the thematic sentence-initial position and be expressed through quantification (*little, no, none of, few*), and sometimes it will be realized through choice of verbs like *fail, neglect, lack, been restricted to,* and the like. Finally, in Move 4 the *gap* is turned into the research space for the present article, or an offer is made to answer the question raised in Move 3. This is commonly realized by a purpose statement ("The aim of the present paper is to give . . . ") or by simple description ("In the present work, a Gaussian-beam launcher is formed by . . . "). On occasion, Move 4 is also signaled by a switch from the impersonal style used in Moves 1-3 to the use of *we.* And inevitably, the smaller the research space (the less evident the existence of an unfilled ecological niche in the research area), the greater the rhetorical *work* needed.

We have thus reached a position where it would seem reasonable to assume that a research article introduction typically closes with a promissory statement, variously indentifiable as an offer of a solution, as a clarification of research purpose, or as an advance notice of what is to come.[1] However, it is much less clear whether the close will also contain a summary announcement of the principal findings. Although we know that the principal findings (PFs) will normally be summarized in the second half of the "informative" abstract and will be reported and discussed at some length in the results and discussion sections, there seems to have been little attention given to the question of whether announcements of principal findings (APFs) are also inserted at an introduction's close (as was indeed the case in the Neelakantaswamy and Hong extract analyzed by Zappen). The only study known to us is a preliminary unpublished investigation by Kinay, Muloshi, Musakabantu, and Swales (1983). In a sample of 50

introductions drawn more or less at random from a range of fields and journals, all but 5 contained clear Move 4 promissory statements. However, only ten of the remaining 45 (22%) also included an APF. Kinay et al. also looked for a possible relationship between the absence of a homotopic abstract and the presence of an APF in the introduction. Of the eight papers without abstracts four also had no bottom line, and so kept their readers in suspense about their findings until the results section, thus suggesting, on very limited evidence, that the correlation may be weak.

The present article reports on a localized case study of the APF apsect of article introductions in two contrasting fields (physical science and psychology) and over time—to ascertain whether there have been any changes in writing practice over the last few decades. To that end we have examined introductions from the *Physical Review* of 1943, 1963, and 1983 and from the *Journal of Educational Psychology* in 1963 and 1983. A major motivation for undertaking this research derived from our observations that handbooks, manuals, and style sheets for prospective authors of research papers appeared to ignore the issue, disagreed amongst themselves, or seemed to be offering prescriptions not in accord with the actual practice of many successful authors ("successful" in the operational sense of succeeding in getting their manuscripts published).

ANNOUNCING FINDINGS IN INTRODUCTIONS: A SURVEY OF MANUALS

There is no discussion of the APF question in several of the works surveyed, such as Peterson (1961), Jones (1971), O'Connor and Woodford (1976), and Michaelson (1982). Where it is discussed, the overall weight of advice is to include APFs in introductions. Thus the Royal Society, in its *General Notes on the Preparation of Scientific Papers* (1965, p.6), advises that

> the introduction should state the reasons for the work (with brief reference to previous work on the subject), the object of the work, *and the main achievements.* (our emphasis)

Calnan and Barabas (1973, p.86) give six functions for the introduction, of which the fifth is:

> to record the most significant finding so that the reader is alerted early and can assess the evidence for it as he reads.

Similarly, Dudley (1977, p.12), in a volume entitled *The Presentation of Original Work in Medicine and Biology*, observes:

> A sentence or even a short paragraph at the end of the introduction *which says what the work has or has not achieved* as well as what it set out to achieve may catch the reader's attention and invite him to test for himself by further reading whether or not he agrees with the contentions expressed. (our emphasis)

The most trenchant version of this advice is contained in the well-known volume by Day (1983) on *How to Write and Publish a Scientific Paper*. The fourth and final suggested rule for a good introduction is as follows:

> It should state the principal results of the investigation. Do not keep the reader is suspense; let the reader follow the development of the evidence. An O'Henry surprise ending might make good literature, but it hardly fits the mold that we like to call the scientific method. (Day, 1983, p.31)

In contrast, recommendations to dispense with an APF in introductions are rarer and more muted. For instance, the IEEE style guide (as cited by Mitchell, 1968, p.161) demurs by implication:

> The *Introduction* orients the reader with respect to the problem and should include the following:
>
> (1) The nature of the problem
> (2) The background of previous work
> (3) The purpose and significance of the paper
> (4) The method by which the problem will be attacked
> (5) The organization of the material in the paper

In fact, we have traced only one manual writer who unequivocally recommends dispensing with an APF, and that is Huth (1982, p. 53):

> Some authors close the Introduction with a short statement of the research findings. This practice has been justified as a device to hold the reader's attention: it has been criticized as moving the conclusion from its logical place in the sequence of the argument. One reason for

> keeping the conclusion at the end of the paper is that many journals now publish full summaries or abstracts on their title pages. Why give the answer twice at the beginning of the paper?

Within the specific contexts of the two journals analyzed in the following section, the survey so far has considered general or secondary sources of advice. The primary sources will naturally be the relevant style guide for the two journals. For the *Physical Review* the primary document is the American Institute of Physics *Style Manual* (1978). In fact, the APF issue is not directly addressed, the closest approximation being the following section on "purpose" (1978, p. 54):

> Every legitimate scientific paper has a purpose that distinguishes it from other papers on the same general subject. Make clear in the introduction just what this purpose is. In other words, orient the reader with respect to the point of view and emphasis of the paper, and *indicate what in particular the paper will accomplish.* (our emphasis)

The phrase "the paper will accomplish" is possibly ambiguous, perhaps deliberately so, but it is clearly less explicit about the necessity for an APF than an injunction to indicate what the paper "has accomplished." Thus it would seem that prospective contributors to the *Physical Review* are not externally constrained to close their introductions with an announcement of principal findings, even if the overall trend in general advice would suggest they would be well-advised to do so.

Mullins's (1977) *A Guide to Writing and Publishing in the Social and Behavioral Sciences* follows the American Psychological Association guidelines, which are in turn adopted by the *Journal of Educational Psychology*. The relevant section is (Mullins, 1977, p. 21):

> In the final paragraph of the problem statement (of article introductions) briefly and clearly present:
>
> — The article's single focus
> — The central hypothesis
> — The research method
> — The major findings (optional but common)

It would therefore seem that educational psychologists are encouraged more directly than their counterparts in physics to follow an APF policy in their submissions to one of the leading journals in the field. In the next section we will present our findings as to what actually happens, as opposed to what might be expected to happen, following prescription, recommendation, and commentary.

TYPES OF INTRODUCTION CLOSE IN TWO JOURNALS

The corpus consists of 110 article introductions selected from two journals, both of which require homotopic abstracts:

A. 66 articles from the *Physical Review (PR)*
   (1) 22 from Second Series, 1943 (volume 63, Nos. 1-6)
   (2) 22 from Second Series, 1963 (volume 129, No. 1)
   (3) 22 from *Physical Review A: General Physics* Third Series, 1983 (volume 27, No. 1)

B. 44 articles from the *Journal of Educational Psychology (JEP)*
   (1) 22 from 1963, volume 54, Nos. 1-3
   (2) 22 from 1983, volume 75, Nos. 1-2

All the articles had clear introduction sections, either self-announced as in the case of the *Physical Review* or followed by a section entitled *Method* as in *JEP*. All the articles in the corpus were also immediately preceded by abstracts. However, the format of the *JEP* changed somewhat in the period between 1943 and 1963, and it was eventually decided to exclude 1943 *JEP* articles for this reason.

The introductions were placed into one of five categories according to the following scheme:

Class A—The introduction contained no Move 4-type statement introducing the present research and no announcement of principal findings (APF).

Class B—The introduction contained a Move 4-type statement but no APF.

Class C—The introduction contained no Move 4 but an APF.

Class D—The introduction contained both a Move 4 and an APF.

Class E—The analysis of the introduction is too uncertain and doubtful to permit categorization.

The corpus provided a single incontrovertible example of Class A:

(1) In general, the substances most favorable to inelastic scattering (of protons) are light elements with high (p.n.) thresholds. (end of introduction) (*PR*, 43)

However, there were several others that seemed intermediate between Class A and Class B (our emphases):

(2) Their well conceived experiments *suggested to us the desirability of repeating* this work with the mass spectrometer as a detector of ionization. (end of introduction) (*PR*, 43)
(3) Consequently, *it was expected* that infra-red studies of antimony *would* contribute toward unravelling its band structure. (end of introduction) (*PR*, 63)

The first has a surface realization of the switch to first person (a typical marker for the onset of Move 4), while in the second the underlying agent of the passive verb can be presumed to be the present experimenters and not previous researchers, and thus would have been realized as "by us" in surface structure. Nonetheless, reference to present work remains implicit and reconstructable rather than manifest in the actual text; for that reason, we have categorized such cases as Class A.

In contrast, the typical Class B introduction ends with an explicit promissory statement, most frequently signaled by *this/*the *present*, but also marked by first person usage or by *here, now,* or *reported* (with or without other signals). Thus we find:

(4) The main purpose of the experiment reported here was to . . .
(5) The study reported herein was designed to . . .
(6) The purpose of this study was to explore . . .
(7) In this paper we give preliminary results of . . .
(8) It is one of the aims of this paper to determine . . .

However, in Class B, the actual findings or results are not specified in any detail, and certainly in less specific and less usable form than even in the homotopic abstract. Class B introductions are concerned with

what will be done, not with what has been found.

There were only two cases of Class C. The shorter is given below:

(9) Therefore, it is of interest to examine the validity of the approximation of neglecting the field connections to the dielectric constant. The error introduced by this approximation will be explicitly calculated and shown to be small or negligible under most circumstances. (*PR*, 63)

The first sentence is classified as Move 3 (hypothesis raising) partly because of its intrinsic rhetorical function and partly because of the arguments we have presented for not assigning Move 4 status to citations like (2) and (3) above. The second sentence, taken as a whole, would seem to be an APF given the conclusion that the error is shown to be "small or negligible." A suitable illustration of a Class D introduction (a statement on the present research plus an APF) is the Zappen text shown in Figure 1, which closes with an outline of the changes made in the launcher. Space does not permit any consideration of the relatively small number of introductions that we have been unable to categorize.[2]

Table 1 shows the results of the classification scheme as it applies to the two samples from the journals. Class B and Class D are the two types of introduction that contain an explicit announcement of either the purpose or the topic of the present research. The fact that these two classes predominate (83%) in the *Physical Review* sample provides useful support for the appropriateness of existing models of article introduction information structure. In 29 of our 55 cases, *Physical Review* authors then went on to indicate their principal findings, and in 1 case (Class C) did so directly without bridging previous research and present findings via a Move 4 statement (see example 9 above). Table 1 also shows that statements of results/findings have slowly but steadily become more common over the last forty years, reaching 55% in 1983. However, the relatively small sample size would suggest that further investigations will be needed before we can reach any firm conclusions about such a trend.

The figures for the *Journal of Educational Psychology* are highly contrasting, for there were only three APFs (a disclosure rate of 6.8% as opposed to 45%), and one of these is of a highly generalized nature:

(10) Thus, the present study corrects many of the methodological and interpretive pitfalls of previous studies of cross-racial ability patterns. (end of introduction) (*JEP*, 83)

TABLE 1
Types of Introduction in Two Journal Samples

	A. The Physical Review			B. The Journal of Educational Psychology			
Year	Class A	Class B	Class C	Class D	Class E	Totals	% with bottom line (C & D)
A - 1943	3	10	0	8	1	22	36%
A - 1963	2	9	1	9	1	22	44%
A - 1983	0	7	0	12	3	22	55%
Totals	5	26	1	29	5	66	45%
B - 1963	1	17	1	1	2	22	9.0%
B - 1983	0	17	0	1	4	22	4.5%
Totals	1	34	1	2	6	44	6.8%

In fact, many of the introductions are quite long, especially in the 1983 sample, and there is consequently much cyclic working through of Move 2-3-4 sequences. Nevertheless, the manifold opportunities to announce results are consistently declined. On occasion, this has given rise to the rhetorically curious situation of the authors referring to their results as if they had been given, when in fact they have not been indicated:

> (11) The major objective of the study was to develop and test the effects of a brief curriculum of special preparation for the analytical portion of the GRE Aptitude Test to assess the susceptibility of three analytical item types to short-term intervention designed to improve performance on the item types. The results were intended to aid decisions about the composition of the analytical section of the test when it becomes fully operational. (end of introduction) (*JEP,* 83)

It is customary to classify abstracts as either indicative or informative. *Indicative abstracts* are commonly defined as those containing information on purpose, scope, and methodology, but not on results or conclusions. *Informative abstracts,* on the other hand, are expected to include those final two elements (Cremmins, 1982). The psychologists in the sample we have examined seem to have a decided preference for *indicative* introductions.

DISCUSSION

The corpus study described in the previous section raises a number of issues. An obvious one is the apparent mismatch between advice in the appropriate manuals and actual practice. The guide for physics researchers makes no mention of either the necessity or the suitability of indicating results at introduction close, and yet it would seem to be an increasingly common practice for *Physical Review* articles to contain such indications. On the other hand, Mullins's claims that in the social and behavioral sciences indicating main findings is "optional but common." Our study of the *Journal of Educational Psychology* shows that an APF is certainly optional but equally certainly is by no means common (with three occurrences out of a possible total of 44). In fact, Mullins's observation about "optional but common" would seem to fit the physic's data well, but not the data from Mullins's designated area. It might therefore be concluded that many of the style manuals are descriptively inaccurate in terms of the rhetorical feature discussed in this article. As applied linguists we would certainly wish to advocate the continual interaction of description and prescription, for without ongoing descriptive analysis of rhetorical trends, prescriptions can become otiose and obsolete. The authority that accrues to generalizations derived from the study of actual texts might in turn lend sufficient credence to style guides for them to be "honored more in the observance than in the breach" by authors and their editorial gatekeepers.

A second issue concerns the disparity between the two sets of data and its possible causes. The two journal samples clearly differ in the degree of APFs in introductions; and, given that this difference is equally clearly not a direct consequence of the instructions given to the authors, then, in the absence of contrary evidence, it is at least possible that the difference is also one of discipline. Why should this be? Why should half the physicists opt for a third mention of principal findings (abstract, results, *and* introduction) while virtually none of the psychologists did so? It is conceivable that the physicists' succinct, verbal announcements are not seen, within that discourse community, as actually constituting results, given the highly quantitative nature of physics. On the other hand, the psychologists may feel that the nature of their results makes it rhetorically unwise to give their readers early access to them. Some evidence for this kind of interpretation derives from the fact that many of the educational

psychology introductions followed the promissory statement—typically of the hypothesis to be investigated—with an introduction final sentence or sentences that dealt not with results but with *method.* However, a text-based study such as this has interpretive limitations once the discourse analysis and the comparison between description and prescription has been completed. A fuller explanation of the phenomena reported would seem to require some seeking out of the beliefs and judgmental processes of those concerned with the research writing process—authors, editors, *and* manual writers.

NOTES

1. The point we wish to emphasize at this juncture is that these two models remain in fairly close agreement with regard to the number and boundaries of rhetorical subsections or "moves" required to account for a typical type of short research article introduction (longer introductions are usually more rhetorically complex and often contain cyclic iterations of subsection sequences). The difference essentially resides in the evaluation and interpretation of subsections, which then becomes manifest in a difference between the attached glosses and labels. Although a resolution of this disagreement lies outside the scope of this article, it is worth observing that we may need both kinds of metaphorical caricature in order to capture the general movement of the arduously crafted introductory sections of research articles. We may need to account for both description and persuasion, for both reportage and promotion, for cool, logical textual surfaces as well as ego- and group-centric subtexts. Indeed, it is likely that this dual approach will be useful irrespective of whether the investigator is a sociologist of knowledge, a discourse analyst, a rhetorician, or—as many of the authors already cited—an individual in some way concerned with the teaching of technical and research communication to either native or nonnative speakers of English.

2. However, it is now necessary to point out that 10 out of the 110 introductions opened with a Move 4-type "introducing present research" statement. Although *prima facie* this finding might seem to disconfirm the viability of the Zappen and Swales models, we would argue that an anomaly percentage of under 10% is perfectly acceptable in discoursal and textual studies. Even more than syntax, discourse is a study of propensities and predilections. Discourse "rules" are generalizations that are permeable to exceptions, rather than laws falsified by a single counterinstance. If in Sapir's famous phrase "all grammars leak," so all the more should we expect to find leakage, deviance, and creativity in the information structures of discourse, even when the analysis is restricted to conventionalized and well-established genres. Initially we noted that *fronted* fourth moves were somewhat more common in *JEP* than PR (6 out of 10 in 40% of the corpus). Subsequently, we investigated the possibility that authors might opt to introduce their own research at the beginning if the introductory section was to be lengthy and complex in an effort to provide a focus for a discursive survey both of previous research and of various kinds of issues. To some extent this is true, at

least in the sense that 4 of the 6 *JEP* "4-fronted" introductions are more than 800 words long. However, one of these 6 introductions is but 130 words in length. On the other hand, the positioning of Move 4 does not bear directly on the topic of this article for it is clear that the researcher has ultimately the same opportunity for inserting an announcement of principal findings, irrespective of whether he or she opens the introduction by referring to the present research or (pre)closes it in this way.

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