National Diversity of Major International Journals in the Field of Communication

by Edmund Lauf

The journal ranking of the Institute for Scientific Information (ISI) is increasingly turning into an international currency for the quality of research output. More than 40 communication journals are ISI-ranked and thus labeled "major international" journals. This analysis of ISI data reveals that the attribute "international" is not always appropriate. National diversity of communication journals is very low due to a dominance of authors from English-speaking countries and U.S. authors in particular. Younger journals and journals with an explicitly stated international mission tend to be international, whereas the internationality of the affiliated organization or impact of a journal had no influence on national diversity. The results suggest that it may be desirable to clearly distinguish between national and international communication journals, to increase the number of international communication journals, and to support authors whose mother tongue is not English.

Communication theory aims to be universal, to be independent of time and space. Aspects such as media ownership, media content, or media impact are becoming increasingly global. Because communication research is not limited by national boundaries, top international communication journals are designed to capture and reflect recent international trends in communication research. Comparative research, international networks, online versions of journals, and simple email exchange contribute to an increasing global framework and most likely to an equitably distributed readership and authorship. Scientists attain a higher international diffusion and visibility of their work by publishing in prestigious international journals (Rey-Rocha & Martin-Sempere, 2004), which becomes increasingly important for furthering a scientific career. International accessibility and national diversity are necessary conditions for journals to function as a barometer of the substantial focus of scholarship and research methods most important to our discipline (Kamhawi & Weaver, 2003; Riffe & Freitag, 1997). On the one hand, to earn the attribute "major international journal," a high circulation, high readership,

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or high impact is needed. On the other hand, an international distribution of authors is required. Many of our top journals claim to be among the leading international journals. Some are published by international organizations; others assert to be a major or unique international forum (e.g., *Media, Culture & Society* or *Communication Theory*, as stated on their homepages).

However, the assumption that authors from all over the world publish articles in top communication journals seems questionable: Are the so-called international journals truly international? It is even possible that the international market of skills reinforces disparity (Vessuri, 2001). International communication organizations already divide the world into over- and underrepresented areas (Global Communication Research Association, 2003). There are some rationales that assume that the distribution of authors' countries of origin in international communication journals does not correspond with the distribution of other country characteristics, such as population size. In particular, a U.S. dominance of authorship seems probable: Most major communication journals are edited and published in the U.S. and—more importantly—all international communication journals are published in English. If English is not an author's mother tongue, more time for writing is necessary. English academic writing by nonnative English speakers leads to concessions in terms of explaining the line of thought and organization of a paper (Clyne, 1987; Fandrych & Graefen, 2002). Furthermore, scholars from non-English-speaking countries are also forced to publish a significant number of articles in national communication journals in their mother tongue, whereas scholars from the U.S. and the U.K. "have barely any publications in other than Englishlanguage journals" (van Leeuwen, Moed, Tijssen, Visser, & van Raan, 2001, p. 345). These language disadvantages may contribute to an overrepresentation of researchers from the U.S. and other English-speaking countries and thus might lead to less internationalized journals. In this article, I will explore the national nature of highly ranked international communication journals and analyze which journal characteristics reinforce internationality.

Analysis of Highly Ranked International Journals

For investigations concerning published communication research, articles from a sample representing the major international journals are often analyzed. Lombard, Snyder-Duch, and Bracken (2002) selected articles from 75 journals indexed in *Communication Abstracts*. Kamhawi and Weaver (2003) chose 10 major mass communication journals based on high circulation, peer review procedure, and low acceptance rates. Most researchers make use of the already existing sample provided by the Institute for Scientific Information (ISI). Whereas *Iowa Guide* or

¹ The Institute for Scientific Information (ISI) covers a multidisciplinary selection of journals from around the world and offers data for ranking scientists, institutions, countries, and journals. ISI distinguished between the Science Citation Index (SCI), including about 3,800 journals, and the Social Science Citation Index (SSCI), listing 1,800 journals (Institute for Scientific Information, 2004a).

Communication Abstracts refers to national and international journals, the ISI is more selective and "seeks to cover journals with international diversity among authors of both source articles and cited articles" (Institute for Scientific Information, 2003b). With the Science Citation Index (SCI) and the Social Science Citation Index (SSCI), the ISI provides information on citations, impact, and other characteristics of major journals. Major journals are those covered by the annual Journal Citation Reports (Institute for Scientific Information, 2003a), which are used as international guidelines of importance.

The national representation of authors in SCI and SSCI journal articles has been analyzed previously. The analysis showed that authors from the U.S. are by far most visible in SCI articles (Inönü, 2003). U.S. authorship, however, is not predominant: The percentage is lower than that of authors from all EU countries taken together (Leydesdorff, 2000). Authors from the U.K., Germany, and France, the countries with the highest population, have a particularly high visibility. Also articles from U.S. authors are, relatively speaking, not more frequently cited than articles from non-U.S. authors (Luwel, 1999). However, studies per field show that there are enormous differences between disciplines. In agricultural economics, for example, Mueller and Sumner (1999) found huge gaps between Germany, other EU countries, and the U.S.

In the field of communication science, SSCI has seldom been analyzed. SSCI data were used to cluster communication journals (Leydesdorff, 2004; Rice, Chapin, Pressman, Park, & Funkhouser, 1996), to compare the impact of communication science with other sciences (So, 1988), and to rank U.S. communication departments (Schweitzer, 1988). Further research on the (inter-)nationality of authorship is rare. Lau (1995) analyzed the impact of Chinese communication science. Yang and Kaid (2000) conducted an author co-citation analysis of all authors who (a) were members of a political communication division in international social science organizations and (b) had published at least 10 articles about political communication in ISI-ranked communication journals. Forty-eight of 51 authors were from the U.S.; the remaining three came from Denmark, Germany, and the U.K. (Yang & Kaid, 2000). These results indicate that most of the higher ranked journals in our field may be U.S. dominated.

Research Questions and Hypotheses

Based on the literature reviewed above I can formulate three expectations about the visibility of countries in communication journals.

H1a: Researchers from the U.S. publish more articles in communication journals than researchers from other countries.

H1b: Researchers from English-speaking countries publish more articles in communication journals than researchers from non–English-speaking countries.

H2: The greater the population of a country, the more authors from that country publish in communication journals.

In addition I argue that contributing an article to an international journal is more likely if the author already has presented the paper to an international conference:

H3: The more often researchers attend international conferences, the more frequently their country will be represented in international journals.

Because nothing is known about the internationality of communication journals, I asked for each journal:

RQ1: What is (a) the proportion of editors from countries other than the U.S., (b) the national diversity score and the proportion of authors from (c) the U.S. and (d) English-speaking countries?

Finally I try to explain (a) the proportion of editors not from the U.S., (b) the national diversity score and the proportion of authors from (c) the U.S. and (d) English-speaking countries, including the U.S. I cautiously formulate five rather explorative hypotheses:

H4: The higher the impact of a communication journal, the higher the internationality of that journal.

H5: Communication journals affiliated to international organizations are more international than journals without an international organizational affiliation.

H6: Communication journals with an international mission statement are more international than journals without such a statement.

H7: The older a communication journal is, the lower the internationality of that journal.

H8: The higher the interdisciplinary nature of a communication journal, the higher the internationality of that journal.

Method

For all analyses, I used the ISI Web of Science data. The sample of the ISI seemed to fit the criteria best, as it covers major international journals. I limited the analysis to articles published from 1998 to 2002 because previously U.S. authors could be searched only by U.S. states. I decided to select all journals listed under the subject category "communication" from the ISI Journal Citation Reports (JCR), Social Science Edition 2001 and 2002 (Institute for Scientific Information, 2003a). In total, I analyzed 43 journals. For three journals (*Communication Education, Communication Monographs*, and *Critical Studies in Media Communication*),

² The definition of this subject category reads as follows: "Communication covers resources on the study of the verbal and nonverbal exchange of ideas and information. Included here are communication theory, practice and policy, media studies (journalism, broadcasting, advertising, etc.), mass communication, public opinion, speech, business and technical writing as well as public relations" (Institute for Scientific Information, 2004b).

data on articles published in 2001 and 2002 are missing in the ISI database. Because *Media Psychology* is newly listed by ISI, data on articles are available only from 2001 onward. To determine the number of author addresses per journal, all articles with missing addresses (333 of 5,208) were excluded. Next, I searched the field "addresses" for the name of each country. Country thus represented the place of work (private and/or organizational address), which is not necessarily the same as nationality.

To test H1a and H1b, country became the unit of analysis. The number of authored (or coauthored) articles was computed per country. I searched for author's addresses from the U.S. (H1a) separately and together with authors from the U.K., Australia, Canada, and New Zealand (H1b). Because the International Communication Association (ICA) is the most extensive and largest international communication organization, data from the 1998-2002 annual ICA conferences were used as an indication of attendance at international conferences (International Communication Association, 2002). For all 20 top countries in terms of visibility, the percentage of attending researchers was computed as a average percentage of all attendances at conferences in the analyzed period. When attendees were from a country that is part of the continent where the conference took place, data were excluded to rule out cultural and geographical accessibility disadvantages. For example, data for Canada or U.S. were left out in 1999 and 2001 when ICA conferences took place in North America. Data regarding national population size were from 1999 (Inönü, 2003). To test H2 and H3 visibility, size of population and ICA attendance of the 20 publishing countries were correlated. Because of extreme outliners and skewed distributions, I ranked each variable and ran Spearman correlations.

To answer RQ1, each journal represents a case. The percentage of editorial board members not from the U.S. was coded at the end of 2003. When the editorial information was not available online, the current print version was used. Due to insufficient information about editorial board members given in *Communication Theory, European Journal of Communication*, and *Public Understanding of Science*, the percentage of U.S. members in the advisory board was coded instead. For one journal, information about the editors was not available.

Before calculating the diversity measure, the countries were first collapsed into six regional clusters: (a) the U.S.; (b) the U.K.; (c) other English-speaking countries (Australia, Canada, and New Zealand); (d) the EU (without the U.K.); (e) Asia (Japan, China, Korea, India, Hong Kong, and Taiwan), and (f) other countries. If an article was coauthored by someone outside of the six different clusters, it was coded separately. Because of coauthorship (e.g., authors from Asia and EU, or the U.K., or the U.S.), the cumulated percentage is greater than 100. To calculate a simple diversity measure, I standardized the percentages by dividing the propor-

³ The presence of authors from English-speaking countries is somewhat underestimated because small and less visible countries were not included.

⁴ International Journal of Conflict Management did not provide information on editorial board members. Instead, the journal stated that they were building a new editorial board and were searching for possible reviewers.

Table 1. Characteristics of the Top 20 Publishing Countries						
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US	3,225	66.2	1	2	1	
UK	642	13.2	2	5	3	
Canada	167	3.4	3	10	8	
Australia	154	3.2	4	12	6	
The Netherlands	138	2.8	5	13	2	
Germany	113	2.3	6	4	4	
China and Hong Kong	82	1.7	7	1	7	
Israel	61	1.3	8	17	5	
Italy	42	.9	9	7	15	
Korea, Rep. of	41	.9	10	8	9	
Sweden	41	.8	11	15	11	
Japan	39	.8	12	3	10	
Finland	34	.7	13	19	16	
Spain	31	.6	14	9	20	
Belgium	30	.6	15	14	12	
France	29	.6	16	6	17	
New Zealand	29	.6	17	20	14	
Switzerland	27	.5	18	16	19	
Taiwan	24	.5	19	11	13	
Denmark	21	.4	20	18	18	
Total	4,875					

Note: Spearman's correlation of visibility with population is .51 and with conference attendance .85.

tion of each cluster by the sum of all clusters, and calculated Simpson's D_2 , ranging between 0 and 1 (McDonald & Dimmick, 2003, p. 61). D_2 reflects the probability that two randomly selected addresses came from different country clusters.

To test H4 to H8 four indicators of internationality were used: the percentage of authors from the U.S., the percentage of authors from English-speaking countries, the percentage of editors not from the U.S. and the national diversity score (D_i) . To explain which journal characteristics are leading to internationality, the author nationalities per article were aggregated to the journal level. The impact factor of a journal (H4) was taken from the ISI 2002 Journal Citation Reports (Institute for Scientific Information, 2003a). Because Communication Education and Quarterly Journal of Speech are no longer ranked, the 2001 data were used. Information about affiliated organizations (H5) was drawn from the Iowa Guide (Dyer, 1998, 2003). I cross-checked whether these organizations were also mentioned in the journals' print or online versions. If the name of an associated member-organization is explicitly national (e.g., American Academy of Advertising or National Communication Association'), the journal was assigned -1. If the organization had an international reference in the name (e.g., ICA), the journal received a 1. All other journals were set to zero. To assess international orientation (H6), all journals with "international" in their name (e.g., Harvard International Journal of Press Politics) were coded as explicitly internationally oriented (= 1). Self-descriptions of all journals on the internet were analyzed afterwards. Journals that explicitly men-

⁵ It is striking that this U.S. organization, renamed in 1997, does not specify the nationality.

tioned serving as an international forum or international journal were assigned 1. Journals with a somewhat international focus (cultural diversity or international themes were only two of many focuses) got a .5. The age of a journal (H7) is equal to the volume number in 2003. The interdisciplinary nature of a journal (H8) is equal to the number of ISI groups other than communication. I also ran OLS regressions on diversity of author nationalities, percentages of U.S. editors, and U.S. authors. Because the sample was not randomly selected, significance levels were referred to only as an indication of the robustness of an effect.

Results

H1a and H1b were supported by the data. Researchers from the U.S. authored two out of three articles (Table 1), thereby clearly dominating communication journals. The percentage of authors from the U.S., the U.K., Canada, and Australia cumulated to 86. That these countries ranked on positions 1 to 4 in terms of author visibility strongly confirms the expectation that authors from native English-speaking countries are most prominent. Authors from the 20 most visible countries could be found in 96.4% of all articles. Authors from the remaining countries worked in New Zealand as an additional native English-speaking country or—with the exception of Israel and Switzerland—in EU-member states or developing Asian countries. In the group of the top 20 countries, the rank of a country was highly correlated with ICA conference attendance and lower with population size. Thus, H2 and H3 were also supported.

RQ1 asked for the proportions of editors not from the U.S., the national diversity score, the percentage of authors from the U.S., and authors from Englishspeaking countries per journal. Six groups were distinguished: the U.S. (69.8%); the U.K. (11.3%); Australia, Canada, and New Zealand (6.5%); the EU (10.1%); Asia (China, Hong Kong, India, Japan, Korea, and Taiwan: 3.5%)⁷; and other countries (5.2%). "Other countries" comprises a diverse group of non-EU Western European countries (Norway, Iceland, or Switzerland) and other Asian countries, as well as all countries from Eastern Europe, South and Central America, and Africa including the Middle East. The average national diversity score was .52 (SD .27); the probability that two randomly selected addresses came from different country clusters ranged between 5 and 96%. All four indicators of internationality were highly correlated (between .76 and .93, not shown in a table). At least five journals scored high on all indicators of internationality: They had a high percentage of non-U.S. editors (at least 75%), a diversity score above .90, less than 50% authors from the U.S., and less than 80% authors from English-speaking countries. Sixteen journals are somewhat international (diversity between .50 and .89). Most journals (n = 20), however, held a diversity score less than .50, with 80% or more U.S. editors and U.S. authors.

⁶ In a separate analysis, the study controlled for coauthorship. Scholars from the U.S., the U.K., Canada, and Australia authored exclusively 83.8% of all articles.

⁷ Please note that I coded the place of work and not nationality. Students and staff members from, for example, Asia in the U.S. were coded as living in the U.S.

Table 2. Indicators for Internationality in Articles Published Between 1998 and 2002 in Communication Journals

Communication Journals				0/ 4	
				% Authors from:	
	N	% Non U.S. eds.	Diversity	U.S.	English-lang. countries
		0.0. 003.	Diversity	0.0.	Codrinies
Discourse & Society	116	84	.96	23	67
Javnost—The Public	117	81	.95	21	55
Language & Communication	94	50	.92	37	74
Public Understanding of Science	93	75	.92	31	77
Media Culture & Society	155	86	.91	29	77
Telecommunications Policy	223	85	.91	41	63
Cyberpsychology & Behavior	199	25	.88	47	68
Research on Lang & Social Interaction	97	19	.81	56	81
European Journal of Communication	88	100	.80	10	50
Internatl Jrnl of Public Opinion Research	106	62	.80	58	67
Narrative Inquiry	71	33	.78	55	89
Publishing Research Quarterly	93	31	.76	55	66
Learned Publishing	120	83	.70	28	89
Journal of Media Economics	69	16	.66	72	81
Science Communication	99	14	.64	69	85
Internatl Jrnl of Lang & Comm Disorders	211	84	.63	9	92
Political Communication	124	60	.62	73	80
Journal of Advertising Research	157	11	.61	75	80
Harvard Internatl Journal of Press Politics	150	25	.60	73	85
International Journal of Conflict Mat	70	_	.57	77	83
Jrnl of Social and Personal Relationships	195	15	.56	77	87
Public Culture	124	18	.53	77	85
Journal of Health Communication	108	15	.48	88	92
Media Psychology	41	12	.46	85	90
JrnI of Broadcasting & Electronic Media	15	19	.42	85	91
Communication Research	120	4	.41	83	87
Journal of Advertising	131	2	.40	92	95
Journal of Communication	153	11	.39	87	93
Written Communication	70	20	.39	83	89
Public Relations Review	147	7	.36	87	94
Technical Communication	94	20	.35	86	94
Health Communication	106	0	.33	89	96
JrnI of Applied Comm Research	72	2	.29	90	96
Public Opinion Quarterly	112	5	.27	91	96
Journalism & Mass Comm Quarterly	219	0	.22	95	96
Human Communication Research	110	4	.20	94	98
JrnI of Business and Technical Comm	67	0	.20	91	97
Communication Theory	81	0	.19	96	99
Critical Studies in Media Communication	50	0	.18	94	98
Communication Education	78	0	.17	95	99
Communication Monographs	56	2	.12	98	98
Western Journal of Communication	91	0	.08	97	99
Quarterly Journal of Speech	46	0	.05	98	98
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Table 3. Predicting Indicators for Internationality of Communication Journals: Betas From Linear Regressions

	% Non-	% Non- National		% Authors from:		
	U.S. eds.	diversity	U.S.	Englang. countries		
Impact	18	17	.26*	.21		
International organization	.02	.13	06	07		
International orientation	.41*	.18	27*	31*		
Journal age	26*	44*	.30*	.33*		
Interdisciplinary	.23	.37*	30*	23		
R^2	.37	.50	.35	.36		
Adjusted R^2	.28	.43	.26	.27		
N	42	43	43	43		

^{* =} p < .05 (one-tailed).

Cultural studies, discourse analytic, and speech-oriented journals were most international. Only one classic mass communication journal—International Journal of Public Opinion Research—could be classified as international, despite still clearly being U.S. dominated (Table 2). By contrast other journals with an explicit international reference in their names were more biased. Of articles found in the Harvard International Journal of Press Politics and International Journal of Conflict Management, three out of four authors originated from the U.S., whereas the International Journal of Language & Communication Disorders was a U.K.-dominated journal. ICA-affiliated journals were only somewhat international; Human Communication Research, in particular, seemed to be a purely North American journal.

To test H4 to H8, regressions on all four indicators for internationality were run. In sum, national diversity is explained best, but also the other indicators were reasonable well predicted. I had to reject H5; international communication organizations did not help internationality at all. Impact of a communication journal (H4) had a significant effect on only the percentage of U.S. authors. However, the international orientation of a journal (H6) did lead to less U.S.-dominated editorial boards and to lower percentages of authors from English-speaking countries, including the U.S. Journal age, as assumed in H7, affected all four indicators. In particular, younger journals were found to be more nationally diverse.

Finally, I hypothesized that the higher interdisciplinary nature of a communication journal would lead to higher internationality. Interdisciplinary nature improved national diversity and reduced the percentage of U.S. authors, but had no significant effect on editorial board membership or authorship from other English-speaking countries.

Discussion and Implications

Overall, the most visible countries in communication journals are English-speaking ones, the U.S. in particular. Nevertheless, communication journals vary in terms of internationality. The differences between them could not be explained by the national or international organization with which they are affiliated. An international mission statement and a strong impact of a journal are positively related to more internationally authored articles. Also, younger journals are a good place for international contributions. It seems that communication journals are in transition.

The number of truly international journals is rising, whereas older journals tend to serve as national research journals. For now, I have to acknowledge that the dominance of the U.S. in communication journals has been much greater than in journals of other disciplines (Grupp, Schmoch, & Hinze, 2001). That journals bordering to other disciplines are more diverse than pure communication journals underlines this finding. There are several possible explanations for this outcome, which I will address below.

First of all, it could be argued that the ISI sampling is biased. Indeed there are some international journals not covered by ISI. However, most of them are rarely cited in other ISI-ranked journals; only *Gazette* and *European Journal of Cultural Studies* are exceptions to a certain extent (Bilandzic, Lauf, & Hartmann, 2004). In contrast to other disciplines, such as political science, sociology, or psychology, important national journals are missing outside the U.S. ISI should consider including other major national or regional journals—for instance, the *Asian Journal of Communication, Communications, Keio, Nordicom,* or *Publizistik.* Such an adjustment of the ISI journal sample would improve the average national diversity of all communication journals. The lack of truly international communication journals, nevertheless, would persist.

A second explanation could be that the review process discriminates against international manuscripts so that they hardly pass the review. What I know is that the majority of managing editors are from the U.S. With fewer than 5% non-U.S. members, one third of all editorials boards, in my judgment, are not prepared to review international manuscripts. In addition, U.S. editors might overrate minor mistakes in U.S. citation systems (e.g., *Chicago Manual of Style, Publication Manual of the American Psychological Association*), lack of English proficiency, missing U.S. literature, and so on. So, indeed, there are indications that non-U.S. authors are disadvantaged, but because information about the review process is missing, I can only speculate. Anyway, could it really explain the huge gap between authors from the U.S. or from other English-speaking countries, and authors from the rest of the world?

Another explanation for the discrepancy found here could be that communication journals are simply a mirror of reality in communication research. Again, I cannot completely rule out that the sheer number of communication departments or communication faculties is the reason for this bias. Assume that the number of members of communication associations is a sufficiently valid indicator of the number of communication scholars in a specific country. The American Associa-

tion for Education in Journalism and Mass Communication (AEJMC) and the German communication association—Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft (DGPuK)—are important national communication organizations. AEJMC is a U.S.-based, "non-profit, educational association of journalism and mass communication faculty, administrators, students and media professionals" that has some 3,500 members (Association for Education in Journalism and Mass Communication, 2004), and the DGPuK "today counts over 700 people among its members, who represent their discipline in research and teaching or utilize their knowledge and expertise in various occupations" (Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft, 2004). Otherwise highly comparable, the German organization does not allow for student membership. Although DGPuK members count for 20% of AEJMC members, German authors just count for 3.5% of U.S. authors (Table 1). This case demonstrates that departments or faculties are not the sole explanation.

A closer look at both organizations suggests cultural explanations. Whereas AEJMC membership includes subscriptions to journals, DGPuK membership instead includes complimentary books. It may be that the journal culture is more important in the U.S. than in Germany. Germans are forced to produce long and complex texts for a master thesis, dissertation, and habilitation, whereas in English-speaking countries journal articles play a more important role for an academic career.

Leydesdorff (2004) found a lack of core communication journals. I may also have to consider a deficit of *international* communication journals. What can be done to improve the internationality of journals? Scholars from non–English-speaking countries should submit more manuscripts, and national scientific communities should reward publication in international journals higher than in national ones. If international exchange in communication research is desirable, journals should encourage authors from all over the world to publish in top communication journals. A really international editorial board is only a first step. Two major international ISI-ranked journals offer additional options to improve diversity: *Discourse & Society* explicitly prefers international manuscripts, and the *International Journal of Public Opinion Research* encourages authors from the non–English-speaking world to submit their manuscripts in their own language for a first review. Such support obviously has contributed to the fact that the first is the most international cultural-studies journal, and the second the most international mass communication journal.

That said, I have to acknowledge some limitations of this attempt to explain the dominance of authors from the U.S. and other English-language countries. As mentioned above, international conference attendance was measured using only ICA conferences. Conferences held by other general international organizations, such as the *International Association for Media and Communication Research*, or by more specialized international organizations, such as the *World Association of Public Opinion Research*, were not considered. The number of inhabitants was only a weak indicator for the number of scholars in a country, at least outside Western industrialized societies. Communication associations, here the U.S.- and German ones, are also not necessarily reflecting the number of scholars. These

shortcomings in the explanation of the national diversity should be reduced in future research. However, I believe that this study makes an important contribution to opening up the discussion about the international orientation of major communication journals.

References

- Association for Education in Journalism and Mass Communication (2004). *About.* Retrieved June 15, 2004, from http://www.aejmc.org/.
- Bilandzic, H., Lauf, E., & Hartmann, T. (2004). How to go international. DGPuK-Wegweiser zu internationalen Tagungen und Fachzeitschriften in der Kommunikationswissenschaft. Filderstadt, Germany: Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft.
- Clyne, M. (1987). Cultural differences in the organization of academic texts: English and German. *Journal of Pragmatics*, 11, 211–247.
- Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft (2004). *Information in English language*. Retrieved June 15, 2004, from http://www.dgpuk.de/
- Dyer, C. S. (1998). The Iowa guide: Scholarly journals in mass communication and related fields. Ames: University of Iowa.
- Dyer, C. S. (2003). The Iowa guide: Scholarly journals in mass communication and related fields. Online edition. Retrieved September 5, 2003, from http://fmp2.its.uiowa.edu/iowaguide/indexpage.html
- Fandrych, C., & Graefen, G. (2002). Text commenting devices in German and English academic articles. *Multilingua*, 21, 17–43.
- Funkhouser, E. T. (1996). The evaluative use of citation analysis for communication journals. *Human Communication Research*, 22, 563–574.
- Galtung, J. (1981). Structure, culture and intellectual style: An essay comparing Saxonic, Teutonic, Gallic and Nipponic approaches. *Social Science Information*, 20, 817–856.
- Global Communication Research Association (2003). *Rationale*. Retrieved October 24, 2003, from http://www.mucic.mq.edu.au/GCRA/rationale.html.
- Grupp, H., Schmoch, U., & Hinze, S. (2001). International alignment and scientific regard as macroindicators for international comparisons of publications. *Scientometrics*, 51, 359–380.
- Inönü, E. (2003). The influence of cultural factors on scientific production. Scientometrics, 56, 137–146.
- Institute for Scientific Information (2003a). *The journal citation report*. Retrieved September 5, 2003, from http://jcrweb.com.
- Institute for Scientific Information (2003b). *The journal selection process*. Retrieved December 15, 2003, from http://www.isinet.com/essays/selectionofmaterialforcoverage/199701.html.
- Institute for Scientific Information (2004a). *Research products*. Retrieved June 15, 2004, from http://www.isinet.com/rsg/.
- Institute for Scientific Information (2004b). Scope notes. *Social Science Citation Index*. Retrieved June 15, 2004, from http://www.isinet.com/journals/scope/scope_ssci.html.
- International Communication Association (2002, September). *ICA Newsletter*. Retrieved May 15, 2004, from http://www.icahdq.org/publicnewsletter/2002/sept2002_Newsletter1.pdf
- Kamhawi, R., & Weaver, D. (2003). Mass communication research trends from 1980 to 1999. *Journalism & Mass Communication Quarterly, 80, 7–27*.

- Lau, T. (1995). Chinese communication studies: A citation analysis of Chinese communication research in English-language journals. *Scientometrics*, *33*, 65–91.
- Leydesdorff, L. (2000). Is the European Union becoming a single publication system? *Scientometrics*, 47, 265–280.
- Leydesdorff, L. (2004). Top-down decomposition of the *Journal Citation Report of the Social Science Citation Index*: Graph- and factor-analytical approaches. *Scientometrics*, 60, 159–180.
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research*, 28, 587–604.
- Luwel, M. (1999). Is the science citation index U.S.-biased? Scientometrics, 46, 549-562.
- McDonald, D. G., & Dimmick, J. (2003). The conceptualization and measurement of diversity. *Communication Research*, 30, 60–79.
- Müller, R. A. E., & Sumner, D. A. (1999). Output counts: Comparing the published contributions by agricultural economists across countries. *European Review of Agricultural Economics*, 26, 533–548.
- Rey-Rocha, J., & Martin-Sempere, M. J. (2004). Patterns of the foreign contributions in some domestic vs. international journals on earth sciences. *Scientometrics*, *59*, 95–115.
- Rice, R. E., Chapin, J., Pressman, R., Park, S., & Funkhouser, E. (1996). What's in a name? Bibliometric analysis of 40 years of the *Journal of Broadcasting & Electronic Media*). *Journal of Broadcasting & Electronic Media*, 40. 511–539.
- Riffe, D., & Freitag, A. (1997). A content analysis of content analyses: Twenty-five years of *Journalism Quarterly, Journalism & Mass Communication Quarterly*, 74, 515–524.
- Schweitzer, J. C. (1988). Research article productivity by mass communication scholars. *Journalism Quarterly*, 65, 479–484.
- So, C. Y. K. (1988). Citation patterns of core communication journals. An assessment of the development status of communication. *Human Communication Research*, 15, 236–266.
- Van Leeuwen, T. N., Moed, H. F., Tijssen, R. J. W., Visser, M. S., & van Raan, A. F. J. (2001). Language biases in the coverage of the Science Citation Index and its consequences for international comparisons of national research performance. *Scientometrics*, *51*, 335–346.
- Vessuri, H. (2001). Science and its cultures. International Social Science Journal, 53, 179-185.
- Yang, L., & Kaid, L. L. (2000). Fragmentation of the intellectual structure of political communication study: Some empirical evidence. Scientometrics, 47, 143–164.