Extended Abstract

Internationalization and Journalization of German Communication Science?
An analysis of scientific articles and citations from 50 years of *Publizistik* and *Medien & Kommunikationswissenschaft*

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Research Interest

The development of the German communication science has been the focus of numerous studies (i.e. Lauf, 2001; Schönbach, 2004; Brosius & Haas, 2009; Potthoff & Kopp, 2013; Potthoff & Weischenberg, 2014). However, the empirical investigation of the so-called internationalization and journalization hypotheses is until today an academic void. Accordingly we examine in our study the extent to which the citation behavior of the German communication science community has internationalized between 1963 and 2012 and if the citation of journal articles has become increasingly important.

While the German communication association (DGPuK) is already describing a process of internationalization in its working papers (DGPuK, 2001; 2008) others (Schönbach, 2004) emphasize the absence of a change in terms of the reference to more international sources. Studies on the language of references in the most important German communication science journals (Brosius & Haas, 2009; Potthoff & Weischenberg, 2014) revealed that English references increased lately while German references decreased. Accordingly, the research results of these studies showed that the number of the referenced journal articles increased and the referenced monographs decreased over the years and concluded that the field professionalized over the years. The question of which references are more relevant for a scientific community is not trivial as it can be held that what we call “scientific objectivity” is not a product of the individual scientist’s impartiality, but a product of the social or public character of scientific method (Popper, 1950, p. 405). Citation analysis in communication science usually focus on American journals (Kent & Rush, 1977; Reeves & Borgman, 1983; Tankard, Chang, & Tsang, 1984; Rice, Borgman, & Reeves, 1988; So, 1988; Pasadeos & Renfro, 1992; Dominick, 1997; Pasadeos, Renfro, & Hanily, 1999; Rice et al., 1996; Chang & Tai, 2005; Pasadeos, Berger, & Renfro, 2010) while just a few studies investigated the German community as represented by its most important communication journals *Publizistik* and *M&K/RuF* (Lauf, 2001; Brosius & Haas, 2009; Potthoff & Kopp, 2013; Potthoff & Weischenberg, 2014). Potthoff and Kopp (2013) found that 86.3% of the references in these two journals were cited just once – the majority of the referenced articles are apparently of just limited...
importance. Hence the differentiation between less popular sources (i.e. sources cited just once) and higher impact sources (i.e. sources cited more than once) seems to be a fundamental distinction as the relevance of a work for a scientific community is perceived as the amount to which it is referenced by other authors (Lazer, Mergel, & Friedman, 2009).

Therefore, we formulated two research questions:

F1: How did the language and publication mold of the referenced articles in Publizistik/M&K change from 1963 to 2012?

F2: How did the language and publication mold of the less popular and highly impact sources in Publizistik/M&K change from 1963 to 2012?

Method

Using citation analysis, we examined the language and the publication mold of all scientific references from the two most important German communication science journals Publizistik and M&K/RuF. Our population consisted of 2,447 scientific articles that were published between 1963 and 2012. In the first step, we chose a random sample of ten percent (246 articles) of all articles from both journals for each decade in order to account for differences between publication outcomes per decade and journal. In the second step we coded each reference from the articles (8,014 references) according to a codebook that contained the variables name of the authors, title, publication year, language and publication mold. The inter-rater agreement (Krippendorff’s Alpha) was measured before the coding procedure by coding 15 articles and their 774 references (Lombard, Snyder-Duch, & Bracken, 2002) and was satisfying for all variables of interest year (0.97), language (0.98) and publication mold (0.88). After the identification of duplicates (e.g. different editions of the same textbook) and not relevant sources (e.g. newspaper articles) we identified 6,710 scientific sources. Nine hundred and sixty were highly reputable sources and 5,750 references were just cited once.

Results

In general, we found that the articles under investigation had indeed internationalized and professionalized in the period between 1963 and 2012. While in the first decade (1963-1972) English sources were uncommon, their percentage increased between 1983 and 1992 as well as between 2003 and 2012 and reached 47 percent per article in the end. The differences between the decades were significant (Chi-square = 36,512; df = 4; p ≤ .01). However, internationalization just appealed to English sources as other languages were not common in our sample. The publication mold of the cited sources changed as well between the decades under investigation. The percentage of referenced journal articles increased from 17 percent per article in the first decade to 39 percent per article in the last decade (2003-2012). The differences between the decades were again significant (Chi-square = 24,737; df = 4; p ≤ .01). According to the existing literature (Bro-sius & Haas, 2009, p. 198-188) this can be seen as an indicator for an increasing
professionalization of the German communication science. On contrary to the referenced journal articles the percentage of cited monographs per article decreased during the period under investigation from 47 percent in the first to 25 percent in the last decade (Chi-square = 15,706; df = 4; p ≤ .01). However, the importance of edited books increased from five percent to 21 percent (Chi-square = 30,999; df = 4; p ≤ .01).

Differentiating between highly reputable and less popular sources revealed another picture though. We found that the less popular sources (i.e. sources cited just once) have internationalized and increasingly come from journals in this period. Contrary to predictions, the higher impact sources (i.e. sources cited more than once) showed no evidence of internationalization but were found to be increasingly German research monographs. The highly reputable English sources were more common in the first decade (37 %) than in the last one (26 %) and monographs were constantly the most common publication mold for the highly reputable sources while journal articles were not as important.

To be able to state which sources were highly reputable sources we calculated a Poisson regression (which is suited for count data) for the whole period and found that journal articles had a higher chance to be cited more than once (IRR = 10,18; p ≤ .01) but monographs still had the highest probability to become high impact sources (IRR = 68,03; p ≤ .01). To our surprise we couldn’t find a significant effect on language. Hence we calculated separate Poisson regressions for each decade. We couldn’t find a consistent pattern, instead the results revealed significant differences between the decades. English sources had a good chance to be highly reputable sources in the first (IRR = 2,48; p ≤ .01) and third (IRR = 1,91; p ≤ .01) decades. On the contrary, in the last decade their chance to be highly reputable sources was worse (IRR = 0,40; p ≤ .01) then average. Journal articles had in the second (IRR = 3,06; p ≤ .05) and third decade (IRR = 3,60; p ≤ .01) a better chance to be highly reputable sources, while there were no significant effects for the other decades. Only monographs had through the whole period a better chance to be highly reputable sources.

Discussion and Conclusions

The citations of references in the two most important German communication science journals have indeed internationalized and professionalized between 1963 and 2012. However, our findings provide important clues for a new perspective on the current developments in the field as they indicate that the more reputable sources are not reaching international scope but are rather limited to German publications and monographs.

The results of Potthoff und Kopp (2013) revealed that the majority of the most cited articles in their sample are fundamental theoretical works. Integrating these fundamental theoretical works is highly relevant for scientific work (Luhmann, 1990; Stichweh, 1987). However, not just the citation of other articles, but as well the publication strategies of the authors are important for the development of a research field. An active internationalization and journalization means publication strategies which focus on English journal articles could lead to a maladjust-
ment between theoretical work and empirical studies, as the latter have better chances to be published in journals. Whether the highly cited articles in German communication science really are fundamental theoretical works, and how the increasing importance of the publication in English journals will affect our field, has to be answered by future studies.

Our study was limited in different ways. Citation analyses are rather restricted in the sense that they just mirror a certain structure of references but are not capable of giving information about the motivations of actors behind the reference system. However they can be an indicator for the structure and development in the field and show which sources have been considered most relevant (White & McCain, 1998; White, Wellman, & Nazer, 2004). Further studies could consider these limitations by conducting interviews with authors and editors of these journals. Additionally, we did just consider the two most important German communication science journals, but German communication scholars are publishing in English journals as well. Whether and how the references in these journals differ from our sample is an interesting question for future research.

Despite these limitations our results provide important first clues for a new perspective on the question of internationalization and professionalization of our field. To give a full picture of the current developments it is important to differentiate between high impact and less important sources as they have developed differently through the last 50 years.

**Literature**


