

Varieties of Industrial Relations Research: Take-over, Convergence or Divergence?

Carola M. Frege

Abstract

Industrial relations (IR) research faces various pressures of internationalization. Not only do global economic forces increasingly shape the subject of the discipline, employment relations, but also the academic community itself is becoming more international. The article discusses whether and in what ways IR research is affected by these trends. It is based on a comparative, longitudinal study of journal publications in the USA, Britain and Germany. The findings reveal significantly different patterns of IR research across the three countries. In particular, the strong variation between US and British research patterns challenges the common notion of a homogeneous Anglo-Saxon style in conducting social science research. The analysis suggests that despite growing internationalization, IR research continues to be strongly embedded in nationally specific research cultures and traditions.

1. Introduction

There is evidence of increasing pressures to internationalize the social sciences in recent decades (Schmitter 1999), observable even in such specialized fields as ‘industrial relations’ (IR) traditionally dominated by Anglo-Saxon research and scholarship. On the one hand, the ongoing globalization of the economy and of employment relations should have an impact on the way industrial relations is being studied, which historically has been embedded in the notion of the nation state and national employment regulations. On the other hand, there is evidence of an intensifying internationalization of academic research activities. There are an increasing number of joint publications by authors of different national contexts, joint international funding, international conferences, cross-citations, sabbaticals abroad and an increasing likelihood of younger graduate students obtaining at least part of their education in another country or academics being employed at some point in their career in more than one country. For example, more than 80 per cent of the

Carola Frege is at the London School of Economics, Department of Industrial Relations.

current graduate students in industrial relations at the London School of Economics (LSE) are non-British. Moreover, national funding institutions (e.g. Leverhulme Trust in Britain) are increasingly fostering international research collaboration. Comparative and international courses are part of most IR curricula these days. There have also been efforts to create European IR Master's and Ph.D. degrees through joint collaboration of European universities. Finally, new IR journals have been launched aiming at supranational issues such as the *European Journal of Industrial Relations* or *Transfer*. And the *British Journal of Industrial Relations* recently changed its subtitle to '*BJIR — an international journal of employment relations*' to emphasize its interest in attracting international authors and topics.

These developments pose the question whether and in what ways IR research will be affected by these trends. At first sight one would predict that IR as a social science would be isomorphic with the evolution of its subject matter. As goes the practice of IR, so will eventually go the study of IR. Thus, if employment relations become globalized so will, one assumes, eventually the content of study of IR. At a deeper level, the question emerges whether the way we conduct research and think about it, thus our research pattern or style — defined as research topics, methodologies and theories — is changing as well.

On the other side, one may emphasize the continuing embeddedness of the social sciences, and thus of IR research, in their national context. One of the major breakthroughs in the philosophy and sociology of science in the last century was the recognition that scientific knowledge has to be seen as a social process and not as predetermined by natural laws (Kuhn 1962; Mannheim 1929). The process of knowledge creation, thus the way we conduct research is therefore not universal, following exclusively objective scientific laws, but is shaped by specific sociohistorical contexts (Camic and Gross 2001). Research patterns can change over time and may differ from location to location. In particular, given that the formation of social sciences during the 19th century coincided with transformations of the nation states and that the latter transformations were crucially dependent on the new discursive understanding of state and society, it seems likely that knowledge production in the social sciences is embedded in specific national research traditions and customs. Thus, different nations may have different styles of conducting research in sociology, political science or for that matter IR.

IR is an interesting case to examine. IR was established as an independent field of study in the 1920s in the USA and subsequently after the Second World War in Britain and other Anglo-Saxon countries. Although originally established by US institutional economists it soon came to be seen as an interdisciplinary field incorporating labour economists, industrial psychologists, personnel management scholars, industrial sociologists and labour lawyers, as well as political scientists working on labour issues. In continental Europe and indeed in the rest of the world, research on work and employment remained a subject in each of those social science disciplines (Frege 2003). In recent years, however, there has been a growing awareness that IR as an

academic field of study faces an increasing crisis since the halcyon days of the 1970s, which expresses itself, among other things, in declining numbers of students, university departments, publications and public interest (Godard 1994; Jacoby 1990; Kaufman 1993). Structural circumstances such as the worldwide decline of unions and collective bargaining — core topics of interest for IR scholars — are usually cited as a major reason for this academic crisis.

The question this article therefore addresses is what kind of national research styles do we find in IR and are they affected by the growing internationalization of the subject field and of academic relations? Thus, does increasing internationalization lead to a takeover of the dominant Anglo-Saxon research style, a convergence of various national styles or are divergent national research patterns likely to continue? And what does this tell us about the future of the IR discipline? The article is based on a longitudinal comparative data set, the first of its kind, of IR journal publications in two Anglo-Saxon countries, the USA and Britain, and in Germany, as an example of continental Europe. The analysis suggests that despite growing internationalization IR research continues to be strongly embedded in national-specific cultures and traditions.

2. Methodology

In order to explore the possible variation between national research patterns I conducted a comparative content analysis of articles published in the most prominent IR journals in the three countries. I analysed the two US journals historically associated with IR: *Industrial and Labor Relations Review (ILRR)* and *Industrial Relations (IndR)* and left out journals, which are more specific in their outlet (e.g. *Comparative Labor Law and Policy Journal*, *Journal of Labor Research* or *Labor History*). A similar distinction was made by Mitchell's (2001: 378) study of US IR journals. In Britain the *British Journal of Industrial Relations (BJIR)* and the *Industrial Relations Journal (IRJ)* were analysed as the two traditional journals while excluding the more specialized *European Journal of Industrial Relations*.¹ In Germany industrial relations as a discipline is not well established and hence there exists only one specialized IR journal, *Industrielle Beziehungen (IB)* which was launched in 1994.² Note that this study excludes publications in human resources (HR) journals in all three countries.

Focusing on journal publications has potential drawbacks. The problem is comparability and comprehensiveness. First, one might object that limiting the study to the top journals narrows the focus to the dominant discourse of the IR field. Thus, IR scholars are characterized in this study as a narrowly defined academic group, which publishes in these IR journals (see a similar definition in Mitchell 2001 or Whitfield and Strauss 2000), while excluding the wider community of the field. I am fully aware that there may be alternative discourses which are being neglected in all three countries. It has been argued, for example, that 'labor studies' publications in the USA are usually more

radical than the mainstream IR field; however, they are also less academic. I also excluded the scholarly works of neighbour disciplines, for example by political scientists, sociologists or labour historians, which deal with specific IR issues. Some critics may argue that by excluding the sociological journal *Work, Employment and Society* I potentially neglect the more radical labour process debates in Britain. There is also a popular perception that if one compares publications outside the core US IR journals and explores research by political scientists or sociologists, the differences from Europe might be less severe. However, including such journals in all three countries would have gone well beyond the scope of this study. More importantly, my hypothesis is that including, for example, industrial sociology or HR journals would not have significantly changed the comparative results of this study. There is ample evidence from mainstream social sciences revealing enduring cross-national research differences (e.g. Levine 1995 for sociology or a special issue of the *Comparative Labor Law and Policy Journal* 2002, 23(3) for labour law). I also conducted a small-scale study of publications in industrial sociology during the 1980s and 1990s and found strong cross-national differences between the USA and Britain.³ Thus, one can assume that the exclusion of these journals should not have an impact on the validity of this study.

Second, critics may argue that *IB* is not representative of German scholarly work on employment relations. It is true that most German IR scholars (as most German social scientists) publish working papers, grant reports, conference papers, 'Festschriften' and books and rarely publish in journals whether in the *IB* or in more specific disciplinary journals. Thus, the majority of publications are not only hard to assemble but could also not be compared to refereed Anglo-Saxon articles. An alternative approach would have been to examine the main book publications in each country. However, one cannot assume that this would have changed the German findings compared to the USA and Britain. German IR scholars do not publish significantly more books than their counterparts in the USA or Britain. Most observers will also agree that the differences in research style between articles and books are similar across countries (for the USA, see Mitchell 2001: 389). Moreover, since book comparisons would inevitably have involved some kind of subjective judgment⁴ on which books are the most important, I opted for a more 'objective' journal route. Finally, and most importantly, however, one can argue that *IB* provides a critical case study. It has the most international image and is likely to be the most open to Anglo-Saxon research compared to other German outlets (it includes a British academic on its editorial board and also publishes English-written articles). Thus, if one finds national-specific research patterns here, one is likely to find them in other German publications as well. To conclude, using the *IB* may not provide a fully comprehensive picture of German research but a sufficient one for the purpose of this study.

The content analysis of the five IR journals comprised two time periods: 1970–1973 and 1994–2000 (*IB* could only be analysed for the second time period).⁵ The time gap between both periods should allow a complete change in generations of scholars and thus allow us to depict long-term trends in the

literature (see Mitchell 2001: 379 for a similar argument). In order to compare the two time periods, two dummy variables, 1970s and 1990s, were created. It was assumed that there is a linear trend of research development between the two periods. The sample contains 1309 articles, 390 from the 1970s and 919 from the 1990s (or 666 US articles, 552 British and 91 German articles). The research patterns were explored by focusing on four variables: nationality of authors, their professional affiliation, research topics and research methodology. The idea was to provide a reliable characterization of research patterns and to examine to what extent national research styles emerge and if so whether they continue to exist over time. One should note that the empirical analysis is essentially inductive, heuristic and explorative rather than deductive and hypothesis testing. Also note that it was not possible to include a comprehensive content analysis of research theories and paradigms for such a large sample.

The variables were conceptualized as follows:

1. The *nationality of authors* (in case of two or more authors, the first author's nationality) was clustered into three groups: Anglo-Saxon (in this sample: USA, UK, Canada, Australia, New Zealand and Ireland); continental European (western and eastern Europe: Germany, France, Italy, Spain, Portugal, Sweden, Denmark, Netherlands, Austria, Hungary and Yugoslavia); Asian (Japan, China, Korea, Taiwan and India) and the rest of the world (Israel, Mexico, Brazil, South Africa, Russia and other). I also produced independent variables for each of the three countries and rearranged the rest accordingly. For example in the US case, US authors were classified as an independent group to separate them from the other Anglo-Saxon countries.
2. *Authors' disciplinary affiliation*, as provided by the author, was broadly classified into 'IR/HR and business school', 'economists/labour economists' and 'other social scientists' (sociologists, political scientists, lawyers and others).⁶ IR and HR scholars were classified together since in many cases, in particular in Britain, former IR departments have been renamed HR departments, which makes a separate affiliation difficult. Similarly, business school affiliations were included since in the USA and Britain many IR scholars work in business schools. The remaining social sciences (sociology, political science and law) were merged into one variable because their frequencies were low.
3. The *article subject* was broadly classified into 'industrial relations' (IR), 'human resources' (HR) and 'labour market' (LM) issues. IR issues comprised the following specific topics: 'collective bargaining', 'industrial democracy', 'unions', 'state' (state as employer, public policies, social policy and labour law), 'international' (supranational organizations, globalization, multinational corporations (MNCs), international labour rights, etc.), 'labour process' (quality of working life, Total Quality Management (TQM), power relations, management strategies, corporate culture/climate, organizational change), 'social issues' (identity

politics such as gender, race, disability discrimination, health and safety) and 'other IR issues'. HR issues focused on firm-specific personnel policies such as 'hiring/turnover', 'training/education', 'career', 'individual motivation', 'performance', 'labour productivity', 'employee participation' (quality circles, employee involvement schemes, ESOPs, etc.) and 'general human resource management'. Finally, LM issues comprised 'labour market trends', 'pay systems' and 'working time' (including contingent or part-time work). The specific topics were based on Mitchell's (2001) study comparing US IR journals and were further specified on the basis of the sampled journal articles.

Classifying topics proved difficult. Articles were classified according to their main topic, but frequently articles covered several topics and it was not always easy to decide on the most important one. For example, an article dealing with worker attitudes to union-joining in France may be classified as an international article or as one dealing with union issues. Moreover, the categories are ultimately arbitrary. For example, some people might not agree with treating LM issues as a separate category from IR, but it seemed a sufficiently large category to treat on its own. Others may argue that TQM can be discussed from an HR as well as from an IR or labour process perspective. However most TQM articles in this sample fell under the latter category. Moreover, even the specific topics are ultimately general. Gender discrimination, for example, which is classified here as part of IR, could include sociological analyses of how discrimination is practised at work, or economic analyses focusing on outcomes such as wage inequality. Finally, the categories neglect the authors' deeper agenda. For example, is there more emphasis on performance rather than equity in analysing employee involvement or pay? In sum, the topics' classification is undoubtedly a second-best solution. Ideally, one would require an in-depth content analysis of each article, but this was not feasible given the large data set.

4. The *methodology* was classified as empirical descriptive, empirical analytical-inductive, empirical analytical-deductive, think piece (essay, commentary, literature review) and theoretical (theory building, methodology). In addition, I distinguished between quantitative or qualitative methods; small or large data sets (smaller or larger than 300 cases⁷); and comparative (nation, sector, etc.), historical/longitudinal or one-time period/one-case study research. Finally, the level of analysis was explored: macro/societal, sectoral/industrial, firm, or micro (group, individual).

3. Results⁸

Nationality of Authors

As can be seen in Table 1, during the 1970s and 1990s 84 per cent of all articles in the USA were published by US authors. The share of US authors was

TABLE 1
Year/Nationality of Authors — US Sample

		<i>US authors</i>	<i>Asia</i>	<i>Europe</i>	<i>Anglo-Saxon (excl. USA)</i>	<i>Rest of world</i>	<i>Total</i>
1970s	<i>IndR</i>	95 79.8%		4 3.4%	17 14.3%	3 2.5%	119 100%
	<i>ILRR</i>	95 87.2%		2 1.8%	11 10.1%	1 0.9%	109 100%
	Total	190 83.3%		6 2.6%	28 12.3%	4 1.8%	228 100%
1990s	<i>IndR</i>	166 85.1%	4 2.1%	2 1.0%	22 11.3%	1 0.5%	195 100%
	<i>ILRR</i>	206 84.8%	1 0.4%	5 2.1%	26 10.7%	5 2.1%	243 100%
	Total	372 84.9%	5 1.1%	7 1.6%	48 11.0%	6 1.4%	438 100%

virtually constant over time (83 per cent for the 1970s and 85 per cent for the 1990s) and did not vary significantly between the two journals (for *IndR* 80 per cent in the 1970s and 85 per cent in the 1990s and for *ILRR* 87 per cent in the 1970s, 85 per cent in the 1990s). 'Anglo-Saxon' authors (excluding the USA) made the second largest group with a total of 11 per cent (12 per cent in the 1970s, 11 per cent in the 1990s). The British were the largest subgroup although their share was decreasing: 8 per cent in the 1970s and 4 per cent in the 1990s. The other countries all had very small shares. Asian authors had no articles in the 1970s and 1 per cent in the 1990s, continental European authors produced 3 per cent of the articles in the 1970s and 2 per cent in the 1990s and the rest of the world produced 2 per cent in the 1970s and 1 per cent in the 1990s. There was no significant variation among the US journals.

In Britain a slightly lesser share of 79 per cent of all articles in both time periods were published by British authors, 14 per cent by Anglo-Saxon authors (excluding Britain), 4 per cent by continental European authors, 2 per cent by Asians and 2 per cent by authors from other countries (Table 2). Over time the share of British authors decreased from 87 per cent in the 1970s to 75 per cent in the 1990s. Anglo-Saxon authors (excluding Britain) slightly increased their total shares from 11 per cent in the early 1970s to 15 per cent in the 1990s whereby US authors were the largest subgroup with overall 8 per cent (no significant variation over time). There was a slight variation between the journals which was constant over time: the *BJIR* was slightly less British dominated (overall 77 per cent in the *BJIR* and 81 per cent in the *IRJ*) but had a larger share of Anglo-Saxon authors (17 per cent compared to 10 per cent in the *IRJ*) and within that slightly more US authors (9 per cent compared to 7 per cent in the *IRJ*). Surprisingly, in contrast to the USA, continental European and Asian authors were not published at all in Britain during the 1970s. In the 1990s continental European authors increased to 6 per cent and Asians to 2 per cent (with no significant differences between the journals), which was more than in the USA. The share of articles by the rest

TABLE 2
Year/Nationality of Authors — British Sample

		<i>British authors</i>	<i>Asia</i>	<i>Europe</i>	<i>Anglo-Saxon (excl. UK)</i>	<i>Rest of world</i>	<i>Total</i>
1970s	<i>BJIR</i>	79			13	2	94
		84.0%			13.8%	2.1%	100%
	<i>IRJ</i>	60			5	1	66
		90.9%			7.6%	1.5%	100%
	Total	139			18	3	160
		86.9%			11.3%	1.9%	100%
1990s	<i>BJIR</i>	142	5	10	36	2	195
		72.8%	2.6%	5.1%	18.5%	1.0%	100%
	<i>IRJ</i>	151	4	12	21	7	195
		77.4%	2.1%	6.2%	10.8%	3.6%	100%
	Total	293	9	22	57	9	390
		75.1%	2.3%	5.6%	14.6%	2.3%	100%

TABLE 3
Year/Nationality of Authors — German Sample

		<i>German authors</i>	<i>Asia</i>	<i>Europe (excl. Ger)</i>	<i>Anglo-Saxon</i>	<i>Rest of world</i>	<i>Total</i>
1990s	<i>IB</i>	69	1	3	17	1	91
		75.8%	1.1%	3.3%	18.7%	1.1%	100%

of the world accounted for 2 per cent in the 1970s (similar to the USA) and 2 per cent in the 1990s (slightly more than in the USA). In other words, British journals seem to have been slightly less open to foreign authors during the 1970s compared to the USA but made up for it in the 1990s.

In the German case 76 per cent of all articles (in the 1990s) were published by German authors, which is slightly less ethnocentric with regard to their authors than in Britain or the USA, and surprising given the language barrier (Table 3). (The German journal attempts to circumvent this problem by occasionally publishing English-language articles.) Nineteen per cent were published by Anglo-Saxons (6 per cent USA, 13 per cent UK), 3 per cent by Europeans (excluding Germans), 1 per cent by Asians and 1 per cent by authors from the rest of the world. It is interesting to note that Europeans constitute a smaller group than the Anglo-Saxons, which confirms the prominence of IR research as a primarily Anglo-Saxon enterprise.

Author Affiliations

To what extent did IR journals differ in the affiliations of their authors? As one would expect US journals published more articles by economists than their British or German counterparts (Table 4). Interestingly, this is not a recent trend, but the emphasis on economics was already apparent in the early

TABLE 4
Year/Author Affiliation — All Countries

		<i>IR/HR/Business</i>	<i>Economist</i>	<i>Other social scientist</i>	<i>Total</i>
1970s	USA	86	91	20	197
		43.7%	46.2%	10.2%	100%
	Britain	70	40	20	130
		53.8%	30.8%	15.4%	100%
Total	156	131	40	327	
	47.7%	40.1%	12.2%	100%	
1990s	USA	147	229	29	405
		36.3%	56.5%	7.2%	100%
	Britain	235	43	43	321
		73.2%	13.4%	13.4%	100%
	Germany	25	11	53	89
		28.1%	12.4%	59.6%	100%
Total	407	283	125	815	
	49.9%	34.7%	15.3%	100%	

1970s. The economic bias of IR research in the USA may therefore not just be an outcome of the econometric turnaround in the US social sciences in the late 1970s (Ross 1991) but may have earlier roots. In more detail, 53 per cent of all US articles from all years were published by economists, 39 per cent by IR/HR/business scholars and 8 per cent by other social scientists. Comparing the 1970s and 1990s, there was a slight increase in economists (46 to 57 per cent) and a decrease in IR/HR/business scholars (44 to 36 per cent) and other social scientists (10 to 7 per cent).

As Table 5 shows there were no significant differences in these broad trends between the *IndR* and *ILRR* journals. However, the data supported the popular perception that the *ILRR* is traditionally more drawn towards economists. In the 1970s more than half of the *ILRR* articles were published by economists (56 per cent), 35 per cent by IR/HR/business scholars and only 8 per cent by social scientists. The *IndR* was very different with the largest group being IR/HR/business scholars (52 per cent), followed by economists (37 per cent) and other social scientists (12 per cent). In the 1990s, economists increased to 64 per cent of all *ILRR* articles, IR/HR/business scholars slightly decreased to 30 per cent and other social scientists totalled 6 per cent. The *IndR* seemed to have followed this trend but was still more balanced with economists now making the largest group (47 per cent), followed by IR/HR/business scholars (45 per cent) and other social scientists (9 per cent).

In Britain the distribution of affiliation was significantly different. The majority of articles (68 per cent) during all years were published by IR/HR/business scholars, only 18 per cent by economists and 14 per cent by other social scientists. Even more surprisingly the trend over time was towards fewer economists and more IR/HR/business scholars. In the 1970s, 54 per cent of articles were published by IR/HR/business scholars (31 per cent by economists), and in the 1990s 73 per cent (13 per cent by economists). Other social

TABLE 5
Year/Author Affiliation — All Journals

		<i>IR/HR/Business</i>	<i>Economist</i>	<i>Other social scientist</i>	<i>Total</i>
1970s	<i>IndR</i>	52	37	12	101
		51.5%	36.6%	11.9%	100%
	<i>ILRR</i>	34	54	8	96
		35.4%	56.3%	8.3%	100%
	<i>BJIR</i>	37	25	17	79
		46.8%	31.6%	21.5%	100%
	<i>IRJ</i>	33	15	3	51
64.7%		29.4%	5.9%	100%	
Total	156	131	40	327	
		47.7%	40.1%	12.2%	100%
1990s	<i>IndR</i>	79	83	15	177
		44.6%	46.9%	8.5%	100%
	<i>ILRR</i>	68	146	14	228
		29.8%	64.0%	6.1%	100%
	<i>BJIR</i>	102	33	16	151
		67.5%	21.9%	10.6%	100%
	<i>IRJ</i>	133	10	27	170
		78.2%	5.9%	15.9%	100%
	<i>IB</i>	25	11	53	89
		28.1%	12.4%	59.6%	100%
Total	407	283	125	815	
		49.9%	34.7%	15.3%	100%

scientists decreased slightly from 15 per cent in the 1970s to 13 per cent in the 1990s (but still higher than in the USA).

The most dramatic change occurred in the case of the *IRJ*. In the 1970s economists yielded 29 per cent but in the 1990s only 6 per cent of articles! Meanwhile, IR/HR/business scholars increased from 65 per cent in the 1970s to 78 per cent in the 1990s. Other social scientists also increased strongly from 6 per cent to 16 per cent. In contrast, in the *BJIR* other social scientists were much more dominant than in the *IRJ* in the 1970s with 22 per cent but this number halved by the 1990s. Economists decreased slightly but much less than in the *IRJ* from 32 to 22 per cent and IR/HR/business scholars increased from 47 to 68 per cent. Despite the slight variations between the British journals (the *BJIR* having slightly more economic publications than the *IRJ*) it is remarkable to see that the widely acknowledged trend towards economicization of IR is merely a US phenomenon and not evident in Britain. It is clearly not an overall Anglo-Saxon trend.

In the German case, as expected given the lack of a traditional discipline of industrial relations, the majority of articles were published by other social scientists (60 per cent) which reveals the continuing multi-disciplinary approach to IR research, followed by IR/HR/business scholars (28 per cent) with economists making up the smallest group of 12 per cent. Dividing the social science cluster into separate professions revealed the strong dominance of sociologists in conducting IR research: 37 per cent were sociologists, 17 per cent political scientists and 4 per cent lawyers.

Research Topics

Given the cross-national diversity with regard to nationality of authors and departmental affiliation it is not surprising that research topics varied substantially between the countries and they also varied over time. With regard to the *broad categories*, IR, HR and LM issues, US journals revealed overall (for both time periods) a rather balanced distribution between the three (27 per cent HR, 37 per cent IR, 36 per cent LM), whereas in Britain and Germany the vast majority of articles were published on IR (68 per cent in Britain, 92 per cent in Germany), less on HR (27 per cent in Britain, 1 per cent in Germany) and even less on LM topics (11 per cent in Britain and 7 per cent in Germany) (Table 6).

However, comparing both time periods, research topics in US journals underwent a major transformation (Table 7). Whereas in the 1970s most articles were on IR (44 per cent IR, 27 per cent HR, 29 per cent LM), most articles published in the 1990s were LM topics (34 per cent IR, 27 per cent HR, 40 per cent LM). These changes were particularly visible in the *ILRR* (IR: 52 to 32 per cent, HR: 17 to 43 per cent, LM: 30 to 43 per cent). Note in particular the steep increase of HR issues. In contrast, *IndR* published fewer IR topics in the 1970s (36 per cent) than the *ILRR* but this share remained stable over time whereas IR topics in the *ILRR* decreased in the 1990s. HR, however, was much more prominent in the *IndR* than in the *ILRR* in the 1970s but declined and converged to a similar level in the 1990s (35 to 28 per cent). Finally, LM topics increased slightly over time in the *IndR* but not as dramatically as in the *ILRR*.

In Britain, in contrast to the USA, IR topics not only scored highest in the 1970s (52 per cent), but even more strongly in the 1990s (68 per cent). HR topics did not increase but slightly declined (27 to 21 per cent) while LM topics halved over time (22 to 11 per cent).

TABLE 6
Year/Broad Research Topics — All Countries

		<i>IR Topics</i>	<i>HR topics</i>	<i>LM topics</i>	<i>Total</i>
1970s	USA	100	61	67	228
		43.9%	26.8%	29.4%	100%
	Britain	84	43	35	162
		51.9%	26.5%	21.6%	100%
	Total	184	104	102	390
		47.2%	26.7%	26.2%	100%
1990s	USA	148	116	174	438
		33.8%	26.5%	39.7%	100%
	Britain	266	80	44	390
		68.2%	20.5%	11.3%	100%
	Germany	84	1	6	91
	92.3%	1.1%	6.6%	100%	
	Total	498	197	224	919
		54.2%	21.4%	24.4%	100%

TABLE 7
Year/Broad Research Topics — All Journals

		<i>IR Topics</i>	<i>HR Topics</i>	<i>Labor market topics</i>	<i>Total</i>	
1970s	<i>IndR</i>	43	42	34	119	
		36.1%	35.3%	28.6%	100%	
	<i>ILRR</i>	57	19	33	109	
		52.3%	17.4%	30.3%	100%	
	<i>BJIR</i>	42	27	25	94	
		44.7%	28.7%	26.6%	100%	
1970s	<i>IRJ</i>	42	16	10	68	
		61.8%	23.5%	14.7%	100%	
	Total	184	104	102	390	
		47.2%	26.7%	26.2%	100%	
	1990s	<i>IndR</i>	71	54	70	195
			36.4%	27.7%	35.9%	100%
<i>ILRR</i>		77	62	104	243	
		31.7%	25.5%	42.8%	100%	
<i>BJIR</i>		123	44	28	195	
		63.1%	22.6%	14.4%	100%	
1990s	<i>IRJ</i>	143	36	16	195	
		73.3%	18.5%	8.2%	100%	
	<i>IB</i>	84	1	6	91	
		92.3%	1.1%	6.6%	100%	
	Total	498	197	224	919	
		54.2%	21.4%	24.4%	100%	

Table 8 shows a more detailed picture comprising the individual topics of the IR and LM categories. HR issues were not subdivided (but are included as a broad category) because the individual topics were too overlapping to allow clear distinctions (e.g. between training and careers). The most frequent topics in US and British journals in the 1970s were HR (27 per cent in the USA and Britain), collective bargaining (USA 19 per cent, Britain 22 per cent), pay/working time issues (USA 18 per cent, Britain 11 per cent), labour market (USA 11 per cent, Britain 11 per cent) and unions (USA 11 per cent, Britain 11 per cent). Thus, the ranking was very similar in both countries. The state, industrial democracy, other IR issues, labour process, international and social issues did not play a major role. Over time, however, both countries developed different research interests. In the 1990s in the US pay/working time issues and HR dominated (both 27 per cent), followed by labour market (12 per cent), unions (11 per cent) and social issues (7 per cent). Except for collective bargaining, which diminished substantially (5 per cent), the ranking did not change much over time. In contrast, in Britain unions became the main research interest in the 1990s (25 per cent), followed by HR (21 per cent), collective bargaining (12 per cent), other IR issues (10 per cent), pay/working time issues (8 per cent), industrial democracy (8 per cent) and international subjects (5 per cent). Also note the entry of industrial democracy and international subjects during the 1990s in Britain.

If one distinguishes between individual journals (Table 9) one can see slight differences between the US journals in the 1970s, but in the 1990s both

TABLE 8
Year/Specific Research Topics — All Countries

	Labour market	Pay/working time	HR	CB	Industrial democ.	Unions	State	Other IR issues	Intern. issues	Labour process	Social issues	Total
1970s												
USA	26	41	61	44	2	25	4	4		5	16	228
	11.4%	18.0%	26.8%	19.3%	0.9%	11.0%	1.8%	1.8%		2.2%	7.0%	100%
Britain	17	18	43	36	16	17	6	4	1	2	2	162
	10.5%	11.1%	26.5%	22.2%	9.9%	10.5%	3.7%	2.5%	0.6%	1.2%	1.2%	100%
Total	43	59	104	80	18	42	10	8	1	7	18	390
	11.0%	15.1%	26.7%	20.5%	4.6%	10.8%	2.6%	2.1%	0.3%	1.8%	4.6%	100%
1990s												
USA	54	120	116	22	10	47	12	18	4	4	31	438
	12.3%	27.4%	26.5%	5.0%	2.3%	10.7%	2.7%	4.1%	0.9%	0.9%	7.1%	100%
Britain	14	30	80	47	30	99	14	39	19	4	14	390
	3.6%	7.7%	20.5%	12.1%	7.7%	25.4%	3.6%	10.0%	4.9%	1.0%	3.6%	100%
Germany	3	3	1	4	12	7	10	14	16	20	1	91
	3.3%	3.3%	1.1%	4.4%	13.2%	7.7%	11.0%	15.4%	17.6%	22.0%	1.1%	100%
Total	71	153	197	73	52	153	36	71	39	28	46	919
	7.7%	16.6%	21.4%	7.9%	5.7%	16.6%	3.9%	7.7%	4.2%	3.0%	5.0%	100%

TABLE 9
Year/Specific Research Topics — All Journals

	<i>Labour market</i>	<i>Pay/working time</i>	<i>HR</i>	<i>CB</i>	<i>Industrial democ.</i>	<i>Unions</i>	<i>State</i>	<i>Other IR issues</i>	<i>Intern. issues</i>	<i>Labour process</i>	<i>Social issues</i>	<i>Total</i>
1970s												
	<i>IndR</i>	20	42	17	2	8	2	1		3	10	119
		16.8%	35.3%	14.3%	1.7%	6.7%	1.7%	0.8%		2.5%	8.4%	100%
	<i>ILRR</i>	21	19	27		17	2	3		2	6	109
		19.3%	17.4%	24.8%		15.6%	1.8%	2.8%		1.8%	5.5%	100%
	<i>BJIR</i>	10	27	23	4	6	3	2	1	1	2	94
		10.6%	28.7%	24.5%	4.3%	6.4%	3.2%	2.1%	1.1%	1.1%	2.1%	100%
	<i>IRJ</i>	8	16	13	12	11	3	2		1		68
		11.8%	23.5%	19.1%	17.6%	16.2%	4.4%	2.9%		1.5%		100%
	<i>Total</i>	59	104	80	18	42	10	8	1	7	18	390
		15.1%	26.7%	20.5%	4.6%	10.8%	2.6%	2.1%	0.3%	1.8%	4.6%	100%
1990s												
	<i>IndR</i>	53	54	8	7	25	5	17	2	1	6	195
		27.2%	27.7%	4.1%	3.6%	12.8%	2.6%	8.7%	1.0%	0.5%	3.1%	100%
	<i>ILRR</i>	67	62	14	3	22	7	1	2	3	25	243
		27.6%	25.5%	5.8%	1.2%	9.1%	2.9%	0.4%	0.8%	1.2%	10.3%	100%
	<i>BJIR</i>	24	44	28	11	55	5	18		4	2	195
		12.3%	22.6%	14.4%	5.6%	28.2%	2.6%	9.2%		2.1%	1.0%	100%
	<i>IRJ</i>	6	36	19	19	44	9	21	19		12	195
		3.1%	18.5%	9.7%	9.7%	22.6%	4.6%	10.8%	9.7%		6.2%	100%
	<i>IB</i>	3	1	4	12	7	10	14	16	20	1	91
		3.3%	1.1%	4.4%	13.2%	7.7%	11.0%	15.4%	17.6%	22.0%	1.1%	100%
	<i>Total</i>	153	197	73	52	153	36	71	39	28	46	919
		16.6%	21.4%	7.9%	5.7%	16.6%	3.9%	7.7%	4.2%	3.0%	5.0%	100%

journals converged (similar to the distribution of the broad topics). For example, in both US journals coverage of collective bargaining topics declined dramatically over time (*IndR* 14 to 4 per cent, *ILRR* 25 to 6 per cent), whereas pay topics increased (*IndR* 17 to 27 per cent, *ILRR* 19 to 28 per cent). However, while union topics become more popular in the *IndR* over time (7 to 13 per cent) they decreased in the *ILRR* (16 to 9 per cent). Social issues dropped in the *IndR* (8 to 3 per cent) but increased in the *ILRR* (6 to 10 per cent). Overall, all findings on IR, LM and HR topics provide a rather homogeneous picture for both US journals in the 1990s and cannot confirm the commonly held impression that the *ILRR* is less diverse than the *IndR* with regard to article theme.

In Britain, the journals revealed even less variation and showed similar changes over time. During the 1970s the *BJIR* was mainly focused on HR, collective bargaining and the labour market, whereas the *IRJ* was more diverse, including for example a large share of articles on industrial democracy (18 per cent). Both journals reduced their interest in collective bargaining over time (but were still higher than in the USA) and revealed a significant increase in unions, in particular in the *BJIR* (6 to 28 per cent) which differs from the USA. Pay/working time, a topic that received increasing attention in the USA in the 1990s, did not figure prominently in the *BJIR* (11 to 12 per cent) and even decreased significantly in the *IRJ* (12 to 3 per cent). In the 1990s the *BJIR* seemed less diverse than the *IRJ*. For example, the *IRJ* yielded 10 per cent of international topics and 6 per cent of social issues in the 1990s, whereas the *BJIR* did not publish any articles with a predominantly international focus and only 1 per cent on social issues. Remember that this does not mean that no *BJIR* articles were dealing with social or international topics; it only means that these were not the main emphasis.

In Germany, the picture was significantly different to both the USA and Britain. Most research was conducted on issues of less concern in the Anglo-Saxon journals. Priority was given to the labour process (22 per cent), followed by international topics (18 per cent), other IR issues (15 per cent), industrial democracy (13 per cent) and the state/public policy (11 per cent).

Methodology of Articles

The methodology of articles varied significantly across countries. Both are clearly interlinked. Although it is difficult to predict which research topics are more prone to empirical rather than to theoretical investigations (IR as well as HR topics should be open to both) some topics are more likely to provoke qualitative rather than quantitative methods. The labour process, for example, would seem to induce more qualitative methods since major questions circle around how workplace relations are governed, whereas most HR research is output oriented and therefore triggers quantitative methods.

(a) Empirical–theoretical research

As Table 10 shows, overall, the USA yielded empirical publications, Germany was mainly theoretical and interpretative, and Britain took a middle position: 84 per cent of all US articles in both time periods were empirical, while the figures for Britain and Germany were 72 per cent and 41 per cent, respectively. Nearly half of all US articles were empirical inductive (47 per cent) followed by empirical-deductive articles (26 per cent). Empirical descriptive and think pieces each yielded 11 per cent and theoretical pieces were last (5 per cent). Germany revealed the other extreme with most articles being think pieces (43 per cent), followed by empirical inductive (22 per cent) and theoretical pieces (17 per cent). Britain took a middle position with the majority of publications being empirical descriptive (33 per cent), followed by empirical inductive (25 per cent) and think pieces (23 per cent).

Comparing the two time periods the trend towards empiricism and sophisticated statistical work was very obvious in the USA: 91 per cent of US articles in the 1990s were empirical versus 72 per cent in the 1970s. In more detail, empirical-inductive articles increased from 33 to 55 per cent in the 1990s, empirical-deductive articles increased from 19 to 30 per cent, whereas empirical-descriptive articles dropped significantly from 20 to 6 per cent as did think pieces (19 to 7 per cent) and theory pieces (10 to 3 per cent). Thus, the notion of what is empirical research shifted over time away from purely descriptive towards more sophisticated, analytical work. Individual journals revealed no significant differences in the USA (Table 11).

In Britain the pattern was very different. The scale of empirical work also increased in Britain over time although at a lower rate: 62 per cent of all articles in the 1970s were empirical versus 75 per cent in the 1990s. Moreover, the empirical articles looked less analytical than their US counterparts. In contrast to the USA, descriptive pieces increased rather than decreased (from

TABLE 10
Year/Nature of Article — All Countries

		<i>Empirical descriptive</i>	<i>Empirical inductive</i>	<i>Empirical deductive</i>	<i>Think piece/ essay</i>	<i>Theory</i>	<i>Total</i>
1970s	USA	45 19.7%	74 32.5%	44 19.3%	43 18.9%	22 9.6%	228 100%
	Britain	38 23.5%	42 25.9%	20 12.3%	39 24.1%	23 14.2%	162 100%
	Total	83 21.3%	116 29.7%	64 16.4%	82 21.0%	45 11.5%	390 100%
1990s	USA	27 6.2%	240 54.8%	130 29.7%	29 6.6%	12 2.7%	438 100%
	Britain	142 36.4%	93 23.8%	59 15.1%	88 22.6%	8 2.1%	390 100%
	Germany	12 13.2%	20 22.0%	5 5.5%	39 42.9%	15 16.5%	91 100%
	Total	181 19.7%	353 38.4%	194 21.1%	156 17.0%	35 3.8%	919 100%

TABLE 11
Year/Nature of Article — All Journals

		<i>Empirical descriptive</i>	<i>Empirical inductive</i>	<i>Empirical deductive</i>	<i>Thinkpiece/essay</i>	<i>Theory</i>	<i>Total</i>
1970s	<i>IndR</i>	25	41	15	25	13	119
		21.0%	34.5%	12.6%	21.0%	10.9%	100%
	<i>ILRR</i>	20	33	29	18	9	109
		18.3%	30.3%	26.6%	16.5%	8.3%	100%
	<i>BJIR</i>	20	30	9	20	15	94
		21.3%	31.9%	9.6%	21.3%	16.0%	100%
	<i>IRJ</i>	18	12	11	19	8	68
	26.5%	17.6%	16.2%	27.9%	11.8%	100%	
	Total	83	116	64	82	45	390
		21.3%	29.7%	16.4%	21.0%	11.5%	100%
1990s	<i>IndR</i>	17	94	59	17	8	195
		8.7%	48.2%	30.3%	8.7%	4.1%	100%
	<i>ILRR</i>	10	146	71	12	4	243
		4.1%	60.1%	29.2%	4.9%	1.6%	100%
	<i>BJIR</i>	56	56	38	40	5	195
		28.7%	28.7%	19.5%	20.5%	2.6%	100%
	<i>IRJ</i>	86	37	21	48	3	195
		44.1%	19.0%	10.8%	24.6%	1.5%	100%
	<i>IB</i>	12	20	5	39	15	91
		13.2%	22.0%	5.5%	42.9%	16.5%	100%
	Total	181	353	194	156	35	919
		19.7%	38.4%	21.1%	17.0%	3.8%	100%

24 to 36 per cent) (particularly evident in the *IRJ*: from 27 to 44 per cent). Inductive pieces decreased slightly (26 to 24 per cent) and deductive pieces only increased slightly (12 to 15 per cent) (visible mainly in the *BJIR*: from 10 to 20 per cent). Although theory pieces decreased significantly from 14 to 2 per cent, think pieces remained the same (24 per cent in the 1970s, 23 per cent in the 1990s).

(b) *Qualitative–quantitative methods*

A related methodological characteristic is the use of qualitative or quantitative methods (Table 12). It comes as no surprise that the vast majority of empirical articles published in the USA in both periods were quantitative (88 per cent), whereas the picture was more balanced in Britain (51 per cent). Germany provided the other extreme with only a third of publications being quantitative. Moreover, over time quantification increased significantly in the USA (79 to 92 per cent) but decreased in Britain (61 to 48 per cent).

As shown in Table 13, US journals were rather similar although the *ILRR* was even more quantitative than the *IndR* (*ILRR* increased their quantitative articles from 81 to 95 per cent, the *IndR* from 77 to 88 per cent). There were larger differences between the British journals, with the *BJIR* being more quantitative than the *IRJ* (*BJIR*: 68 to 61 per cent in the 1990s; *IRJ*: 51 to 33 per cent). The two journals seemed to represent different traditions of British IR research, a more quantitative tradition similar to the USA,

TABLE 12
Year/Qualitative vs. Quantitative Methodology — All Countries

		<i>Qualitative</i>	<i>Quantitative</i>	<i>Total</i>
1970s	USA	35 21.5%	128 78.5%	163 100%
	Britain	39 39.0%	61 61.0%	100 100%
	Total	74 28.1%	189 71.9%	263 100%
1990s	USA	31 7.8%	366 92.2%	397 100%
	Britain	154 52.4%	140 47.6%	294 100%
	Germany	24 58.5%	17 41.5%	41 100%
	Total	209 28.6%	523 71.4%	732 100%

TABLE 13
Year/Qualitative vs. Quantitative Methodology — All Journals

		<i>Qualitative</i>	<i>Quantitative</i>	<i>Total</i>
1970s	<i>IndR</i>	19 23.5%	62 76.5%	81 100%
	<i>ILRR</i>	16 19.5%	66 80.5%	82 100%
	<i>BJIR</i>	19 32.2%	40 67.8%	59 100%
	<i>IRJ</i>	20 48.8%	21 51.2%	41 100%
	Total	74 28.1%	189 71.9%	263 100%
1990s	<i>IndR</i>	20 11.8%	150 88.2%	170 100%
	<i>ILRR</i>	11 4.8%	216 95.2%	227 100%
	<i>BJIR</i>	58 38.7%	92 61.3%	150 100%
	<i>IRJ</i>	96 66.7%	48 33.3%	144 100%
	<i>IB</i>	24 58.5%	17 41.5%	41 100%
	Total	209 28.6%	523 71.4%	732 100%

represented in the *BJIR* (e.g. LSE) and a more sociological, qualitative tradition in the *IRJ* (e.g. Warwick).

(c) *Small–large data set*

It is also no surprise that US journals favoured large-scale data, which usually translates into secondary rather than self-collected data, whereas Britain and

Germany favoured small-scale data. There was a significant shift from the 1970s to the 1990s in the US case, which differed from Britain (Table 14). Whereas 61 per cent of all empirical articles published in the *ILRR* and *IndR* (no significant differences) were small-scale in the 1970s (72 per cent in Britain) this number significantly decreased to 29 per cent in the 1990s (but remained the same in Britain) (Table 15). In Germany, even more than in

TABLE 14
Year/Small vs. Large Data Set — All Countries

		<i>Small</i>	<i>Large</i>	<i>Total</i>
1970s	USA	99 60.7%	64 39.3%	163 100%
	Britain	72 72.0%	28 28.0%	100 100%
	Total	171 65.0%	92 35.0%	263 100%
1990s	USA	115 29.0%	282 71.0%	397 100%
	Britain	211 71.8%	83 28.2%	294 100%
	Germany	30 81.1%	7 18.9%	37 100%
	Total	356 48.9%	372 51.1%	728 100%

TABLE 15
Year/Small vs. Large Data Set — All Journals

		<i>Small</i>	<i>Large</i>	<i>Total</i>
1970s	<i>IndR</i>	49 60.5%	32 39.5%	81 100%
	<i>ILRR</i>	50 61.0%	32 39.0%	82 100%
	<i>BJIR</i>	36 61.0%	23 39.0%	59 100%
	<i>IRJ</i>	36 87.8%	5 12.2%	41 100%
	Total	171 65.0%	92 35.0%	263 100%
1990s	<i>IndR</i>	64 37.6%	106 62.4%	170 100%
	<i>ILRR</i>	51 22.5%	176 77.5%	227 100%
	<i>BJIR</i>	89 59.3%	61 40.7%	150 100%
	<i>IRJ</i>	122 84.7%	22 15.3%	144 100%
	<i>IB</i>	30 81.1%	7 18.9%	37 100%
	Total	356 48.9%	372 51.1%	728 100%

Britain, most empirical articles in the 1990s used small-scale data (81 per cent). Similarly to the quantification of the field, the tendency to use larger samples, which facilitate more sophisticated multivariate statistical analysis, is neither universal nor an Anglo-Saxon but so far an exclusively US phenomenon (although exceptions exist, of course, in Britain such as publications using the WERS data set).

(d) Cross-sectional, longitudinal and one-time period studies

Empirical publications can also be characterized by the extent to which their analysis is comparative, longitudinal or based on a one-time case study (Tables 16 and 17). Most social scientific work tends towards the latter and the US, British and German journals did not differ here. There has been a trend, however, over time to increase comparative as well as longitudinal work and this is equally evident in the USA and Britain. For example, 72 per cent of USA and 78 per cent of British articles were based on a one-time period investigation in the 1970s and these articles declined in the 1990s to 61 per cent in the USA and 56 per cent in Britain. Simultaneously, comparative work doubled in the USA (9 to 18 per cent) and even more so in Britain (6 to 19 per cent). Longitudinal work increased as well but to a lesser extent from 19 to 21 per cent in the USA and 16 to 25 per cent in Britain. There were no significant differences between the journals in both countries. The German journal yielded 81 per cent one-time case studies (more than in the USA and Britain) and 19 per cent comparative work (a similar share to the Anglo-Saxon countries). There was, however, no longitudinal analysis.

(e) Macro–sector–firm–micro level

Finally, whether research focuses on the macro (national), sector, firm or micro (individuals, groups) level differed widely among countries (Tables 18 and 19). Whereas US journals favoured individual/group level analysis (41

TABLE 16
Year/Comparative/Longitudinal/One-Time Period Studies — All Countries

		<i>Comparative</i>	<i>Longitudinal</i>	<i>One-time</i>	<i>Total</i>
1970s	USA	15 9.2%	31 19.0%	117 71.8%	163 100%
	Britain	6 6.0%	16 16.0%	78 78.0%	100 100%
	Total	21 8.0%	47 17.9%	195 74.1%	263 100%
1990s	USA	72 18.1%	85 21.4%	240 60.5%	397 100%
	Britain	56 19.0%	73 24.8%	165 56.1%	294 100%
	Germany	7 18.9%		30 81.1%	37 100%
	Total	135 18.5%	158 21.7%	435 59.8%	728 100%

TABLE 17
Year/Comparative/Longitudinal/One-Time Period Studies — All Journals

		<i>Comparative</i>	<i>Longitudinal</i>	<i>One-time</i>	<i>Total</i>
1970s	<i>IndR</i>	9 11.1%	18 22.2%	54 66.7%	81 100%
	<i>ILRR</i>	6 7.3%	13 15.9%	63 76.8%	82 100%
	<i>BJIR</i>	4 6.8%	13 22.0%	42 71.2%	59 100%
	<i>IRJ</i>	2 4.9%	3 7.3%	36 87.8%	41 100%
	Total	21 8.0%	47 17.9%	195 74.1%	263 100%
	1990s	<i>IndR</i>	29 17.1%	27 15.9%	114 67.1%
<i>ILRR</i>		43 18.9%	58 25.6%	126 55.5%	227 100%
<i>BJIR</i>		21 14.0%	50 33.3%	79 52.7%	150 100%
<i>IRJ</i>		35 24.3%	23 16.0%	86 59.7%	144 100%
<i>IB</i>		7 18.9%		30 81.1%	37 100%
Total		135 18.5%	158 21.7%	435 59.8%	728 100%

TABLE 18
Year/Analytical Level: Macro/Sector/Firm/Micro — All Countries

		<i>Macro</i>	<i>Sector</i>	<i>Firm</i>	<i>Micro</i>	<i>Total</i>
1970s	USA	35 21.5%	45 27.6%	28 17.2%	55 33.7%	163 100%
	Britain	31 31.0%	21 21.0%	30 30.0%	18 18.0%	100 100%
	Total	66 25.1%	66 25.1%	58 22.1%	73 27.8%	263 100%
	1990s	USA	44 11.1%	56 14.1%	125 31.5%	172 43.3%
Britain		76 25.9%	65 22.1%	124 42.2%	29 9.9%	294 100%
Germany		6 13.3%	6 13.3%	28 62.2%	5 11.1%	45 100%
Total		126 17.1%	127 17.3%	277 37.6%	206 28.0%	736 100%

per cent micro, 27 per cent firm, 18 per cent sector, 14 per cent macro), Germany favoured firm level analysis (62 per cent firm, 13 per cent macro, 13 per cent sector, 11 per cent micro) and Britain yielded the most balanced distribution with firm level analysis leading (39 per cent firm, 27 per cent macro, 22 per cent sector, 12 per cent micro).

TABLE 19
Year/Analytical Level: Macro/Sector/Firm/Micro — All Journals

		<i>Macro</i>	<i>Sector</i>	<i>Firm</i>	<i>Micro</i>	<i>Total</i>	
1970s	<i>IndR</i>	18 22.2%	24 29.6%	17 21.0%	22 27.2%	81 100%	
	<i>ILRR</i>	17 20.7%	21 25.6%	11 13.4%	33 40.2%	82 100%	
	<i>BJIR</i>	22 37.3%	11 18.6%	14 23.7%	12 20.3%	59 100%	
	<i>IRJ</i>	9 22.0%	10 24.4%	16 39.0%	6 14.6%	41 100%	
	Total	66 25.1%	66 25.1%	58 22.1%	73 27.8%	263 100%	
	1990s	<i>IndR</i>	24 14.1%	30 17.6%	60 35.3%	56 32.9%	170 100%
		<i>ILRR</i>	20 8.8%	26 11.5%	65 28.6%	116 51.1%	227 100%
<i>BJIR</i>		27 18.0%	34 22.7%	73 48.7%	16 10.7%	150 100%	
<i>IRJ</i>		49 34.0%	31 21.5%	51 35.4%	13 9.0%	144 100%	
<i>IB</i>		6 13.3%	6 13.3%	28 62.2%	5 11.1%	45 100%	
Total		126 17.1%	127 17.3%	277 37.6%	206 28.0%	736 100%	

There was strong evidence that the variation between USA and Britain was already evident in the 1970s and became stronger in the 1990s. Thus, the USA increased its share of micro articles from 34 per cent in the 1970s to 43 per cent which was essentially due to the *ILRR* (*ILRR*: 40 to 51 per cent, *IndR*: 27 to 33 per cent) whereas Britain halved its micro articles from 18 to 9 per cent (*BJIR*: 20 to 11 per cent, *IRJ*: 15 to 9 per cent). Moreover, whereas macro and industry level analysis decreased by half in the USA between the 1970s and 1990s (macro: 22 to 11 per cent, sector: 28 to 14 per cent), British journals saw a slight decrease in macro analysis (31 to 26 per cent) but remained stable in their share of sector level analysis (22 per cent). There were no relevant differences between the individual journals. Finally, in both countries the number of articles on the firm level increased (USA: 17 to 32 per cent, UK: 30 to 42 per cent).

4. Discussion

Table 20 summarizes the main ideal-typical national research trajectories found in this study. Six findings can be highlighted. First, US journals were slightly more ethnocentric than the British, and the Germans were the least, but in all cases the vast majority (70–90 per cent) of articles were published by national authors and this did not change much over time. Moreover, 96 per cent of all articles in the USA during the 1970s and 1990s were published

TABLE 20
US, British and German Industrial Relations Research Patterns

	<i>USA</i>	<i>Britain</i>	<i>Germany</i>
<i>Institutional</i>			
Affiliations of authors (ranking)	Primarily economists, second IR/HR/business	Primarily IR/HR/business, second economists	Other social scientists (especially industrial sociologists)
Nationality of authors	Virtually all US some Anglo-Saxons very few Europeans, Asians and virtually none from the rest of the world	Virtually all British, a larger share of Anglo-Saxons, some Europeans, a few Asians and rest of the world	Most German some Anglo-Saxons a few Europeans a few Asians and rest of the world
<i>Research subject</i>			
Broad topic in the 1990s	LM, IR, HR (balanced)	Focus on IR	Focus on IR
Top five specific topics in the 1990s (ranked)	Pay, HR, LM, unions, social issues	Unions, HR, collective bargaining, other IR issues, pay	Labour process, international, other IR issues, industrial democracy, state
<i>Methodology of majority of articles</i>			
Nature of articles	Empirical (inductive)	Empirical (descriptive)	Think pieces/essays
Empirical research: Quantitative/qualitative	Quantitative	Qualitative and quantitative	Qualitative
Small/large scale	Large-scale	Small-scale	Small-scale
Comparative, longitudinal, one-time period	One-time period	One-time period	One-time period
Analytical level	Micro (individual, group) level	Firm level	Firm level

by Anglo-Saxon authors (USA, Britain and others). This figure was even larger in Britain during the 1970s (98 per cent) but dropped slightly during the 1990s to 90 per cent. These findings confirm the Anglo-Saxon dominance of the field of study. To conclude, although the British and German journals were slightly more nationally diverse than the US journals, none of these journals was on their way to becoming truly international in terms of their authorship.

Second, the USA was dominated by labour economists, Britain by IR/HR/business scholars and Germany by other social scientists. These trends did not change over time. The findings challenge the widespread assumption that IR as an independent discipline in Anglo-Saxon countries necessarily produces more inter-disciplinary research than in other countries. In particular, note the dominance of labour economists in the USA, also reflected in the editorial boards of both US journals, which seems to indicate the persistence of the economic origin of the discipline in the USA.

Third, the decline of IR issues in US publications may be explained by the declining relevance of unions and collective bargaining in US employment relations since the early 1980s. However, the widespread thesis that the decline of traditional IR institutions leads to an automatic decline of IR research cannot be supported in the British case. British unions experienced a significant reduction of their power between the 1970s and 1990s while research on IR issues (in particular union research) was higher in the 1990s than in the 1970s. However, the continuing presence of IR research in Britain may have been induced by the recent labour law reforms of the Blair government such as the introduction of a minimum wage and unionization procedures.

Moreover, it is remarkable how little HR was a topic in German research (1 per cent) and how strongly the field focused on IR (92 per cent). One explanation may be that German HR scholars are disproportionately more likely to avoid the *IB* and publish in specific HR journals compared to their US and British counterparts. However, given that most HR journals in Germany are practitioner oriented (except the *Zeitschrift für Personalforschung: German Journal of Human Resource Research*, established in 1987) and that in Britain or the USA the supply of academic HR journals is much larger, this is not a likely scenario. A more sensible explanation may be that historically personnel management was treated in a highly legalistic manner in Germany and is still not very receptive to the US-driven HRM paradigm (Mueller 1994).

Fourth, the findings support the well-known argument that Anglo-Saxon social sciences are in general more empirically and pragmatically oriented (Mitchell 2001; Schmitter 1999; Whitfield and Strauss 2000) compared to German research, which is more theoretical and critical (Delanty 1997). Mitchell (2001: 382), for example, describes US research as largely applied research with a strong emphasis on testing mid-range hypotheses. This is also commonly seen in British research. In Germany, on the other hand, there seems to be a stronger attempt to affiliate oneself with the 'grand social science theories' (e.g. as a Weberian or a system theorist) and this 'home address' serves as a theoretical basis for the research. It is, for example, no coincidence that a recent annual conference (1999) of the German Industrial Relations Association was devoted to 'theories of industrial relations' whereas the US or British annual conferences usually address more practical issues of concern. Finally one should note that with regard to the empirical work, the study revealed important differences between the two Anglo-Saxon countries and assigns Britain a middle position between the USA and Germany. This is further substantiated in the findings on quantitative–qualitative methods.

Fifth, in Germany as well as in Britain, most publications were qualitative in the 1990s whereas in the USA most work was quantitative. This confirms the common perception of the US social sciences as quantitatively biased (Bender and Schorske 1997; Ross 1991). Thus, despite the slight variation between the British journals, the data challenge the argument of a general, universal trend toward quantification since the 1970s in the IR discipline. So

far this is mainly a US trend partly enhanced through the computerization of social sciences but also through the long-standing bias in US academia towards pragmatic, positivist research (Schorske 1997: 328).

Finally, US research was biased towards large-scale data, Britain and Germany preferred self-collected small-scale data, and all preferred one-time rather than comparative or longitudinal research. Moreover, the US data, with their emphasis on micro level analysis, challenge Mitchell's (2001: 385) finding that IR research in the USA is generally not interested in the micro level. However, taking all countries together, the firm level has generally been the most important level of IR analysis. In Britain as well as in Germany the firm was the most popular level of analysis during the 1990s and in the USA the second most important. In other words, IR research has been mostly occupied with workplace relations rather than industry or national level IR systems.

5. Conclusion

How international has IR research become? The two proxies of internationalization used in this study,⁹ the share of foreign authors and of international topics, revealed that the ongoing globalization of the economy and of the research community has not yet translated itself into a strong international research environment in the Anglo-Saxon countries, although it has to a certain extent in Germany. Germany seems the most internationalized, partly due to the fact that it is a latecomer in the field and partly, one may argue, because German industrial relations is increasingly shaped by supranational bodies such as the European Union. The latter is also true for Britain, which may explain why Britain is relatively more internationalized than the USA. The prominent absence of international topics in the USA seems to confirm the stereotype of US research as being parochial and ethnocentric (Hyman 2001).

Moreover, the international forces have not yet led to a homogeneous IR research style. On the contrary, the findings revealed significantly different patterns of IR research across the three countries (overriding the variation sometimes found between journals of one country). In particular, the fact that research patterns varied between the USA and Britain challenges the commonly accepted notion of a homogeneous Anglo-Saxon style of conducting research.

Thus, despite the increasing convergence of IR practices throughout the advanced industrialized world and increasing international communication within the research community, there remain distinctive national research patterns that are astonishingly resistant to processes of universalization. The findings therefore challenge the takeover thesis, the prediction that Anglo-Saxon research will take over continental European traditions (or the US take over British research). There is also no evidence of significant convergence between the three countries, a finding that challenges predictions of the

diminishing significance of the nation state. This article argues instead for the nation state's enduring importance at least for the field of knowledge creation.

How can we explain the continuation of diverse national research patterns? On the one hand, research seems strongly shaped by the research subject, namely the national IR systems. For example, the lack of interest in the state and industrial democracy in the USA can be explained by the traditional absence of the state and workplace democracy in US industrial relations, whereas their dominance in Germany mirrors their continuing centrality in the German IR system.

On the other hand, the country variation may also indicate different research priorities which cannot be reduced to national IR practices but which are embedded in long-standing intellectual traditions.¹⁰ For example, the fact that the USA traditionally has a strong interest in HR policy, whereas German academics are more interested in the labour process — both approaches look at the workplace — indicates the existence of different paradigms, aims of research and social science legacies. German social scientists have traditionally been more concerned about the labour process and its outcomes for workers as a social class than their mainstream US counterparts who are more interested in individual work attitudes and workplace efficiency. Moreover, the fact that German scholars focus on industrial democracy may not just be due to their labour institutions promoting democracy at work but also because of a long-standing tradition in German research that interprets industrial democracy as an important attribute of political democracy and hence as a value in itself (Frege 2005).

To conclude, the cross-country variation of research patterns suggests that research continues to be embedded in national specific customs and traditions. Research styles are arguably not random characteristics bundled together arbitrarily but are interconnected and form cohesive patterns, which are not easily transformed over time. Moreover, there is no reason to assume that these varieties are deviations from a standard, or delays in reaching that standard. On the contrary, the variety and persistence of national intellectual profiles over time undermines assumptions of a universal, linear evolution of the social sciences and instead highlights their national historical embeddedness.

However, this does not mean that these patterns should be seen as historically fixed. They are potentially open for change (Ross 1991). Scholars may have had good reasons for choosing their scientific path, which was subsequently institutionalized, but these were reasons consistently shaped by specific historical and cultural intentions. Given hindsight, we may find that there are reasons for choosing differently in the future, especially given the academic crisis of the IR discipline. Becoming aware of different national approaches, and thus of different research options, is a first step. What should follow is a dialogue between research patterns; how they could benefit from each other to ensure the long-term viability of the discipline. In particular, the findings of the study raise the following questions: first, is the ethnocentric character of Anglo-Saxon journals sustainable or would they gain from the

stronger inclusion of non-Anglo-Saxon authors; second, is the US emphasis on labour economics sustainable or should a declining field seek to embrace a broader, inter-disciplinary perspective; third, is the US emphasis on integrating HR a successful response to the decline of collective institutions that should be emulated by British and German research, or does this simply represent the capture of the field in the US by HR scholars; and finally, is the singular focus of US research on quantitative methodology or the equally narrow German focus on case studies sufficient to sustain the field in these countries, or should they embrace the methodological pluralism seen in Britain?

Final version accepted 7 December 2004.

Acknowledgements

The author wishes to thank Sanghoon Yi for his valuable research assistance and John Kelly for his critical comments on an earlier draft of this article. Special thanks to Berndt Keller, Adrian Wilkinson and the editor Edmund Heery for their helpful suggestions. The research was funded by a Rutgers University small research grant.

Notes

1. The *EJIR* was launched in 1996 making a comparative analysis over time difficult, but more importantly its explicit claim to publish cross-national European research makes it a more specialized outlet. Including the *EJIR* would have biased the British sample by increasing its share of international, comparative work. Exploring cross-country differences between the traditional, mainstream IR journals is therefore a more reliable test of national research patterns.
2. There are a few other publications which deal with IR but have a broader agenda. For example, *WSI-Mitteilungen*, founded in 1947 as the journal of the union confederation (DGB)'s research institute, has a broad interest in macro-economic analysis, wage and income distribution politics and social politics. *SOFI-Mitteilungen* publishes working papers of the SOFI Institute, a prestigious institute of industrial sociology in Germany, founded in 1970. Finally, *Gewerkschaftliche Monatshefte* and *Mitbestimmung* are DGB-sponsored journals for a wider intellectual and unionist audience.
3. I conducted a small-scale survey of the two top industrial sociological journals in the USA and Britain (no specialized journal exists in Germany): *Work and Occupations* (WO) and *Work, Employment and Society* (WES) (launched in 1987) during 1987–1989 and 1999–2001. The data is available on request from the author. There was convincing evidence of significant country differences of research patterns over both time periods which supports my argument and justifies the focus on IR publications (e.g. the WO was more quantitative than WES; WES comprised a broader spectrum of authors from various disciplines, whereas WO was monopolized by sociologists).

4. Quotation indexes are not comparable cross-countrywise because virtually all 'international' indexes such as the 'social science index' are US biased.
5. The *ILRR* goes back to the late 1940s, the *IndR* started in the early 1960s as does the *BJIR*. The *IRJ* only started in 1970 and this is why I used this date as the starting year for my analysis. The underlying idea was to use time periods in which most journals could be compared. The *IB* was founded in 1994 and this became the starting year for the second time period. The decision to examine seven recent years and four years in the 1970s was ultimately arbitrary and shaped by research grant constraints. However, both time periods are longer than in Mitchell's (2001) journal analysis which covered two years in the 1960s and two in the 1990s. Moreover, the periods seemed sufficient to obtain reliable information on the variations of the published articles. Finally, I would also suggest (on the basis of 'participant observation') that recent publications in the sampled journals after 2000 continue to be very similar to the research patterns of the observed 1990s.
6. Note that due to the nature of this study, based on a survey of articles, authors' affiliations might not always reveal the authors' original professional training. An economist working in a business school would show here under the classification 'IR/HR and business school'. However, I argue that the departmental affiliation is more important in shaping research styles than the original profession. For example, a labour economist in an IR department is more likely to be shaped by the IR discipline and usually publishes in different journals than a labour economist in an economics department.
7. The threshold between small and large data sets is ultimately arbitrary, but for the purpose of this study I used 300 cases. This threshold seemed robust when tested against reasonable alternatives (200–500 cases).
8. Based on crosstabs; all percentages are rounded up.
9. Additional indicators could be the degree to which national topics (e.g. union organizing in Britain) are being discussed from an international comparative perspective, or how much foreign literature is being quoted. These would have required an extensive content analysis which was not possible given the sample size.
10. Critics could point out, however, that major changes in the USA may have occurred before the 1970s, thus that US research was potentially more similar to European research before that time. Yet, Mitchell's (2001) content analysis of US journals in the early 1960s provides similar findings to mine. Moreover, studying the earliest *ILRR* publications of the late 1940s and early 1950s reveals surprising similarities with the 1970s and 1990s from a cross-national perspective. Although the early publications were methodologically very different (more historical and descriptive than empirical), with regard to the authors, affiliations and topics the outlined US pattern was already visible at that early stage. For example, most authors were economists by training.

References

- Bender, T. and Schorske, C. E. (eds.) (1997). *American Academic Culture in Transformation*. Princeton: Princeton University Press.
- Camic, C. and Gross, N. (2001). 'The new sociology of ideas'. *The Blackwell Companion to Sociology*. Oxford: Blackwell.

- Delanty, G. (1997). *Social Science — Beyond Construction And Realism*. Minneapolis: Minnesota University Press.
- Frege, C. M. (2002). 'Scientific knowledge production in the US and Germany: the case of industrial relations research'. *Comparative Labor Law and Policy Journal*, 23: 865–94.
- (2003). 'Industrial relations in continental Europe'. In P. Ackers and A. Wilkinson (eds.), *Understanding Work and Employment*. Oxford: Oxford University Press, pp. 242–64.
- (2005). 'The discourse of industrial democracy: Germany and the US revisited'. *Economic and Industrial Democracy*, 26(1): 153–77.
- Godard, J. (1994). 'Beyond empiricism: towards a reconstruction of IR theory and research'. *Advances in Industrial and Labor Relations*, 6: 1–35.
- Hetzler, H. W. (1995). '25 Jahre deutsche Sektion der international Industrial Relations Association — Erinnerungen, Erfahrungen und Erwartungen'. *Industrielle Beziehungen*, 2(3): 312–34.
- Hyman, R. (2001). 'Theorizing Industrial Relations: Anglo-Saxon Individualism Versus the European Social Model'. Working paper, London School of Economics.
- Jacoby, S. M. (1990). 'The new institutionalism: what can it learn from the old?'. *Industrial Relations*, 29(2): 300–16.
- Kaufman, B. (1993). *The Origins and Evolution of the Field of Industrial Relations in the United States*. Ithaca: ILR Press.
- Kuhn, T. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Levine, D. N. (1995). *Visions of the Sociological Tradition*, Chicago: Chicago University Press.
- Mannheim, K. (1929). *Ideologie und Utopie*. Bonn: Friedrich Cohen.
- Mitchell, D. (2001). 'IR journal and conference literature from the 1960s to the 1990s — what can HR learn from it? Where is it headed?'. *Human Resource Management Review*, 11: 375–93.
- Mueller, M. (1999). 'Enthusiastic embrace or critical reception? The German HRM debate'. *Journal of Management Studies*, 36: 465–82.
- Ross, D. (1991). *The Origins of American Social Science*. Cambridge: Cambridge University Press.
- Schmitter, P. C. (1999). 'Seven (disputable) theses concerning the future of "transatlanticized" or "globalized" political science'. Manuscript of a presentation at the IPISA 50th Anniversary conference, September.
- Schorske, C. E. (1997). 'The New Rigorism in the Human Sciences, 1940–1960'. In T. Bender and C. E. Schorske (eds.), *American Academic Culture in Transformation*, pp. 309–330.
- Whitfield, K. and Strauss, G. (2000). 'Methods matter: changes in industrial relations research and their implications'. *British Journal of Industrial Relations*, 38: 141–52.