

Successful communication in English for non-native users of the language

International conferences make Spain a world leader in writing, editing and translation research

Karen Shashok*

Mediterranean Editors' and Translators' Meeting 2006. International communication—Promising practices (METM06)

Barcelona, Spain, 27-28 October 2006.

<www.metmeetings.org/pagines/metm06.htm>.

Publishing and Presenting Research Internationally: Issues for Speakers of English as an Additional Language (PPRISEAL)

La Laguna, Tenerife, Spain, 11-13 January 2007

<<http://webpages.ull.es/users/ppriseal/>>

Two events that looked at the practical (METM 06) and academic side (PPRISEAL) of successful communication in English helped make Spain “the world leader in ESP” (English for specific purposes), in the words of one eminent participant at the latter conference. Participants at both events found elements of consensus between the working methods of translators, editors, and other professionals at the wordface,¹ and the findings of researchers who look for patterns in written texts that predict how different genres should be written to meet readers’ expectations.

METM06 (Mediterranean Editors' and Translators' Meeting 2006)

In October 2006, the second international meeting of Mediterranean Editors and Translators (MET) drew to Barcelona about 100 practitioners of communication- and language-related professions.² The participants included translators, author’s editors, copyeditors, journal editors, publishers, medical writers and bibliometricians, along with a few academic experts in writing and languages for specific purposes. The program, based on the theme “International communication—Promising practices,” focussed on ways to improve writing, translating and editing skills. Attendants came from 20 different countries in the Mediterranean region, and judged MET’s second international professional development event as successful as this organization’s first international meeting in 2005.³

In the plenary sessions, participants learned about plagiarism, got advice on how to meet the needs of demanding clients, and were introduced to other international organizations for communication professionals. Intensive training workshops covered appropriate citation, statistics, translating and

editing, effective annotation of texts by author’s editors, and punctuation. Panel sessions dealt with coaching oral communication, the new European translation standard EN-15038, academic English, time management, the history of translation in the Mediterranean region, “accidental” interpreting, and successful freelancing. Short workshops concentrated on alternatives to the impact factor, point-by-point replies to editors and peer reviewers, non-directive listening for translators and communications coaches, and journals’ instructions to authors. The program also included presentations on topics such as visual aids to support lectures, author’s editing at a distance, the overlapping roles of authors and editors, ghostwriting in medical journals, translating a minoritized language, translation in undergraduate instruction in medical English, and teaching publishing skills to researchers whose first language is not English. The full program along with abstracts, some PowerPoint presentations, and other resources can be consulted at www.metmeetings.org/METM06. Also available on the website is information on METM07, to be held in Madrid on 26-27 October, 2007.

Highlights from plenary sessions—Good professional practices around the globe

Miguel Roig, a psychology professor at St. John’s University in New York and advisor to the US Government’s Office of Research Integrity, reminded the audience that ideas can be stolen or misattributed from any medium including verbal communications and unpublished sources, not just from published material. His research suggests that the actual incidence of plagiarism is much higher than claimed, although he cautioned that it is hard to determine the true incidence. Roig drew attention to the problem of self-plagiarism, which misleads readers into believing that unoriginal material is new, and skews the literature by over- or underestimating statistical effects in reviews and metaanalyses.

Chris Durban, a freelance English-to-French translator based in Paris and President of the Société Française des Traducteurs (SFT), is well known for her efforts to “raise the bar” in the translating profession, particularly in economic and financial translation. She explained how to satisfy “premium clients,” which she defined as those who give advance notice of work, value the translator’s input, are willing to answer translator’s questions about the material, and pay well and on time. Durban reminded the audience that despite the increasing numbers of foreign language speakers in the world,

* Translator and editorial consultant, Granada, Spain. Address for correspondence: kshashok@auna.com.

the key skill truly professional translators sell—in addition to their language and subject matter competencies—is good writing that meets the target readers’ needs.

The panel session titled “Organizations for communication professionals—What do they offer you?” acquainted participants with several associations for academic writing, publishing and translating professionals around the world.⁴ In attendance were Arjan Polderman representing the European Association of Science Editors (EASE), Ana Marusic for the Council of Science Editors (CSE) and the World Association of Medical Editors (WAME), and Farhad Handjani for the Eastern Mediterranean Association of Science Editors (EMAME). Also on hand were Sheryl Hinkkanen, Secretary-General of the International Federation of Translators (FIT), Chris Durban representing SFT, and Elise Langdon-Neuner, Editor of the European Medical Writers Association (EMWA) journal *The Write Stuff*.

The European standard EN-15038 on translation quality

A panel session chaired by Greg Morley, a freelance translator and medical writer in El Escorial, Spain, focussed on European quality standards for translation services. Juan José Arevalillo, speaking as Head of the Spanish Committee on EN-15038, clarified a number of issues about the new European standard that had been worrying translators, especially freelancers. According to Arevalillo, freelancers will not necessarily be obliged to certify their business as EN-15038-compliant. Certification is expected to involve considerable expense (see below) that many “sole traders” cannot reasonably be expected to bear. This is especially true in Spain, where the average yearly income for translators is only about EUR 21 000, according to a survey published in 2004.⁵ So certification appears to be more appropriate for translation agencies and other types of communications businesses.

The standard does not define the steps in the actual processes of translation revision (which will be compulsory) or review (intended to “ensure respect for the conventions of the domain”). Instead, it aims to ensure that appropriate quality assurance measures are implemented and documented by translation service providers (TSPs). One of the main functions of the standard is to ensure that the process of translation and aspects of the TSP’s relations with service providers and clients are transparent, so that if a quality problem arises, it can be traced to a specific step in the process. Through improvements in the process, it is hoped that the outcome, i.e., the final quality of translations, will also improve. It is also hoped that by making EN-15038-compliant translations more desirable than other translations, the standard will help translation agencies and communications companies to improve their internal quality control and quality assurance practices.

Arevalillo cautioned that individual TSPs (whether agencies or freelancers) will need to develop their own systems and metrics to document compliance with the standard and any gains in translation quality that their EN-15038-compliant practices yield. A translation that has been revised

and reviewed when it is delivered to the client—regardless of whether the client is the end user or an agency that will repackage and resell the “product”—will naturally be more expensive than a translation that has not been revised and reviewed in accordance with the processes required by the standard.

Sheryl Hinkkanen, speaking as a Finnish-to-English translator, noted a key contribution to the standard from the Finnish Association of Translators and Interpreters and other national organizations working with “small” languages. These associations pointed out that in some settings it will not be realistic to expect a translation to be handled by a native user of the target language. Revision and review are intended to compensate for possible deficiencies in quality when a translation is done by someone for whom the target language is not their first language.

Helen Casas, a freelancer in Sant Cugat (Barcelona), Spain, noted that for most clients price is the main concern, but since clients are typically unable to judge the quality of a translation, they are reluctant to pay top rates for the promise of a level of quality they cannot verify themselves. Echoing the view of many freelancers, she pointed out that the original translator always ought to be allowed to recheck the reviser’s corrections before the final translation is delivered. This serves the dual purpose of providing feedback to the original translator and preventing overeager revisers from introducing errors. Casas expressed uncertainty over the effectiveness of the standard: if it raises the quality of translations and also raises income for translators, everyone stands to benefit. However, it might raise costs for translators (since the time needed to document and administer certification processes will not be trivial) without increasing quality if revisers or reviewers do not always make useful “corrections.”

The audience at METM06 was surprised to learn that the actual text of the standard is not freely available. As of February 2007 the British Standards Institute prices were GBP 25 for the Provider’s Guide, and GBP 68 or GBP 34 for the actual standard. In Spain, standard UNE-EN-15038 cost EUR 27.61 at the time of this writing. Having to pay for a document that contains guidance on a new process that some practitioners may not be enthusiastic about represents an initial barrier to compliance. Worse still, the cost of certification was estimated at between EUR 5000 and EUR 10 000 for initial certification, and several thousand euros per year thereafter for annual renewal. Arevalillo noted, however, that in Spain the Asociación de Empresas de Traducción (ACT) had negotiated substantial reductions in these costs by forming a group of TSPs willing to share the expense of “consolidated certification.”

For TSPs who already revise their work conscientiously (or have it revised by someone competent to do so), document all steps in their translation and administration processes, and use transparent business practices based on good faith, it is hard to see how EN-15038 will benefit them. Will the standard help educate clients about the work involved in high-quality translation? Will it put a halt to incompetently-done translation? Might it favor low-quality, “rubber-stamp

revision” between acquiescing partners? There seems to be room for skepticism, since the market will always contain clients who choose to pay low rates—a choice which helps to perpetuate mediocre translation.

PPRISEAL (Publishing and Presenting Research Internationally: Issues for Speakers of English as an Additional Language)

The PPRISEAL conference, held in La Laguna (or more properly, San Cristóbal de La Laguna), a UNESCO World Heritage city on the island of Tenerife in the Canary Islands, attracted a varied group of specialists in the use of English by researchers for whom it is not their first language. Featured in the program were plenary lectures by some of the world’s most highly regarded authorities in discourse analysis. Best of all, the schedule allowed enough time during breaks and excursions for colleagues to share their knowledge, make friends, and discuss issues they cared about—very deeply, to judge from the intensity of the conversations. Sally Burgess of the Department of English and German Philology, Universidad de La Laguna (Spain) and Margaret Cargill of the Adelaide Graduate Centre, University of Adelaide (Australia) assembled an excellent program that created opportunities for academics and other language professionals to discuss how to work successfully with scholars from “the periphery” of their international research community.

How international is English?

At the heart of many discussions was the awareness that researchers who must publish in a language that is not their first are at a competitive disadvantage for readers’ attention compared to native users of English, and that more “just and equitable practices in the conduct and communication of research worldwide” are needed to ensure rhetorical and academic diversity. Also needed, said some of the plenary speakers, are stronger efforts by academic journals and publishers to facilitate access to and dissemination of academic knowledge, especially in areas where Internet access is undependable or unavailable. Geopolitical aspects of knowledge creation, dissemination, and access were mentioned several times during PPRISEAL, and strategies that would favor greater diversity and more equitable levels of participation in knowledge creation were identified in the PPRISEAL Manifesto.⁶

Many participants were teachers or trainers of writing in English, and most of the short presentations dealt with ways to make teaching more effective. However, it was also recognized that English has been displacing other languages and discourse styles as a legitimate instrument for academic communication. This trend, although inevitable, worried many experts in La Laguna, and was felt to be potentially damaging to cultural diversity. Even philological or linguistic research likely to be relevant mainly to users of other languages often ends up being published in English because of institutional policies to reward researchers *only* for publication in English, but not for publication of research results *about* their own language *in* their own language.

Translation quality—Subject expertise versus linguistic expertise

Rather depressing for this reporter was the assumption by some participants at PPRISEAL that translation was not a useful strategy for writers who wish to communicate with their peers in English. The apparent reason why discourse analysts felt translation quality was so often unsatisfactory was because translators are not always experts in the specific subject of a research report. According to some participants, the lack of specialized knowledge renders translators unable to produce a text that satisfies the expectations of readers who are subject experts.

Every native-English-speaking professional translator or language editor I have ever asked during the last 20 years has said it is almost *de rigueur* for journal reviewers and editors to request that authors have a native speaker of English review the manuscript, even when the text has been prepared by an experienced professional translator or editor.³ This may be evidence that some translators and authors’ editors are failing to do their job well. It may also be a sign of prejudice against authors from non-English-speaking countries. However, researchers whose first language *is* English also receive complaints about “the English” from reviewers and editors. Peer reviewers and editors often have opposite opinions on how well written a manuscript is. And as all researchers know, changes made in the text by reviewers and editors are not always grammatically or scientifically correct, and sometimes lead to confusion by changing the author’s meaning. This seems to suggest that peer review might not be very reliable in providing feedback about the quality of the writing.

Fluency in speaking a language is no guarantee of skill in editing specialized texts in that language. Likewise, holding a PhD in a specialized field is no guarantee of skill in writing, even in one’s first language. The fact is simply that individuals who are experts in academic disciplines and are also able to translate, write, or edit well for a specialized audience are rare specimens in the known universe. Some researchers at PPRISEAL who have studied how scholars produce texts for publication in English (usually with the help of either a subject expert or a language expert) recognized that subject expertise and writing expertise are indeed two different skill sets.

Despite claims heard at PPRISEAL that subject expertise was a prerequisite for producing specialized translations, subject expertise itself is no guarantee that a translation will be handled successfully, nor is lack of subject expertise a barrier to excellent translation.⁷ This is exemplified by the success of Spanish medical journals that are being translated into English (to very high standards) by teams of professional translators with no training in medicine.^{8,9} Translators can become adept at learning about specialist subjects efficiently so that they can produce a text that will not jar on the specialist’s ear, although “learning how to learn” requires time, effort, and motivation.

Globalization in academic publishing in English should not mean the end of discourse diversity

Although the emphasis at PPRISEAL was on the English language, the conference organizers and attendants were

concerned that overdependence on rhetorical systems used in English might be contributing to intolerance toward alternative patterns in language and discourse that arise from other languages. Suresh Canagarajah, editor of the highly regarded journal *TESOL Quarterly*,¹⁰ explained that English written by authors with multilingual literacy can reflect their ability to shuttle between writing strategies and meld elements of text in ways writers who know only English are unable to achieve. Texts produced by this “code-meshing” process can be just as effective as texts that are compliant with the well-known rhetorical moves described by Swales’ system of CARS (creating a research space) analysis.¹¹ Canagarajah urged editors and reviewers to be more flexible in judging the manuscripts they receive, since writing strategies that depart from the “classical” sequence of rhetorical moves identified by Swales can be used intentionally by authors to communicate ideas that English-language writing patterns are unable to express.

The organizers and plenary speakers had specific recommendations for the audience on how to help make academic publishing in English a more accurate reflection of the diverse ways in which ideas can be communicated. Although the CARS model is a research tool that has dominated discourse analysis for three decades, John Swales himself reminded participants that rhetorical and academic diversity needs to be maintained so that cognitive potentials are not lost. He noted that although literary devices and style have been “driven out” of academic English, these more personal elements of writing remain important in academic discourse in other languages such as Arabic. Srikant Sarangi identified three areas where research holds potential: pedagogy (i.e., how writing processes are taught and implemented), procedures (i.e., the influence of different inputs by authors, reviewers and editors before publication), and practice (i.e., what people do as authors, editors, reviewers and readers).

John Flowerdew identified potential areas of tension in academic writing and publishing as 1) conflicts between the need to meet accepted norms for good writing versus tolerance for other kinds of writing, and 2) differences between disciplines in what authors wish to achieve professionally. These discipline-related differences are evident when writing in the experimental sciences—characterized by a degree of culture-independent, international consensus regarding basic concepts, current theories, and how to write about them—is compared to writing in the social and human sciences, where the need to publish for the wider international audience conflicts with the need to “speak to and about local culture.”

Françoise Salager-Meyer called for the creation of publicly-funded regional organizations to facilitate the dissemination of relevant research in the main languages of local research communities. Inmaculada Fortanet noted that peer review processes are variable and often less effective than most researchers assume in improving the quality of what gets published. She asked participants to consider how reviewers for international journals are chosen, how reviewers’ reports could be made more useful, and how the review process could be improved overall.

Communicators at the wordface and in academia— Future collaboration?

Cross-disciplinary events such as the MET meetings and the PPRISEAL conference are helping to close the gap between theory and practice in scholarly communication. Academics from departments of translation, philology, and languages for specific purposes are discovering that some practices predicted to work on the basis of theory have already been shown to be effective, or at least promising, by wordface professionals.

Academic communication will be truly international only when rhetorical features that typify languages other than English are identified and considered effective, so that authors can choose the most effective strategy from among many alternative discourse structures. This is one of the possible paths toward the discourse diversity that is part of the world’s cultural and cognitive heritage, and that members of MET and participants at the 2007 PPRISEAL conference in La Laguna hope to help preserve.

Acknowledgments

Some of the information in this report was verified by Juan José Arevalillo, Helen Casas, Sheryl Hinkkanen and Greg Morley, and I thank them for their detailed and useful feedback.

Note: Some information about METM06 in this article was published previously in reference number 2.

References

1. Chesterman A, Wagner E. Can Theory Help Translators? A Dialogue Between the Ivory Tower and the Wordface. (Series Translation Theories Explained, Vol 9.) Manchester, UK: St. Jerome Publishing, 2002.
2. Shashok K. Closing the gap between editing practice and theory. METM 06. European Science Editing 2007; 33(1): 6-7.
3. Shashok K. Mediterranean Editors’ and Translators’ Meeting 2005. Professional development for practitioners and researchers in specialized communication in English. Panace@ 2006; VII (23): 191-193. <http://medtrad.org/panacea/IndiceGeneral/n23_agenda_Shashok.pdf>.
4. CSE: www.councilscienceeditors.org; EASE: <www.ease.org.uk>; EMAME: <www.emro.who.int/EMAME/>; EMWA: <www.emwa.org>; FIT: <www.fit-ift.org>; SFT: <www.sft.fr>; WAME: <www.wame.org>.
5. Asociación de empresas de traducción (ACT). Estudio de situación del mercado español de servicios profesionales de traducción. ACT 2004. 2005. Available from: <www.act.es> [accessed 12 February 2007].
6. PPRISEAL Manifiesto. Available at <http://webpages.ull.es/users/ppriseal/manifiesto_ppriseal.html> [accessed 2 March 2007].
7. O’Neill M. Who makes a better medical translator: the medically knowledgeable linguist or the linguistically knowledgeable medical professional? A physician’s perspective. In: Fischbach H, ed. Translation and medicine. American Translators Association Scholarly Monograph Series vol. X. Amsterdam: John Benjamins, 1998: 69-80.

8. Kerans ME. Project management and quality assurance in cover-to-cover translation of a medical journal. In: Hayhoe, G. Proceedings, 2005 IEEE International Professional Communication Conference, Limerick, Ireland, 10-13 July 2005. Piscataway, NJ, USA: IEEE; 2005. p. 220-236. DOI: 10.1109/IPCC.2005.1494181
9. Shashok K. Project management and quality assurance in cover-to-cover English translation of a Spanish science journal. International Federation of Science Editors IFSE-12, AMERBAC-WAME Workshop, Mérida, México, 10-14 October 2004. Available from the author.
10. About TESOL Quarterly. Available at: <www.tesol.org/s_tesol/seccss.asp?CID=209&DID=1679> [accessed 23 January 2007].
11. Swales J. Genre analysis: English in Academic and Research Settings. Cambridge: Cambridge University Press, 1990.

¿Atópico o alérgico?

Juan Manuel Igea Aznar

Clínica Alergoasma, Salamanca (España)

En la literatura médica es frecuente toparse con el término *atópico*, y los alergólogos y otros especialistas médicos lo utilizan a menudo para referirse a esos pacientes que tienen los bolsillos llenos de pañuelos de papel, estornudan continuamente, muestran la piel enrojecida e inducen picores sólo con mirarlos; en definitiva, a esos pacientes con un aspecto «raro».

Y es que *atópico* significa precisamente eso, fuera de lugar, extraño, raro, distinto. Menos mal que los pacientes no suelen tener conocimientos de griego, porque si no, entenderían rápidamente el significado del término y protestarían airadamente contra tan grosera apreciación de aquél en quien buscan ayuda y consejo.

Pero los médicos, que, por desgracia, tampoco solemos tener conocimientos de griego, ignoramos asimismo lo que expresamos realmente con esa palabra, y por ello no la utilizamos con ánimo despectivo. La utilizamos sólo porque en nuestros libros se dice claramente que atópico es el que sufre reacciones alérgicas frente a sustancias inocuas que le rodean, como los pólenes, el epitelio de los animales y otras muchas más, todo ello como fruto de un error de apreciación de nuestro sistema defensivo sobre la peligrosidad de tales sustancias.

Pero en los tiempos en que vivimos cada vez está más claro que ser *alérgico* no es ser *raro*. Todo lo contrario, donde menos se lo espera uno salta un alérgico, y además serlo aporta a algunos una dignidad especial que airean a la menor ocasión. Parece que ya nadie que se precie de tener cierta dignidad puede ir por ahí sin referir alguna anécdota en torno a su divertida y curiosa alergia.

¿De dónde procede, pues, tal modo de llamar *raro* al frecuente y orgulloso alérgico?

Pues el inventor fue un inmunólogo estadounidense, Arthur F. Coca, que a pesar de vivir en un lugar tan lejano podría ser casi paisano, porque su apellido se debe a que descendía de la familia segoviana que ocupó el castillo del mismo nombre en el siglo XVI.

En 1923, año en que nacieron cantantes tan variopintas como Lola Flores y María Callas, este tataranieta de emigrantes segovianos ideó una nueva clasificación de las enfermedades por hipersensibilidad, tan de moda por novedosas en aquel entonces. En esa clasificación acuñó el término *atopia* para designar lo que él consideraba un grupo de enfermedades «raras o extrañas», que eran la rinitis alérgica estacional, el asma y el eccema. Para Coca estas enfermedades extrañas eran claramente diferentes de la anafilaxia, ya definida por Richet y Portier en 1902, y de la alergia, definida por von Pirquet en 1906. El término no lo creó solo, sino que contó con la ayuda de un catedrático de griego y sánscrito de la Universidad de Columbia, Edward D. Perry. *Atopia* se formó a partir de *a-topos*, ‘fuera de lugar’ en griego.

Esta distinción entre esas enfermedades «atópicas» por un lado y la alergia y la anafilaxia por otro creó una gran controversia en los siguientes años, en los que diferentes escuelas internacionales defendieron esa tesis o la contraria, es decir, que todo era lo mismo. El tiempo y las investigaciones quitaron, como sabemos, la razón a Coca, y en 1947 él mismo llegó a aconsejar públicamente a sus colegas que no utilizaran más el término *atopia* y usaran sólo los de *alergia* y *anafilaxia*.

A pesar de la renuncia de su autor, el término había provocado fascinación y se afianzó con fuerza, en especial entre los alergólogos e inmunólogos estadounidenses, y todavía hoy se habla habitualmente de rinitis atópica, asma atópica o dermatitis atópica.

Luego el término *atopia*, que nació de un error de apreciación, es en realidad equivalente a lo que hoy llamamos con mucha mayor propiedad *alergia*, término que carece de ese matiz semántico negativo del primero. Por ello coincidimos con el propio Coca en que es preferible referirse al alérgico como tal y no como atópico y que la palabra *atopia* debería abandonarse y olvidarse.

Pero las palabras se crean y dominan al principio, pero después caminan entre los que las piensan y las usan adquiriendo vida propia. Por eso, la palabra *atopia* pronto empezó a traducir no sólo la alergia en sí, sino la capacidad de hacerse alérgico. Y en este sentido se pronunció en primer lugar Pepys, en 1975, que entendía por *atopia* la presencia de anticuerpos IgE en el

tuviera o no síntomas el paciente; después, Settifpane y Lockey, que entendían por *atopia* sólo la presencia de rinitis, asma o eccema, y finalmente Eriksson, que exigía síntomas y al menos una prueba cutánea alérgica positiva a algún alérgeno.

En los últimos decenios se han continuado usando *alergia* y *atopia* de forma intercambiable, pero además esta última ha adquirido además ese matiz de «sujeto con predisposición a sensibilizarse a todo aquello que le rodea mediante un mecanismo inmunitario mediado por anticuerpos IgE».

Desde el relativo apoyo que me ofrece mi posición de médico alergólogo y traductor médico, yo recomendaría emplear *alergia* para caracterizar a las enfermedades mediadas por la IgE y dar a *atopia* sólo el sentido de ‘predisposición a padecer alergia’. Y esta última acepción sólo porque resulta útil en el ámbito clínico para clasificar a ese grupo de pacientes que a lo largo de su vida tienden a sensibilizarse a muchos de los alimentos y aeroalérgenos con los que se encuentran, tengan o no síntomas clínicos.

El término *dermatitis atópica*, aunque muy impreciso (sólo el 70 %-80 % de los que padecen esta dermatitis crónica son alérgicos), está ya tan aceptado por la comunidad médica internacional desde hace tanto tiempo que sería empresa imposible su sustitución por otro más acorde con la fisiopatología de la enfermedad.

Pero este hecho no debe soliviantarnos, porque si hay una especialidad médica donde los nombres de las enfermedades tienen poca relación con sus mecanismos fisiopatológicos, ésa es la dermatología.

Bibliografía

- Chase MW. Irreverent recollections from Cooke and Coca, 1928-1978. *J Allergy Clin Immunol* 1979; 64: 306-319.
- Coca AF, Cooke RA. On the classification of phenomena of hypersensitiveness. *J Immunol* 1923; 8: 163-182
- Cohen S, Dworetzky M, Frick OL. Coca and Cooke on the classification of hypersensitiveness. *J Allergy Clin Immunol* 2003; 111: 205-10.
- Eriksson NE. Allergy screening in asthma and allergic rhinitis. *Allergy* 1987; 42: 189-195
- Lockey RF, Turkeltaub PB, Bair-Warren IA, Olive CA, Olive ES, Peppe BC. The hymenoptera venom study I, 1079-1982: dermatographies and history-sting data. *J Allergy Clin Immunol* 1988; 82: 370-381.
- Pepys J. Atopy. En: Gell PGH, Coombs RRA, Lachmann PJ, ed. *Clinical aspects of immunology*, 3.^a ed. Oxford: Blackwell Scientific, 1975; 877-902.
- Settipane GA, Newstead GJ, Boyd GK. Frequency of hymenoptera allergy in an atopic and normal population. *J Allergy Clin Immunol* 1972; 50: 146-150.

