

Close to home: notes on the post-publication withdrawal of a Spanish research paper

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Abstract

The rapid withdrawal from publication of a research article by a Spanish immunogeneticist and eight colleagues from Spain and Palestine was called "unprecedented" by one publishing ethics expert and was widely discussed during the winter of 2001 and 2002. The present paper analyzes the text of the retracted article, focusing on features that are often examined in English for specific purposes classes in an effort to discover how such features could have guided revision. The aspects named for study were the location and number of problematic wording decisions that drew fire for reasons unrelated to science, anomalous rhetorical patterns and the use of hedging. The paper was also compared to three others by the same first author. Finally, a paragraph from the Introduction was edited, in order to check the adequacy of the analysis of wording, moves and hedging for guiding revision. The results suggested that wording, thematic development, and clearly marked introductory and concluding moves, rather than hedging, would be relevant features to target for revision. The analysis includes discussion of how articles come to be published with language and rhetorical shortcomings and how a local author's editor, equipped with knowledge of the target genre, can guide author revision.

Key Words: Writing, second language genres, research article. editing. hedging. discourse analysis.

Resumen

La rápida retirada de publicación de un artículo original escrito por un inmunólogo español y ocho colegas de España y Palestina fue "sin precedentes" según un experto en ética editorial y fue ampliamente discutido durante el invierno del 2001-2002. El presente trabajo analiza el texto del artículo retirado, con atención a las características que a menudo se estudian en clases de inglés para fines específicos, con el objetivo de descubrir cómo estas características podrían haberse utilizado para orientar la revisión. Los aspectos concretos a estudiar fueron la locación y cantidad de expresiones potencialmente

problemáticas que atrajeron críticas por razones ajenas a la ciencia, la anomalía en la retórica funcional y la atenuación de la misma. Además, el artículo fue comparado con tres trabajos más del primer autor. Finalmente, un párrafo de la Introducción fue sometido a una corrección de estilo con el fin de averiguar si los aspectos antes mencionados eran suficientes para orientar la revisión del texto. Los resultados sugirieron que las características a indicar para revisión serían, más que la atenuación retórica, la expresión a nivel de frase o palabra, el desarrollo temático, y la provisión de secciones funcionales (*moves*) con clara demarcación en la Introducción y la Conclusión. El presente análisis incluye una discusión sobre cómo se editan artículos con deficiencias lingüísticas y retóricas así como la manera en que un asesor lingüístico, con conocimientos del género de destino, puede orientar la revisión del autor.

Palabras clave: redacción, segunda lengua, géneros, artículo de investigación, corrección de estilo, atenuación retórica, análisis de discurso.

Introduction

Editors and others involved in scientific communication have been discussing an unusual case of withdrawal from publication, in October 2001, of a scientific paper on the genetic origins of Palestinians (Arnaiz-Villena et al., 2001b, retracted)¹. The paper's first author was immunogeneticist Antonio Arnaiz-Villena of Universidad Complutense in Madrid, who had already been widely published in his specialty at the time of the incident, was sufficiently respected in his field to be on the editorial board of the journal (*Human Immunology*, an organ of the American Society of Histocompatibility and Immunogenetics - ASHI) and had earned the society's confidence enough to be designated guest-editor of the special issue in which the paper appeared. The withdrawal was ordered by the journal's editor-in-chief with the approval of the former AHSI president, who went on record to say the paper had "offended and embarrassed" the society (Klarreich, 2001). Letters of protest from members threatening to resign were referred to.

The charges in the lay press and e-list exchanges have been that the Introduction contained sociopolitical content that was inappropriate to a scientific article and that an objective and a conclusion went beyond what the results could support.² Debate has centered on three questions: 1) whether or not language or translation problems contributed to wording that offended some readers, 2) whether or not parts of the historical background in the Introduction and the controversial second objective (to explain current conflicts in the Middle East) were appropriate to this scientific paper, and 3) whether withdrawal of the article was the right step to take in response to readers' protests or the article's intrinsic problems. The first two issues involve aspects of language use and genre features that are central to the teaching of English for specific

purposes (ESP). The third is also of interest to those who teach research paper writing or assist authors or publishers. Therefore, my belief is that an exploration of the text in the Arnaiz-Villena case is an appropriate contribution to a growing body of ESP literature on how non-English-native (E2) writers manage international publication and how their work is perceived and handled by editors. (For example, Gosden, 1992 and 2001; Flowerdew, 2000 and 2001.)

The case may also interest those concerned with how politics can affect access to the media, as some commentators have charged that the heart of the matter is the researchers' finding that Palestinian and Jewish populations are genetically close (McKie, 2001). Indeed, the affair has significance partly because of the surprisingly dramatic events that followed retraction, including the removal of Dr. Arnaiz-Villena from one of his appointments and his later arrest on such charges as diverting clinical resources to research, in a chain he alleges is related to the retraction (Galaz, 2002a and 2002b). Whether or not the charges are a form of harassment can be debated, but certainly the journal's quick decision to retract was remarkable - and has been called "unprecedented" by one publishing ethics expert quoted in *Nature* (Klarreich, 2001). Published papers are not usually withdrawn for bad writing - as the real or perceived presence of a political agenda would indicate was present - or even for bad science. Rather they are left to endure ridicule or be ignored if they fail to convince the larger community of readers. Even challenged papers remain citable for a time. For example, allegations of fraud in data handling for a paper published in *Cell* in 1986 (Weaver et al., 1986, retracted) took ten years to sort out to the profession's apparent satisfaction. The paper was not actually withdrawn until 1991 in spite of being "rife with errors" according to sources cited by Shashok (1999) in a review of books on "the Baltimore affair". Normally, only proven fraud or plagiarism will lead to retraction, usually after time-consuming investigation, as can be verified by visiting the web sites of the U.S. government Office of Research Integrity or the Committee on Publication Ethics (a group of British science editors).

Drama is not the main reason for taking an interest in the retracted paper, however. While rapid withdrawal was so remarkable that it may well have been related to a convergence of social pressures after 11 September 2001, features of text probably contributed to misinterpretation, exacerbating negative reactions and undermining defense of the paper once post-publication scrutiny started. I therefore undertook an analysis of features that could have been targeted for revision, a matter of practical interest to ESP teachers and editors of E2 texts. Three objectives were related to aspects of text to study prospectively:

- 1) To locate, count and estimate the significance of wording decisions that could be taken to imply political bias. In this, I was exploring the author's own

- concern that the use of certain expressions in the article laid him open to criticism (McKie, 2001), especially since some might have been reflections of first-language interference (e.g., "colonists" rather than "settlers" for "*colonos*").
- 2) To look for rhetorical patterns (moves) that are unusual in the light of what we know of how research articles are structured, particularly Introductions. In doing so, I was exploring grounds for the hypothesis that readers are more likely to become irritated when their expectations are not met, possibly leading to negative assessment.
 - 3) To examine the pattern of hedging in the light of what has been reported for medical research articles by Salager-Meyer (1994). This objective explored the hypothesis that differences in discourse modulation may influence the impression made by E2 writing.

Furthermore, Gosden (1995, 1998) has shown that an author's revision of thematic development plays an important role in creating successful manuscripts, and Coates (et al.) (2002) recently reported that manuscripts submitted to one journal with a high number of errors (more than the average for all E2 manuscripts in the sample) had a lower acceptance rate, while the lowest national acceptance rate belonged to the country with the highest error rate. A superficial reading of the retracted paper revealed that it was replete with interlanguage problems. It was therefore clear that the features named above for prospective study might not identify all those that could affect a reader's willingness to cope with the paper's scientific message. This reasoning led to the following objective:

- 4) To reflect retrospectively on how I, as an experienced author's editor, would approach revision of the text and how I would orient my dialog with the author about revision.

Finally, although a first-hand account of how the article came to be written and published (authoring process or rigor of peer review) is unavailable to us, I hypothesized that comparison between the withdrawn paper and earlier work by the same first author would give some hint of how Dr. Arnaiz-Villena's teams' writing normally appears after it has gone through external review that has not been supervised by himself. Carrying out that comparison comprised the fifth objective.

Method

To meet the first objective, I converted the pdf file (Acrobat Reader®, InstallShield Software Corporation, U.S.A.) of the article to a Word® file (Microsoft, U.S.A.). I then read the entire article on paper and marked terms or phrases that seemed to differ from those usually used in the mainstream Anglophone press to discuss Middle East events. Finally, I searched the Word® file to check for repetition of such uses and for all terms considered offensive by commentators (e.g. "concentration camp" and "colonist"). A colleague more familiar with conflicts in the region also read the article and briefly reviewed the results with me. To meet the second objective, I printed the Introduction and identified the moves, using the classification of Swales (1990). I also looked briefly at the structure of the Discussion for possible anomalies based on my own experience with author's editing. As Dudley-Evans (1995) has pointed out, Discussion moves are more complex; thus, a detailed analysis would have been too time consuming for an exploratory paper. To meet the third objective I looked for instances of hedging, applying the very broad definition implicit in the five types studied by Salager-Meyer (1994). Briefly they are as follows: "shields" express degrees of probability; "approximators" enable the author to avoid precision; "expressions of personal doubt/involvement" are typified by the clause "I believe"; "emotionally-charged intensifiers" express the author's reaction (e.g. "surprisingly"); and "compound hedges" are juxtapositions of more than one. I used a file from which I had deleted tables, figures and legends, notes and other items that were not part of the running text. When counting the number of words used for a hedge, I took as many as were necessary to establish the author's level of claim; for example, "may have numbered about" was a compound hedge comprising four words.

To meet the fourth objective and provide a sample of editing for comparison, from which to estimate the adequacy of the first three objectives for guiding useful targets for revision, I applied my usual method of editing, reflection and author querying to one paragraph from the Introduction. Finally, for comparison, I obtained three articles by Dr. Arnaiz-Villena and others (1992, 1997 and 2001a) with the same IMRAD (Introduction-Method-Results-and-Discussion) structure. The latter two were chosen because they were from sub-specialty journals similar to *Human Immunology*. The first was chosen because it was published by the broader and highly respected *New England Journal of Medicine (NEJM)*. I was interested in knowing whether the move patterns and overall presentation of the withdrawn paper were usual or unusual in published work by Dr. Arnaiz-Villena's teams. Observations arising from this objective are discussed when they are relevant to any other textual feature described.

Results and discussion

Nearly all the politically suggestive phrases that differed from those used in mainstream news reports were found in the Introduction (Table 1). First-language interference can clearly be blamed for two phrases in my opinion. One is "colonist", given that Spanish does not have another nuanced word, comparable to "settler", for that concept. The other is "and started a war", which might have arisen as a result of variable subject-verb word order in Spanish. The presence of grammatical error in the first part of the sentence (Item 1, Table 1) leaves an English-native reader groping for meaning and syntax and, coming right after the unilateral focus of "self-", it is quite possible to interpret that the author wants to say that Israel started a war. In fact, *empezó una guerra* could just as easily have been translated as (or edited to) "a war started", which is the more likely interpretation. The reference to "concentration" camps (Item 5) may also appear deliberately provocative to many English speakers who use that label only for the extermination camps of Nazi Germany. However, the term has been applied more widely in Spanish history to a variety of situations, for example to the Vichy government's camps for Republican refugees after the Spanish Civil War and to concentrations of prisoners and sympathizers inside relatively closed plazas during the war itself. Thus, if the authors were not subjecting their text to careful revision - and there is evidence to that effect, as will be discussed below - they may not have realized that a narrow connotation would lead to strong reactions. Finally, the word "scattered" might seem to indicate bias because it evokes the notion of loneliness, inviting sympathy for Palestinians who suffer isolation. Similarly, the use of "theoretically" in Item 4 may also evoke sympathy; furthermore, it sounds sarcastic. Neither of the last two items seems attributable to direct language interference.

Table 1. Potentially problematic expressions in the Introduction to the withdrawn research article

Expression used [†]	More likely mainstream press expressions [‡]
1) Israel's <u>self-proclaimed independent</u> [<i>sic</i>] in 1948...	1) After the establishment of the state of Israel in 1948 ...
2) ... and <u>started a war</u> against Muslim Palestinians and other Muslim neighbouring countries	2) ..., war broke out with neighbouring Arab countries
3) Jewish <u>colonist</u> [<i>sic</i>] ...	3) settlers
4) ... in their [Palestinians'] <u>theoretically</u> own territories	4) in the Gaza strip; <i>or</i> in territories administered by the autonomous Palestinian government
5) <u>concentration</u> camps	5) refugee camps
6) [Palestinians living] <u>scattered</u> in Jordan	6) [Palestinians living] in Jordan

* Arnaiz-Villena et al. (2001b, retracted)

[†] Items 1 and 2 were on p. 891, adjacent in the text; all others were found on p. 892, with Items 3 and 4 adjacent in the text.

[‡] The alternatives are not meant to serve as editorial changes. They only indicate more neutral candidate phrases that would be more familiar to many readers.

Each anomaly occurred only once. The authors do not seem, therefore, to have been insisting on a political agenda, suggesting that the position of ASHI upon retraction - that the authors were using "a scientific forum to advance ... bias" (Tyan, 2001) - was an overstatement. Dr. Arnaiz-Villena denied bias, in fact, when speaking to *The Observer*:

Perhaps I should have used the words [*sic*] settlers instead of colonists, but really, what is the difference? And clearly, I should have said refugee, not concentration, camps, but given that I was referring to settlements outside of Israel - in Syria and Lebanon - that scarcely makes me anti-Jewish. (McKie, 2001)

Thus, the author's defense is consistent with my portrait of an E2 writer who has been informed of unintentionally poor word choice and regrets it, but even so, seems still unaware of the intensity of its effect.

In the Discussion I found only one phrase that surprised me and that might offend given its combination with what follows. Specifically, the Bible was referred to as a "religious and historical book that is a continuous source of historical Middle East facts, but that only tells the Jewish view" (with a book published in Barcelona cited as the source of the opinion) (Arnaiz-Villena et al., 2001b, retracted; p. 895). That was immediately followed by a statement of need for "a more *objective* history of Middle East [*sic*; my italics] and particularly ancient Canaan" (the cited sources being the same book plus a French atlas). That Discussion sentence, with its allusion to a lack of Jewish objectivity, was all the more significant, however, because it was found near the beginning of that section and appeared to be a statement preparing for the present research. Usually such a move precedes the objective in a classically structured Introduction (Swales, 1990) but is missing from the withdrawn article, as will be discussed below. The same information, phrased differently, placed where it was expected, and hedged would have drawn little attention. Thus, something to the effect that the Bible has sometimes been used as a historical source written from the point of view of Jewish chroniclers, followed by a statement that studying the human leukocyte antigen (HLA) system can play a role in objectively corroborating or questioning accounts of ancient settlement patterns, could have contributed to creating a plausible research space. Such interventions - changing the location of content and creating relationships as well as simple rephrasing - fall well within the scope of editing practice, as is illustrated by Flowerdew's (2000) account of how a Hong Kong scholar's paper underwent several cycles of substantive editing both locally and in-house. Editors can, however, create a text that strays from an author's original intentions, as in fact happened to the Hong Kong author, who Flowerdew says "mentioned a number of aspects of content he had felt obliged to change" (p. 144) in the interest of coming into line with the journal's political ideology. In the

present case, only Dr. Arnaiz-Villena and colleagues themselves could tell us whether they would have been grateful for editorial help or felt betrayed by such interference.

The fact that the anomalous wording was found almost exclusively in the Introduction may have played an important part in escalating the negative reactions of some readers. In spite of our strong expectations about the structure of Introductions, opinions about their importance vary. On the one hand, novice authors have sometimes argued to me that as an Introduction does not contain their contribution to science, it should not be the section that affects a referee's assessment of their papers. Gosden (1992) offered evidence that such an attitude may be widespread when he reported that surveyed editors emphasized the attention they give to scientific findings in making decisions to accept a paper and underlined the need for clear Results and Discussion sections. However, the editors Burrough-Boenisch (1998) surveyed described a complex variety of IMRAD reading behaviors that would probably affect the processing (or not) of Introductions. She found that scientists change their strategies when different roles are involved (editing vs. reviewing vs. personal scientific use), with the editing role most likely to involve IMRAD-order reading. Her interpretation was that editors probably read that way "to check that the paper meets the requirements of exposition and build-up that are implicit in the ... structure" (p. 5). Furthermore, Burrough-Boenisch found that native English and E2 speakers, when reading as scientists, differed as to when they read an Introduction, with half the English natives reading it just after the abstract and less than a quarter of the E2 scientists doing so. Such variation in how scientists attend to the section that theoretically precedes and frames research raises the possibility that much of the attention given to the retracted paper's Introduction by post-publication readers may have come from English-speaking scientists or from non-scientists who were attracted by the topic to read the only section whose information was comparatively comprehensible to them. We can also guess that the peer reviewers for the article were probably E2 readers, as the paper emerged from a European congress with a continental organizing committee and nine scientific advisors from Spain, France, Italy and Switzerland, plus two from the United States. In such a situation, a plausible alternative hypothesis to the strong accusations by ASHI that Dr. Arnaiz-Villena deliberately circumvented usual peer review practice³ is that reviewers applied their usual reading strategies and gave little attention to the Introduction of a topic that was highly familiar to them. Then, in the absence of an obligation to practice recursive writing in response to reader feedback (such as challenging peer review involves) the author probably never seriously reconsidered his draft of the Introduction. That Spanish scientists tend not to write recursively on their own, before submittal, has been reported by St John (1987) in a limited study

that has been widely cited and never challenged to my knowledge, possibly because it documents our informal observations.

Once a scientist's attention was drawn to the Introduction, however, it would have been hard for him or her to describe it as typical of its genre. Table 2 shows the author's handling of introductory moves in function of Swales's Create a Research Space (CARS) model (1990). Anomalous features include the missing second move and the unusually long summarizing move given over to a historical account that uses, almost exclusively, sources like encyclopedias that scientists do not usually cite. At first, it seems unclear why the author took that approach, as the summary implies there is strong consensus about events among historians. Then, because no explicit gap in the research is outlined, a reader is left to infer that the immunogenetic technique will be applied only to confirm or question currently unchallenged opinions. However, a look at the Introductions to the two sub-specialty journal articles chosen for comparison shed some light. The earlier one (Arnaiz-Villena et al., 1997) has a more typically-structured Introduction featuring an interdisciplinary review of literature on gene typing, historical anthropology and linguistics (Move 1) and includes a short but explicit 14-word Move 2 in the contextualizing frame before the objective ("...due to the still undefined relationships...", p. 38). The more recent one, however, precedes the objectives with a mere mention of the gene-clustering literature after a sketch of the social-historical situation of the populations studied but leaves the research space to be inferred (Arnaiz-Villena et al., 2001a). A candidate sentence about gene clustering is self-citation and mentions earlier results showing non-clustering for one of the populations, but its status as a Move 2 is undermined by contextualization with "furthermore", which suggests it only continues the interdisciplinary review of the literature. These features seem to indicate that after 1997 and before 2000, Dr. Arnaiz-Villena's team came to feel little need to create a space for this type of research. Had they made a more explicit case for the study of Palestinian HLA frequencies, they might have attenuated reactions to their controversial second objective, or engaging in revision, they might have modified or deleted that objective before generating controversy.

The hypothesis that shortcuts in the authoring or editing process may have allowed the paper to be published in an unpolished state that left it weaker than others by Dr. Arnaiz-Villena and colleagues was also supported by brief comparison of the Discussion sections of the four articles and a look at the Introduction to the early 1992 article. Interestingly, a precursor to my finding of classic Move 2 introductory information in the first paragraph of the retracted article's Discussion, as described above, can be seen in the 1997 Discussion. That section begins with a paragraph on

Table 2. Analysis of the Introduction to the withdrawn research article*

Outline of the author's Introduction	Move classification, based on the CARS model (Swales, 1990) [†]
<ul style="list-style-type: none"> • 1 paragraph claiming the applicability of the immunogenetic technique to anthropology (11 lines): 1) "The highly polymorphic human leukocyte antigen (HLA) system has been validated... since the first HLA Anthropology Workshop (reference)... and in all the subsequent..." 2) "HLA gene frequencies correlate with geographically related populations." 3) "The existence or absence of gene flow among neighbouring ethnic groups may be assessed with the study of HLA frequencies and... (2 references)." 4) 5 paragraphs with historical accounts of settlement in the area since the "3rd millennium BC or more ancient [<i>sic</i>]". References: <ul style="list-style-type: none"> a. 2 encyclopedias b. the Bible c. a social/anthropological atlas d. 1 research article (self-citation) e. several books f. an annual geopolitical summary 	<p>Move 1: Establishing a territory</p> <p>Step 1: Claiming centrality <i>and/or</i></p> <p>Step 2: Making topic generalization(s) <i>and/or</i></p> <p>Step 3: Reviewing items of previous research (?)</p>
<ul style="list-style-type: none"> • Not present 	<p>Move 2: Establishing a niche</p> <p>Step 1A: Counter-claiming <i>or</i></p> <p>Step 1B: Indicating a gap <i>or</i></p> <p>Step 1C: Question-raising <i>or</i></p> <p>Step 1D: Continuing a tradition</p>
<ul style="list-style-type: none"> • 1 paragraph stating the objective with two sub-objectives: "The aim ... to examine the genetic relationships of Palestinians with their neighbours (particularly the Jews and other Mediterranean populations in order to: "(1) discover the Palestinian origins, and "(2) explain the historic basis of the present day Middle East conflict" 	<p>Move 3: Occupying the niche</p> <p>Step 1A: Outlining purposes <i>or</i></p> <p>Step 1B: Announcing present research</p> <p>Step 2: Announcing principal findings</p> <p>Step 3: Indicating research article structure</p>

* Arnaiz-Villena et al. (2001b, retracted)

[†] The titles of Moves and Steps that are present in the Introduction are shown in bold face type.

how the HLA technique allows researchers to see patterns that distinguish rather than homogenize populations, Move 1 information that is not directly related to the new results reported in 1997 but that suggests why they are desirable. Relocation would have contributed to a stronger CARS Introduction in that paper, and its inclusion in the Palestinian paper, might have been useful. The early *NEJM* article on another topic (Arnaiz-Villena et al., 1992), on the other hand, has an elegant CARS Introduction with what Swales calls a pattern of "cyclicity" (1990, p. 158), with clearly marked Move 2 sentences at two points and, more unusually, closure with a second claim of centrality (Move 1, Step 1) from a different angle. Of course, the cycling could have been supplied by highly interventionist editors, such as Flowerdew (2000) has described, particularly given the resources available to the *NEJM*. However, the

germ of cyclicity is already present in Dr. Arnaiz-Villena's style, specifically in a tendency to block results by topics in the Discussion and come to separate conclusions for each in all four articles analyzed here. In fact, only the two earlier ones (1992 and 1997) contain integrative conclusions addressing the overall objectives and implications of the papers. That no such conclusion was present in either of the two more recent papers (2001a and 2001b, retracted) is consistent with the authors' apparent expectation of a small, accepting discourse community familiar with their technique and its literature.

The percentage of words devoted to hedging in the withdrawn article's Discussion section, at 5.66% (55/972), was below the mean 13% Salager-Meyer (1994) calculated for medical research articles. On the other hand, 4.88% (46/942) of the Introduction corresponded to hedges, and that percentage is above the mean 3.5% that can be inferred from the chart on p. 156 of Salager-Meyer's paper. Table 3 gives the breakdown by type, showing the author's underuse of compound hedges and avoidance of both types of expressions of personal involvement.

Table 3. Type distribution of 44 hedges in the withdrawn research article* and comparison to the distribution reported for the genre

Hedging types and percentages for medical research papers†		Hedges in the withdrawn article
Shields	40.7%	29 (65.9%)
Approximators	23.2%	14 (31.8%)
Personal doubt/involvement	} < 7%	0
Emotionally-charged intensifiers		0
Compound hedges	29.3%	1 (2.3%)

* Arnaiz-Villena et al. (2001b, retracted)

† Salager-Meyer (1994)

The latter feature probably arises from the value placed on an *estilo impersonal* in Spanish, as can be seen from the instructions to authors of many Spanish journals, such as *Medicina Clínica*. The extensive use of approximators might be an artefact of the topic or the type of sources cited. The hedging pattern, then, seems unusual, although the effect on readers can only be guessed. Still, the fact that hedging accounted for a substantial proportion of the Introduction suggests that greater modulation alone would not have helped make that section more acceptable. More careful wording (the author's hypothesis) and greater attention to introductory moves (my suggestion), especially establishing a niche for the present research, would have been helpful features to target in revision. Aspects of

organization are more likely at fault in the Discussion as well. There, the lack of a classic conclusion summarizing the response to the research questions seems at least as relevant as hedging.

Finally, Table 4 shows how I might approach revision of the text with the authors. In the first column, I have removed details of the historical background, thus also eliminating points whose relevance to patterns of migration and conquest in the Mediterranean is unclear - for example the point about the Holocaust during World War II. Shortening the Introduction would therefore deal with a variety of problems, yet leave the authors the option of mentioning specific historical events in the Discussion later if they shed light on how their results change or confirm assumptions about relationships in the area. Before intervening to that extent, however, I normally seek revision from an author for two reasons. One is to facilitate expression of the author's full original and bibliographic research experiences, as recursive writing by the author will produce a richer text that encompasses more than an editor's unilateral rearrangement of only the items that are visible in a draft. I have illustrated and discussed how author revision reaches beyond editorial revision elsewhere (Kerans, 2001). Another is to minimize the likelihood of altering the author's real intentions, such as happened to the Hong Kong author described by Flowerdew (2000).

The edited text (first column) illustrates revision undertaken freely, with no set plan. Obvious grammar errors have been corrected and parallel structures provided in the first two sentences and elsewhere. Some information has been moved forward from further down in the text and rephrased (e.g., "Persia" from "ancient Iranians"). The elliptical "in Middle Ages [*sic*]" has been completed in the second sentence. A fuller context frame has been added to the third sentence and the rheme in that sentence has also been enriched by information that had previously been expressed as the theme of a new clause. Providing simple temporal context frames for the two clauses in the fourth sentence, taken from information already present in the author's text, establishes a parallel sentence pattern that gives cohesion and a sense of direction to the paragraph. The reader's expectation of finding such a frame is then met in the fifth sentence, where the author's original ungrammatical information about Israel's proclamation of independence, discussed earlier, has been converted to a temporal context frame that relates it to the ensuing war but that does not lay blame. Thus, the restructuring of context frames and themes, a strategy whose importance has been underlined by Gosden (1998) but which was not named prospectively for investigation in the first three objectives for the present paper, emerged as a focus for needed attention. That the simpler errors corrected would also be relevant to improving readers' perception of the paper is supported by the recent findings of

Table 4. Sample editing of a paragraph from the Introduction of the withdrawn article, * with the copyeditor's reaction and questions for author reflection

Fifth of seven paragraphs[†]	Reaction	Queries, for author
<p>Alexander the Great [9] surrendered Gaza after a long siege about 333 BC and the area. L later, Gaza became an important Christian center [9] and then afterwards an important Islamic after when center because Palestine was converted to Islam by Arabie troops entered around and priests by 700 AD [9]. Ancient Canaan, (known as Palestine since the Middle Ages, and modern times has sequentially belonged to the Persia, the Roman-Byzantine empire, Egyptian Muslim Mammelukes, the European crusaders and finally the Ottoman-Empire [9] since the XVI century. In 1918 When British led mixed Arab-British troops seized the region in 1918. Palestine had 750,000 inhabitants in 1919 [9], and only 70,000 of whom were Jewish, as a result of dispersion to immigration rapidly increased the number of Jews (who had been several times led to Diaspora by the Hellenistic-Roman period, expelled, deported, and massacred by ancient Iranians and Romans, most western European countries, and finally Hitler [8,9]. By 1936, † there were 400,000 Jews present in Palestine, and by 1936 and 600,000 by 1947, when the total Palestine population of Palestine amounted to 2,000,000 inhabitants, there were 600,000. The United Nations plan for Palestine partition in 1947 is illustrated in Figure 2 [9]. When Jewish inhabitants proclaimed Israel's self-proclaimed independence in 1948, and started a war broke out with against Muslim Palestinians and other Muslim neighbouring Arab countries, and A after several regional wars, Israel has come to occupy the area taken more space and sized Jerusalem, as illustrated in Figure 3. The present situation (April 2001) is unstable.</p>	<p>This paragraph picks up the history begun three paragraphs earlier. Apparently it focuses on invasions and changes in cultural influences. However, the previous two paragraphs also recount such events and they must also have affected culture. The reasons for paragraph divisions are unclear.</p> <p>Change "ancient Iranians" to "Persia", given the dates involved and move to list of rulers'. The use of "Arab", "Arabic" and "Arabian" needs to be checked throughout manuscript. The relevance of Hitler to the Mediterranean is unclear. Note there may be chronology problems. Complete list of reasons for Diaspora may become relevant in Discussion but is not clearly so here.</p> <p>Reference 8 is a genetics research paper (self-citation), yet population numbers are the focus of the sentence. Error?</p> <p>"Palestine population" refers to all inhabitants of the land, even though elsewhere in the article the word "Palestinians" is not so used. Potential confusion. Check.</p> <p>Is the U.N. plan clearly relevant? Possibly the author believes it has a message relevant to the collection of blood samples for the study. Check it; make it explicit?</p>	<p>What are your reasons for starting and stopping paragraphs? What does each one represent to you?</p> <p>Regarding the use of "Canaan" and "Palestine", can we segregate use chronologically? When?</p> <p>The historical background is unusually long. Can you shorten it, possibly to one paragraph? What message is essential to the objectives? Is naming the invaders relevant here? If the names are relevant to later discussion of HLA patterns, can you save the specifics for the Discussion?</p> <p>How are the reasons for the Diaspora relevant to the objectives?</p> <p>Are the population figures relevant to the objectives? How?</p> <p>Why have you used reference 8 to substantiate historical facts? Did the findings of reference 8 change or support our understanding of history in some way? What way?</p> <p>What is your reason for including the U.N. map? And the next one?</p> <p>What message do you want the maps to reveal in relation to immunogenetics? Can you state the message explicitly in the text?</p>

* Arnaiz-Villena et al. (2001b, retracted)

† Editing changes are shown as crossed-out sections or additions in bold face, underlined.

Coates et al. (2002), that the acceptance rate for comparatively error-free E2 medical manuscripts was higher than that of manuscripts with more errors. Benfield and Howard (2000) also reported a lower acceptance rate for papers with errors by E2 authors submitting to a journal. Even though no direct complaints were made by ASHI about language quality when retracting, it is reasonable to assume, therefore, that errors affected readers' ability to perceive the article as valuable.

The authors' approval of editorial additions such as the one provided for context in the third sentence, and of deletions of such information as "in 1919" in the same sentence could easily be solicited under normal circumstances. In fact, many problems remain for discussion with the author. The second column, showing my thoughts as I confronted revision of the paragraph, indicates how I would present the proposed changes to the author and the third column shows how I would have sought the author's involvement in further revision. Guiding an author toward recursive writing is both possible and necessary if changes in larger rhetorical moves are desired (Kerans, 2001). Finally, although such heavy editing may seem like ghost writing to readers unfamiliar with publishing, it is in fact within the range of developmental editing for authors, the practice of which has been described by McNab (1988), Rew (1999), Shashok (2001) and Burrough-Boenisch (2001).

The present analysis has been confined to textual features and a comparison with a limited number of Dr. Arnaiz-Villena's many previous publications. Readers' reactions, other than my own, were not systematically investigated and have only been considered as reported in the press, as the background leading to withdrawal of the paper. It is reasonable to assume, however, that readers have generally responded negatively to the article as a whole, given that few defenders have come forward. Similarly, conversations with Dr. Arnaiz-Villena might also have provided valuable insights. In my judgment, however, the present study of textual features alone needed to be undertaken in a timely way, even though the authors' cooperation was unavailable.

Implications for teaching and editing

The analysis of wording, moves and hedging patterns revealed differences between the withdrawn article, others typical of the genre and three others by the same author. Together with the sample editing of a segment of the Introduction, the findings confirmed the author's belief that wording contributed greatly to the paper's failure but further revealed that revision of thematic development would also help the author produce a more defensible, enduring paper. It is not clear, on the other hand, how adherence to a more typical pattern of hedging might have contributed. An interesting question, though, is

raised by the total absence of personal doubt and involvement hedges. A possible implication is that encouraging a writer to adopt a style that includes a more personal voice in drafting stages - if only as a heuristic serving a pedagogical purpose - might also enhance the role that writing can play in raising awareness of one's own thinking and hence favor substantive revision.

Finally, the hope that journals will provide editorial assistance with language problems, as some reports suggest may be available (Flowerdew, 2000 and 2001; Gosden, 1992) seems optimistic to me. We have persistent beliefs about editorial processes that might once have been widespread but that are now inconsistently applied at best. (Should readers believe that cut-rate publishing must have been involved in the Arnaiz-Villena affair, I mention that the house that handles the journal is first-string Elsevier of Holland, which also publishes *English for Specific Purposes* and *The Lancet*.) However, the belief that peer review and editorial oversight lead to text improvement seems to be supported by my finding of more expected functional moves in the two earlier articles by the same first author. The evident lack of quality assurance from publishers, however, means that local ESP teachers, translators and author's editors can provide a valuable service by establishing ways to bring surrogate pre-submittal review of rhetorical organization to E2 authors. The quality of academic papers - on which an author's reputation depends - continues to affect reader response even after peer reviewers and editors have given favorable assessments. Quality clearly needs to be provided for close to home, however, as authors cannot assume there will be checks farther along in the editorial process.

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NOTAS

1 Document "medline01n0537.xml" of the National Library of Medicine is the earliest record of retraction, dated 10 October 2001 (http://www.nlm.nih.gov/bsd/license_doc_notes/med01n0537.html; access 26 March 2002), although the Medline database entry gives November 2001 as the date. If a reader is interested in replicating any part of this study, but finds the retracted article unavailable in libraries, contact M. E. Kerans at med003792@saludalia.com for a copy.

2 An Internet search using the last name of the first author (Arnaiz-Villena) will yield links to e-list comments and articles from the lay press. As recently as April 2002, articles were still appearing.

3 ASHI's strongest accusation of circumvention in peer review came in a document attached to an e-mail to me from the current president, Dr. Robert A. Bray, who said the statement had been submitted to *Nature*. As of May 2002, published accusations of editorial shortcuts were implied only, implicit in announcements that editorial policies were being reviewed (Iyan, 2001) and that guest editors will be more carefully supervised in the future (Klarreich, 2001).

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