THE ANALYSIS OF FACULTY NEEDS TO ENGLISH FOR ACADEMIC PURPOSES IN A MIDDLE-EASTERN CONTEXT

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Abstract. *Needs Analysis, a process that focuses on how an English course addresses the needs of its learners, is an integral part of every ESP/EAP course. Since the emergence of English for Academic Purposes, extensive research has been conducted to specify the needs of university students to English for both educational and research purposes. However, research with a focus on the measurement of English-related needs of university professors and research staff is scarce and even non-existent in Middle-eastern contexts. Considering the fact that writing English papers and books, attending international conferences, and interacting with their colleagues around the world is crucial to the success of university professors, the aim of this paper is to analyze the needs of faculty members from various academic departments at three large universities in a Middle-eastern context. A 25-item questionnaire was completed by 138 university professors, and the findings indicate that there is a significant demand for EAP, and specifically, Academic Writing courses at Engineering and Health departments, whereas the demand is not significant for Humanities and Social Sciences despite the fact that scholars in Humanities and Social Sciences are the most detached from the global academic and research contexts. Therefore, the findings of this paper show that the increasing pressure to publish in English-medium journals has led to an alienation from the international academic platforms, especially in Social Sciences and Humanities where the non-native scholars' English needs are placing them at a disadvantage in comparison with their native speaker colleagues in other parts of the world. The results also revealed that age was an important indicator of the professors' English writing competence and their ability to meet the expectations of English-medium journals.*

Key words: *needs analysis, English for academic purposes, English for specific purposes, English-medium publication*

1. INTRODUCTION

The territory of science has been substantially penetrated by English, and English has been called the lingua franca of science (Crystal, 2003; Gibbs, 1995; Polo & Varela, 2009). French and German once ranked on the same level in science and technology, meaning that international journals and conferences provided scholars with a possibility to write, publish, and present their works in these languages too. However, the alternative is not available to any further extent because English is now the only medium of scientific communication, especially in the natural sciences, but also in humanities and social sciences (Ammon, 2010).

The pain non-native speakers of English go through being compelled to publish and present in English-medium contexts causes all sorts of problems in their academic lives. Gunnarsson (2001) believes that this language deficiency eventually leads to the researchers' alienation from the academic society and decreases their motivation in trying to probe the unknown. The imposition of English gradually creates attitudes towards the international language and makes it even harder for the scholars to cope with the difficulties caused by English deficiency (Ammon, 1994; Flowerdew, 1999; Polo & Varela, 2009). Since English-medium publishing is highly valued by different academic institutions around the world, non-native research staff at the universities try their best to get their works published in English-medium journals (Lillis & Curry, 2006a).

Hutchinson & Waters (1987) believe that the starting point of every language program should be the analysis of what the learners need the language for. In General English language courses, the needs of each of the learners is not very evident. However, Hutchinson & Waters (1987) suggest that "it is always possible to specify needs, even if it is only the need to pass the exam at the end of the school year. There is always an identifiable need of some sort" (p. 53). Since the distinguishing feature of an English for Specific Purposes (ESP) course is its content, it should always reflect what learners need. When Munby (1978) published his *Communicative Syllabus Design*, syllabus designers started to figure out the importance of Needs Analysis (NA). Munby gave them a very thorough guideline for the analysis of the needs of learners by introducing a set of micro-functions in a communicative needs processor (Dudley-Evans & ST John, 1998).

Ammon (1994) maintains that the English-related problems experienced by non-native scholars vary from one environment to another, as some scientific communities find it much easier to cope with. Ammon also believes that despite the numerous pieces of research conducted in different geographical areas in order to specify the language-related lacks and needs, the picture is still hazy and needs clearing up by more research in different parts of the world. For instance, he mentions that there are gaps in the data for Third-world countries where the reality of language-related complications might be even more adverse.

In an attempt to fill the gaps in the data related to imperatives to publish in English, Curry & Lillis (2004) conducted a research in which they examined how multilingual scholars coped with the obligation of having English publications. They worked with 16 psychology scholars in Hungary, Slovakia, and Spain in order to see how these scholars negotiated their interests and demands in a range of communities, and the attached values for English publications in each of the communities. Their ultimate goal in the research was to enable TESOL practitioners to better understand multi-lingual scholars' needs and make plans to respond to those needs in different situations. The scholars who contributed to their study as participants wrote for and published in many professional journals, and they declared that they had little time to attend any formal ESP or academic writing classes. Therefore, they concluded that TESOL practitioners had to adapt themselves to these scholars' real lives if they wanted to help them, and thus, they would have to work with the scholars individually and not in groups. Curry & Lillis (2004) also concluded if students are educated in English-speaking contexts, they are more likely to continue to write in English even after they go back their home countries, and consequently, they will be more likely to get their texts published.

One of the most comprehensive studies which analyzes the needs of multilingual scholars belongs to Polo & Varela (2009). They stated that studies whose focuses are on the specific reality of Southern European countries were scarce, and that they intended to

compensate for the imbalance by conducting such research and reporting the data collected at the University of Santiago de Compostela, Spain. They used a 25-item postal questionnaire which was sent to each research staff from various departments. A total of 213 questionnaires were returned to the researchers, and the findings indicated that English clearly played a weaker role at the University of Santiago than in other institutions previously investigated, and that the native language (Galician) was still the first choice for most of the academic tasks. While some groups of respondents evaluated their current English writing competence as sufficient, most of the scholars declared that they were aware of an increasing pressure to improve their English knowledge and ability. Their participants asserted that because of their scanty resources, they are constantly placed in an unjust position in comparison to the other more privileged groups of NNS scholars, particularly in Europe.

The purpose of the present study is to analyze the needs of scholars in a Middle-eastern context in an attempt to fill the gaps in the data for language-related problems experienced by non-native scholars and to provide enough comparable data to gain a clearer picture of what can be done to shorten the lengths non-native scholars go to trying to make their voices heard on an international level.

2. METHODOLOGY

Considering the fact that publishing papers and books in English-medium journals, attending international conferences, and advancing their disciplines is crucial to the success of university instructors and research staff, this paper intends to analyze the needs of non-native scholars from various academic departments at the University of Tehran, University of Tabriz, and Urmia University in Iran.

Data for this study were gathered using a questionnaire which was either emailed or handed in person to the participants. The questionnaire was originally constructed by Polo & Varela (2009), and was sent from Spain to the researcher of the presents study via the postal service. The initial version of the questionnaire was modified based on a number of brief interviews with the members of some academic departments. These initial exploratory interviews served the purpose of finding the areas in which the critical position of English was felt to be problematic and helping to identify the relevant dimensions of the issue for further in-depth analysis. A final version of the questionnaire was piloted with eight researchers from Urban Planning, Law and Food Science departments which were not included in the final sample.

The final version of the questionnaire consisted of 25 items. The first nine items of the questionnaire sought basic demographic information (sex, age, university, department, and native language). A range of topics covered the remaining items which include the following: frequency of English publications and collaboration with English-speaking scholars (items 10 and 11), frequency of attending meetings or spending part of education abroad (items 12 to 14), methods used to improve English (items 15 and 16), the extent to which certain academic activities were carried out in English (item 17), self-assessed competence in English (items 18 and 19), tendency to attend certain English programs designed for them (items 20 and 21), courses that can best cater for their English-related needs (item 22 to 25).

In total, the number of questionnaires that were given to scholars was 174, of which 138 were returned to the researcher. The questionnaires were given to the faculty members of three large universities in Iran. The resulting overall response rate was 79.31%. The

distribution of responses across disciplines and other variables matched rather closely the actual proportions in the study population. Scholars 35 years and younger contributed 29.0% of responses, those aged between 36 and 50 were 39.1% and those 51 and over were 31.9%. Both sample size (N=138) and distribution of respondents were thus considered satisfactory, and data collection was complete for the purposes of this survey.

The process of data analysis in the present study is supported via Chi-square tests of significance, as responses to 5-point Likert scales in the questionnaire are considered nominal data. Answers to the questions related to scholars' needs-based preferences are reported in percentages.

3. RESULTS

The questionnaire which was used to collect the data of the study consisted of an item inquiring about the academic fields of the research staff and their English publication percentages. The participants were first assigned into one the three general academic groups, and then, were analyzed separately based on their declared English publication percentage. The results, which appear in Figure 1, revealed that the instructors and research staff working in humanities & social sciences field were less likely to publish their research in English, as 87% of them declared that they publish less than 25% of their work in English. On the other hand, nearly 60 % of researchers in health & medical sciences and 47% in engineering publish more than 75% of their work in English.
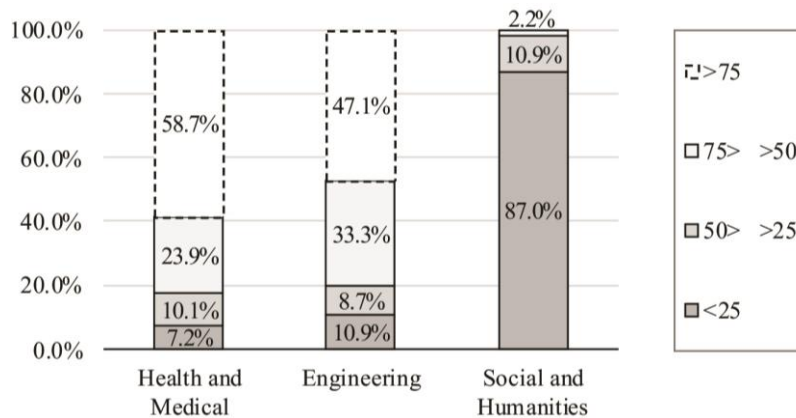

Fig. 1 Percentage of work published in English, by research area (N=138

Item 2 of the questionnaire, which asked the researchers about their ages, revealed that age was a factor indicating the proclivity of a researcher for publishing in English. 53% of researchers under the age of 35 published most of their work in English, whereas this inclination decreased as the researcher's age increased. 32 % of the researchers between 36-50 publish more than 75% of their work in English, and this number decreases to only13.8 % for researchers who are 51 years old and above (Figure 2).
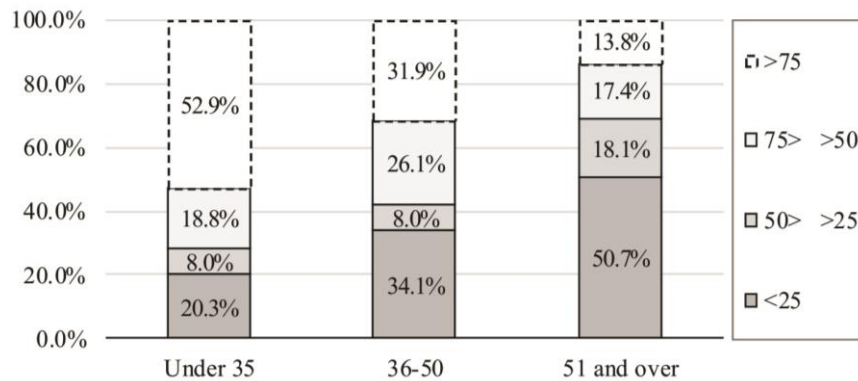
Fig. 2 Percentage of work published in English, by age (N=138)

Item 18 of the questionnaire asked the professors to assess their English competence in carrying out various regular academic tasks based on a 5-point scale (1= very poor; 5= very good). The results of a Chi-square performed to find out how the researchers in each of the three major academic fields assessed their own competence in giving English lectures revealed that the proportion of researchers who are able to give lectures in English is indeed associated with their major academic fields ($\chi^2 = 22.11$; $df = 8$; $\rho = .005$; *phi* = .40).

Table 1 Self-assessed competence in giving English lectures in each academic field
(N=138)

			Competence in giving English lectures					Total
			1	2	3	4	5	
Academic fields	Health and medical sciences	Count	5	8	16	12	9	50
		% within academic field	10.0%	16.0%	32.0%	24.0%	18.0%	100.0%
	Engineering	Count	5	15	14	8	5	47
		% within academic field	10.6%	31.9%	29.8%	17.0%	10.6%	100.0%
	Humanities and social sciences	Count	15	13	5	5	3	41
		% within academic field	36.6%	31.7%	12.2%	12.2%	7.3%	100.0%
	Total	Count	25	36	35	25	17	138
		% within academic field	18.1%	26.1%	25.4%	18.1%	12.3%	100.0%

Table 1 shows that in the field of health and medical sciences, 24% and 18.0% of the researchers consider themselves as 'good' and 'very good' in giving English lectures, respectively. These percentages decrease to 17.0 and 10.6 for those in engineering, and they further decrease to 12.2 and 7.3 for those in humanities and social sciences. A considerable percentage of 36.6 % of the researchers in the field of humanities assessed their competence

in presenting English lectures as 'very poor', whereas this percentage is only 10 for those in the fields of health and engineering.

Table 2 displays the results for a Chi-square test performed to find the association between the researchers' major academic fields and their self-assessed competence in publishing their research in English. The results revealed that the proportion of researchers who are able to give lectures in English is indeed associated with their major academic fields ($\chi^2 = 26.06$; df = 8; $\rho = .001$; *phi* = .43). It was also found that more than 58% of the researchers in health and medical sciences considered themselves as competent in publishing their work in English. In the engineering departments, most of the scholars (about 70 %) rated their ability to get published in English at level 3 or less, meaning that publication in English was beyond their current competence. The result is even more striking for those in the humanities and social sciences departments 61% of whom considered themselves at level 2 or below (poor and very poor) in their current competence in getting published in English. In general, researchers at the health departments assessed themselves as capable of writing and publishing English articles and books, but most of those in the engineering and humanities departments evaluated this ability as poor.

Table 2 Self-assessed competence in English publishing in each academic field (N=138)

			Competence in publishing in English					Total
			1	2	3	4	5	
Academic fields	Health and medical sciences	Count	3	9	9	17	12	50
		% within academic field	6.0%	18.0%	18.0%	34.0%	24.0%	100.0%
	Engineering	Count	4	13	16	8	6	47
		% within academic field	8.5%	27.7%	34.0%	17.0%	12.8%	100.0%
	Humanities and social sciences	Count	13	12	7	5	4	41
		% within academic field	31.7%	29.3%	17.1%	12.2%	9.8%	100.0%
	Total	Count	20	34	32	30	22	138
		% within academic field	14.5%	24.6%	23.2%	21.7%	15.9%	100.0%

In the 21st item of the questionnaire, the researchers were asked if they would be willing to attend an EAP program at the university if the English department of the university decided to cater for their English needs. They were required to choose the answer of this question which was either yes or no.
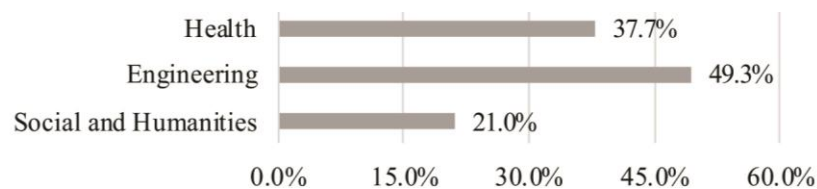

Fig. 3 Percentage of scholars willing to attend EAP courses, by research area (N=138)

The results, shown as Figure 3, indicate that nearly half of the researchers at engineering departments feel the necessity of ESP classes that would cater for their English needs, as 49% of them gave the answer 'yes' to item 21 of the questionnaire. However, the demand for EAP classes was not considerable at humanities and social sciences departments since only 21% of the researchers stated that they would attend EAP classes. At various health and medical departments, 37.7% of the researchers declared that they were willing to attend EAP classes.

The participants were asked to choose from among the different functions of English that could have been offered to them as actual courses with the purpose of catering for their language needs. The results, which appear in Figure 4, indicate that more than half of the population demanded Academic Writing and EAP courses to be offered to the faculty members and research staff at the universities. The demand for informal conversation classes was also high (at 43%) which indicated the gap researchers feel when attending international conferences. 34% of the participants felt the necessity of effective translation services at the university, which is an indicator of the populations' unwillingness to present or write their research directly in English. Only 6% of the researchers pointed out that they were willing to learn the language by themselves, which emphasized the necessity of English courses that could attend to the researchers' language needs. The demand for online classes was also low (at 16%), indicating that a traditional class would more successfully win the researchers over.
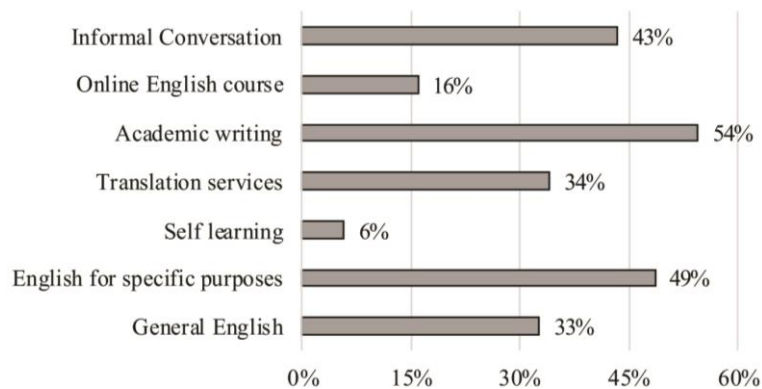

Fig. 4 Respondents' preferences to ways to cater their English-related needs (N=138)

4. DISCUSSION AND CONCLUSIONS

The present study aimed to find the gaps between Middle-eastern faculty members and research staff's English competence and their international success which lies in participating in tasks which require them to use English. One of the main findings of the present study was that the above-mentioned gap was much wider in the fields related to humanities and social sciences, whereas it was less significant in the health and engineering fields. The fact that these researchers cannot get to publish or present their work in international environments may be related to their lack of English competence. In recent years, fields such as science, technology, engineering, etc. have received the majority of

attention, investment, and financial support from different public and private organizations. While these areas of research are undoubtedly important, the importance of humanities and social sciences should not be disregarded since it includes areas such as social care, the justice system, business, and economy which are extremely crucial. It is thus imperative that this academic imbalance be addressed, and more educational support be provided to humanities and social sciences in developing countries such as Iran.

The findings of the present study are in line with those of Polo & Varela (2009), Murray & Dingwall (2001), and Gunnarsson (2001) who found that researchers working in the humanities and social sciences are less proficient in English compared with their counterparts in engineering or health departments, and they continuously encounter challenges in their use of the international language. These language-related problems lead to their reluctance to become internationalized in their own fields of study and prevent them from pushing their fields forward despite the fact that they may be as capable as their English-speaking colleagues in the west.

One of the major findings of the present study was that researchers in the fields of engineering and humanities rated their abilities in getting their work published in English-medium journals below average. Given the significance of writing skills in any scientific field, this study primarily focused on this skill and the challenges it creates for the faculty members. The study revealed that external help is often needed for the researchers whenever they want to put their research into writing. It was also found that a considerable number of these researchers prefer to use more 'indirect' methods, such as translation, instead of trying to fill in their language gap permanently, as also maintained by Lillis & Curry (2006a). This finding was also in line with Polo & Varela (2009) who found that 38% of the researchers preferred to seek assistance from mediators instead of improving their writing skills.

According to Canagarajah (1996) and Ammon (2001), non-native researchers have a plethora of language-related concerns that English-speaking researchers do not. In addition to more limited access to English journals and books, they struggle with English when writing their research and often spend much more time on it. As a result, non-native scholars usually feel frustrated with English competence being obligatory for their ultimate success. Therefore, EAP practitioners should become aware of all the English-related difficulties that non-native scholars go through, and design courses that could alleviate the pain.

When the participants of the present study were asked if they were willing to participate in specific-purpose English classes, the answers varied from one academic field to another. Although the language insufficiency was more apparent in the field of humanities and social sciences, the researchers in that field were less eager to improve their English. Further research is needed to find the reasons or any possible attitudes towards the international language that may have led to a preference for isolation from the rest of the academic world.

Another important finding in the present study was that the participants attached high importance to the development of their academic writing and field-specific language skills. This finding was in contrast with Polo & Varela (2009) who found that the advancement of oral skills was more preferred by the university research staff. This finding implicates that planning academic writing and ESP courses for the research staff at universities can be a positive move towards catering for their language needs.

Swales (2004) maintained that the situation of non-native scientists and researchers is a very complicated one. Non-native researchers are "at pains to make themselves and their work visible" (Polo & Varela, 2009, p. 163). Swales (2004) also suggests that some younger researchers even surpass their senior colleagues just because of their more developed

language skills. This statement was proven in the specific context of the present research where the younger researchers and faculty members had greater number of English-medium publications. This finding sheds light on the importance of ESP classes for the senior faculty who may be feeling more distressed than the more privileged younger groups.

In general, this study is an answer to some fundamental questions about the reasons that some scholars in Iran, and more generally, in many Middle-eastern universities, may sometimes fall behind their western colleagues when it comes to research. Taking into consideration the fact that EAP courses are offered only at the undergraduate level in most universities, EAP practitioners should be aware that these courses might be more necessary for the university research staff and graduate students than the undergraduates. EAP and academic writing classes should be offered to all non-native researchers in order to enable them to share their innovative ideas with the world and to have a role in the improvements that internationally occur in their field of study.

REFERENCES

Ammon, Ulrich. *The present dominance of English in Europe. With an outlook on possible solutions to the European language problems*. na, 1994.

Ammon, Ulrich, ed. *The dominance of English as a language of science: Effects on other languages and language communities*. Vol. 84. Walter de Gruyter, 2001.

Ammon, Ulrich. "English as a future language of teaching at German universities? A question of difficult consequences, posed by the decline of German as a language of science." *Contributions to the Sociology of Language* 84 (2001): 343-362.

Baldauf Jr, Richard B., and Bjorn H. Jernudd. "Language of publications as a variable in scientific communication." *Australian Review of Applied Linguisics* 6, no. 1 (1983): 97-108.

Burgess, Sally. "Packed houses and intimate gatherings: Audience and rhetorical structure." *Academic discourse* (2002): 196-215.

Canagarajah, A. Suresh. ""Nondiscursive" requirements in academic publishing, material resources of periphery scholars, and the politics of knowledge production." *Written communication* 13, no. 4 (1996): 435-472.

Cargill, Margaret, and Patrick O'Connor. "Developing Chinese scientists' skills for publishing in English: Evaluating collaborating-colleague workshops based on genre analysis." *Journal of English for Academic Purposes* 5, no. 3 (2006): 207-221.

David, Crystal. "English as a global language." *UK: Cambridge University Press. Print* (1997).

Curry, Mary Jane, and Theresa Lillis. "Multilingual scholars and the imperative to publish in English: Negotiating interests, demands, and rewards." *TESOL quarterly* (2004): 663-688.

Curry, Mary Jane, and Theresa M. Lillis. "Academic research networks: Accessing resources for English-medium publishing." *English for Specific Purposes* 29, no. 4 (2010): 281-295.

Dudley-Evans, Tony, and Maggie Jo St John. *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge university press, 1998.

Flowerdew, John. "Writing for scholarly publication in English: The case of Hong Kong." *Journal of Second Language Writing* 8, no. 2 (1999): 123-145.

Gibbs, W. Wayt. "Lost science in the third world." *Scientific American* 273 (1995): 92-99.

Graddol, David. "The future of English?: A guide to forecasting the popularity of the English language in the 21st century." (1997).

Gunnarsson, Britt-Louise. "Swedish, English* French or German." *The dominance of English as a language of science: Effects on other languages and language communities* 84 (2001): 287.

Hutchinson, Tom, and Alan Waters. *English for specific purposes*. Cambridge University Press, 1987.

Lillis, Theresa, and Mary Jane Curry. "Professional academic writing by multilingual scholars interactions with literacy brokers in the production of English-medium texts." *Written Communication* 23, no. 1 (2006): 3-35.

Lillis, Theresa, and Mary Jane Curry. "Reframing notions of competence in scholarly writing: From individual to networked activity." *Revista Canaria de Estudios Ingleses* 53, no. Special Is (2006): 63-78.

Moreno, Ana I. "Genre constraints across languages: Causal metatext in Spanish and English RAs." *English for Specific Purposes* 16, no. 3 (1997): 161-179.

Moreno, Ana I., and Lorena Suárez. "A study of critical attitude across English and Spanish academic book reviews." *Journal of English for Academic Purposes* 7, no. 1 (2008): 15-26.

Polo, Francisco Javier Fernández, and Mario Cal Varela. "English for research purposes at the University of Santiago de Compostela: a survey." *Journal of English for Academic Purposes* 8, no. 3 (2009): 152-164.

John, Maggie Jo St. "Writing processes of Spanish scientists publishing in English." *English for Specific Purposes* 6, no. 2 (1987): 113-120.

Swales, John. *Research genres: Explorations and applications*. Ernst Klett Sprachen, 2004.

Wood, Alistair. "International scientific English: The language of research scientists around the world." *Research perspectives on English for academic purposes* (2001): 71-83.