

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Daoud, Adel; Kohl, Sebastian

Working Paper

How much do sociologists write about economic topics? Using big data to test some conventional views in economic sociology, 1890 to 2014

MPIfG Discussion Paper, No. 16/7

Provided in Cooperation with:

Max Planck Institute for the Study of Societies (MPIfG), Cologne

Suggested Citation: Daoud, Adel; Kohl, Sebastian (2016): How much do sociologists write about economic topics? Using big data to test some conventional views in economic sociology, 1890 to 2014, MPIfG Discussion Paper, No. 16/7, Max Planck Institute for the Study of Societies, Cologne

This Version is available at: https://hdl.handle.net/10419/141452

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

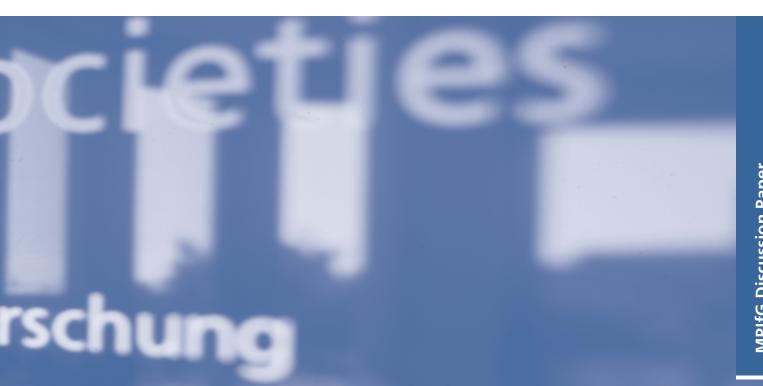




MPIfG Discussion Paper 16/7

How Much Do Sociologists Write About Economic Topics? Using Big Data to Test Some Conventional Views in Economic Sociology, 1890 to 2014

Adel Daoud and Sebastian Kohl



Adel Daoud and Sebastian Kohl

How Much Do Sociologists Write About Economic Topics? Using Big Data to Test Some Conventional Views in Economic Sociology, 1890 to 2014

MPIfG Discussion Paper 16/7 Max-Planck-Institut für Gesellschaftsforschung, Köln Max Planck Institute for the Study of Societies, Cologne May 2016

MPIfG Discussion Paper ISSN 0944-2073 (Print) ISSN 1864-4325 (Internet)

© 2016 by the authors

About the authors

Adel Daoud is a researcher at the Department of Sociology and Work Science, University of Gothenburg and currently a visiting scholar at the Department of Sociology, University of Cambridge. Email: daouda@newschool.edu

Sebastian Kohl is a researcher at Uppsala University and the Institute for Housing and Urban Research. Email: sebastian.kohl@soc.uu.se

MPIfG Discussion Papers are refereed scholarly papers of the kind that are publishable in a peer-reviewed disciplinary journal. Their objective is to contribute to the cumulative improvement of theoretical knowledge. The papers can be ordered from the institute for a small fee (hard copies) or downloaded free of charge (PDF).

Downloads

www.mpifg.de Go to *Publications / Discussion Papers*

Max-Planck-Institut für Gesellschaftsforschung Max Planck Institute for the Study of Societies Paulstr. 3 | 50676 Cologne | Germany

Tel. +49 221 2767-0 Fax +49 221 2767-555 www.mpifg.de

info@mpifg.de

Abstract

Sociological self-understanding is that the frequency of economic topics in sociology has peaked twice: first during the classical era between 1890 and 1920 and second after Mark Granovetter's often cited 1985 article. This paper tests this established view using all JSTOR sociology articles from 1890 to 2014 (142,040 articles, 157 journals). Combined topic and multilevel modeling found strong evidence for the first peak but the proportion of economics topics has also been decreasing over the past century. The emergence of the New Economic Sociology as a subdiscipline of sociology had less to do with an increased focus on general economic issues and more to do with an increased topic mix of organization and social theory. The paper shows that this specific topic mix began to increase from 1929 peaking by 1989 and suggests that the New Economic Sociology, rather than marking the beginning of a second peak, is more a product of the other general currents of organization sociology and social theory. The paper also finds that this subdiscipline is internally diverse in topics and rather male dominated.

Zusammenfassung

Im soziologischen Selbstverständnis gab es zwei Hochphasen in der Häufigkeit der Behandlung von ökonomischen Themen im Rahmen soziologischer Forschung: zunächst in der Zeit der Klassiker zwischen 1890 und 1920 und dann wieder nach Mark Granovetters vielfach zitiertem Artikel von 1985. Das Discussion Paper prüft diese Behauptung unter Verwendung aller bei JSTOR verfügbaren Volltextsoziologieartikel (142.040 Artikel, 157 Zeitschriften). Mithilfe von Topic- und Multilevelmodeling konnten deutliche Belege für die erste Hochphase erbracht werden, wobei der Anteil ökonomischer Themen im Verlauf des vergangenen Jahrhunderts gesunken ist. Das Entstehen der Neuen Wirtschaftssoziologie als Teildisziplin der Soziologie steht weniger im Zusammenhang mit dem verstärktem Augenmerk auf ökonomische Themen als mit einer Kombination aus Organisationsforschung und Sozialtheorie. Das Paper zeichnet Aufkommen und Verbreitung der Kombination dieser Themen von 1929 bis zur Hochphase im Jahr 1989 nach und kommt zu dem Ergebnis, dass die Neue Wirtschaftssoziologie eher aus allgemeinen Strömungen von Organisationssoziologie und Sozialtheorie entstanden ist, als dass sie ein Zeichen für den Beginn einer zweiten Hochphase darstellt. Darüber hinaus wird aufgezeigt, dass die Wirtschaftssoziologie intern themenheterogen ist und tendenziell von männlichen Autoren bearbeitet wird.

Contents

| 1 | Introduction |] |
|----|--|----|
| 2 | Literature background | 3 |
| 3 | Research design, data and methodology | 7 |
| | Data: The full-text JSTOR articles between 1890 and 2014 | 7 |
| | Topic modeling: Measuring the topical orientation of sociology articles | 11 |
| | Multilevel modeling: Formal evaluation of the topical trend of sociology | 14 |
| 4 | Analysis and results | 16 |
| 5 | Discussion and conclusions | 40 |
| Ар | pendix | 43 |
| Re | ferences | 52 |

How Much Do Sociologists Write About Economic Topics? Using Big Data to Test Some Conventional Views in Economic Sociology, 1890 to 2014

1 Introduction

The story of the New Economic Sociology is usually presented as a success story: after a dearth of economic topics in the Parsonian era, the subdiscipline experienced an unprecedented Renaissance in the 1980s and particularly after the publication of Mark Granovetter's often cited 1985 article, *Economic Action and Social Structure – The Problem of Embeddedness*. In one of the latest reflections on the state of economic sociology, the entry in the new *International Encyclopedia of the Social & Behavioral Sciences* notes: "Over the past 30 years, economic sociology has erupted into a vibrant and visible subfield as sociologists increasingly apply social theories to study the economy" (Fligstein/Dioun 2015: 4128).

By analyzing all full-text research articles between 1890 and 2014 (n = 142,040) provided through the courtesy of JSTOR, this article scrutinizes this well-established view: does the development of economic topics in sociology really follow a U-shaped trend, and how should we contextualize Granovetter's important publication from a historical perspective? Using topic modeling techniques, we identify a category of a distinctly economic topic, ECON, among the 15 topical categories covering sociological research over the last century. This topical category is, however, by no means dominant in today's sociological journals and has been declining in frequency over the last few decades. A closer look at the contemporary canon of economic sociology, in turn, reveals that its writings combine the topics of organization and social theory, which confirms the internal heterogeneity of the discipline (Beamish 2007: 1000; DiMaggio/Zukin 1990; Daoud/Larsson 2011). Grouping these topics together as economic sociology, labeled ECONSOC, we find that its take-off occurred already during the Parsonian era, peaking in 1989. Thus, no significant positive effect of the post-1985-Granovetter period

Authors' names are in alphabetical order. We thank Pascal Braun, and Hans Ekbrand for their support. The article has profited from its presentation at the Gesis Text Mining Workshop and the Max Planck Institute for the Study of Societies in 2015. We thank Lothar Krempel, Étienne Ollion, Michael Reif, Patrik Aspers, Sanjay Reddy, Anton Törnberg, and Petter Törnberg for their helpful comments. The work would not have been possible without JSTOR's efficient provision of data and technical support. Additional material and visualizations can be found at <www.adeldaoud.se>.

can be observed on ECONSOC, which we tested statistically. Our main conclusions are that ECON topics were dominant long before and even outside the framework of the new economic sociology literature, while ECONSOC topics were part of the growing interest in organization sociology and social theory, which then eventually turned their attention also to economic phenomena.

This article thus contributes in several ways to the sociology of sociology by making use of big textual data and techniques in automated text analysis as have already been used for different corpora. First, it complements and goes beyond existing bibliometric research because it exploits full-text information. Second, it complements manuallycoded content analyses because it exploits data beyond single years in the few flagship journals. The high fluctuation of topics between adjacent years and the topic-cleavage between the few elite and the mainstream journals throws some doubt on the generalizability of work based on selective manual coding. Finally, our approach offers a counterweight to the literature within economic sociology itself where the many claims about developments in the applied literature, the state of the art, and possible futures for economic sociology are rarely accompanied by an empirically grounded sociology of science but rather by anecdotic evidence and personal impressions of the authors involved (see e.g., Beamish 2007). Like much history of sociology in general, the history of economic sociology is written as a history of theories and thinkers (Platt 2010) but not as one of scientific journals and publishing practices. Our article thus helps to enrich the self-interpretations of the discipline.

The sociology of any sociological subdiscipline is important not only because it implicitly guides researchers' self-interpretation and academic identity, but because it often helps legitimize the existence and support of certain disciplines. Disciplines often emerge as an intended cure to the supposed faults and deficits of existing ones (Abbott 2001). Meta-studies about the past successes of disciplines are used to attract research money. Disciplinary history is therefore not a politically neutral field; it is often undertaken by insiders and does not always necessarily live up to standards of scientific rigor. Our approach helps achieve some objectifying distance to this intra-disciplinary production of history and assures higher reliability.

The internal fragmentation of sociology has further led scholars to overrate the absolute growth of their own subdiscipline, while losing sight of the generally enormous expansion of sociology and its publication outlets over the last few decades. The extreme and ongoing division of labor in scientific disciplines such as sociology makes it impossible for individual authors to read the entire output of a discipline, even of some subdisciplines. A researcher would need to spend her entire lifetime to read the corpus we analyze. Meanwhile, a similar corpus would have been produced without the researcher having herself written anything. This suggests that tools of automated text analyses might be of use which, if we accept losing some qualitative information, increase the number of documents covered exponentially.

To account for our claims, we proceed in the next section to derive five central propositions from the existing literature on the sociology of (economic) sociology. The third section presents the data on sociological journal articles and the methods we used (topic modeling and multilevel modeling). Section four tests the five propositions outlined. In the last section, we discuss the implications of our findings and suggest further research beyond the current study framework.

2 Literature background

Ever since Albion Small's writings (1916), sociologists themselves have written histories about their discipline, often as a side activity, while historians started working on social science history in the 1970s (see Sica 2007). The history of a discipline can be written in different ways: as topic history, theory history, institutional or bibliometric history. We will briefly turn to each of these strands of literatures, report their existing findings on economic sociology in particular, and derive five propositions for further testing.

The first, the topic history approach, describes a discipline's trajectory in terms of clusters or research agenda. Ever since the 1930s, content-analysis techniques of the major journals have been used to describe developments in the entire discipline (Becker 1930; Shanas 1945; McCartney 1970; Champion/Morris 1973; Garnett 1988; Logan 1988; Sieg 2002: 111f.; Abend/Petre/Sauder 2013; Abend 2006), while similar works on the content of books have been rare (Gans 1997). A common presupposition of this literature is that it is indeed possible to isolate clearly distinct topics in the literature, a step which requires a certain degree of specialization in the discipline. The establishment of clearly distinguishable subtopics in sociology goes back to the 1920s (Hinkle/Hinkle 1960: 51). This trend has continued ever since to the point at which the discipline has reached a state of hyper-specialization that has turned the sociological enterprise into a conglomeration of numerous subdisciplines (Turner 2006). Regretted by some as theoretical fragmentation (Collins 1986), lauded as increasing professionalism by others, the tendency towards more subdisciplines can also be said to leave sociology without a core of common citations (Hargens 1991; Crane/Small 1992; Oromaner 2008): the discipline is no longer tied together by overarching theory or by the big three flagship journals, American Journal of Sociology (AJS), American Sociological Review (ASR) and Social Forces (SF). Although economic categories almost always appear among the coded categories in content analyses, they have not been subject to particular attention by the authors. A precondition for a history of economic topics in sociology is to clearly single out and separate these topics from others. Thus, the first proposition that we will test is as follows:

Proposition 1 (Specialization proposition): Economic topics can be singled out from general sociology, i.e., economic sociology can be captured as a topic specialization within the discipline.

With regard to the field of economic sociology more specifically, few content analyses have been undertaken for the late twentieth century. The most common self-description of the discipline is that it is one of the "most vibrant" fields of sociology, if not *the* most vibrant – a description also found in one of its latest state-of-the-art reports (Aspers/Dodd/Anderberg 2015: 2). Empirical studies supporting or weakening this self-description are rare. In their analyzis of a selective sample of manually coded American and German sociology articles from the main journals in some of the years between 1974 and 2005, Beckert and Besedowsky (2009) show that the portion of economic topics increases from the 1970s onwards, with the largest increase occurring in the late 1970s to the early 1980s. They also find that the share of articles with dependent economic variables grows and that firms and markets become increasingly important as topics from the 1980s onwards, while the number of economic sociology theories (network, institutionalism, cultural sociology) rises from this point on.¹

A content analysis of economic topics in French sociology reveals a similar sociological retreat from economic topics after Durkheim's legacy faded. Between 1960 and 1980, less than 2 percent of the articles and book reviews in the *Revue française de sociologie* were distinctly economic, and their share increased only in the 1980s (Heilbron 1999). Even in the traditionally Durkheimian *Année sociologique*, the number of economic topics is very volatile between 1949 and 1980 and is, on average, far lower than that of work-related themes, as based on the mentions in the journal's index. Moreover, economic topics tend to be dealt with by non-sociologists (Steiner 2005). Findings for the other major French sociology journals for the pre-1980 period are similar: even though economic topics appear, they are far from being major or regularly appearing topics, whereas economics dominates the field in the *Revue économique* (ibid.). We derive from these studies the following proposition:

Proposition 2 (Prevalence proposition): Economic topics have become more important than (all) other topics over the last three decades and have grown in importance.

The second and probably the most frequent historical approach to sociology, as found in general sociology books, textbooks, or specialized journals, consists of a history of theories and approaches (e.g. Turner 2013).² An obvious problem with this approach

¹ In Germany, most of these developments are less pronounced and roughly lag by a decade. An earlier study of the three major German journals between 1948 and 1977, however, identified industrial sociology and social class as the most important topics (Lüschen 1979). This latter finding for Germany corresponds with our findings for the English-language journals.

As a subfield, one can also discern sociology's history in terms of research methods (Platt 1998). Another widely reported finding in the literature is a tendency toward quantification, regression analysis and positivistic meta-theory (Platt 2016).

is that theory production makes up only a small part of all writings and has even been shown to be detached from actual research (Menzies 1982; Sica 1989). In the historiography of economic sociology, this focus on the study of classical authors and the depiction of the subdisciplinary history as a sequence of theories and approaches has undoubtedly been dominant. The resulting and generally accepted view of economic sociology's place within the overall discipline is roughly the following (Swedberg 1987: 17; Beckert 2002: 1f.; Steiner 2007: 3; Gislain/Steiner 1995: 198).

While the nineteenth-century classics worked primarily on economic topics, by the 1920s,

sociology became what early Chicago sociologist Albion Small called the 'science of leftovers,' backing off of the economic and political spheres and focusing on such unclaimed subjects as the family, deviance, crime, and urban pathology. [...] Thus, by 1920, both European and American sociologists were occupied with subjects far removed from the core concerns of economics. The separation of the disciplines was well underway before Talcott Parsons came on the scene, but Parsons' influence reinforced and solidified that separation. (Granovetter 1990: 89, 90)

While some economic topics were only kept selectively alive between 1940 and 1970 in the fields of industrial sociology, Marxism, and Third-World studies (Guillén et al. 2003:4f.), they again appeared on the sociological agenda in the wake of the end of the Parsonian era, the end of the Keynesian consensus, the defense against economic imperialism, and the economic crisis of the 1970s (Beckert 2007: 5f.; Fourcade 2007: 1015; Beckert/Diaz-Bone/Ganßmann 2007: 21ff.), supposedly making the subdiscipline one of the most stimulating fields within sociology (Beckert/Deutschmann 2010: 7; Sparsam 2015: 53). The precise date of this rebirth is difficult to ascertain, but

[i]f one nonetheless were to choose one single year as the birthdate for New Economic Sociology, it would be 1985 since this was the year when the term 'New Economic Sociology' was born and also the year when Mark Granovetter's article appeared that was soon to become the most popular article of all in contemporary economic sociology. (Swedberg 1997: 162 [quote]; Granovetter 1985)

Granovetter's article became one of the most cited articles in the discipline (Healy 2014) and ranks first in a syllabus analysis of economic sociology (Wang 2012). Out of this literature we derive the third proposition about the long-term development:

Proposition 3 (U-shape proposition): The frequency of economic topics in sociology follows a U-shaped curve between the end of the nineteenth century and today, with the bottom of the U representing the Parsonian era.

A third approach in a discipline's historiography concerns institutional history, which addresses questions about the establishment of departments (Abbott 1999), financial support structures (Turner/Turner 1990), professional organizations (Simpson/Simpson 1994), common research networks, conferences, teaching, or publications. This re-

search also supports the specialization view of the discipline, as reflected in growing subsections of the American Sociological Association (ASA; Ollion 2011). In this respect, economic sociology's growth has been recently documented in terms of a special ASA section, rising membership, and specialized research networks (Fligstein 2015). The rise of the New Economic Sociology has also been addressed in this historiographic perspective through the use of institutional and biographical data on 31 key contributors to this subdiscipline. Thus, Convert and Heilbron (2007) explain that its emergence was facilitated by the demise of existing dominant paradigms such as functionalism, by the increasing number of sociologists in general and those working at business schools in particular, and by the financial support of the Russell Sage Foundation. They also identify male researchers as constituting the core behind economic sociology. It is from this last point that we derive another proposition.

Proposition 4 (Gender proposition): Economic topics in sociology are predominantly addressed by male researchers.

A fourth approach to scientific history is bibliometric. Thus, citation analyses are used to find out about clusters of topics through co-citations or authorships patterns. Historiographs enable us to trace concepts over time through citations (Garfield/Sher/Torpie 1964; Garfield/Pudovkin/Istomin 2003). Main findings, however, usually concern the language, age, or format (monograph, article) of citations, the degree of interdisciplinarity, authorship networks, gender effects, or other formal patterns of citations (e.g. Rosenberg 2015). Sometimes these also concern citation's content, such as the qualitative-quantitative divide in sociology (Swygart-Hobaugh 2004). Historiographs are able to trace topics through citation links based on the keyword searches offered in databases such as the Web of Science. Lietz (2015), for example, uses 27,760 Web-of-Science articles containing the words "social network" and found that the relative frequency of networkrelated economic sociology articles decreased or stagnated starting in the second half of the twentieth century. A syllabus citation analysis found a distinction could be drawn in economic sociology between classical topics and authors, on one side, and more modern ones, on the other (Wang 2012): it further identified various cores within the discipline. This confirms the general claim about economic sociology's fragmentation into different subtopics (Aspers/Dodd/Anderberg 2015), sometimes described as different types of embeddedness (DiMaggio/Zukin 1990). From this we derive our last proposition.

Proposition 5 (Heterogeneity proposition): Economic sociology displays a diversity of internal topics.

Our topic model approach has a close kinship to the content analysis approach and complements much of the bibliometric literature. It takes advantage of the entire content of the published articles and creates links between articles through common *semantic* structures, rather than relying on patterns of citations, authorship, titles, or keywords. Thus, our model is richer in terms of discerning the semantic content that actually ties together certain texts over time.

While the potential of topic modeling is still in an exploratory phase (Ramage et al. 2009), economic sociologists themselves have already used the topic modeling algorithm in some recent empirical studies (Fligstein/Brundage/Schultz 2014; DiMaggio/Nag/Blei 2013). Other scholars have extended its use even further. For example, it has been applied to various scientific disciplines (McFarland et al. 2013; Teich et al. 2015, Argamon, Dodick, and Chase 2008), but also to newspaper or historical-document corpora (McCallum/Corrada-Emmanuel 2007; Block 2006), social media (Zhao et al. 2011), and fictional texts (Blevins 2010). Using an approach closest to our own, Bleier/Strotmann (2013) investigate 100 years of German sociology through the yearly proceedings of the German Sociological Society. However, the purpose of many of these analyses lies more in introducing and probing a new method than in making a contribution to existing debates in the sociology of science.

In the next section, we outline in greater detail what data we will use to test our five propositions, the details of the topic modeling technique, and why we also deploy multilevel regression.

3 Research design, data and methodology

Data: The full-text JSTOR articles between 1890 and 2014

Our original data consist of 142,040 full-text sociology³ research articles from 157 journals that were published between 1890 and 2014, as provided by the "Data for Research" program of JSTOR and accessed on 12 December 2014. The last two to three years of articles often still lie beyond JSTOR's "moving wall" of granted access by publishers. JSTOR is known for offering the largest retrospective digitalization in the social sciences and is the most complete non-profit provider of such information (Sanders 2012: 39). The article coverage starts with the *Annuals of the American Academy of Political and Social Sciences* in 1890, and its exponential growth over time reflects the overall growth of the discipline and its publications.⁴

We cleaned and organized the data in the following steps, see Figure 1.⁵ First, data was downloaded as HTML-string objects from the JSTOR data repository. Second, we extracted meta-data about the articles using regular expressions, deleted journals with

What counts as a "sociology" journal is, in fact, also determined by automated content-analysis procedures (personal communication from JSTOR, 21 August 2015).

⁴ See Appendix, Table A-1 and Figure A-1 for coverage details.

The full-text articles were cleaned, organized, and analyzed using the R programming language accompanied by a variety of packages, most notably: the *tm* (text mining) package for management of the text corpus (Meyer/Hornik/Feinerer 2008); the *dplyr* package for general data management (Wickham/François 2005); the *topicmodels* package for estimating latent topics

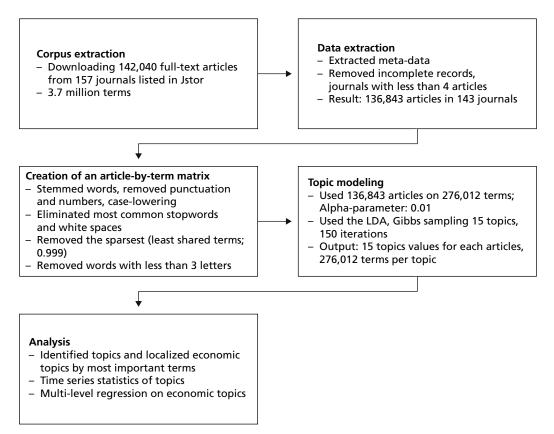


Figure 1 Flow-Chart of how we transformed the data

little coverage or lacking meta-data, leaving 136,843 articles from 143 journals. Third, we created a document-term matrix, which consists of all the word types contained in the articles. We removed common words using the tm-package's stopword list, as well as numbers, white space, and punctuation from this matrix. We also stemmed all the terms. After applying these procedures, we still had about 3.7 million common terms. We further removed all spare terms, that is, those not shared by many documents. We also removed terms with less than 0.001% prevalence rate, which left us with 216,406 terms. These are the terms that we then fed to the topic model.

Any data, even the big data we have set up for this paper, is but a sample from a larger population and has, therefore, an own underlying data generating process that needs to be made explicit. First, we analyzed only articles written in English and therefore included only English-language articles from the most important non-English-language journals, such as *Actes de la recherche en sciences sociales*, *Revue française de socio-écono-*

⁽Hornik/Grün 2011); *ggplot2* for graphical outputs; and *R2MLwiN* accompanied by the *MLwiN* software to fit multilevel growth models (Rasbash et al. 2015).

We experimented with different thresholds and found that this 0.001%-prevalence rate provided enough words to satisfactorily distinguish variety between articles. When we applied the topic modelling algorithm to the 3.7 million terms, we never managed to get the model to converge – even after running it for about six weeks.

mie, Revue française de sociologie, Kölner Zeitschrift für Soziologie und Sozialpsychologie, Zeitschrift für Soziologie and Stato e mercato. There were countries where economic sociology has been more or less pronounced, also in their national journals, that are not covered here (Heilbron 1999; Beckert 2000; Barbera 2002). The reason we focus exclusively on English articles is that the quantitative text-mining technique should only be applied to one language at a time. This selectivity can also be justified by the fact that the English-speaking social science journals make up 85.3 percent of all refereed journals in Ulrich's International Periodicals Directory 2004 (Gingras/Mosbah-Natanson 2010). Moreover, in the years 1990–92, the United States and United Kingdom alone produced 64.5 percent of all sociology articles, and they received 84.6 percent of all citations in the Social Science Citation Index (SSCI; Glänzel 1996: 298). This language bias also involves a geographic bias of topics favoring US topics, as noted in the literature (Kennedy/Centeno 2007).

Second, even in the English-speaking world, we do not cover all journals and all years; there are well-known difficulties in accessing the entire population of sociology journals. There is no indexing service that covers all self-declared sociology journals; instead, many lists include numerous self-declared, non-sociological journals. The journal population is constantly changing, and sociology content is also published in places other than those publications considered proper sociology journals (Bell 1967; Hardin 1977: 32f.). For instance, in the 1980s, there were 48 new journals and 32 cessations in the Ulrich's directory, creating a total of 245 journals in sociology and some adjacent disciplines (Hargens 1991). Over time, the overall number has grown tremendously (Platt 2010). Albion Small counted 16 sociology journals in 1916 (Small 1916: 786), and the Journals-of-the-century project (Rudasill 2001) counts 87 titles for 1932 in Ulrich's index, 280 in 1963, and 1,500 titles in 1998 worldwide, although this also includes nonpeer-reviewed and popular journals. "Journalseek" lists 385 scientific journals in sociology proper worldwide. This included interdisciplinary journals. The German "Elektronische Zeitschriftenbibliothek" lists 5,751 sociology journals globally, using a broad definition. These numbers reflect the upper boundary and include many non-refereed journals from all kinds of adjacent disciplines.

Some comparisons with databases other than JSTOR are also revealing. SocIndex is probably the most encompassing sociological research database with almost 900 full-text journals with 700,208 English articles for the period 1895–2015 (SocIndex, 13 July, 2015). A closer look reveals that this larger number of journals and articles is mostly achieved by extending sociology to the neighboring fields of psychology, criminology, and regional studies, to name a few. The well-known Web of Science Core Collection,

This high number of English-language citations is also behind the explicit language bias of the SSCI construction (Crane/Small 1992: 201). For the even stronger dominance of English in the SSCI and UNESCO DARE databases in the 1990s, see (Narvaez-Berthelemot/Russell 2001); for the dominance of English in the IBSS bibliography of social science books, see (Kishida/Matsui 1997).

in turn, lists 139,773 articles for "sociology" from the nineteenth century to 2015, which closely resembles our JSTOR data volume. The Social Science Citation Index (SCCI) lists 142 journals in sociology (2015), 31 of which intersect with our corpus because the SCCI also includes many non-English journals. The intersection set includes well-known, highly ranked sociology journals, while no clear topic-related pattern distinguishes the non-intersecting journals. A shortcoming of our corpus is the absence of some newer journals associated with economic sociology, such as Socio-economic Review, but others are included, such as Society and Economy, Review of Social Economy, and the American Journal of Economics and Sociology. Since other non-economic-sociology journals were also not recently included and since this concerns only the most recent period, one cannot speak of a systematic distortion of the entire corpus. Finally, the Scopus database lists 1.7 million articles in "social sciences" since 1960, while no further discipline-refinement is possible.

While these purely quantitative comparisons might suggest that our corpus is small, some qualitative observations prove this to be wrong. First of all, our corpus covers the three big American (and two major British) journals used in previous sociological studies of sociology (Gaston/Zelditch 1979; Crothers 2011). They mostly represent general sociological themes produced at a few elite universities (Weeber 2006) and are often not in line with ASA section membership proportions (Angèle/Ollion 2012: 22). However, sociology is a discipline where, due to restricted top-journal space (Chubin 1975) and a reproached bias of article selection by top journals (Becker 1990; Karides et al. 2001), the periphery of specialized journals and mass universities has remained equally important (Hargens 1991; Oromaner 2008). One reason for this is also the tendency of important authors in the social sciences to avoid the major journals (Gans/Shepherd 1994: 170). There is also evidence that broader accessibility and easier access have made non-elite journals more important (Acharya et al. 2014). It is therefore important for any study in sociology claiming to be representative to go beyond the narrow core of journals and include the world of well-known specialized journals. Their impact factors all lie between 0.5 and 1.5, and the volatile rankings are of no further help to sort them (Best 2015). We refer to such representative specialized journals, mentioned by Oromaner (2008), as Social Problems, Social Psychology Quarterly, Journal of Marriage and the Family, Administrative Science Quarterly, Sociology of Education, Journal of Health and Social Behavior or the Annual Review of Sociology, The American Sociologist, Theory and Society, Sociological Theory, Sociometry, Acta Sociologica, Social Research, and Social Science Quarterly, which are all covered by our JSTOR sample for their entire historical time span. Beyond this important set of specialized journals, we cover a periphery of changing journals, of which the average sociologist is unlikely to have heard of, such as Aula, Contexts, or Contagion. The demarcation lines of this disciplinary periphery are difficult to draw, but it also makes up only a minority in our corpus.

⁸ See: http://econsoc.mpifg.de/journals.asp.

⁹ Similarly, the *American Political Science Journal* has been found to no longer represent its discipline (Sigelman 2006).

Third, while we go beyond bibliometric analyses that do not use the textual body of articles (and for pre-1991 articles not even abstracts), we do not analyze books, only review articles such as in the Annual Review or book reviews as contained in Contemporary Sociology. Sociology still is a two-genre discipline of both journals and books, with considerable citations coming from books (Line 1981; Wolfe 1990; Clemens et al. 1995; Mochnacki/Segaert/Mclaughlin 2009; Moksony/Hegedűs/Császár 2014). Though these studies found systematic differences for book or article departments, the New Economic Sociology has not been found to matter in this regard. The article approach, however, excludes many of classical works in sociology that were published in book form. Yet two indications suggest that this is not necessarily a worrisome selectivity. First, we find high values for economic topics in the classical period in spite of them being mostly outside of our corpus. This possibly reflects the fact that citations of books in journals and book reviews lead to an indirect measurement of book topics. Second and most importantly, studies examining topics in books and articles over the same time period have not found substantial differences across the publication forms in terms of subject matter (Lüschen 1979; Clemens et al. 1995). We find a similar result in our analysis, when comparing, for instance, Contemporary Sociology, ASR's outsourced review section, with the topics in its main journal (cf. Figure A-2, Appendix).

These three limitations – English-language centeredness, a sample of journals, no book corpus – should be kept in mind when interpreting and generalizing the results. In principle, these are not unsolvable limitations, but any research project of this size is faced with them. In the last section we will point to some ways in which future research will be able to deal with these limitations.

Topic modeling: Measuring the topical orientation of sociology articles

As pointed out by DiMaggio/Nag/Blei (2013), sociologists analyze text using one of three approaches: the qualitative reading of text, the semi-structured qualitative reading with a coding sheet, or fully automated algorithmic analyses. One of the main limitations of the first approach is linked mainly to the difficulty of producing reproducible results. Two of the limitations of the second approach are its impracticality for large corpora: we have about 140,000 articles, and if one would spend two hours to read each article without doing anything else (eating, sleeping, publishing etc.), it would take about 32 years to get through our corpus – without even producing an analysis of the articles. Moreover, it would also be difficult to achieve a reasonable degree of inter-coder reliability were one to employ several coders instead. The main limitation of the third approach is that the meaning of a text (an article) is reduced to its constitutive words (keywords), without necessarily looking at the discursive, contextual, and linguistic relations between these words. Frequency-based content analysis is an example of such an approach (Jockers 2014: 73ff.). What we need are approaches that satisfy four desiderata (DiMaggio/Nag/Blei 2013): first, they must be *explicit*, which means that data and esti-

mation methods are reproducible and transparent; second, they need to be *automated* in order to allow for the analysis of large corpora; third, they must be *inductive* to allow for discovery of underlying structures and so for (qualitative or quantitative) hypothesis testing; fourth, the approaches must *account for the relationality of meaning* across varying discursive and linguistic contexts. Topic modeling fulfills all these conditions (Blei/Nag/Jordan 2003; Blei/Lafferty 2007).

The basic idea behind topic modeling is that of a bag of words. ¹⁰ This means that the order of the words in a document is not exploited for information. The main assumption behind this reasoning is that there are certain given latent topics that inform a given field (e.g., sociology) and that condition the writing of documents (e.g., articles). Each topic has a list of all terms which are assigned a certain probability (with non-zero probability for all terms, adding up to one); in turn, each document has a probability score on every (also adding up to one). The "writing process of a document," from the perspective of the bag of words approach, can then be described in the following steps, assuming here that we have 15 topics: first, we take a random document in the field of sociology and roll a die with 15-sides (15 topics) so that the likelihood of each side is equal to that particular documents probability score – in other words, it is a die weighted to show how likely a document belongs to the 15 topics. Imagine that our die showed topic 5. Second, we go to topic 5 and roll another die, only now one with sides equal to the number of terms (assume that we have 3,000 terms) and weighted according to the probability distribution of terms across that topic. Imagine that we roll the 3000-sided die and we get the word "market." Third, we assign the term "market" to our document and re-do the whole process again until we fill up all the so-called tokens of that document. Tokens are the number of term-slots that a document has (i.e. the length of the document): we may re-use a term in the process described above. Accordingly, a document scores on all the topics (document-topic matrix) with a certain probability – adding up to 1 for each document; all topics score to all terms (topic-term matrix) with a certain probability – adding up to 1 for each topic.

The central task of the topic modeling algorithm is to estimate these probabilities. In the example above, all parameters were assumed. There are several estimation algorithms determining these probabilities, but the most common one, also used in this paper, is called Latent Dirichlet Allocation (LDA), which is underpinned by Bayesian statistical theory. LDA has a relational and machine-learning approach to modeling language. The algorithm will seek to find structure in the corpus by co-occurrences between words with respect to how they cluster in documents. This forces the algorithm to take into account the relational aspect in the corpus. The only observed data are words and documents, whereas topics and the probabilities are estimated. As DiMaggio/Nag/Blei (2013: 578) describe:

¹⁰ There are several pedagogical or technical introductions to how topic models work and examples of its application (Newman et al. 2006; Fligstein/Brundage/Schultz 2014); we will give only a brief primer here.

LDA takes a relational approach to meaning, in the sense that co-occurrences are important in the assignment of words to topics. Intuitively, in order to capture these patterns of co-occurrence, LDA trades off two goals: first, for each document, allocate its observed words to few topics; second, for each topic, assign high probability to few words from the vocabulary. Notice that these goals are at odds. Consider a document that exhibits one topic. Its observed words must all have probability under that topic, making it harder to give few words high probability. Now consider a set of topics, each of which has very few words with high probability; documents must be allocated to several topics to explain those observations, making it harder to assign documents to few topics. LDA finds good topics by trading off these goals.

An important premise to bear in mind is that the number of topics has to be specified by the researchers manually, which some have suggested to be problematic (Schmidt 2013). However, we argue that this manual specification does not pose a problem *per se*. We regard topic modeling as a way of solving a jigsaw puzzle: whether the puzzle consists of 20 pieces or 2000 pieces, it will always reconstruct the exact same picture. To ensure interpretability, and similarly to DiMaggio/Nag/Blei (2013) and Fligstein/Brundage/Schultz (2014), we kept our topics to a relatively low number, in our case 15. This number merely defines the number of clusters into which we want the algorithm to order the terms of the articles and subsequently the topic distribution across each article. We found 15 topics to be convenient in the analysis because the major terms for one topic were semantically quite homogeneous and sufficiently distinct from other topics. ¹¹ Previous manual journal content analyses have worked within a similar range of head categories (Kinloch 1988).

Another manual choice that we had to make is to set the so-called α -parameter. This parameter defines the prior Dirichlet distribution the model assumes. We set the α -parameter to 0.01. The lower the α -parameter, the more concentrated will be the topic distribution that the model assumes for each article. This means that the model will try to assign, or concentrate, the topic distribution for each article – a concentration on fewer topics but never zero. Conversely, the higher the α -parameter, the more uniform the topic distribution will be across each article. We have experimented with various topic numbers and α -parameters; we still found the results to be robust for the value we have chosen. Lastly, we estimated the model using Gibbs sampling as implemented in a Markov Chain Monte Carlo (MCMC) technique, which we ran for 150 iterations.

¹¹ The fact that most countries' sociology associations are split into 10–15 sections further supports our choice (Bannister 2008). The ASA had already more than 50 sections in the 1970s, but this often represents political rather than substantive distinction; a cluster analysis of members' preferences (Ennis 1992) or their co-memberships in sections (Cappell/Guterbock 1992) even reduced them to only seven topics.

¹² A model with arbitrarily high α -parameter value will force the articles to have a uniform topic distribution with 1/15 probability in each topic: equal likelihood that an article belongs to all 15 topics. This happens because the α -parameter regulates how much prior distribution should be assigned to an article for each topic. Therefore, the lower the α -parameter is, the more the data (the text) will influence the outcome. Conversely, the higher the α -parameter is (the prior distribution), the less the data will influence the outcome of the model.

Multilevel modeling: Formal evaluation of the topical trend of sociology

While topic modeling measures the topical orientation in the discipline of sociology, it lacks standardized mechanisms to formally test the growth of the economic topics in sociology (viz. the U-shape proposition). It also lacks mechanisms to control for confounders. We will, therefore, complement the topic model analysis with a statistical regression analysis in order to estimate the time trends and to control for some confounding variables, such as journal clustering and article page length. It might be the case that the overall effect is driven by some journals, or it could be that longer articles are having some un-proportional effect on the time trend. We aim to extend this list of control variables in the future. We rely specifically on multilevel modeling because it allows us to capture the time-trend of the economic orientation of sociology as well as control for the journal clustering of articles (Singer/Willett 2003; Steele 2014).

We chose multilevel models over fixed effect models because we want to estimate the variation both within and between journals to determine their relative importance. When the model is defined correctly, it can properly estimate what a fixed effect model can do (capture time-varying effects) and other more useful estimations (time-invariant effects, partition lower and higher level variance, clustering effects, etc.; Bell/Jones 2014).

We defined the following baseline multilevel model with the following fixed part:¹³

$$\begin{split} ECON_{aj} &= \beta_{1}1890to1920_{aj} + \beta_{2j}1921to1984_{aj} + \beta_{3j}1985to2014_{aj} \\ &+ \beta_{4}1890to1920_{slope_{aj}} + \beta_{5j}1921to1984_{slope_{aj}} \\ &+ \beta_{6j}1985to2014_{slope_{aj}} + \beta_{7}Pages_{aj} + \varepsilon_{aj} \end{split}$$

With the following random part:¹⁴

$$\beta_{2j} = \beta_2 + u_{2j}$$

$$\beta_{3j} = \beta_3 + u_{3j}$$

$$\beta_{5j} = \beta_5 + u_{5j}$$

$$\beta_{6i} = \beta_6 + u_{6i}$$

¹³ Note the terminological difference between a *fixed effects models* and the *fixed part of multilevel modelling*. A fixed effects model is a type of regression, whereas the fixed part of a multilevel model captures the average effect of the specified variables.

Whereas the fixed part captures the average estimated effect, the random part captures how the effect is distributed (deviates) for each and every case (articles and journals).

And we assume that both the higher level random terms (σ_{u2}^2 , σ_{u3}^2 , σ_{u5}^2 , σ_{u6}^2) and lower level variance (σ_{ε}^2) are normally distributed with mean zero and are uncorrelated with the fixed effect parameters. The random terms are allowed to co-vary (captured by the covariance parameters σ_{u2u3} , σ_{u2u5} etc.), such as:

$$\begin{bmatrix} u_{2j} \\ u_{3j} \\ u_{5j} \\ u_{6j} \end{bmatrix} \sim N \left(0, \begin{vmatrix} \sigma_{u2}^2 \\ \sigma_{u2u3} & \sigma_{u3}^2 \\ \sigma_{u2u5} \sigma_{u3u5} & \sigma_{u5}^2 \\ \sigma_{u2u6} \sigma_{u3u6} \sigma_{u5u6} \sigma_{u6}^2 \end{vmatrix} \right)$$

$$\left[\varepsilon_{ai}\right] \sim N(0, \sigma_{\varepsilon}^2)$$

The dependent variables are captured by the term $ECON_{aj}$ which measures the economic orientation of a particular article and will be derived from the topic model output. We test both ECON and ECONSOC. The index a is the article identifier: it runs from [1, 2, ... 136843] – the total valid articles in our sample. The index j is the journal identifier: it runs from [1, 2, ... 143] – covering all the journals in our sample. This also means that all the articles (136,843) are hierarchically nested in 143 journals. Moreover, the values of $ECON_{aj}$ runs from 0 to 1 since it is a proportion variable. Higher values indicate that article a in journal j has a larger economic orientation than lower values.

The focal independent variables are the era-variables, which are defined as the mean (intercepts) economic orientation during the eras 1890to1920,1921to1984, and 1985to2014, respectively; the other three are defined as the trend (slopes) of the economic orientation of articles during the 1890to1920slope,1921to1984slope, and 1985to2014slope, respectively. The variables estimating the mean are all defined as dummy variables; the variables estimating the slope are timer-variables that count in decimal years (omitting leap years) when the article was published in the relevant era. For example, an article published in mid-1986 will have a counter value of 1.5 (one and a half years): it counts the difference of when the era starts and the date when the article was published in that relevant era. If the general story described by the standard narrative of economic sociology is correct, the classical era should have a high 1890to1920 value with an increasing 1890to1920slope, the intermediary era should have a lower 1921to1984 value with a decreasing 1921to1984slope, and the New Sociological era should have again a high 1985to2014 value and an increasing 1985to2014slope.

We also test some polynomial versions of the model defined above: quadratic, cubic, quartic, and quintic. These allow us to test where the topical maxima and minima occur exactly. It is a less strict version of the spline model above.

4 Analysis and results

Proposition 1: Specialization

To test the first proposition about an identifiable economic topic, we first report the basic results of our topic model that we ran with 150 iterations on the basis of 276,012 terms and 136,843 articles. Table 1 displays the 15 topics with their 50 most characteristic terms. All terms receive a probability with which they contribute to each topic and probabilities add up to one for each topic. These first 50 terms cumulate to joint probabilities of between 15 and 30 percent and can therefore be considered crucial for the content of each topic. This group of results is robust since we could reproduce the same result with a smaller random sample.

To determine the topic headings of Table 1 and thus to interpret the model, we started from our understanding of the key terms characterizing them. We ignore the words that are not nouns because they do not carry much meaning. As it turns out, most lists of terms point us to common subdisciplines in sociology, such as the sociology of education, sociology of religion, gender and family sociology, occupational sociology, sociology of deviance, social theory or else political sociology. Topic 7, which we labeled "economic" or ECON, for short, is prima facie the one most characterized by economic terms.

To support this initial impression, we further consulted the lists of articles that loaded the highest on the respective topics. Table 2 presents these top articles published in AJS and ASR for the ECON topic, and the corresponding tables for the topics "public" (Table A-2) and "organization" (Table A-3) are in the Appendix.

An inspection of the titles¹⁵ and an even more in-depth inspection of the articles and the authors show ECON to be mainly about basic empirical work on economic matters and can be subsumed under a broad tradition in political economy. Until the 1950s, sociological authors were often part of general departments of political economy, frequented annual conferences of American economists, and published on similar empirical economic topics such as wages and unionism, price cycles, or demographic and agricultural issues (Young 2009; Backhouse/Fontaine 2010: 186). Economic topics were not the reserved domain of early sociologists such as Veblen or Innes (Mitchell 2005) but were naturally addressed by institutional economists, geographers such as George O. Smith (ranked 15th, 20th, and 24th in Table 2), demographers such as Warren S. Thompson (18th), or authors listed in bibliographies of female economic thinkers such

¹⁵ For older articles we also referred to the main text, as their titles were shorter and therefore often not informative. Confirming existing observations on title length (Becker 2003; Moody 2006), we found that the average word length of titles almost doubled from about 6–7 words in the first half of the twentieth century to about 11–12 words in the 2000s. This finding should make one skeptical about the quality of bibliometric analyses based on key-word searches in titles only.

as Dorothy Wescott (Maden/Seiz/Pujol 2004). Also many agrarian and developmental topics are present, for example, in the works of Denis O'Hearn (13th, 48–49th). While economists turned their attention ever more frequently to theoretical articles, they left the field of economic topics open to sociologists and scholars of other disciplines (Morgan/Rutherford 1998; Backhouse 1998). However, to our surprise, we do not find any new economic sociologists among the top articles on this topic. Moreover, most of these articles were published in the first half of the twentieth century, indicating that they resonated with the work of classic authors.

To call topic 7 an economic topic implies that others are sufficiently non-economic. Therefore, we briefly inspect the other topics to verify that they are indeed distinct from purely economic topics and that they adequately represent a homogenous sociology topic in and of themselves. The organization topic captures the work of the leading scholars in both organization studies and, more particularly, in the New Economic Sociology. Neil Fligstein has five articles in AJS and ASR on this topic that rank highly: 2nd, "Bank Control, Owner Control, or Organizational Dynamics" (1992), co-authored with Peter Brantley; 7th, "Networks of Power or the Finance Conception of Control?" (1995); 21st, "The Spread of the Multidivisional Form among Large Firms, 1919–1979" (1985); 30th, "The Intraorganizational Power Struggle" (1987); 37th, "Markets as Politics" (1996). These five articles have an organization-topic probability of over 63 percent. Paul DiMaggio co-authored one article on this list with Walter Powell, "The Iron Cage Revisited" (1983), that ranks 38th with a 63-percent topic probability. Brian Uzzi has three articles ranking among the top 60: 11th, "Embeddedness in the Making of Financial Capital" (1999); 17th, "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations" (1996); 59th, "Embeddedness and Price Formation in the Corporate Law Market" (2004). These three articles have an organization-topic probability of over 58 percent.

With regard to the other topics, that of "ethnicity/race" includes such important authors as Douglas S. Massey (seven times), known for his work on racial segregation (Massey/ Denton 1993), and Stanley Lieberson (27th rank), known for his work on ethnic relations. The "politics/state" topic includes classical authors in comparative politics such as Theda Skocpol and Seymour M. Lipset. The "work/labor" topic, in turn, captures traditional issues in occupational sociology, such as stratification, wages, inequality, and industrial relations. Rachel Rosenfeld's important work on occupational inequalities is represented (Moller 2007). The topic "education" clearly captures issues with regards to schools, stratification, educational achievement, and occupation, and includes articles such as the notable one by James Coleman from 1960, "The Adolescent Subculture and Academic Achievement" and John W. Meyer's work on education. Articles listed under the topic "law/crime" have titles from the prominent criminologist Lawrence W. Sherman. His article "Reply: Implications of a Failure to Read the Literature" in the ASR ranks the highest on this topic; his article from 1993 with the title "Attacking Crime" in the journal Crime and Justice ranks 36th in all of JSTOR. The renowned author Walter R. Gove has six articles on this list.

| Table 1 Th | The 15 topics and their top 50 terms | nd their top | 50 terms | | | | | | , | / | | | | |
|----------------|--------------------------------------|-----------------|---------------|-----------------|-----------------|---------------|-----------------|-----------------|--|-----------|---------------------|-----------------------|--|------------------|
| ڕ | 40,146 | erriti | Sanssile | VIIII E FAR | togets, | 3/HO | Ungerich | TOOLIN | J. J | PRINIPINO | | esea Kariy | est of the state o | ALLERO SIA |
| . On | ANO. | Ine) | | | | | , Solo | | | Olla | Silot I | | | |
| 1 state | school | crime | africa | famili | work | econom | manag | social | one | | religi | black | polit | model |
| 2 will | ednc | law | african | women | labor | develop | | sociolog | peopl | behavior | religion | american | state | use |
| 3 one 4 may | research | social | des | sexual | employ | product | organiz firm | new | new | group | church israel | white | social | can |
| 5 public | sociolog | polic | french | parent | dol | market | journal | press | can | studi | palestinian | new | new | data |
| 6 law | colleg | court | coloni | child | occup | industri | new | univers | time | journal | isra | race | parti | two |
| 7 american | social | nse | languag | health | worker | increas | research | york | like | | arab | racial | public | will |
| 8 govern | education | case | south | marriag | econom . | per | work | one | way | person | cathol | ethnic | movement | set |
| | teacher | legal | canadian | sex | Incom | world | review | societi | cultur | measur | christian | urban | polici | differ |
| 10 can | children | new | paris | men | differ | countri | process | cultur | also | psycholog | Jewish | communiti | press | number |
| | studi | instic | latin | gender | data | trade | structur | human | use life | | islam | group | Dower | variabl |
| | teach | violenc | dne | mother | tabl | capit | control | work | make | abl | pob | immigr | intern | result |
| | program | prison | franc | ade | women | growth | perform | scienc | even | L | state | york | dovern | may |
| 15 must | class | medic | dan | care | rate | new | network | american | see | tabl | protest | pobnl | world | valú |
| 16 nation | academ | journal | english | social | wage | economi | may | concept | mani | relat | new | press | democrat | choic |
| | high | research | lov | marit | | agricultur | nse | structur | will | | studi | unit | right | estim |
| | learn | patient | mexico | relationship | | china | chang | studi | women | | nation | area | war | measur |
| | work | report | european | male | chang | also | market | individu | man | <u>u</u> | polit | univers | vote | social |
| | esn | nealth | Trance | research | level | state | corpor | system | person | | east | atrican | countri | Tunction |
| nodn 17 | group | stual | van | studi fatbor | percent | rurai | relat | relat | Know | g | midai | negro | Support | analysi fizet |
| 22 case | develop vol.14h | vork | une | new. | relat | in port | studi | society | nrec | factor | west | studi | german | riist |
| | yours | virtin | spanish | family | time | govern | inform | research | world | | Will | neighborhood european | also deuropean | giveri |
| | one | control | histori | femal | increas | rate | industri | may | just | | movement | among | econom | individu |
| | train | review | del | life | class | one | effect | natur | social | onship | jew | state | american | relat |
| | profession | mental | sur | role | social | bank | | process | mean | idu | india | south | elect | prefer |
| | year | delingu | social | time | educ | farm | inistr | develop | univers | | one | america | soviet | tabl |
| | graduat | problem | brazil | marri | review | year | | problem | think | _ | secular | percent | CIVII | theori |
| 30 war | Institut | american | nigeria | may | market ertim | nation | power sociole | sociology | may first | level | support militari | census | develop | also mothod |
| 32 number | schools | rate | london | live | USe | area | model | econom | sav | | includ | hous | societi | statist |
| 33 power | american | effect | pour | support | status | system | Q | differ | take | respons | palestin | migrat | system | point |
| | also | may | region | husband | men | chines | | life | place | status | intern | chicago | issu | distribut |
| | new | press | intern | home | result | larg | press | polit | york | model | journal | cultur | see | test |
| | parent | state | dni | asn | measur | cent | also | power | get | _ | forc | resid | chang | probabl |
| | bublic | bublic | cultur | among | earn | Indod | product | world | two | | peopl | states | liber | group |
| | students | alcohol | ındıgen | relat | noiun | tood | behavior | action | call | survey | report | nation | politics | observ |
| | can | offend | univers | behavior | ındustrı | toreign | decis | modern | come | | member | local | noiun | time |
| | communiti | sentenc | est | report | sociolog | social | tion | view | much | an | right | differ | global | order |
| 41 organ | Journal | also | iinguist | adolesc | nigner | can | theori | mean | Well | | World | review | retorm | TOIIOW |
| | number | Juverill | Studi | diso | number | intern | role | review | ident want | | arriorig | CldSS | dernocraci | general |
| 43 lact | grade | abus porcent | gialia | young Julio | Jel Sleo | chang | vork | also | Walle | Gliotion | dhoup two | livo | idoolog 1 | lilius |
| | par titrip activ | percent | hritish | divorc | iournal | tax | -unment | | feel | | near | region | vork | possibi |
| | depart | system | tradit | partner | high | cost | technolog | london | form | | gaza | number | class | sinc |
| | achiev | sociolog | dutch | adult | mobil | produc | institut | Will | becom | ort | faith | southern | organ | consid |
| 48 Ing | differ | violence | los 504ii. | birth | less | | level | valu | often +bia@ | | see | rural | | structur |
| 49 ment | report | instice | natily | york differ | signific | region nit | relationship | point theory | tning | among | area | Tamili | | snow |
| 50 servic | mani | Justice | Modern | diller | Sampi | | SOCIAI | meory | experi | | Ianu | Wastilligton | group | Indic |

Table 2 Top 60 ECON articles in the AJS and ASR

| Table 2 Top 60 ECON articles in the AJS and ASR | | | le Politica de Situation de Sit |
|--|-----------------------|--|--|
| N _t | leumor leumor | * Offile | The following the first of the following the |
| 1 Production | AJS 1930 | Dorothy Wescott | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 2 Foreign Trade and Investments | | G. B. Roorbach | 0.00 0.00 0.00 0.00 0.00 0.93 0.00 0.00 |
| 3 Production | | Dozothy Wescott | 0.00 0.00 0.00 0.00 0.92 0.00 0.00 0.00 |
| 4 Floduction 5 Production | AJS 1952 AJS 1929 | Dolothy Westott | 0.00 0.00 0.00 0.00 0.00 0.00 0.82 0.00 0.00 |
| 6 Production | - | Harry Jerome | 0.00 0.00 0.00 0.00 0.00 0.78 0.00 0.00 |
| | • | Richard E. Barrett, Martin K. Whyte | 0.00 0.01 0.00 0.00 0.01 0.73 0.06 0.00 0.00 0.00 0.00 0.00 0.07 |
| 8 Mines and Plantations and the Movements of Peoples | AJS 1932 | Edgar T. Thompson | 0.00 0.00 0.00 0.00 0.00 0.73 0.00 0.00 |
| 9 Orbanization and Imiation: Lessons from the English Price 10 The Concept of Dominance and World-Organization | AJS 1984 | Jack A. Goldstone R. D. McKenzie | 0.00 0.00 0.00 0.00 0.02 0.12 0.01 0.10 0.00 0.0 |
| 11 Population | _ | Warren S. Thompson | 0.00 0.00 0.01 0.02 0.12 0.71 0.00 0.00 0.00 0.00 0.00 0.05 0.03 |
| 12 The Ecology of Indonesian Cities | _ | Nathan Keyfitz | 0.00 0.00 0.05 0.00 0.00 0.71 0.00 0.00 0.00 0.00 0.03 0.03 0.00 |
| 13 Innovation and the World-System Hierarchy: British Subjuga | _ | Denis O'Hearn | 0.00 0.00 0.00 0.00 0.03 0.71 0.18 0.02 0.00 0.00 0.00 0.01 0.04 |
| 14 Modes of Extraction, Unequal Exchange, and the Progressive | _ , | Stephen G. Bunker | 0.00 0.00 0.07 0.00 0.00 0.71 0.09 0.07 0.00 0.00 0.00 0.05 0.01 |
| 15 Natural Resources 16 The Social Origins of Agrarian Change in Late Medieval Fnd | AJS 1930 A IS 1994 | George Otts smith Rosemary I Hopgroff | 0.30 0.30 0.30 0.30 0.30 0.30 0.70 0.30 0.3 |
| 17 The Great City in Southeast Asia | _ | Norton S. Ginsburg | 0.00 0.00 0.00 0.00 0.00 0.00 0.70 0.00 0.00 0.00 0.00 0.00 0.00 |
| 18 The Conditions of Rural Life | _ | T. B. Manny | 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 19 The Need for a Population Policy in Japan | _ | Warren S. Thompson | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 20 Natural Resources | ` | George Otis Smith | 0.00 0.00 0.00 0.00 0.00 0.69 0.00 0.00 |
| 21 Rural Lite 22 The Origin and Growth of Hrhanization in the World | AJS 1928 | John M. Gillette Kingslav Davis | 0.23 0.01 0.00 0.00 0.01 0.00 0.68 0.00 0.00 0.00 0.00 0.00 0.00 |
| 23 Agrarian Reforms in the Far Fast | | H Boeke | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 24 Natural Resources | _ | George Otis Smith | 0.00 0.00 0.00 0.00 0.04 0.67 0.00 0.00 0.00 0.00 0.00 0.00 0.00 |
| 25 Rural Life | • | Carl Č. Taylor | 0.05 0.00 0.00 0.01 0.00 0.66 0.00 0.00 0.00 |
| 26 Natural Resources | | George Otis Smith | 0.00 0.00 0.00 0.00 0.00 0.06 0.00 0.00 |
| 27 Economic Structure of Rural Bengal: A Survey of Six Villag | ASR 1948 | Ramkrishna Mukherjee | 0.00 0.00 0.00 0.00 0.02 0.15 0.65 0.00 0.00 0.00 0.03 0.00 0.00 0.14 |
| 28 ropulation Fressure and the Founte of Westell Civilization 29 The Causes of Bural-Urban Migration a Survey of German The | _ | E. W. Holstee Budolph Heberle | 0.00 0.00 0.00 0.00 0.00 0.04 0.00 0.00 |
| 30 Natural Resources | | George Otis Smith | 0.00 0.00 0.00 0.00 0.00 0.64 0.00 0.00 |
| 31 The Political Economy of Food: The Rise and Fall of the Po | _ | Harriet Friedmann | 0.00 0.00 0.01 0.00 0.00 0.63 0.02 0.05 0.00 0.00 0.00 0.03 0.24 |
| 32 Urbanism in India | ` | Robert I. Crane | 0.00 0.00 0.00 0.00 0.05 0.63 0.00 0.00 0.03 0.00 0.08 0.21 0.00 |
| 33 Urbanism and Population Distribution in China | AJS 1951 | Fenton Keyes | 0.00 0.00 0.00 0.00 0.63 0.00 0.00 0.00 |
| 34 The Secondary Circuit of Capital Reconsidered: Globalizati | | J. L. Hypes Kevin Fox Gotham | 0.03 0.00 0.00 0.00 0.01 0.62 0.00 0.00 0.00 0.14 0.00 0.00 |
| 36 How Do People Transform Landscapes? A Sociological Perspec | AJS 2009 | Thomas K. Rudel | 0.00 0.00 0.01 0.00 0.00 0.61 0.02 0.07 0.00 0.00 0.01 0.13 0.14 |
| 37 The Relationship Between Population Growth and Economic De | ASR 1962 | Edward G. Stockwell | 0.00 0.00 0.00 0.00 0.36 0.61 0.00 0.00 0.00 0.00 0.00 0.00 0.0 |
| 38 Population Areas and Physiographic Regions in Canada | AJS 1927 | C. A. Dawson | 0.00 0.00 0.11 0.00 0.00 0.60 0.00 0.00 |
| 39 Economic Limits of International Resettlement | | Wilbert E. Moore | 0.00 0.00 0.00 0.00 0.00 0.59 0.00 0.00 |
| 40 Changing Food Habits of the Japanese in Hawaii 41 Population. Private Ownership. Technology, and the Standar | ASK 1945 AJS 1951 | Jitsuichi Masuoka William Fielding Ogburn | 0.00 0.00 0.00 0.00 0.19 0.58 0.02 0.00 0.00 0.00 0.00 0.00 0.00 |
| 42 Public Range Lands – A New Policy Needed | AJS 1916 | Romanzo Adams | 0.00 0.02 0.00 0.01 0.00 0.58 0.00 0.00 0.00 0.00 0.00 0.00 |
| 43 Recent Migration in the Soviet Union | - | Eugene M. Kulischer | 0.00 0.00 0.00 0.00 0.00 0.58 0.00 0.00 |
| 44 Why do Peasants Rebel? Structural and Historical Theories | | J. Craig Jenkins | 0.00 0.01 0.00 0.00 0.02 0.58 0.01 0.09 0.00 0.00 0.00 0.02 0.27 |
| 45 Economic Differences Among Rural Centers | ASR 1947 | Vincent Heath Whitney | 0.15 0.00 0.00 0.00 0.00 0.00 0.57 0.00 0.00 |
| 47 An Appraisal of China's Historical Population Data | _ | D: Lane, ivi. 3tullipp, iv. ivi. ivialsii Ta Chen | 0.00 0.00 0.00 0.00 0.00 0.57 0.00 0.01 0.00 0.00 0.00 0.00 |
| 48 The Irish Case of Dependency: An Exception to the Exceptio | _ | Denis O'Hearn | 0.00 0.00 0.00 0.00 0.26 0.57 0.07 0.00 0.00 0.00 0.00 0.00 0.10 |
| 49 Reply: Tales and Realities | ASR 1990 | Denis O'Hearn | 0.00 0.00 0.00 0.15 0.57 0.05 0.08 0.02 0.00 0.00 0.00 0.10 |
| 50 Population Trends in Japan | _ | Jesse F. Steiner | 0.00 0.00 0.00 0.08 0.12 0.56 0.00 0.00 0.00 0.00 0.00 0.01 0.00 |
| 51 Agrarian Conflict and the Origins of Korean Capitalism | AJS 1998 | Gi-Wook Shin | 0.00 0.01 0.00 0.00 0.00 0.55 0.03 0.04 0.00 0.00 0.03 0.06 0.27 |
| 52 The Why of Income 53 Agricultural Enterprise and Bural Class Relations | AJS 1913 | Scott Nearing Arthur L. Stinchcombe | 0.00 0.02 0.35 0.04 0.18 0.00 0.00 0.00 0.00 |
| 54 Economic Reasons for the Coming of the Mexican Immigrant | | Max Sylvius Handman | 0.00 0.00 0.00 0.00 0.01 0.55 0.00 0.00 |
| 55 Occupations | • | Ta Chén | 0.00 0.00 0.00 0.02 0.17 0.54 0.00 0.00 0.00 0.00 0.00 0.01 0.00 |
| 56 Housing in Vienna: A Socialistic Experiment | | Robert E. Chaddock | 0.00 0.00 0.00 0.01 0.00 0.54 0.00 0.00 0.00 0.00 0.00 0.01 0.00 |
| 57 Forces of Urban Centralization and Decentralization | AJS 1941 | Homer Hoyt | 0.17 0.00 0.00 0.00 0.00 0.00 0.54 0.00 0.00 |
| 59 Some Sociological Problems in the Work of FAO | • | Conrad Taeuber | 0.04 0.00 0.00 0.00 0.00 0.54 0.00 0.09 0.00 0.00 0.00 0.00 0.00 0.0 |
| 60 Farm Tenancy and Social Factors: A Study in Oklahoma | | Thomas C. McCormick, Ellen Barney | 0.11 0.00 0.00 0.00 0.00 0.53 0.00 0.00 0.12 0.00 0.18 |
| | | | |

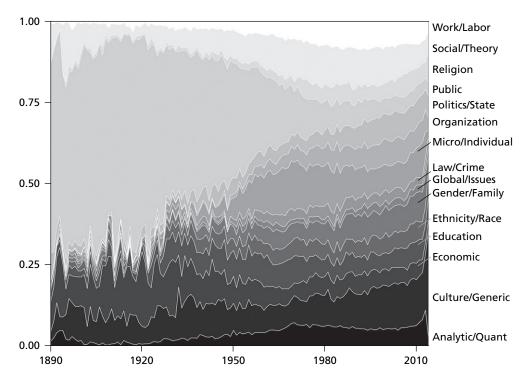


Figure 2 The relative shares of all 15 topics in sociology, 1890–2014

Notes: (a) Authors' calculations. (b) Annual average percentages of topic probabilities, calculated from all the articles. (c) The stacked graphs are ordered according to the order of the legend.

We take this evidence to be sufficient to support the first proposition about an identifiable economic topic in our corpus. This topic has been present since the birth of sociology and survived as an identifiable and singular topic through the last century. This finding is equally supported by earlier content analyses of main journals (Becker 1930, 1932; Kinloch 1988). This topic captures parts of the research in the sociology of work, industry, and organization which, in previous studies, constituted together between 10 and 15 percent of all ASA members between 1930 and 1960 (Simpson 1961) and more than 8 percent of research topics (McCartney 1970). Accordingly, we suggest that this topic corresponds to the field of classical political economy rather than the issues dealt with by contemporary economic sociologists.

Figure 2, displaying the stacked plot of all 15 topics, confirms that the ECON topic has developed into a sizeable topic over time. Much of the growth of both the ECON topic and all other specialized topics occurred at the cost of the initially dominant, then rapidly declining "public" topic. We interpret this finding as the ongoing process of professionalization and specialization. We identified the "public/sociology" topic as most heterogeneous, containing many of the topic areas of the early AJS that Andrew Abbott described as "a mishmash of would-be professional sociology, impassioned progressivist rhetoric, learned European argument, reports on local social problems, legislative programs, and who knows what else" (1999: 96). The number of non-sociological

topics and non-sociologist authors was continually narrowed down, and identifiable subdisciplines began to emerge (Shanas 1945; Abbott 1999: 85; Duncan/Duncan 1933). As the AJS is the main journal for the early period in sociology, the dominance and decline of the heterogeneous topic comes as no surprise and confirms existing manual AJS content analyses for the early period (Becker 1930, 1932). This trend is further fueled by the entry of more and specialized journals in the 1930s (Bannister 2008), especially the ASR, which was founded as an explicit counterpublication to AJS (Lengermann 1979), as was later the journal *Social Problems* (Henslin/Roesti 1976). In all these journals, the ECON topic is well represented.

Proposition 2 and 3: Prevalence and U-shape

Turning to the next propositions about economic sociology being the most vibrant field in sociology and its U-shaped development, we analyze the ECON's development in comparison with other disciplines and over time. To this purpose, Figure 3 displays the average annual probabilities with which we find the ECON topic. Figure 4 compares it to other major topics in our corpus. For the ECON topic, we also added standard deviation bars and linear estimates for the three major eras of economic topics, as identified by Swedberg (1997).

Invalidating the second proposition, we do not find that the ECON topic is relatively more dominant than other important topics such as organization, social theory, or culture. The organization topic, for instance, was virtually nonexistent at the beginning of the twentieth century and started to become increasingly frequent just before the 1950s. This fits well with Clegg and Bailey's historical description of the field, where organization studies emerged formally in the 1970s with the European Group for Organization Studies (2008). Even if organization studies is still described as being a vibrant and growing field, our model suggests that this topic reached a peak around the beginning of the twenty-first century. The work-labor topic, in turn, follows a similar trend, although it remained a couple of percentage points above the organization topic throughout the period of 1890 to 2000. The social theory topic has an interesting semi-U-shaped trajectory: during the classical era the likelihood that a random sociology article would be about theory was almost 20 percent; during the beginning of the hiatus era, this figure plummeted; then it rose throughout the entire postwar period. We note that the frequency of all four topics has been declining since the beginning of the twenty-first century, making room for the culture topic – more formally known as the cultural turn in sociology (Best 2007). This topic has been enjoying increasing interest since the 1980s and was experiencing an eruption of interest by 2010. This conforms to observations by Jacobs and Spillman (2005), who describe it as "one of the most influential trends in the humanities and social sciences in the last generation." Nonetheless, since our topic measure is a relative measure, an increase in one topic comes at the expense of the others. This is confirmed by the negative correlation between the topics (Table A-4, Appendix). By the 1960s, the ECON topic had also lost most of its importance in favor of the culture topic.

Economic topic likelihood (in percent) 0.2 0.1 New Economic Sociology Era Classical Era Hiatus - Dormant Era 0.0 1890 1920 1950 1980 2010

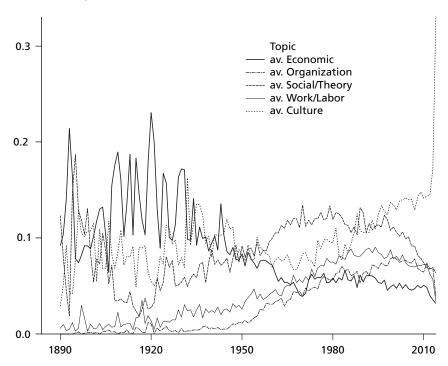
Figure 3 Relative share of ECON and other specialized topics

Notes: (a) Authors' calculations from the posterior of the topic-document distribution, often denominated θ . (b) The figure captures the average economic topic proportion for each year calculated from all the articles in the JSTOR data. (c) Simple linear models are fitted for each era (economic topic regressed on time, n=142,040) with 95%-confidence interval. (d) The raw one-quarter of standard deviation is overlayed. (e) The definitions of the three eras are taken from Richard Swedberg (1997).

The finding also invalidates the third proposition about ECON's historical development. The ECON topic increased in frequency during the classical era, in line with the customary view. But the model shows also that this topic has been declining ever since the peak it had during the classical era. We will conduct more formal statistical tests of this observation below. The strong fluctuations, especially during the earlier stages, are

Figure 4 ECON in comparison with other topics

The average article topic score likelihood (in percent)



not only linked with fewer articles per year; they have also been found in manually coded content analyses (Becker 1930, 1932). Moreover, journals diversify their topics over time, and they are subject to academic trends and fashion cycles (Bort/Kieser 2011). ¹⁶

Proposition 4: Gender

To test the gender proposition, we use authors' first names to infer their gender, a technique commonly used in onomastics and sociology (Culmont 2014). There is a small error margin due to androgynous names whose frequency is, however, negligible in our sample (Lieberson/Dumais/Baumann 2000). Moreover, not all cases can be used because some author information is missing, some authors use abbreviations only, and some names are not covered by the most complete US first name database provided by the US Social Security. For the 112,097 valid cases of first authors, we found positive correlations of male authors with the economic topic (r = 0.07) and the organization (0.01) and social-theory topic (0.09) and negative correlation with cultural (-0.12) and

¹⁶ The generally strong year-to-year fluctuations should make one cautious with regard to the many research designs that use only a single year to represent a decade or the general state of the discipline.

¹⁷ https://www.ssa.gov/oact/babynames/background.html, accessed on the January 3, 2016.

gender/family sociology (-0.23). This confirms the observation in the literature that economic topics have been written about more often by male authors. The result also suggests that the major increase of female authorship from less than 5 % to more than 35 % over the last century in our sample could be one of the reasons for the decline of economic topics and the rise of family, gender, and cultural sociology.

Proposition 5: Heterogeneity

To test the heterogeneity proposition about various topics within New Economic Sociology more specifically, we analyze the topic distributions of its key theoretical concept "embeddedness" and its central contributors. In spite of its curvilinear development (Krippner/Alvarez 2007; Beckert 2007; Gemici 2008), embeddedness is still the hallmark concept of the New Economic Sociology and can therefore serve as a proxy for this literature. Figure 5 depicts the distribution of the term embeddedness over the 15 topics. The x-axis represents the 15 topics and the y-axis the probability that the term embeddedness belongs to the given topic. We cannot confirm the above finding that research in economic sociology overlaps strongly with the ECON topic. The embeddedness term, in turn, scores highest on the organization, the social theory, and the cultural topics. This finding is the first hint about economic sociology's internal diversity, and the high scores for these topics might be associated with the strong ties the subdiscipline has with organizational theory, business schools, and theoretical writings about classics.

We also analyzed some of the central contributors to economic sociology to determine their *genetic topical features*. The heat maps in Figure 6 depict the topic distribution for five leading scholars, their articles, and topic distribution. This panel gives a detailed picture of all of the articles these scholars have in our JSTOR sample and their respective topic distribution.

It comes as no surprise that the topic model suggests that Richard Swedberg's work tends to be more theoretically oriented. Of his 19 articles in our JSTOR data, "Can There Be a Sociological Concept of Interest" is the most theoretical; with a topic proportion of 88 percent, it is the most topic-concentrated paper. As can be seen by the heat map, "Civil courage (Zivilcourage): The case of Knut Wicksell" is his most topic-diffuse paper. For Swedberg's 19 JSTOR articles, the average topic proportion is 60 percent in social theory, 10 percent in politics/state, 8 percent in economic. He has only 5 percent in organization. Interestingly, Patrik Aspers, one of the leading economic sociologists in Sweden (Azarian/Daoud/Larsson 2014), who was a Ph.D. student of Swedberg, scores exactly 60 percent in the social theory topic. He scores higher in the economic and organization topics than Swedberg does: 17 percent and 11 percent, respectively. This makes him fit somewhat better than Swedberg in the overall tendency exhibited in the New Economic Sociology, thus marking a general generational shift of the economic sociologists. Judging from our heat maps, the most diverse leading economic sociologists – when defined as those having the most articles and the most varied topic distribution – are Neil Fligstein, Paul DiMaggio, and Frank Dobbin.

Figure 5 The topic distribution of the term "embeddedness"

Note: (a) Authors' calculations from the posterior of the term-topic distribution, often denominated ϕ . (b) The bars show the importance of the term embeddedness for each topic.

Mark Granovetter's celebrated article "Economic Action and Social Structure" has a topic mix of 40 percent social theory, 36 percent organization, 11 percent public, 5 percent economic, and less than 0.01 percent work-labor. His own averaged mixture of the 11 JSTOR articles is similar but has less probability in the topics of social theory and organization and more in the analytics/quant topic (which derives in part from Harrison White's influence and Granovetter's own application of social network theory).

The mix between the topics of organization and social theory seems to be the defining genetic feature of the current state of the New Economic Sociology. We tested this further. Relying on a list of economic sociology by Convert and Heilbron (2007) and on authors from a recommended reading list (Beckert et al. 2015), we calculated the

Figure 6 A heat-map panel of economic sociologists and their topic distribution

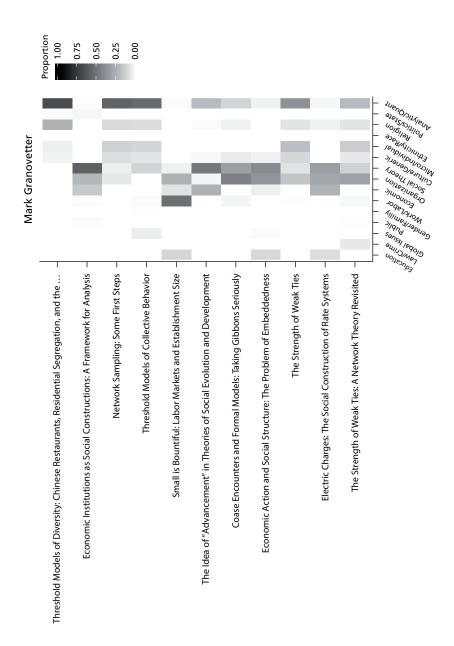


Figure 6, continued

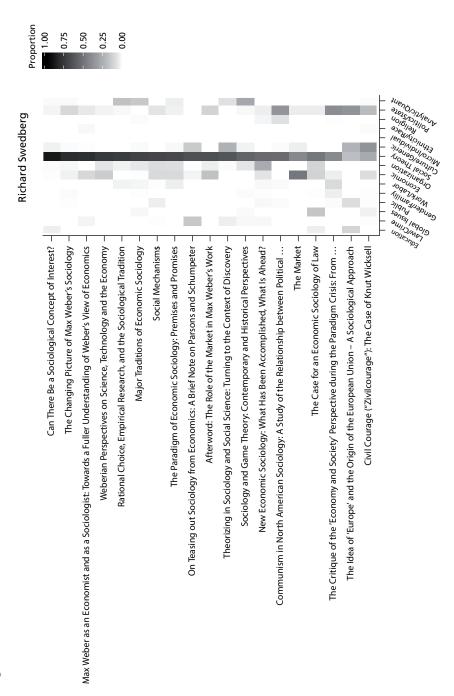


Figure 6, continued

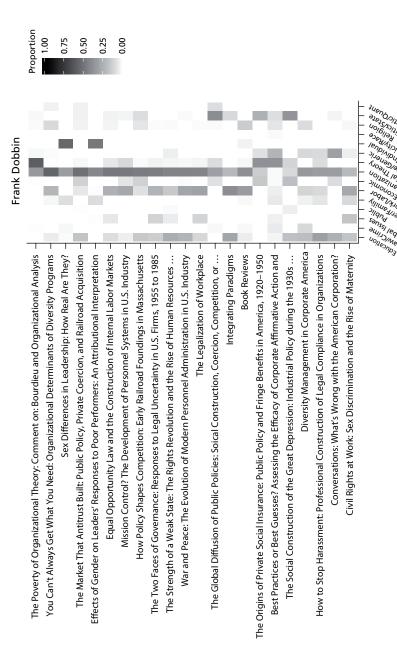


Figure 6, continued

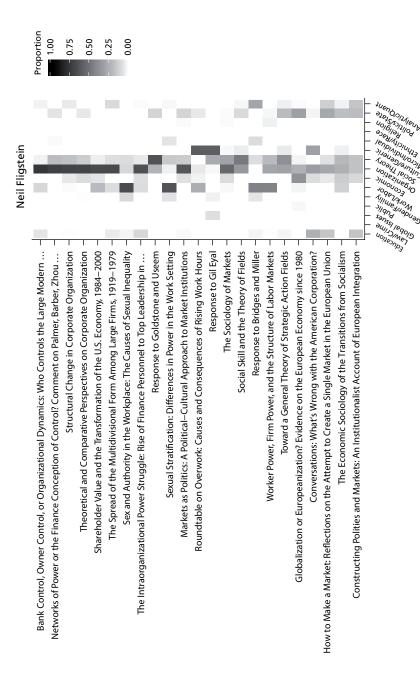
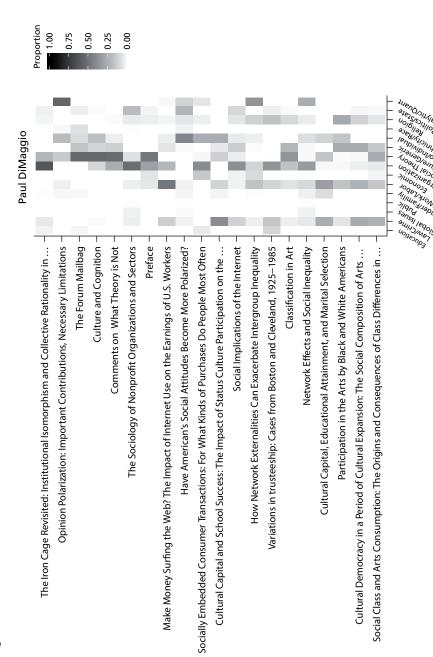


Figure 6, continued



average topic distribution of economic sociology more generally, see Table 3: 22 percent $(\pm 5.3\%)$ in social theory, 21.5 percent $(\pm 4.6\%)$ in organization, 9.8 percent $(\pm 2.2\%)$ in economic, 7.2 percent $(\pm 2.5\%)$ in work-labor, 6.2 percent $(\pm 1.7\%)$ in culture. The 95-percent confidence interval is in the parentheses. Simultaneously, an average sociologist publishing during the new economic sociology era (1985-2014) has an equivalent score of 5.1 percent $(\pm 0.1\%)$ on the economic topic; during the hiatus era (1920-1984), the same average sociologists would have a score of 7 percent $(\pm 0.1\%)$ and an even higher score during the classical era, 13.8 percent $(\pm 0.5\%)$. We calculated these confidence intervals with the help of a statistical bootstrapping method and based on the topic modeling results. This enables us to determine how certain we are about these numbers and to make group comparisons.

In summary, what produces a new economic sociologist is – somewhat surprisingly – not so much the focus on the economic topic, because economic sociologists have only 2.1 percent more than the average sociologist, measured during the era of the New Economic Sociology (1985–2014). Neither is it the work-labor topic: economic sociologists have 1.6 percent less than the average sociologist. What sets the economic sociologists apart from the rest of the sociologists is rather the emphasis of a topical mixture of organization and social theory. There are several deviations from these observations that are worth noting. For example, Viviana Zelizer's work has an average of 11.2 percent in the gender/family topic, which is higher than the average new economic sociologist that is at 1.2 percent. The fact that the new economic sociologists (and the classics) have ignored gender and family issues is well documented (England/Folbre 2005). Our model confirms this empirically. Zelizer's work has the lowest proportion in the organization topic (4%) along with Swedberg (5%). Granovetter's work tends to be more in the analytics/quant topic (25.2% compared with the average of 5.6%).

Multilevel model testing of Proposition 3

While the results so far have been inductively and descriptively driven by the topic model, we used multilevel models to deductively verify the time trends. This deductive approach also allows us to estimate the influence of specific journals and to control for article length. As our dependent variables, we used the ECON topic in the first model and the sum of the social theory and organization topics as a proxy for economic sociology or ECONSOC. The rationale behind including this second dependent variable is the following: even if economic topics (ECON), as found by our topic model, do not follow the hypothesized U-shape, this could still hold true for the topic-mix most closely represented by typical economic-sociology texts. We thereby grant that economic sociology might not be about topics captured by our topic model (captured by ECON) but by what economic sociologists are actually doing (captured by ECONSOC). We first turn to the ECON-regressions (Table 4).

¹⁸ We follow a formulation by Fourcade here: "We should perhaps simply and modestly say that today economic sociology is what economic sociologists do" (2007: 1018).

| \subseteq |
|----------------|
| ā |
| Ū |
| _ |
| ā |
| in pe |
| _ |
| .= |
| |
| 2 |
| ~ |
| 0 |
| := |
| ≒ |
| ≍ |
| -2 |
| |
| ب |
| .2 |
| \overline{c} |
| |
| |
| .= |
| \simeq |
| ō |
| + |
| ī |
| .= |
| the |
| _ |
| + |
| $\overline{}$ |
| \simeq |
| ⋍ |
| ar |
| S |
| Ţ |
| .2 |
| 0 |
| × |
| \simeq |
| 0 |
| .≃ |
| Ų |
| 0 |
| Ñ |
| U |
| .≃ |
| ┰ |
| ~ |
| O |
| \subseteq |
| onomic |
| ິ |
| ă |
| |
| > |
| 2 |
| <u>e</u> |
| Z |
| |
| |
| |
| |
| $^{\circ}$ |
| (1) |
| e 3 |

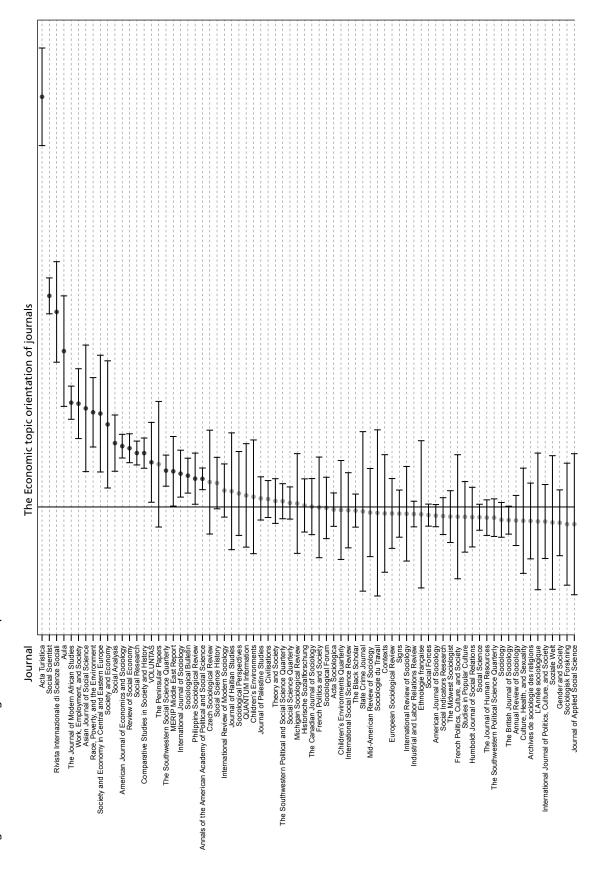
| Table 3 New economic sociologists and their topic distributions in percent | ic sociole | ogists and | their topi | c distribut | ions in per | cent | | | | | | <i>3</i> 2, | 101 | | | |
|--|------------|------------|------------|-------------|----------------|----------------|------------|----------|----------------|---|------------------|-------------|-----------|-------------|--|-----------|
| Staying. | SPILL | 3/19/14 | GOISESUPS | SUIJ Me | Sonstille dolo | Silute Hisphes | Toge TALON | 3/HOHOJÝ | holdesine of o | Tooly Jepos | allego Petriling | ONIDONO SIN | AOIDIISA | Ded William | of State of the st | enontheir |
| Alejandro Portes | 54 | 3.9 | 9 | 6.0 | 3.2 | 1.4 | 12.1 | 6.7 | 3.9 | 11.6 | 1.6 | 11.7 | 0.1 | 24.9 | 9 | 5.9 |
| Andrea Maurer | 0 + | c | | c | , | c | | o c | 7 ((| 9 | | c | | | , | |
| Arithorny S. Alvarez Brish 1177: | | 1.0 | 0.0 | 0.0 | - 0 | 0.0 | 13.6 | 0.0 | 52.7 | 00 | 0.0 | 0.0 | 0.0 | ر ان د | 7.0 | 6.5 |
| Bruce Carruthers | - 2 | 10.7 | t C | 2. 4. | 0.0 | 0.1 | 4.0 | 23.6 | 16.8 | 15.1 | 4.7 | 0.6 | 0.0 | 3.0 | 15.9 | 6.7 |
| Carlo Trigilia | · – | 0.0 | 0:0 | i | 22.8 | 0.0 | 9.7 | 19.8 | 16.6 | 7.3 | 0.0 | 0.0 | 0:0 | 3.7 | 18.1 | 2.0 |
| | 0.0 | | | | | | | | | | | | | | | |
| Charles Smith | 29 | 21.1 | 5.9 | 4.8 | 0.2 | 1.9 | 4.3 | 0.9 | 6.2 | 11.8 | 11.7 | 8.8 | 4.8 | 7.1 | 3.7 | 1.6 |
| Christoph Deutschmann David Stark | 12 | 2.9 | 1.6 | 0.0 | 0.1 | 1.1 | 13.5 | 8.5 | 29.7 | 10.7 | 2.1 | 1.6 | 0.1 | 1.2 | 20.3 | 6.6 |
| Dirk Baecker | . 0 | | | | | | | | | | i | | | ! | | |
| Frank Dobbin | 22 | 12.6 | 1.0 | 5.6 | 0.3 | 2.1 | 14.4 | 3.9 | 35.3 | 9.0 | 4.2 | 4.8 | 0.1 | 2.7 | 6.4 | 0.7 |
| Frank Romo | 0 , | | | | | , | | 1 | 1 | 1 | L | | , | 1 | 7 | |
| Fred Block | 12 | 4.1.4 | 0.7 | 0.8 | 1.0 | 0.L | 7.9 | 17.5 | 5.7 | 71.7 | 0.0 7.3 | 0.0 | 1.7 | 7.7 | 3.2 | 0.6 |
| Gertraude Mikl-Horke | 2 0 | 0.0 | - | 7.0 | 0.1 | ÷ | 0.0 | 2.2 | 2.6 | <u>, </u> | r: r | | <u>:</u> | 0.0 | 3.5 | 2 |
| Greta R. Krippner | 4 | 6.7 | 0.0 | 0.1 | 1.7 | 0.1 | 9.9 | 19.9 | 21.4 | 31.9 | 1.0 | 0.0 | 0.0 | 8.0 | 0.6 | 0.8 |
| Harrison C. White | 20 | 2.5 | 0.7 | 0.1 | 0.5 | 8.0 | 4.4 | 4.7 | 15.2 | 18.5 | 11.5 | 4.2 | 0.3 | 1.9 | 1.0 | 33.7 |
| Ivan Light | 7 | 7.4 | 1.3 | 5.9 | 0.1 | 0.3 | 14.1 | 11.8 | 4.0 | 11.2 | 7.2 | 0.2 | 0.5 | 28.1 | 5.6 | 2.0 |
| James Coleman | 1 00 | 6.1 | 24.5 | 2.4 | 0.0 | 0.5 | 9.7 | 4.3 | 2.7 | 0.0 | 0.4 | 11.1 | 0.3 | 4.3 | 2.9 | 30.9 |
| John F Paddett | \ 0 | 0.1 | 0.3 | <u></u> | 7:0 | 0.0 | 3.4 | g.5 | 71.6 | 46.3 | 0.0 | <u></u> | 0.0 | 7.0 | 9.0 | 6.7 |
| Laurel Smith-Doerr | m | 0.0 | 8.2 | 0.0 | 0.0 | 1.5 | 11.9 | 0.4 | 57 | 7.9 | 8.3 | 0.8 | 0.0 | 0.0 | 0.0 | 3.9 |
| Laurent Thvenot | 2 | 0.0 | 2.2 | 0.0 | 29.6 | 0.0 | 6.3 | 1.3 | 5.0 | 37.9 | 3.2 | 1.1 | 0.0 | 0.0 | 10.4 | 3.0 |
| Linda Brewster Stearns | 12 | 7.7 | 0.0 | 2.8 | 0.0 | 0.1 | 9.3 | 5.8 | 46.9 | 1.4 | 0.5 | 1.6 | 0.0 | 12.7 | 4.8 | 6.4 |
| Luc Boltanski | 7 | 8.4 | 2.3 | 0.0 | 16.3 | 0.0 | 1.6 | 4.3 | 17.9 | 23.3 | 10.2 | 0.0 | 0.3 | 0.0 | 9.3 | 6.1 |
| Marian Foundar | 5 0 | , (| 10 | G | 0.7 | | 7-7 | 15.0 | 2.6 | 100 | , , | 5 | 9 | 5 | ,,, | 0 |
| Mark Granovetter | 11 | 2.8 | 0.5 | 0.5 | 0.1 | 0.0 | 5.4 | 7.0 | 19.4 | 23.1 | 4.2 | 5.7 | 0.0 | 5.9 | 0.3 | 25.2 |
| Mark Lazerson | 2 | 2.9 | 0:0 | 0.0 | 13.8 | 0.4 | 10.2 | 32.1 | 34.4 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 |
| Marshall Meyer | 15 | 12.4 | 4.0 | 4.1 | 0.0 | 0.0 | 5.8 | 9.0 | 35.8 | 10.2 | 1.7 | 4.0 | 0.0 | 1.7 | 3.9 | 15.7 |
| Mauro F. Guilln | 12 | 8.0 | 1.2 | 0.0 | 2.5 | 0.0 | 5.7 | 10.4 | 41.1 | 8.4 | 4.5 | 2.0 | 0.1 | 9.0 | 15.7 | 6.9 |
| Michael Schwartz | 22 | 10.3 | 3.2 | 2.6 | 0.0 | 5.6 | 3.4 | 5.2 | 21.5 | 7.0 | 9.9 | 11.3 | 5.4 | 9.0 | 6.4 | 8.8 |
| Milan Zafirovski | 7 1 | - 0 | 0.0 | 0.0 | 2.4 | 0.0 | 3.1 | 2.5 | 1.6 | 50.4 73.5 | 10.7 | 0.0 | 1.4 | 0.0 | n ~ | 7.9 |
| Mitchel Abolafia | <u>-</u> | 10.4 | 0:0 | 1.3 | 0.0 | 0.0 | 0.0 | 24.9 | 48.3 | 6.3 | 6.3 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 |
| Neil Fligstein | 23 | 4.0 | 0.0 | 0.4 | 0.1 | 1.2 | 13.6 | 5.5 | 38.0 | 17.5 | 7.2 | 0.7 | 0.0 | 0.3 | 7.7 | 3.9 |
| Neil Smelser | 7 | 3.7 | 5.1 | 0.7 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 65.4 | 9.6 | 0.0 | 0.0 | 9.0 | 14.3 | 0.0 |
| Nicole W. Biggart | 77 | 11.8 | 0.1 | 0.4 | 0.5 | 7.0 | 0.5 | 11.3 | 33.5 | 78.0 | 9.9 | 0.0 | 1.0 | 6.0 | 9 | 0.1 |
| Nina Bandeli | o / | 0.0 | 3.2 | 0.7 | 0.0 | 0.0 | 8.1 | 11.2 | 27.7 | 10.6 | 14.8 | 1.8 | 0.0 | 1.6 | 16.9 | 3.3 |
| Patrick McGuire | m | 7.1 | 9.8 | 0.3 | 0.0 | 0.0 | 2.7 | 15 | 13.7 | 32.7 | 0.0 | 4.6 | 0.0 | 9.3 | 5.2 | 0.8 |
| Patrik Aspers | 6 | 0.0 | 0.5 | 0.0 | 0.1 | 0.1 | 1.4 | 17.4 | 11.1 | 8.65 | 5.5 | 0.1 | 0.1 | 0.1 | 1.4 | 2.4 |
| Paul DiMaggio | 18 | 1.2 | 9.6 | 0.4 | 0.0 | 1.3 | 11 | 1.6 | 20.1 | 16.1 | 8.3 | 11.2 | 0.7 | 6.5 | 4.0 | 7.8 |
| Paul Hirsch | 17 | 5.3 | 2.8 | 6.1 | 0.0 | 10.1 | 5.1 | 3.7 | 27.8 | 23.6 | 15.2 | 1.6 | 0.0 | 2.3 | 3.5 | 2.8 |
| Reinhold Hedtke | 0 | 0. | 0.7 | 6.0 | 0.0 | 0.01 | 24.7 | - | <u>v.</u> | 4.7 | t. Ci | 7.7 | 0.0 | D.C | 0.0 | - 0 |
| Richard Swedberg | 19 | 1.1 | 1.5 | 1.3 | 0.8 | 0.4 | 1.2 | 8.1 | 4.6 | 0.09 | 0.9 | 0.0 | 0.1 | 9.0 | 10.2 | 4.1 |
| Roger Friedland | 17 | 2.9 | 9.0 | 0.1 | 0.1 | 0.7 | 8.8 | 5.7 | 28.1 | 11.4 | 3.4 | 6.0 | 6.7 | 12.2 | 13.5 | 4.9 |
| Sarah Babb | 9 | 9.4 | 0.4 | 0.5 | 2.3 | 0.0 | 3.5 | 21.6 | 9.5 | 11.7 | 4.0 | 0.4 | 0.4 | 2.4 | 33.7 | 0.4 |
| Trevor Pinch | 4 (| 2.8 | 0.1 | 2.2 | 0.0 | 6.0 | 0.0 | 11.8 | ος (ος (| 27.5 | 28.4 | 2.8 | 0.0 | 0.0 | 0.0 | 14.6 |
| Walter W. Powell | 10 | 8.0 | × .00 | 0.2 | 0.0 | 0.3 | 4.5 | 5.3 | 50.7 | 10.0 | 9.0 | 0.0 | 0.2 | 2.9 | 1.5 | 5.0 |
| Wayne Baker Victor Nee | 16 | 4.0 | 7.1 | 3.0 | 7.0 | 1.4 | 20.6 | | 140.1 | 0.7 | 3.0 | 6.0 | 0.0 | 16.8 | 11.5 | 9.9 |
| Viviana Zelizer | 2 00 | 12.8 | 0.1 | 1.9 | 0.5 | 11.2 | 3.0 | | 4.1 | 33.5 | 18.8 | 0.0 | 0.4 | 0.5 | 1.7 | 0.4 |
| | 9.8 (2.7) | 5.2 (1.5) | 2.6 (1.2) | 1.3 (0.5) | 2.4 (1.8) | 1.2 (0.9) | 7.2 (2.5) | (5) | 21.5 (4.6) | 22 (5.3) | 6.2 (1.7) | 2.6 (1) | 0.7 (0.4) | 4.1 (1.8) | 7.7 (2.1) | 5.6 (2.2) |
| | | | | | | | | | | | | | | | | |

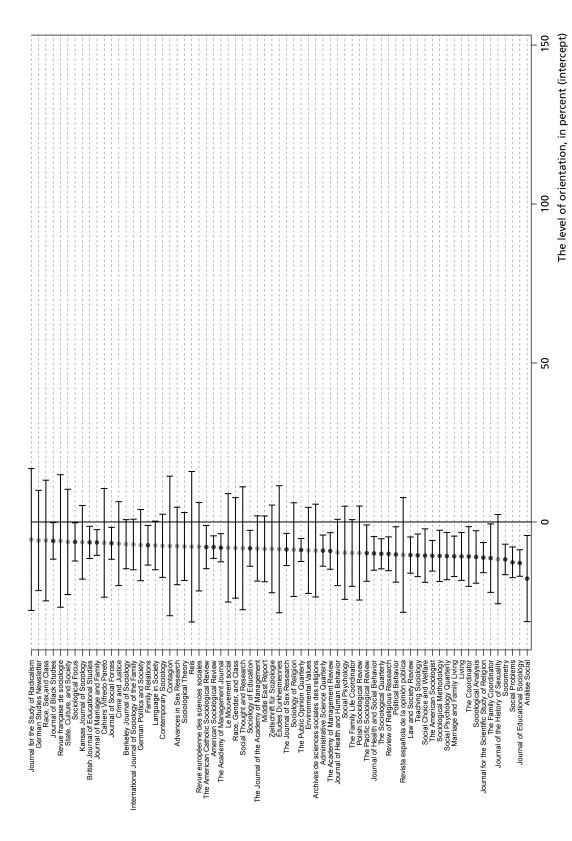
Table 4 Multilevel regressions on ECON

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|------------|------------|--------------------------------------|---------------|---------------|-------------------|--------------------|
| Intercept | 6.47*** | | | 11.62*** | 5.51*** | 3.18 | -1.14 |
| Era1890to1920 | (0.79) | 13.46*** | 7.57*** | (1.65) | (1.80) | (1.85) | (1.83) |
| Era1921to1985 | | 6.66** | 12.92*** | | | | |
| Era1986to2014 | | 5.71** | 5.31** | | | | |
| Pagelength | | 0.03** | (50.1) ***90.0 | 0.04** | 0.05*** | 0.05 | 0.05*** |
| Era1890to1920slp | | (0.00) | 0.29** | (0.00) | (0.00) | (0.00) | (0.00) |
| Era1921to1985slp | | | (0.02) -0.13*** | | | | |
| Era1986to2014slp | | | (0.0 <i>2)</i> -0.07*** (0.02) | | | | |
| Years | | | | ***90.0- | 0.07*** | 0.36*** | 0.91*** |
| Years2 | | | | (0.01) | (0.02) | (0.03) | (0.05) |
| Years3 | | | | | (0.00) | (0.00) ***00.0 | (0.00) 0.00** |
| Years4 | | | | | | (0.00) | (0.00) ***00.0- |
| RP2.var.Intercept | 87.23 | | | 329.02 | 327,96 | 347,71 | 328,55 |
| RP1.var.Intercept | 144.21 | 142.85 | 142.85 | 140.92 | 140.84 | 141 | 140.44 |
| DIC | 1069404.25 | 1068280.62 | 1068371.12 | 1066457.75 | 1066381.75 | 1066160.50 | 1065989.12 |
| LogLikelihood | -534702.12 | -534140.31 | -534185.56 | -533228.88 | -533190.88 | -533080.25 | -532994.56 |
| Journal | 143 | 143 | 143 | 143 | 143 | 143 | 143 |
| Articles RP2.var.Era.1921to1985 | 136843 | 136843 | 136843 | 136843 | 136843 | 136843 | 136843 |
| RP2.cov.Era.1921to1985.Era.1986to2014 | | 90.56 | 000 | | | | |
| RP2.var.era.1980t02014 RP2.var.Era.1921t01985.slp | | 84.92 | 0.05 | | | | |
| RP2.cov.Era.1921to1985.slp.Era.1986to2014 | | | 2.82 | | | | |
| RPZ.cov.Era. 192 Ito 1985.SIp.Era. 1986to20 14.SIp RPZ.cov.Era. 1986to2014.Era. 1986to2014.SIp | | | -0.03 -1.56 | | | | |
| RP2.var.Era.1986to2014.slp | | | 0.03 | | | | |
| RP2.cov.Intercept.Years RP2.var.Years | | | | -1.71 0.01 | -1.72 0.01 | -1.86 0.01 | -1.72 0.01 |
| | | | | | | | |

***p < 0.001, **p < 0.01, *p < 0.05. Economic topic is the dependent variable in all models. Estimated with R2MLwiN and MLwiN 2.32, IGLS.

Figure 7 Journal ranking of the intercept in ECON's model 7





in estimating the Economic topic (model 7). (c) Journals above the zero-line are more economically oriented than journals below the zero-line. Journals at the zero-line have an average economic orientation. Notes: (a) Authors' calculations. (b) The caterpillar plot is based on the multilevel modeling estimation. It depicts the intercept residual rank of the 143 journals included

Model 1 partitions the variance into the between-journal (RP2.var.Intercept) and with-in-journal (RP1.var.Intercept) scores. Potential journal variables are, for instance, the editors, the editorial board, or past-topic history. Journal variables are characteristics of the journal that apply to every article within the journal. Article-level variables are the publication date, authors' characteristics (e.g., gender, age, affiliation, funding), page length, citation, and other bibliometric characteristics. What we show here is the relative importance of each level.

For the ECON topic, we found 37.7 percent variance at the journal level. This shows that our results depend less on the selected journal corpus than on what happens at the article level. The Appendix (Figure A-2) presents details on the different contributions to the model results and thereby shows that the deviation of each journal across the average trend (the zero-line; Figure 7).

Model 2 shows that the discipline of sociology had, on average, a 13.46 percent ECON share during the classical era (Era1890to1920), 6.66 percent during the hiatus era (Era1921to1985), and somewhat less, 5.71 percent, during the era of New Economic Sociology (Era1986to2014). Model 3 shows that, by the beginning of the classical period, the average sociology article had 7.57 percent ECON share, which increased by 0.29 percent every year until 1920 (Era1890to1920slp). By then, the average article featured an ECON share of 12.92 percent, which then decreased by –0.13 percent until 1985 (Era1921to1985slp). After the publication of Granovetter's article in 1985, the decreasing trend still continued (Era1986to2014slp), albeit at a shallower rate (–0.07%). This shows that the discipline of sociology has been gravitating toward a decrease in the ECON topic. These results account for page length of articles and journal clustering.¹⁹

Thus, the U-shape curve cannot be considered the best theory of the history of economic topics in sociology. In models 4 through 7, we therefore try to estimate polynomial curves with a closer fit to the actual data. With a superior log-Likelihood, we found that a fourth degree polynomial presents the best fit for ECON. Its result is depicted in Figure 8. This figure shows that the sociology discipline reached an ECON-peak already in 1923 and has found itself in a decreasing trend ever since. The model estimates a slowdown in this depreciation around the period between 1970 and 1990, with a further acceleration of the depreciation after this period. Although we find a decreasing trend, this slowdown might be due to the appearance of the New Economic Sociology.

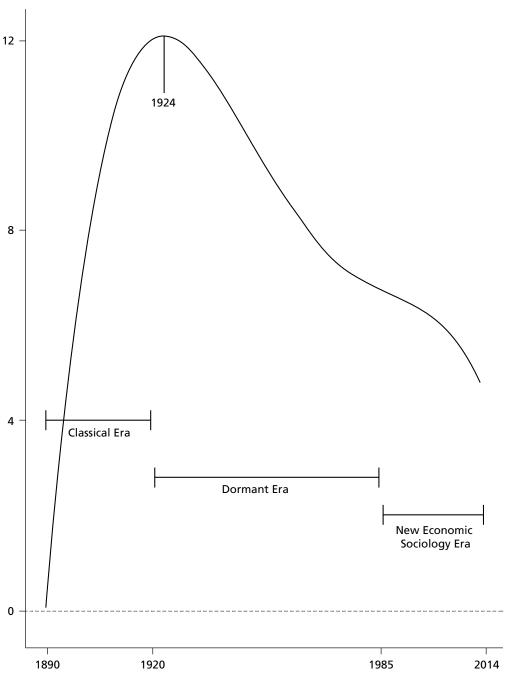
We now turn to testing proposition 3 for the ECONSOC in a manner that parallels that of the ECON topic. The estimated seven models produce the results shown in Table 5.

¹⁹ The page length of articles falls from about 20 pages to 11–12 pages around 1940 and rises again to about 15 by the 2000s.

²⁰ A fifth degree polynomial results in a worse fit with a log-Likelihood of –584718.1.

Figure 8 Estimated trend of the ECON topic





Model 1 decomposes the variance into the variations of between-journal (RP2.var.Intercept) and within-journal (RP1.var.Intercept). This model shows that we have 36.6 percent of the variation between journals and the rest within them (between articles in the same journal). This model also has a superior log-Likelihood (–587256.19) over

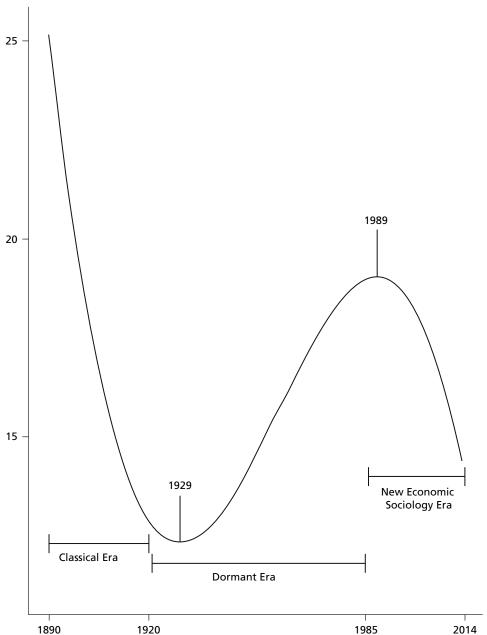
Table 5 Multilevel regressions on ECONSOC

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|------------|-----------------|--------------------|------------------|-------------|--------------------|------------|
| Intercept | 17.16*** | | | 22.22*** | 21.46*** | 25.56*** | 25.36*** |
| Era1890to1920 | | 5.64*** | 12.84*** (0.73) | | | | |
| Era1921to1985 | | 17.17*** (1.16) | 5.17*** | | | | |
| Era1986to2014 | | 17.47*** | 20.50*** (1.40) | | | | |
| Pagelength | | -0.00 | -0.03*** | -0.01* (0.01) | -0.01*** | -0.02*** | -0.02*** |
| Era1890to1920slp | | | -0.36*** | | | • | |
| Era1921to1985slp | | | 0.25*** | | | | |
| Era1986to2014slp | | | _0.15*** (0.04) | | | | |
| Years | | | | -0.04 | -0.02 | -0.75*** | -0.73*** |
| Carco | | | | (0.03) | (0.04) | (0.04) | (0.08) |
| cal 32 | | | | | (0.00) | (0.00) | (0.00) |
| Years3 | | | | | | -0.00*** (0.00) | **00'0- |
| Years4 | | | | | | | (0.00) |
| RP2.var.Intercept | 179.23 | | | 1078.42 | 1073.24 | 918.25 | 918.21 |
| RP1.var.Intercept | 310.87 | 304.29 | 299.72 | 300.29 | 300.29 | 298.85 | 298.85 |
| | 11/4512.38 | 11/1835.00 | 1169928.88 | 11/0138.50 | 11/0138.00 | 1169464.88 | 1169464./5 |
| Logrikeliilood | -30/236.19 | 00.719000- | -304964.44 | -303009.23 | -3630695.00 | -304/32.44 | -304/32.30 |
| articles | 136843 | 136843 | 136843 | 136843 | 136843 | 136843 | 136843 |
| RP2.var.Era.1921to1985 | | 170.08 | | | | | |
| RP2.cov.Era.1921to1985.Era.1986to2014 | | 162.51 | | | | | |
| RP2.var.Era.1986to2014 | | 198.83 | 254.07 | | | | |
| RP2.var.Era.1921to1985.slp | | | 90.0 | | | | |
| RP2.cov. Era. 1921 to 1985. slp. Era. 1986 to 2014 | | | 3.74 | | | | |
| RP2.cov.Era.1921to1985.slp.Era.1986to2014.slp | | | -0.04 | | | | |
| RF2.cov.era.1900(02014.6ra.1900(02014.5rp RP2.var.Fra.1986to2014.slp | | | 0.11 | | | | |
| RP2 cov Intercept Years | | | | 18 80 | -8.75 | -7 34 | -7 34 |
| RP2.var.Years | | | | 0.09 | 0.09 | 0.07 | 0.07 |
| | | | | | | | |

***p < 0.001, **p < 0.01, *p < 0.05. The sum of the organization and social theory topics is the dependent variable in all models. Estimated with R2MLwiN and MLwiN 2.32, IGLS.

Figure 9 Estimated trend of the ECONSOC topic

Organization and Social/Theory in percent



a single level model (-618039) (not shown in the table). In model 2 and 3 of Table 5, we provide a formal test for the third proposition regarding the U-shaped economic orientation of the discipline of sociology. In model 2 we estimate the average level of the ECONSOC topic. On average, during the classical era between 1890 and 1920, a random sociology article had a 5.64 percent share of ECONSOC. During the intermediary era (1921 to 1985), this topic mix was 17.17 percent on average. During the new

economic sociology era from 1985 onwards, ECONSOC rose to 17.47 percent, which was not significantly different from the hiatus era. Therefore, these observations do not support the third proposition, again controlled for page length and journal clustering.

Another way of looking at the phenomenon is captured by model 3, which includes the trends within each era. At the very beginning of the classical era (around the year 1890), the average sociology article had a 12.84 percent ECONSOC share. The trend within this era (Era1890to1920slp), however, was that the topic mix decreased every year by 0.36 percent. At the start of the intermediary era, the average sociology article is estimated to have had an ECONSOC share of 5.17 percent. The trend (Era1921to1985slp) was an increase of about 0.25 percent every year. This led to an average estimated ECONSOC topic share of 20.50 percent by the beginning of the new economic sociology era. During this era (Era1986to2014slp), the trend again decreased by -0.15 percent every year. Therefore, this model also does not support the third proposition.²¹

The two previous models were constrained to test the level and the trend of a particular topic, with three cut-points (splines). Again, the U-shaped curve does not present the adequate form to capture the ECONSOC trend. Therefore, in models 4 through 7, we fit various polynomial models to the data in order to assess the best functional form of the trend more freely. Comparing the log-Likelihood of these four models, we can see that model 6 (a third degree polynomial function) has the best fit to the data, namely 1169464.88. Figure 9 captures the estimated trend of model 6. This graph tells us that the low point of the ECONSOC topic occurred in 1929 and that the peak occurred by 1989.²² After that, we enter a period of stagnation or even depression – only future data will tell if this is merely a temporary glitch or a permanent trend.

5 Discussion and conclusions

We started out with five propositions characterizing the conventional view on economic sociology today, specifically that it is said to focus on distinctly economic topics, to be the most vibrant field in sociology, to have a U-shaped trajectory, to be male dominated, and internally diverse. We show in this study that an economic topic, ECON,

We tested also for an explicit Within-Between Random Effect estimation as suggested by Bell and Jones (Bell/Jones 2014). We find little evidence for a between-effect with regards to this time variable. This means that we are getting a precise fixed-effect estimator. Using a random effect model instead of a fixed effect model allows us to estimate the within-effect but also estimate the between-journal variance.

²² It should be mentioned that we fitted the same polynomial models as in models 4 through 7 but by letting more slopes vary. Some of these models do improve the fit (log-Likelihood and DIC) but often result in model nonconvergence – most likely due to the unbalanced nature of the data.

exists as a singular topic in sociology, distinct from other topics in sociology. However, our analysis does not find it to be of the expected importance that the conventional story makes us believe. It was important during the classical period, but its relevance has declined ever since. It also turns out that economic sociologists are not promoting this topic as much as they are the topic mix of organization and social theory, which we call ECONSOC. The polynomial regression suggests that, if there is a U-shaped trajectory for ECONSOC, it then all started a bit earlier: with the low point occurring in 1929 and the high point in 1989. This means that the overall take-off of this topic already occurred during the Parsonian era. Still, our findings also suggest that this topic mix went into decline just four years after the publication of the celebrated 1985 article by Granovetter that marks the beginning of the new economic sociology era.

One of the main thrusts of our paper is to show that the self-understanding of economic sociology conflicts with the actual prevalence of economic topics as found by our analysis. In our study, we stick closer to what sociologists actually do instead of what they claim they do. The dearth of economic topics that is often maintained about the pre-1980 period has been contradicted by our empirical analysis. Previous sociology had talked about economic phenomena, even if it might be true that they did not do so under one coherent heading or movement. After all, this is a topic-based history of sociology, not an institutional or theory history of the discipline. While sociologists, in practice, talked about the economy, it might also still hold that dominant theories did not attribute much importance to economic elements in their theories (Baurmann 2001: 380). Finally, the different self-understanding of economic sociologists might also stem from the fact that the number of journals and articles across the fields has exploded over the past decades, just as the number of researchers and the importance of journals has increased. The perceived absolute rise of these article numbers in economic sociology is undeniable, but the importance of the discipline diminishes once we compare its relative importance to other disciplines. This supports the view that subdiscipline histories might have lost touch with the development of sociology at large.

As it turns out, what economic sociology itself would consider as some of the core texts and authors of their discipline are actually much more pervaded by dominant themes other than economic ones. Thus, the strong presence of organization topics inherited from neo-institutionalism, of quantitative topics from network analysis, and of social theory from post-Parsonian debates show both the heterogeneity of approaches in economic sociology and its roots in other topic areas. On average, a new economic sociologist contributes about 9.8 percent ($\pm 2.2\%$) to the ECON topic, while she contributes 21.5 percent ($\pm 4.6\%$) to the organization topic²³ and 22 percent ($\pm 5.3\%$) to the social theory topic. At the same time, an average sociologist publishing during the New Economic Sociology era (1985–2014) has an equivalent score of 5.1 percent ($\pm 0.1\%$)

Organizational sociology has been a booming field ever since WWII (Scott 2004). It differentiated itself from other fields and developed into a field with its own journals, professional groups (Augier/March/Sullivan 2005), and ever denser citations of its own concepts (Bort/Schiller 2011).

pertaining to the ECON topic; during the hiatus era (1920–1984), the same sociologist would have a score of 7 percent ($\pm 0.1\%$). She would have an even higher score during the classical era, 13.8 percent ($\pm 0.5\%$). Thus, empirically oriented political economy researchers are the propellers of ECON, not the new economic sociologists.

In this sense, the article finding can also be read positively as an invitation to sociologists to look across disciplines and narrow key-term searches for common topics in sociology. As it turns out, many economic topics, such as occupational sociology, existed even in the Parsonian era. Although sometimes mentioned (Aspers/Dodd/Anderberg 2015), they are excluded from what is perceived now as the common canon of economic sociology, despite the fact that they were relatively more important in their era than economic sociology is today.

The findings of this study are, of course, restrained by the data limitations which we initially mentioned: English-centeredness, a restricted sample of journals, and no books. We presented a plausible argument why we do not consider our findings to be distorted by this, at least not within the field of English-language sociology. All of these limitations can, in principle, be overcome in future studies. Other article-providing platforms such as EBSCO can be used to complement the JSTOR data; individual journals and additional volumes can be added to the corpus to see whether this changes any of the results. More book reviews published in other journals can offer initial insights into the topics of the reviewed books, and the ongoing digitalization of ever more sociology books will also make it possible to extend the journal corpus into the book area. The study can be replicated for other languages as well, although the mix of several languages within one topic-model is problematic.

With regard to the explanatory side, more meta-data can be extracted from the text data or even taken from other external sources to add more control and explanatory variables into our models. This offers a virtually unexploited field of future research, linking precise topics with collaboration networks, university affiliations, researchers' careers, etc. Much of the work done in bibliometrics on the basis only of titles or abstracts can now be refined by a larger basis of textual data.

The topic-model results can also be employed for academic purposes other than the description and explanation of topic trends: journals can better situate themselves in the academic landscape, can better describe their topic mix over time, and use this information in the selection of new contributions. Authors, in turn, can use the model results in their literature searches of new topics, thus conducting a content-based search rather than a discipline-based one, as is often implicitly done. They can find out about articles that are close to their own contributions topic-wise and thus discover commonalities beyond disciplinary boundaries.

Appendix

| Tables | | |
|---------|--|-----|
| A-1 | Journal description | -45 |
| A-2 | Top 60 public-oriented articles in the AJS and the ASR | 46 |
| A-3 | Top 60 organization-oriented articles in the AJS and the ASR | 47 |
| A-4 | Correlations between topics | 48 |
| | | |
| Figures | | |
| A-1 | Article development over time | 49 |
| A-2 | Journal ranking by deviation from slope of ECON model 7 50- | -51 |

Table A-1 Journal description

| | Journal | Coverage | Articles | Average pag |
|---|--|-----------|----------|-------------|
| | Acta Sociologica | 1955–2013 | 1,061 | 14.6 |
| | Acta Turistica | 1989–2011 | 225 | 19.8 |
| | Administrative Science Quarterly | 1956–2012 | 1,471 | 20.7 |
| | Advances in Sex Research | 1963–1963 | 28 | 8.8 |
| | American Journal of Economics and Sociology | 1941–2013 | 3,101 | 13.9 |
| | American Journal of Sociology | 1895–2014 | 5,333 | 13.7 |
| | American Sociological Review | 1936–2013 | 5,303 | 11.6 |
| | Annals of the American Academy of Political and Social Science | 1890–2013 | 13,424 | 10.6 |
| | Annual Review of Sociology | 1975–2012 | 798 | 24.2 |
| | Anlise Social | 1964–2014 | 66 | 24.1 |
| | Archives de sciences sociales des religions | 1974–2008 | 99 | 17.9 |
| | Archives de sociologie des religions | 1959–1972 | 35 | 10.2 |
| | Arts et traditions populaires | 1961–1961 | 1 | 56 |
| | Asian Journal of Social Science | 2001–2008 | 225 | 20.5 |
| | Aula | 1990–1992 | 58 | 11.7 |
| | Berkeley Journal of Sociology | 1959–2010 | 363 | 22.4 |
| | British Journal of Educational Studies | 1952–2013 | 1,069 | 14.8 |
| | Cahiers Internationaux de Sociologie | 1969–2006 | 2 | 14 |
| | Cahiers Vilfredo Pareto | 1963–1971 | 6 | 17.3 |
| | Children's Environments | 1992–1995 | 100 | 10.3 |
| | Children's Environments Quarterly | 1984–1991 | 253 | 6.3 |
| | Children, Youth and Environments | 2003–2014 | 482 | |
| | Civilisations | 1951–2009 | 561 | 14.0 |
| | Comparative Studies in Society and History | 1958–2013 | 1,531 | 23.7 |
| | Contagion | 2006–2014 | 94 | 13.8 |
| | Contemporary Sociology | 1973–2013 | 467 | 3.4 |
| | Contexts | 2002–2013 | 625 | 4.0 |
| | Crime and Justice | 1979–2014 | 368 | 39.1 |
| | Critical Historical Studies | 2014–2014 | 11 | |
| | Culture, Health, and Sexuality | 1999–2013 | 712 | 14.9 |
| | Czech Sociological Review | 1966–2010 | 228 | 17.4 |
| | Egyetemi Szemle | 1985–1985 | 1 | 15 |
| | Environmental Values | 1992–2013 | 569 | 16.8 |
| | Estudios Sociológicos | 1992–1992 | 1 | 05 |
| | Ethnologie française | 1992–2013 | 23 | 8.8 |
| | European Sociological Review | 1985–2013 | 727 | 16.2 |
| | Family Relations | 1980–2013 | 1,972 | 8.5 |
| | French Politics and Society | 1985–1999 | 217 | 11.2 |
| | French Politics, Culture, and Society | 1999–2012 | 211 | 16.7 |
| | Gender and Society | 1987–2013 | 902 | 19.4 |
| | German Politics and Society | 1986–2013 | 580 | 17.2 |
| | German Studies Newsletter | 1983–1986 | 69 | 3.6 |
| | Historische Sozialforschung | 1979–2012 | 836 | 17.8 |
| | Humboldt Journal of Social Relations | 1973–2010 | 441 | 21.2 |
| | Industrial and Labor Relations Review | 1947–2011 | 2,310 | 14 |
| | International Journal of Politics, Culture, and Society | 1987–2013 | 610 | 18.9 |
| | International Journal of Sociology | 1971–2012 | 678 | 25.5 |
| | International Journal of Sociology of the Family | 1971–2010 | 621 | 14.4 |
| | International Review of Modern Sociology | 1972–2010 | 529 | 16.5 |
| | International Review of Qualitative Research | 2014–2014 | 7 | |
| | International Review of Sociology | 1971–1971 | 15 | 11.5 |
| | International Social Science Review | 1982–2009 | 371 | 9.8 |
| | Journal for the Scientific Study of Religion | 1961–2013 | 1,959 | 11.7 |
| | Journal for the Study of Radicalism | 2007–2014 | 119 | 14.4 |
| | Journal of Applied Social Science | 2007–2010 | 61 | 11.7 |
| | Journal of Black Studies | 1970–2013 | 1,569 | 17.5 |
| | Journal of Educational Sociology | 1927–1963 | 2,412 | 7.3 |
| | Journal of Haitian Studies | 1995–2012 | 230 | 15.6 |
| | Journal of Health and Human Behavior | 1960–1966 | 231 | 7.5 |
| | Journal of Health and Social Behavior | 1967–2012 | 1,553 | 12.8 |
| | Journal of Marriage and Family | 1964–2013 | 4,282 | 10.9 |
| | Journal of Palestine Studies | 1971–2014 | 3,036 | 6.6 |
| | Journal of Social Forces | 1922–1925 | 356 | 4.7 |
| | Journal of the History of Sexuality | 1990–2012 | 385 | 24.9 |
| | Kansas Journal of Sociology | 1964–1975 | 161 | 10.8 |
| | L'Année sociologique | 1995–2012 | 17 | 22.2 |
| | Language in Society | 1972–2013 | 721 | 22.9 |
| | Law and Society Review | 1966–2013 | 1,300 | 26.3 |
| | Le Mouvement social | 1980–1999 | 198 | 18.1 |
| | Living | 1939-1940 | 65 | 2.8 |
| | MERIP Middle East Report | 1971-1988 | 795 | 4.7 |
| | Marriage and Family Living | 1941-1963 | 1,102 | 4.3 |
| | Michigan Sociological Review | 1982-2012 | 179 | 19.5 |
| ļ | Mid-American Review of Sociology | 1976-1996 | 190 | 16.4 |
| | Middle East Report | 1988–2010 | 1,050 | 4.1 |
| | Philippine Sociological Review | 1953–1997 | 215 | 12.0 |
| | Polish Sociological Review | 1993–2011 | 515 | 14.9 |
| | | | | |

Table A-1, continued

| Tab | le A-1, continued | | | |
|------------|--|------------------------|----------------|--------------|
| 79 | QED: A Journal in GLBTQ Worldmaking | 2013–2013 | 16 | |
| 80 | QUANTUM Information | 1976–1979 | 15 | 5.1 |
| 81 | Race, Gender, and Class | 1995-2010 | 532 | 17.5 |
| 82 | Race, Poverty, and the Environment | 1990-2012 | 820 | 2.6 |
| 83 | Race, Sex, and Class | 1993–1994 | 26 | 16.3 |
| 84 | Reis | 1988–2011 | 8 | 20 |
| 85 86 | Review of Religious Research Review of Social Economy | 1959–2013 1942–2014 | 1,254 1,339 | 12.9 15.1 |
| 87 | Revista Mexicana de Sociología | 1980–1980 | 2 | 28.5 |
| 88 | Revista española de la opinión pública | 1971–1976 | 7 | 28.1 |
| 89 | Revue europeénne des sciences sociales | 1972–2004 | 104 | 18.0 |
| 90 | Revue française de sociologie | 2001–2010 | 59 | 26.5 |
| 91 | Rivista internazionale di scienze sociali e discipline ausiliarie | 1908–1910 | 4 | 17.8 |
| 92 | Rivista Internazionale di Scienze Sociali | 1968–2008 | 207 | 20.7 |
| 93 | Signs | 1975–2014 | 1,853 | 11.4 |
| 94 95 | Social Analysis Social Choice and Welfare | 1979–2013 1984–2013 | 781 1,391 | 16.8 16.8 |
| 96 | Social Forces | 1925–2013 | 5,351 | 13.3 |
| 97 | Social Indicators Research | 1974–2012 | 2,228 | 20.8 |
| 98 | Social Issues in Israel | 2008-2008 | 1 | 15.0 |
| 99 | Social Problems | 1953-2014 | 2,297 | 10.4 |
| | Social Psychology | 1978–1978 | 41 | 8.6 |
| 101 | Social Psychology Quarterly | 1979–2012 | 1,049 | 12.4 |
| 102 | Social Research | 1934–2010 | 2,620 | 21.4 |
| 103 104 | | 1930–1981 1976–2013 | 1,532 790 | 5.9 24.7 |
| 104 | · · · · · · · · · · · · · · · · · · · | 1976–2013 | 2,349 | 12.3 |
| 106 | | 1972–2012 | 1,584 | 15 |
| 107 | Social Thought and Research | 1997–2010 | 99 | 24.4 |
| 108 | Society and Economy | 2002-2012 | 189 | 18.5 |
| 109 | Society and Economy in Central and Eastern Europe | 1995-2001 | 179 | 19.5 |
| 110 | | 1964–1992 | 761 | 11.5 |
| 111 | Sociological Bulletin | 1952–2011 | 724 | 16.9 |
| | Sociological Focus | 1967–2012 | 1,111 | 14.6 |
| 113 114 | 3 | 1986–2013 | 851 494 | 20.7 30.8 |
| 115 | 3, | 1969–2012 1983–2010 | 870 | 11.7 |
| 116 | | 1983–2012 | 594 | 17.3 |
| 117 | , , , , , , , , , , , , , , , , , , , | 2005–2010 | 5 | 17.8 |
| 118 | Sociologisk Forskning | 1964-2010 | 15 | 10.9 |
| 119 | Sociology | 1967-2011 | 1,618 | 15.9 |
| 120 | 37 | 1963–2012 | 1,080 | 15.9 |
| 121 | | 1993–2013 | 467 | 17.8 |
| | Sociometry | 1937–1977 | 1,346 | 12.4 |
| 123 124 | | 1978–2008 2012–2014 | 14 33 | 15.6 |
| | State Crime Journal | 2012–2014 | 24 | 9.9 |
| | State, Culture, and Society | 1984–1985 | 29 | 22.2 |
| 127 | Studies in Popular Culture | 1977-2012 | 519 | 13.8 |
| 128 | Symbolic Interaction | 1977-2010 | 902 | |
| 129 | Teaching Sociology | 1973–2013 | 1,484 | 9.5 |
| 130 | The Academy of Management Journal | 1963–2013 | 2,840 | 15.6 |
| 131 | The Academy of Management Review | 1976–2013 | 1,728 | 14.6 |
| 132 133 | The American Catholic Sociological Review The American Sociologist | 1940–1963 1965–2013 | 432 1,675 | 9.8 8.6 |
| 134 | The Black Scholar | 1969–2014 | 2,334 | 4.9 |
| 135 | | 1950–2013 | 1,715 | 16.6 |
| 136 | The Canadian Journal of Sociology | 1975–2007 | 691 | 17.6 |
| 137 | The Coordinator | 1952–1959 | 133 | 4.1 |
| 138 | The Family Coordinator | 1968–1979 | 786 | 6.0 |
| 139 | The Family Life Coordinator | 1959–1967 | 168 | 5.2 |
| 140 | The Journal of Human Resources | 1966–2008 | 1,546 | 20.0 |
| 141 | The Journal of Modern African Studies | 1963–2012 | 1,478 | 19.6 |
| 142 143 | The Journal of Sex Research The Journal of the Academy of Management | 1965–2013 1958–1962 | 1,757 109 | 10.9 8.0 |
| 144 | The Midwest Sociologist | 1940–1959 | 224 | 3.4 |
| 145 | The Pacific Sociological Review | 1958–1982 | 559 | 13.4 |
| 146 | The Peninsular Papers | 1977–1977 | 5 | 14.4 |
| 147 | The Public Opinion Quarterly | 1937-2012 | 3,346 | 13.7 |
| 148 | The Sociological Quarterly | 1960–2012 | 1,910 | 16.2 |
| 149 | The Southwestern Political Science Quarterly | 1920–1923 | 53 | 14.9 |
| 150 | The Southwestern Political and Social Science Quarterly | 1923–1931 | 177 | 15.9 |
| 151 | The Southwestern Social Science Quarterly | 1931–1968 1974–2013 | 1,004 | 10.4 |
| 152 153 | Theory and Society VOLUNTAS | 1974–2013 1990–2014 | 1,008 560 | 26.8 19.6 |
| 154 | Work, Employment, and Society | 1987–2011 | 827 | 18.6 |
| 155 | Zeitschrift für Soziologie | 1972–2011 | 59 | 14.3 |
| | Études Durkheimiennes | 1998–2012 | 85 | 12.7 |
| | | | | |

| Table A-2 Top 60 public-oriented articles in the AJS and the | the ASR | | | | γò | O(1) | SONSI | Sans Sans | | | Hoolife | J. J | lenonipol Juanas | /e _h (| S)ENT | a)eAll | *Uenol. |
|---|---------|------|---|------------|--------------|-------------|----------------|-----------|------------|-------|------------|--|---------------------|--------------------|--------|--------|---------|
| * Pilah | eumor | TO T | OLANA | 21/9/14 | Jue's Server | Solo Solver | POLIES [ROPO]S | NOW SON | 6 , | C/6/2 | 1/18/20 | SIDIN SIDIN | 1,02 | Olojjek Olojjek | 30/10/ | *TeUD | b. |
| 1 Government | AJS | 1930 | | 0.97 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | | 0 | 0.00 00.00 | 00.00 | 00.00 | 0.01 | 0.00 | 0.00 | |
| 2 Government | AJS | 1932 | J. P. Chamberlain | 0.97 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 0.00 | 00.00 | 00.00 | 0.00 | 0.00 | 0.00 | |
| | Als | 1905 | /oodruff | | | | | 0.00 | | | | | | | | | |
| 5 Government | AJS | 1928 | | | | | | 0.00 | | | | | | | | | |
| | AJS | 1902 | Frank E. Horack | 0.95 0.00 | 00.00 | 0.00 | 0.00 | 0.00 | 0.04 0 | 0.00 | 0.00 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8 The Recovery Law | AIS | 1934 | everett S. Lvon | | | | | 00.00 | | | | | | | | | |
| 9 Concerning a Minor Reform in Indiana | AJS | 1901 | | | | | | 0.00 | | | | | | | | | |
| 10 The Law Relating to the Relief and Care of Dependents. VI | AJS | 1898 | | | | | | 0.00 | | | | | | | | | |
| 11 Labor Legislation 12 Conditions Delation to the Treatment of Employees and Labor | AJS | 1929 | | 0.94 0.03 | 0.00 | 0.00 | 0.03 | 0.00 | 0.01 0 | 0.00 | 0.00 0.00 | 00.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 13 The New York Building Trades Paralysis of 1903 | Als | 1904 | Haves Robbins | | | | | 0.00 | | | | | | | | | |
| 14 How Chicago Met the Unemployment Problem of 1915 | AJS | 1915 | _ | | | | | 0.05 | | | | | | | | | |
| 15 Progress in Philadelphia | AJS | 1920 | Voodruff | | | | | 0.00 | | | | | | | | | |
| | AJS | 1931 | | | | | | 0.05 | | | | | | | | | |
| 1/ Municipal Keview 1907–1908 18 Philadelphia Streat-Bailway Franchices | Als | 1909 | Clinton Rogers Woodruff | 0.91 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 0.01 | 00.00 | 0.00 | 0.00 | 0.05 | 0.00 | |
| 19 The Minnesota System in the Management of Public Charitable | AIS | 1908 | | | | | | 0.00 | | | | | | | | | |
| 20 The Charities Chapter of the Greater New York Charter | AJS | 1901 | Folks | | | | | 00.00 | | | | | | | | | |
| 21 The Board of Control in Minnesota | AJS | 1901 | | | | | | 0.00 | 0.000 | | | | | 00.0 | 0.00 | | |
| | AJS | 1907 | mond Henderson | | | | | 0.03 | | | | | | | | | |
| 23 Anti-Monopoly Legislation in the United States | Als | 1896 | | 0.90 0.00 | | 0.00 | 0.00 | 0.00 | | 0.00 | 0.02 0.00 | 00.00 | 0.00 | 0.00 | 0.07 | | |
| 24 Cities and Towns Mobilize for War 25 The Cubridizing of Private Charities | ASK | 1901 | Wiadisiava S. Frost | 0.90 0.03 | 0.00 | | | 0.00 | 00.0 | | 0.00 | | | | | 9.0 | |
| 25 The Substituting of Filwate Charlines 26 A Year's Municipal Development | AJS | 1901 | Woodruff | | | | | 0.00 | | | | | | | | | |
| 27 Principles of Public Charity and of Private Philanthropy in Germany | AJS | 1897 | | | | | | 0.00 | | | | | | | | | |
| 28 Some Permanent Results of the Philadelphia Upheaval of 1905–06 | AJS | 1907 | /oodruff | | | | | 0.00 | | | | | | | | | |
| 29 Government | AJS | 1931 | | | | | | 0.00 | | | | | | | | | |
| 30 A Review of Municipal Events, 1906-7 | AJS | 1908 | | | | | 0.00 | 0.00 | 0.00 | | | | | 0.00 | | | |
| 31 Municipal Review, 1908–1909 32 Municipal Review 1909–1910 | AIS | 1911 | Clinton Rogers Woodruff | 0.89 0.02 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 0.00 | 00.00 | | 0.03 | 0.00 | |
| 33 Government | AJS | 1933 | | | | | | 0.03 | | | | | | | | | |
| 34 The Relation of Municipal Government to American Democratic | AJS | 1905 | L. S. Rowe | 0.89 0.00 | 00.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.08 0.0 | 0.00 0.00 | 00.00 | 0.00 | 0.03 | | |
| 35 Statement to the Presidents of the Constituent Companies | AJS | 1920 | | | | | | 0.00 | | | | | | | | | |
| 36 The Present Status of the Public Service | Als | 1922 | Clinton Rogers Woodruff | 0.88 0.02 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.03 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 38 Public Service Through Chambers of Commerce | S A | 1921 | | | | | | 0.00 | | | | | | | | | |
| 39 Foreign Policy | Als | 1929 | slie Buell | | | | | 0.00 | | | | | | | | | |
| 40 Politics in Public Institutions of Charity and Correction | AJS | 1898 | | | | | | 0.00 | | | | | | | | | |
| 41 The Charity Franchise | AJS | 1914 | | | | | | 0.01 | | | | | | | | | |
| 42 Insurance of Industrial Working-Men as an Instrument of | AJS | 1906 | Arnold C. Klebs | 0.87 0.00 | 0.04 | 0.00 | 0.02 | 0.03 | 0.02 0 | 0.00 | 0.01 0.01 | 00.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 43 Social and Labor Legislation 44 Practical Municipal Progress | Als | 1906 | foodruff | | | | | 0.00 | | | | | | | | | |
| 45 Public Outdoor Relief | AJS | 1900 | our C. R | | | | | 0.02 | | | | | | | | | |
| 46 Social Legislation | AJS | 1929 | | | | | | 0.00 | | | | | | | | | |
| | AJS | 1928 | /oodruff | | | | | 0.00 | | | | | | | | | |
| 48 Congressional Opposition to Pure Food Legislation, 1879–1906 | AJS | 1930 | | | | | | 0.00 | | | | | | | | | |
| 49 The Need of a Socialized Jurisprudence 50 Industrial Incurance XI Protective Legislation | AJS | 1917 | Peter Alexander Speek Charles Richmond Handerson | 0.86 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | |
| 51 Social Technology and the Courts in Modern Times | ASR | 1945 | | | | | | 00.00 | | | | | | | | | |
| | AJS | 1900 | | | | | | 0.00 | | | | | | | | | |
| 53 Principles of Public Charity and Private Philanthropy in Germany | AJS | 1897 | | | | | | 0.00 | | | | | | | | | |
| 54 Workmen's Compensation or Insurance of Workmen and Their | AJS | 1912 | | | | | | 0.09 | | | | | | | | | |
| 55 Industrial Insurance. VIII. Insurance Plans of Railroad Corporations | AJS | 1908 | nd Henderson | 0.85 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.01 | 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 55 A Decade of Official Pool-Kellel III Indiana 57 Public Ownership and Popular Government | AIS | 1906 | William Horace Brown | 0.00 60.00 | | | | 00.0 | | | | | | | | | |
| 58 Social and Labor Legislation | AJS | 1930 | λí | | | | | 0.00 | | | | | | | | | |
| 59 Industrial Insurance. XII. Survey and Outlook | AJS | 1909 | erson | | | | | 0.08 | | | | | | | | | |
| 60 Social and Labor Legislation | AJS | 1932 | Charles W. Pipkin | 0.85 0.00 | 00.0 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 0.0 | 0.00 0.00 | 00.00 | 90.0 0 | 0.00 | 0.00 | |

| - 1 | \sim |
|-----|---------------------|
| | ^ |
| | $\vec{}$ |
| | ASK |
| | W |
| | Ē |
| - 7 | the AJS and the |
| | _ |
| | O |
| | \Box |
| | σ |
| | _ |
| 9 | _ |
| | ~ |
| | 4 |
| | Φ |
| | ĭ |
| - 7 | ì |
| | _ |
| | \Box |
| • | _ |
| | es |
| | Φ |
| - | ŭ |
| | ĭ |
| | ۲ |
| | a |
| | 10 |
| | ented |
| | di |
| | * |
| | ÷ |
| | ā |
| | |
| | ò |
| | Ö |
| | ╧ |
| | tion |
| | ō |
| | $\overline{}$ |
| | ä |
| | Ñ |
| | _ |
| | |
| | $\overline{\alpha}$ |
| | gal |
| | |
| | ŏ |
| | |
| | $\overline{}$ |
| - (| 9 |
| | 900 |
| | 느 |
| ٠. | ō |
| | _ |
| | |
| | |
| | ~ |
| - | • 1 |
| | A-3 |
| | 4 |
| | Φ |
| - | <u>a</u> |
| | ap |
| | a |
| | ÷ |
| | |

| Table A-3 Top 60 organization-oriented articles in the A | | IS and the ASR | ¥. | | < | | | 27 | 70. | | | Too | , John | 31. | 16 ₀ | Sol | oy. | XUENC |
|--|----------------------|----------------|---|--------|-----------|----------|------------|-----------------|--------------|--------|--------|------------|--|-------------------|---------------------|--|---------------|--------|
| ⁹ HJ | | | \$ tolypak | 3/Ign | TO HE TON | Jn. | | SIADUADUAD SAIL | Je Lyton Sta | | . 60- | AHIPOS ESI | ONIO DINA DINA DINA DINA DINA DINA DINA DINA | Olololia Olivoria | Olellah Polellah | SOLATION ASSOCIATION ASSOCIATI | Aleus Solallo | SAMEUN |
| The Social Construction of Market Value: Institutionalizat | ASR 2004 | | James D. Westphal, Edward J. Zajac | 0.02 0 | 0.00 | 0.00 | 0.00 0.00 | 00 0.07 | 7 0.00 | | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.04 | |
| | | | Prechel | | | | | | | | | | | | | 0.00 | | |
| 4 The Ties That Bind: Organizational and Class Bases of Stab | | | Roger Friedland, Donald Palmer, Jiten | | | | | | | | | | | | | | 90.0 | |
| 5 Size, Centralization and Organizational Adoption of Innova 6 The Eriandly and Predatory Acquisition of Large 11S Corns | ASR 1977 | | Edward V. Morse, Michael K. Moch Brad M. Rarber Vasemin Sovsal Donal | 0.04 0 | 0.00 | 0.00 0.0 | 0.00 0.00 | 0.00 | 0.00 | 0.74 | 0.00 | 0.00 | 0.16 | 00.00 | 0.00 | 0.00 | 0.06 | |
| | | | stein | | | | | | | | | | | | | 0.07 | 0.00 | |
| 8 The Finance Conception of Control – "The Theory That Ate Ne" | ľ | | Brad M. Barber, Donald Palmer, Xuegua | | | | | | | | | | | | | 0.00 | 0.04 | |
| | ` | | Joel A. C. Baum, Walter W. Powell | | | | | | | | | | | | | 0.03 | 0.00 | |
| 10 Automation and Bureaucratic Structure | AJS 1968 | | Marshall W. Meyer | 0.00 | 0.06 | 0.00 | 0.00 0.00 | | 0.00 | 0.77 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | |
| | ľ | | Catherine H. Tinslev, Kristina A. Die | | | | | 0.05 | | | 0.10 | | | | | 0.00 | 000 | |
| | ` | | Wayne E. Baker | | | | | | | | | | | | | 0.00 | 0.17 | |
| | | | Phelps Tracy, Koya Azumi | | | | 0.00 00.00 | 0.02 | 2 0.04 | 1 0.70 | 0.02 | 0.00 | 0.14 | | | 0.00 | 0.08 | |
| | | | James D. Westphal, Edward J. Zajac | | | | | | | | | | | | | | 0.01 | |
| 16 An Examination of the Determinants of Organizational Struc 17 The Sources and Consequences of Embaddedness for the Found | AJS 1983 ASR 1996 | | Hiroshi Mannari, Cheng-Kuang Hsu, Rob Brian Hzzi | 0.00 | 0.00 | 0.00 | 0.00 0.00 | 0.00 | 0.00 | 0.70 | 0.02 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.12 | |
| | ľ | | Robert R. Faulkner, Gene A. Fisher, W | | | | | | | | | | | | | | 0.08 | |
| | ` | | Andrew H. Van De Ven, Richard Koenig | | | | | | | | | | | | | | 0.07 | |
| | ` | | James R. Lincoln, Peggy Takahashi, Mi | | | | | | | | | | | | | | 0.07 | |
| 21 The Spread of the Multidivisional Form Among Large Firms, | Ì | | stein | | | | | | | | | | | | | 0.00 | 0.10 | |
| 22 Vinere Do Interorganizational Networks Come From? | AJS 1999 | | Mattheway 22fonto Boos Eriodland Don | 0.00 | 0.00 | 0.00 | 0.00 0.00 | 0.03 | 0.00 | 0.67 | 0.01 | 0.02 | 0.0 | 0.00 | 0.01 | 0.00 | 0.25 | |
| 23 EOST III Space: The Geography of Colporate Interfecting Pilities 24 The Effects of Organizational and Political Embeddedness of | Ι'' | | Matthew Zarolite, Roger Friedrand, Doll Theresa Morris Harland Prechel | | | | | | | | | | | | | | 000 | |
| | ` | | Henrich R. Greve, Gerald F. Davis | | | | | | | | | | | | | 0.00 | 0.16 | |
| | | | Toby E. Stuart, Joel M. Podolny | | | | | | | | | | | | | | 0.16 | |
| 27 Leaving a Legacy: Position Imprints and Successor Turnover | ASR 2007 | | M. Diane Burton, Christine M. Beckman | | | | | | | | | | | | | | 0.00 | |
| | ASR 1991 | | Martin Kenney, Richard Florida | 0.04 | 0.00 | 0.00 | 0.00 0.00 | | 1 0.13 | | | | | 0.00 | 0.03 | 0.00 | 0.00 | |
| 30 The Intraordanizational Power Strundler Rise of Finance Pe | ľ | | Meil Fliostein | | | | | 0.00 | | 0.00 | 0.02 | | 000 | | | | 0.00 | |
| | • | | Ronald S. Burt, Kenneth P. Christman | | | | | | | | | | | | | | | |
| | | | Zorn | | | | | | | | | | | | | | | |
| | | | Michael T. Hannan, M. Diane Burton, J | | | | | | | | | | | | | | | |
| | | | Michael Schwartz, Beth Mintz ازی ۸ کوننیت | | | 0.00 | | | | | | | | | 0.14 | | | |
| 35 Embeddedness and Contractual Relationships in China's Tran | ASR 2003 | | Lisa A. Reistei Wei Zhao, Xueguang Zhou, He Cai, Qian | 0.01 | 0.00 | | 0.00 0.00 | 0.07 | 7 0.12 | 0.63 | 3 0.02 | 0.00 | 0.07 | 0.00 | | 0.03 | 0.04 | |
| | | | Istein | | | | | | | | | | | | | 0.12 | 0.00 | |
| | i l | | Paul J. DiMaggio, Walter W. Powell | 0.03 | | | | 00.00 | 00.00 | | | | 0.00 | | 0.03 | | | |
| | | | Ezra W. Zuckerman | | | | | | | | | | | | | | | |
| 40 Organizational Niches and the Dynamics of Organizational M 41 Naw, Profess Technology, Joh Design, and Work Organization. | AJS 1994 | | Joel A. C. Baum, Jitendra V. Singh Marvellen R. Kellev | 0.00 | 0.00 | 0.00 | 0.00 0.04 | 0.15 | 0.00 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.12 | |
| | ľ | | Linda Brewster Stearns, Kenneth D. Al | | | | | | | | | | | | | | 0.00 | |
| | | | Brayden G. King, Ion Bogdan Vasi | | | | | | | | | | | | | 0.15 | 0.05 | |
| | | | James N. Baron, Joel M. Podolny | | | | | | | | | | | | | 0.00 | 0.05 | |
| | Ì | | Christine Oliver, Joel A. C. Baum | | | | | | | | | | | | | 0.00 | 0.03 | |
| 46 Structural Inertia and Organizational Change 47 Organization Size and Failure Among Health Maintenance Org | ASK 1984 ASR 1992 | | Michael I. Hannan, John Freeman Ion R. Christianson, Douglas R. Whole | 0.05 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.60 | 0.17 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | |
| | ľ | | Robert F. Freeland | | | | | | | | | | | | | | 0.00 | |
| | | | J. Eugene Haas, Richard H. Hall, Norm | | | | | | | | | | | | | | | |
| | ` | | Harvey | | | | | | | | | | | | | | 0.22 | |
| | | | Michael T. Hannan, Toby E. Stuart, Jo | | | | | | | | | | | | | | 0.24 | |
| 52 Theory Building and Cheap Talk About Legitimation: Reply t | ASR 1995 | | Michael T. Hannan, Glenn R. Carroll Isabel Eorgandez Mateo | 0.00 | 0.00 | 0.00 | 0.00 0.00 | 00.17 | 0.00 | 0.59 | 0.11 | 0.01 | 0.00 | 0.00 | 0.08 | 0.05 | 0.00 | |
| | | | Linda Brewster Stearns. Mark S. Mizru | | | | | | | | | | | | | | | |
| | | | Hayagreeva Rao, Klaus Weber, L. G. Th | | | | | | | | | | | | | | | |
| | | | Linda D. Molm, Gretchen Peterson, Nob | | | | | | | | | | | | | | | |
| | | | Gregory E. Robbins, Christina L. Ahma | | | | | | | | | | | | | | | |
| 58 Power and Privilege in the Large Corporation: Corporate Co 59 Embaddadness and Price Formation in the Corporate Law Mark | AJS 1981 | | Michael Patrick Allen Brian Hzzi Rvon Lancaster | 0.15 | 0.00 | 0.00 | 0.00 0.02 | 0.16 | 0.00 | 0.58 | 3 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | |
| | | | brian Ozzi, kyon Lancaster Onker N. Basu, Mark W. Dirsmith, Parv | | | | | | | | | | | | | | | |
| - 1 | | | | | | | | | - | - | | | - | - | | | | |

Table A-4 Correlations between topics

| | Public | Education Law/ | Law/ Crime | Global/ Issues | Gender/ Family | Work/ Labor | Economic | Organi- zation | Social/ Theory | Culture/ Generic | Micro/ F Individual | Religion | Ethnicity/ Politics/ Race State | Politics/ State |
|------------------|----------|-------------------------------------|---------------|-------------------|-------------------|----------------|----------|-------------------|-------------------|---------------------|------------------------|----------|------------------------------------|--------------------|
| Public | | | | | | | | | | | | | | |
| Education | -0.06*** | | | | | | | | | | | | | |
| Law/Crime | -0.03*** | -0.07*** | | | | | | | | | | | | |
| Global/Issues | -0.04*** | -0.06*** -0.05*** | -0.05*** | | | | | | | | | | | |
| Gender/Family | -0.19*** | -0.05*** 0.00 | 0.00 | -0.05*** | | | | | | | | | | |
| Work/Labor | -0.15*** | -0.05*** -0.06*** | -0.06*** | -0.07*** | 0.06*** | | | | | | | | | |
| Economic | 0.08*** | -0.13*** -0.11*** | -0.11*** | 0.03*** | -0.14*** | -0.07*** | | | | | | | | |
| Organization | -0.11*** | -0.11*** -0.07*** -0.05*** | -0.05*** | -0.07*** | -0.14*** | -0.02*** | -0.05*** | | | | | | | |
| Social/Theory | -0.22*** | -0.22*** -0.08*** -0.07*** | -0.07*** | -0.04*** | -0.15*** | -0.15*** | -0.09*** | -0.06*** | | | | | | |
| Culture/Generic | -0.16*** | -0.16*** -0.05*** -0.03*** | -0.03*** | 0.04*** | -0.04*** | -0.22*** | -0.13*** | -0.13*** | -0.01*** | | | | | |
| Micro/Individual | -0.26*** | -0.26*** -0.05*** 0.03*** | 0.03*** | -0.11*** | 0.17*** | -0.07*** | -0.20*** | 0.00 | -0.17*** | -0.19*** | | | | |
| Religion | -0.03*** | ***80.0- ***60.0- | -0.08*** | -0.01*** | -0.10*** | -0.11*** | -0.06*** | -0.11*** | -0.05*** | 0.00 | -0.07*** | | | |
| Ethnicity/Race | -0.10*** | -0.04*** -0.01*** | -0.01*** | -0.02*** | -0.04*** | 0.04*** | -0.05*** | -0.10*** | -0.12*** | -0.04*** | -0.03*** | -0.06*** | | |
| Politics/State | 0.00 | -0.12*** -0.09*** | -0.09*** | 0.07*** | -0.17*** | -0.08*** | -0.02*** | -0.06*** | -0.03*** | -0.06*** | -0.06*** -0.12*** | 0.01* | -0.06*** | |
| Analytic/Quant | -0.18*** | -0.18*** -0.07*** -0.03*** -0.06*** | -0.03*** | | -0.10*** | 0.04*** | -0.07*** | 0.01** | -0.07*** | -0.16*** 0.03*** | 0.03*** | -0.11*** | -0.04*** | -0.07*** |

Figure A-1 Article development over time

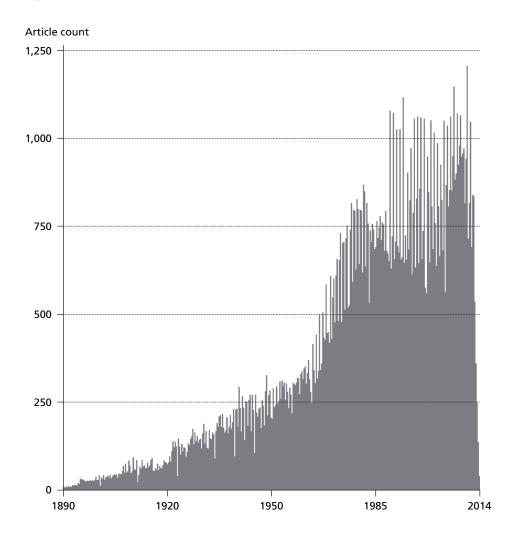
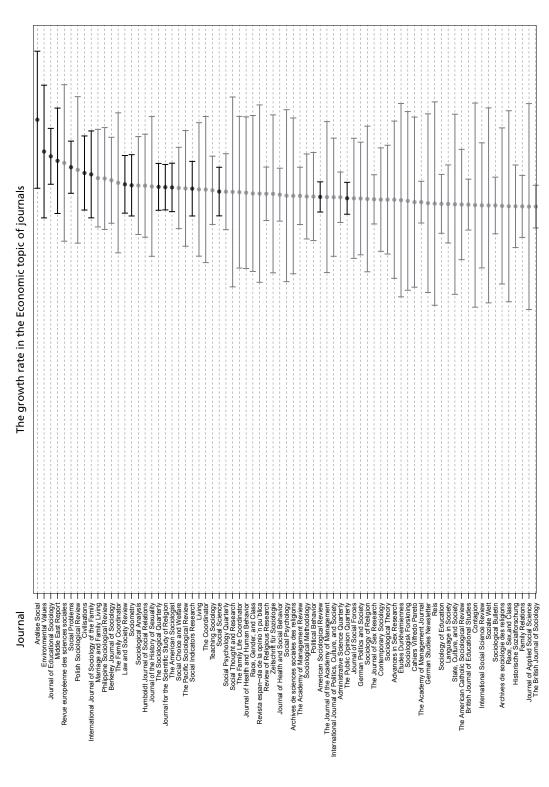
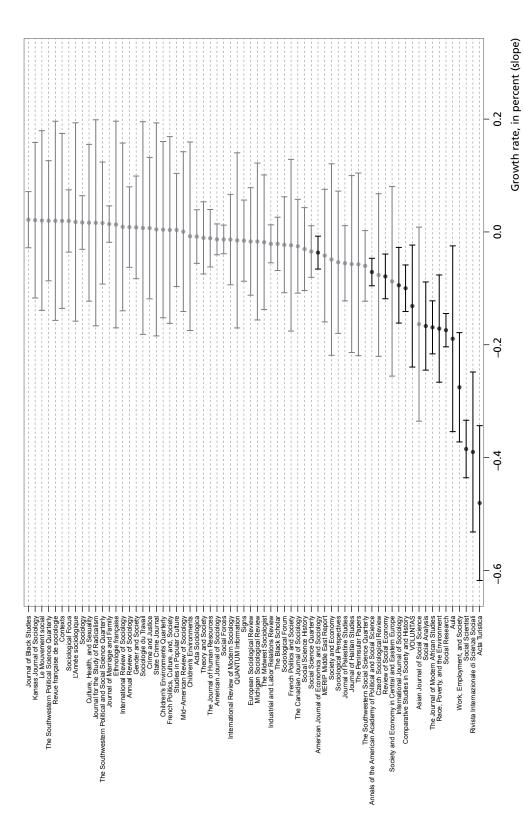


Figure A-2 Journal ranking by deviation from slope of ECON model 7





Notes: (a) Authors' calculations. (b) The caterpillar plot is based on the multilevel modeling estimation. It depicts the slope residual rank of the 143 journals included in estimating the Economic topic (model 7). (c) For journals above the zero-line, their economic topic orientation is growing at a faster pace than journals below the zero-line. Journals at the zero-line have an economic orientation growth.

References

- Abbott, Andrew, 1999: *Department and Discipline: Chicago Sociology at One Hundred.* Chicago: University of Chicago Press.
- —, 2001: Chaos of Disciplines. Chicago: Chicago University Press.
- Abend, Gabriel, 2006: Styles of Sociological Thought: Sociologies, Epistemologies, and the Mexican and US Quests for Truth. In: *Sociological Theory* 24, 1–41.
- Abend, Gabriel/Caitlin Petre/Michael Sauder, 2013: Styles of Causal Thought: An Empirical Investigation. In: *American Journal of Sociology* 119, 602–654.
- Acharya, Anurag, et al., 2014: Rise of the Rest: The Growing Impact of Non-elite Journals. In: *Cornell University Library*, arXiv:1410.2217 [cs.DL].
- Angèle, Christin/Étienne Ollion, 2012: *La sociologie aux États-Unis aujourd'hui*. Paris: La Découverte. Argamon, Shlomo/Jeff Dodick/Paul Chase, 2008: Language Use Reflects Scientific Methodology: A Corpus-based Study of Peer-reviewed Journal Articles. In: *Scientometrics* 75, 203–238.
- Aspers, Patrik/Nigel Dodd/Ellinor Anderberg, 2015: Introduction. In: Patrik Aspers/Nigel Dodd (eds.), *Re-Imagining Economic Sociology*. Oxford: Oxford University Press, 1–33.
- Augier, Mie/James G. March/Bilian Ni Sullivan, 2005: Notes on the Evolution of a Research Community: Organization Studies in Anglophone North America, 1945–2000. In: *Organization Science* 16, 85–95.
- Azarian, Reza/Adel Daoud/Bengt Larsson, 2014: Ekonomisk sociologi. Stockholm: Liber.
- Backhouse, Roger E., 1998: The Transformation of U.S. Economics, 1920–1960, Viewed through a Survey of Journal Articles. In: *History of Political Economy* 30 (Supplement), 85–107.
- Backhouse, Roger E./Philippe Fontaine, 2010: Toward a History of the Social Sciences. In: Roger E. Backhouse/Philippe Fontaine (eds.), *The History of the Social Sciences since 1945*. Cambridge: Cambridge University Press, 184–233.
- Bannister, Robert C., 2008: Sociology. In: Theodore M. Porter/Dorothy Ross (eds.), *The Cambridge History of Science*, Vol. 7: *The Modern Social Sciences*. Cambridge: Cambridge University Press, 329–353.
- Barbera, Filippo, 2002: Economic Sociology in Italy: Past and Present. In: *International Review of Sociology* 12, 145–157.
- Baurmann, Michael, 2001: Jens Beckert: Grenzen des Marktes. Die sozialen Grundlagen wirtschaftlicher Effizienz. Book Review. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 53, 191–195.
- Beamish, Thomas D., 2007: Economic Sociology in the Next Decade and Beyond. In: *American Behavioral Scientist* 50, 993–1014.
- Becker, Howard P., 1930: Distribution of Space in the American Journal of Sociology, 1895–1927. In: *American Journal of Sociology* 36, 461–466.
- ——, 1932: Space Apportioned Forty-eight Topics in the American Journal of Sociology, 1895–1930. In: *American Journal of Sociology* 38, 71–78.
- Becker, Howard S., 1990: The Most Critical Issue Facing the ASA. In: *The American Sociologist* 21, 321–323.
- ——, 2003: Guest Editorial: Long-term Changes in the Character of the Sociological Discipline: A Short Note on the Length of Titles of Articles Submitted to the "American Sociological Review" during the Year 2002. In: *American Sociological Review* 68, iii–v.
- Beckert, Jens, 2000: Economic Sociology in Germany. In: *Economic Sociology: European Electronic Newsletter* 1, 2–7.
- ——, 2002: Beyond the Market: The Social Foundations of Economic Efficiency. Princeton: Princeton University Press.
- ——, 2007: The Great Transformation of Embeddedness: Karl Polanyi and the New Economic Sociology. MPIfG Discussion Paper 07/1. Cologne: Max Planck Institute for the Study of Societies.
- Beckert, Jens/Natalia Besedovsky, 2009: *Die Wirtschaft als Thema der Soziologie: Zur Entwicklung wirtschaftssoziologischer Forschung in Deutschland und den USA*. MPIfG Discussion Paper 09/1. Cologne: Max Planck Institute for the Study of Societies.

- Beckert, Jens/Christoph Deutschmann, 2010: Neue Herausforderungen der Wirtschaftssoziologie. In: Jens Beckert/Christoph Deutschmann (eds.), *Wirtschaftssoziologie*. Kölner Zeitschrift für Soziologie und Sozialpsychologie, Special Issue. Wiesbaden: VS Verlag, 7–21.
- Beckert, Jens/Rainer Diaz-Bone/Heiner Ganßmann, 2007: Einleitung: Neue Perspektiven für die Marktsoziologie. In: Jens Beckert/Rainer Diaz-Bone/Heiner Ganßmann (eds.), *Märkte als soziale Strukturen*. Frankfurt a.M.: Campus, 19–39.
- Beckert, Jens, et al., 2015: *Literaturliste Sektion Wirtschaftssoziologie der DGS*. http://wirtsoz-dgs.mpifg.de/dokumente/lit_sektionwirtsoz_Okt_2015.pdf
- Bell, Andrew/Kelvyn Jones, 2014: Explaining Fixed Effects: Random Effects Modeling of Time-series Cross-sectional and Panel Data. In: *Political Science Research and Methods* 3, 133–155.
- Bell, Daniel, 1967: The Social Sciences Press: United States of America. In: *International Social Science Journal* 19, 245.
- Best, Joel, 2015: Following the Money across the Landscape of Sociology Journals. In: *The American Sociologist*, 1–16.
- Best, Steven, 2007: Culture Turn. In: George Ritzer (ed.), *The Blackwell Encyclopedia of Sociology*. Blackwell Reference Online.
- Blei, David M./John D. Lafferty, 2007: A Correlated Topic Model of Science. In: *The Annals of Applied Statistics* 1, 17–35.
- Blei, David M./Andrew Y. Ng/Michael I. Jordan, 2003: Latent Dirichlet Allocation. In: *The Journal of Machine Learning Research* 3, 993–1022.
- Bleier, Arnim/Andreas Strotmann, 2013: *Towards an Author-Topic-Term-Model Visualization of 100 Years of German Sociological Society Proceedings.* Unpublished manuscript. Cologne: GESIS Leibniz Institute for the Social Sciences. http://arxiv.org/pdf/1305.1343v1.pdf
- Blevins, Cameron, 2010: *Topic Modeling Martha Ballard's Diary.* <www.cameronblevins.org/posts/topic-modeling-martha-ballards-diary>
- Block, Sharon, 2006: Doing More with Digitization: An Introduction to Topic Modeling of Early American Sources. In: *Common-Place* 6(2). <www.common-place-archives.org/vol-06/no-02/tales/>
- Bort, Suleika/Alfred Kieser, 2011: Fashion in Organization Theory: An Empirical Analysis of the Diffusion of Theoretical Concepts. In: *Organization Studies* 32, 655–681.
- Bort, Suleika/Simone Schiller, 2011: Reducing Uncertainty in Scholarly Publishing: Concepts in the Field of Organization Studies, 1960–2008. In: *Schmalenbach Business Review* 63, 337–360.
- Cappell, Charles L./Thomas M. Guterbock, 1992: Visible Colleges: The Social and Conceptual Structure of Sociology Specialties. In: *American Sociological Review* 57, 266–273.
- Champion, Dean J./Michael F. Morris, 1973: A Content Analysis of Book Reviews in the AJS, ASR, and Social Forces. In: *American Journal of Sociology* 78, 1256–1265.
- Chubin, Daryl, 1975: The Journal as Primary Data Source in Sociology of Science: With Some Observations from Sociology. In: *Social Science Information* 14, 157–168.
- Clegg, Stewart R./James R. Bailey, 2008: Introduction. In: Stewart R. Clegg/James R. Bailey (eds.), International Encyclopedia of Organization Studies. Thousand Oaks, CA: Sage, xliii–xlviii.
- Clemens, Elisabeth S., et al., 1995: Careers in Print: Books, Journals, and Scholarly Reputations. In: *American Journal of Sociology* 101, 433–494.
- Collins, Randall, 1986: Is 1980s Sociology in the Doldrums? In: *American Journal of Sociology* 91, 1336–1355.
- Convert, Bernard/Johan Heilbron, 2007: Where Did the New Economic Sociology Come from? In: *Theory and Society* 36, 31–54.
- Crane, Diane/Henry Small, 1992: American Sociology since the Seventies: The Emerging Identity Crisis. In: Terence C. Halliday/Morris Janowitz (eds.), *Sociology and Its Publics: The Forms and Fates of Disciplinary Organization*. Chicago: The University of Chicago Press, 197–234.
- Crothers, Charles, 2011: Developments in British Sociology as Shown in British Sociology Journals. In: *Sociological Research Online* 16, 13.
- Daoud, Adel/Bengt Larsson, 2011: Economic Sociology Old and New. In: *International Journal of Pluralism and Economics Education* 2(3), 255–269.

- DiMaggio, Paul/Sharon Zukin, 1990: Introduction. In: Paul DiMaggio/Sharon Zukin (eds.), *Structures of Capital: The Social Organization of the Economy*. Cambridge: Cambridge University Press, 1–36.
- DiMaggio, Paul/Manish Nag/David Blei, 2013: Exploiting Affinities between Topic Modeling and the Sociological Perspective on Culture: Application to Newspaper Coverage of US Government Arts Funding. In: *Poetics* 41, 570–606.
- Duncan, Hannibal Gerald/Winnie Leach Duncan, 1933: Shifts in Interests of American Sociologists. In: *Social Forces* 12, 209–212.
- England, Paula/Nancy Folbre, 2005: Gender and Economic Sociology. In: Neil Smelser/Richard Swedberg (eds.), *The Handbook of Economic Sociology*. Princeton: Princeton University Press, 627–649.
- Ennis, James G., 1992: The Social Organization of Sociological Knowledge: Modeling the Intersection of Specialties. In: *American Sociological Review* 57, 259–265.
- Fligstein, Neil, 2015: What Kind of Re-imagining Does Economic Sociology Need? In: Patrik Aspers/ Nigel Dodd (eds.), *Re-imagining Economic Sociology*. Oxford: Oxford University Press, 301–316.
- Fligstein, Neil/Jonah Stuart Brundage/Michael Schultz, 2014: Why the Federal Reserve Failed to See the Financial Crisis of 2008: The Role of "Macroeconomics" as a Sense Making and Cultural Frame. IRLE Working Paper 111–14. Berkeley, CA: University of California.
- Fligstein, Neil/Cyrus Dioun, 2015: Economic Sociology. In: James D. Wright (ed.), *International Encyclopedia of the Social & Behavioral Sciences*. 2nd edition. Amsterdam: Elsevier, 67–72.
- Fourcade, Marion, 2007: Theories of Markets and Theories of Society. In: *American Behavioral Scientist* 50, 1015–1034.
- Gans, Herbert J., 1997: Bestsellers by Sociologists: An Exploratory Study. In: *Contemporary Sociology* 26, 131–135.
- Gans, Joshua S./George B. Shepherd, 1994: How Are the Mighty Fallen: Rejected Classic Articles by Leading Economists. In: *The Journal of Economic Perspectives* 8, 165–179.
- Garfield, Eugene/A. I. Pudovkin/V. S. Istomin, 2003: Why Do We Need Algorithmic Historiography? In: *Journal of the American Society for Information Science and Technology* 54, 400–412.
- Garfield, Eugene/Irving H. Sher/Richard J. Torpie, 1964: *The Use of Citation Data in Writing the History of Science*. Philadelphia, PA: Institute for Scientific Information.
- Garnett, Richard A., 1988: The Study of War in American Sociology: An Analysis of Selected Journals, 1936 to 1984. In: *The American Sociologist* 19, 270–282.
- Gaston, Jerry/Morris Zelditch, 1979: The Big Three and the Status of Sociology. Review of American Journal of Sociology, 1975–1977. Charles E. Bidwell; American Sociological Review, 1975–1977. Morris Zelditch, Jr.; Social Forces, 1975–1977. Everett K. Wilson. In: *Contemporary Sociology* 8, 789–793.
- Gemici, Kurtulus, 2008: Karl Polanyi and the Antinomies of Embeddedness. In: *Socio-Economic Review* 6, 5–33.
- Gingras, Yves/Sébastien Mosbah-Natanson, 2010: Where Are Social Sciences Produced? In: 2010 World Social Science Report: Knowledge Divides. Paris: UNESCO Publishing, 149–153.
- Gislain, Jean-Jacques/Philippe Steiner, 1995: La sociologie économique, 1890–1920: Émile Durkheim, Vilfredo Pareto, Joseph Schumpeter, François Simiand, Thorstein Veblen et Max Weber. Paris: Presses universitaires de France.
- Glänzel, Wolfgang, 1996: A Bibliometric Approach to Social Sciences: National Research Performances in 6 Selected Social Science Areas, 1990–1992. In: *Scientometrics* 35, 291–307.
- Granovetter, Mark, 1985: Economic Action and Social Structure: The Problem of Embeddedness. In: *American Journal of Sociology* 91, 481–510.
- ——, 1990: The Old and the New Economic Sociology: A History and an Agenda. In: Roger Friedland/A. F. Robertson (eds.), *Beyond the Marketplace: Rethinking Economy and Society.* New York: de Gruyter, 89–112.
- Guillén, Mauro F., et al., 2003: The Revival of Economic Sociology. In: Mauro F. Guillén et al. (eds.), *The New Economic Sociology: Developments in an Emerging Field.* New York: Russell Sage Foundation, 1–32.

- Hardin, Bert, 1977: The Professionalization of Sociology: A Comparative Study: Germany USA. Frankfurt a.M.: Campus.
- Hargens, Lowell L., 1991: Impressions and Misimpressions about Sociology Journals. In: *Contemporary Sociology* 20, 343–349.
- Healy, Kieran, 2014: *Sociology's Most Cited Papers by Decade.* http://kieranhealy.org/blog/archives/2014/11/15/top-ten-by-decade/ (accessed 23 August 2015)
- Heilbron, Johan, 1999: Economic Sociology in France. In: *Economic Sociology, European Electronic Newsletter* 1, 4–9.
- Henslin, James M./Paul M. Roesti, 1976: Trends and Topics in "Social Problems" 1953–1975: A Content Analysis and a Critique. In: *Social Problems* 24, 54–68.
- Hinkle, Roscoe C./Gisela J. Hinkle, [1954]1960: *Die Entwicklung der amerikanischen Soziologie: Eine Geschichte ihrer Motive und Theorien.* Wien: Verlag für Geschichte und Politik.
- Hornik, Kurt/Bettina Grün, 2011: Topicmodels: An R Package for Fitting Topic Models. In: *Journal of Statistical Software* 40, 1–30.
- Jacobs, Mark D./Lyn Spillman, 2005: Cultural Sociology at the Crossroads of the Discipline. In: *Poetics* 33,1–14.
- Jockers, Matthew, 2014: Text Analysis with R for Students of Literature. Berlin: Springer.
- Karides, Marina, et al., 2001: Representing the Discipline: Social Problems Compared to ASR and AJS. In: *Social Problems* 48, 111–128.
- Kennedy, Michael D./Miguel A. Centeno, 2007: Internationalism and Global Transformations in American Sociology. In: Craig Calhoun (ed.), *Sociology in America: A History.* Chicago: Chicago University Press, 66–712.
- Kinloch, Graham C., 1988: American Sociology's Changing Interests as Reflected in Two Leading Journals. In: *The American Sociologist* 19, 181–194.
- Kishida, Kazuaki/Sachiko Matsui, 1997: International Publication Patterns in Social Sciences: A Quantitative Analysis of the IBSS File. In: *Scientometrics* 40, 277–298.
- Krippner, Greta R./Anthony S. Alvarez, 2007: Embeddedness and the Intellectual Projects of Economic Sociology. In: *Annual Review of Sociology* 33, 219–240.
- Lengermann, Patricia Madoo, 1979: The Founding of the American Sociological Review: The Anatomy of a Rebellion. In: *American Sociological Review* 44, 185–198.
- Lieberson, Stanley/Susan Dumais/Shyon Baumann, 2000: The Instability of Androgynous Names: The Symbolic Maintenance of Gender Boundaries. In: *American Journal of Sociology* 105(5), 1249–1287.
- Lietz, Haiko, 2015: *Scale-free Identity: The Emergence of Social Network Science*. Unpublished dissertation. University Duisburg-Essen.
- Line, Maurice B., 1981: The Structure of Social Science Literature as Shown by a Large-scale Citation Analysis. In: *Social Science Information Studies* 1, 67–87.
- Logan, John R., 1988: Producing Sociology: Time Trends in Authorship of Journal Articles, 1975–1986. In: *The American Sociologist* 19, 167–180.
- Lüschen, Günther, 1979: Die Entwicklung der Deutschen Soziologie in ihrem Fachschrifttum Perioden, Sachgebiete und Methoden seit 1945. In: Günther Lüschen (ed.), *Deutsche Soziologie seit 1945*. Wiesbaden: VS Verlag, 169–192.
- Maden, Kirsten K./Janet A. Seiz/Michèle Pujol, 2004: A Bibliography of Female Economic Thought to 1940. London: Routledge.
- Massey, Douglas S./Nancy A. Denton, 1993: *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- McCallum, Andrew/Andrés Corrada-Emmanuel, 2007: Topic and Role Discovery in Social Networks with Experiments on Enron and Academic Email. In: *Journal of Artificial Intelligence Research* 30, 249–272.
- McCartney, James L., 1970: On Being Scientific: Changing Styles of Presentation of Sociological Research. In: *The American Sociologist* 5, 30–35.
- McFarland, Daniel A., et al., 2013: Differentiating Language Usage through Topic Models. In: *Poetics* 41, 607–625.

- Menzies, Kenneth, 1982: Sociological Theory in Use. London: Routledge.
- Meyer, David/Kurt Hornik/Ingo Feinerer, 2008: Text Mining Infrastructure in R. In: *Journal of Statistical Software* 25, 1–54.
- Mitchell, Ross, 2005: Veblen, Innis, and the Classic Tradition: North American Economic Sociology. In: Anthony J. Blasi (ed.), *Diverse Histories of American Sociology*. Leiden: Brill, 339–359.
- Mochnacki, Alex/Aaron Segaert/Neil Mclaughlin, 2009: Public Sociology in Print: A Comparative Analysis of Book Publishing in Three Social Science Disciplines. In: *Canadian Journal of Sociology/Cahiers canadiens de sociologie* 34, 729–764.
- Moksony, Ferenc/Rita Hegedűs/Melinda Császár, 2014: Rankings, Research Styles, and Publication Cultures: A Study of American Sociology Departments. In: *Scientometrics* 101, 1715–1729.
- Moller, Stephanie, 2007: Rosenfeld, Rachel (1948–2002). In: George Ritzer (ed.), *The Blackwell Encyclopedia of Sociology*. Malden, MA: Blackwell, 3964–3965.
- Moody, James, 2006: Trends in Sociology Titles. In: The American Sociologist 37, 77–80.
- Morgan, Mary S./Malcolm Rutherford, 1998: American Economics: The Character of the Transformation. In: *History of Political Economy* 30, 1–28.
- Narvaez-Berthelemot, Nora/Jane Russell, 2001: World Distribution of Social Science Journals: A View from the Periphery. In: *Scientometrics* 51, 223–239.
- Newman, David, et al., 2006: Analyzing Entities and Topics in News Articles Using Statistical Topic Models. In: *Intelligence and Security Informatics*, 93–104.
- Ollion, Étienne, 2011: De la sociologie en Amérique: Éléments pour une sociologie de la sociologie étasunienne contemporaine. In: *Sociologie* 3, 279–294.
- Oromaner, Mark, 2008: Intellectual Integration and Articles in Core Sociology Journals, 1960–2000. In: *The American Sociologist* 39, 279–289.
- Platt, Jennifer, 1998: A History of Sociological Research Methods in America, 1920–1960, Vol. 40. Cambridge: Cambridge University Press.
- ——, 2010: Sociology. In: Roger E. Backhouse/Philippe Fontaine (eds.), *The History of the Social Sciences since 1945*. Cambridge: Cambridge University Press, 102–135.
- ——, 2016: Using Journal Articles to Measure the Level of Quantification in National Sociologies. In: *International Journal of Social Research Methodology* 19, 31–49.
- Ramage, Daniel, et al., 2009: *Topic Modeling for the Social Sciences*. Stanford, CA: Stanford University: Computer Science Department and School of Education.
- Rasbash, Jon, et al., 2015: A User's Guide to MLwiN, Version 2.32. Bristol: University of Bristol, Centre for Multilevel Modelling.
- Rosenberg, Zila, 2015: Citation Analysis of M.A. Theses and Ph.D. Dissertations in Sociology and Anthropology: An Assessment of Library Resource Usage. In: *The Journal of Academic Librarianship* 41, 680–688.
- Rudasill, Lynne, 2001: Journals of the Century in Sociology. In: The Serials Librarian 39, 57–67.
- Sanders, Luise, 2012: Zeitschriften der Politikwissenschaft: Ein Kompendium. Berlin: de Gruyter.
- Schmidt, Benjamin M., 2013: Words Alone: Dismantling Topic Models in the Humanities. In: *Journal of Digital Humanities* 2(1). http://journalofdigitalhumanities.org/2-1/words-alone-by-benjamin-m-schmidt/
- Scott, W. Richard, 2004: Reflections on a Half-century of Organizational Sociology. In: *Annual Review of Sociology* 30, 1–21.
- Shanas, Ethel, 1945: The American Journal of Sociology through Fifty Years. In: *American Journal of Sociology* 50, 522–533.
- Sica, Alan, 1989: Social Theory's "Constituency". In: The American Sociologist 20, 227–241.
- ——, 2007: Defining Disciplinary Identity: The Historiography of US Sociology. In Craig Calhoun (ed.), *Sociology in America: A History*. Chicago: Chicago University Press, 713–732.
- Sieg, Alexander, 2002: Konditionen und Strukturen internationaler Rezeption von Fachwissen in der frühen deutschen und amerikanischen akademischen Soziologie. Dissertation. Berlin: Freie Universität Berlin.
- Sigelman, Lee, 2006: The Coevolution of American Political Science and the American Political Science Review. In: *American Political Science Review* 100, 463–478.

- Simpson, Richard L., 1961: Expanding and Declining Fields in American Sociology. In: *American Sociological Review* 26, 458–466.
- Simpson, Ida H./Richard L. Simpson, 1994: The Transformation of the American Sociological Association. In: *Sociological Forum* 9, 259–278.
- Singer, Judith D./John B. Willett, 2003: Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence. New York: Oxford University Press.
- Small, Albion W., 1916: Fifty Years of Sociology in the United States (1865–1915). In: *American Journal of Sociology* 21, 721–864.
- Sparsam, Jan, 2015: Wirtschaft in der New Economic Sociology. Berlin: Springer.
- Steele, Fiona, 2014: Multilevel Modelling of Repeated Measures Data. In: *LEMMA VLE Module* 15, 1–61
- Steiner, Philippe, 2005: Pourquoi la sociologie économique est-elle si développée en France? In: *L'Année sociologique* 55, 391–415.
- —, [1999]2007: La sociologie économique. Paris: La Découverte.
- Swedberg, Richard, 1987: Economics and Sociology Early Clashes. In: Current Sociology 35, 11–24.
- ——, 1997: New Economic Sociology: What Has Been Accomplished, What Is ahead? In: *Acta Sociologica* 40, 161–182.
- Swygart-Hobaugh, Amanda J., 2004: A Citation Analysis of the Quantitative/Qualitative Methods Debate's Reflection in Sociology Research: Implications for Library Collection Development. In: *Library Collections, Acquisitions, and Technical Services* 28, 180–195.
- Teich, Elke, et al., 2015: The Linguistic Construal of Disciplinarity: A Data-mining Approach Using Register Features. In: *Journal of the Association for Information Science and Technology*, published online, 5 May 2015, DOI: 10.1002/asi.23457.
- Turner, Jonathan H., 2006: American Sociology in Chaos: Differentiation without Integration. In: *The American Sociologist* 37, 15–29.
- —, 2013: Theoretical Sociology: 1830 to the Present. London: Sage.
- Turner, Stephen P./Jonathan H. Turner, 1990: The Impossible Science: An Institutional Analysis of American Sociology. London: Sage.
- Wang, Dan, 2012: Is There a Canon in Economic Sociology? In: ASA Economic Sociology Newsletter 11, 1–8.
- Weeber, Stan C., 2006: Elite versus Mass Sociology: An Elaboration on Sociology's Academic Caste System. In: *The American Sociologist* 37, 50–67.
- Wickham, Hadley/Romain François, 2005: *dplyr: A Grammar of Data Manipulation. R Package Version 042.* https://cran.r-project.org/web/packages/plyr/index.html
- Wolfe, Alan, 1990: Books vs. Articles: Two Ways of Publishing Sociology. In: *Sociological Forum* 5, 477–489.
- Young, Christobal, 2009: The Emergence of Sociology From Political Economy in the United States: 1890 to 1940. In: *Journal of the History of the Behavioral Sciences* 45, 91–116.
- Zhao, WayneXin, et al., 2011: Comparing Twitter and Traditional Media Using Topic Models. In: Paul Clough et al. (eds.), *Advances in Information Retrieval*. Berlin: Springer, 338–349.

Recent Titles in the Publication Series of the MPIfG

MPIfG Discussion Papers

DP 16/6 R. Bronk, W. Jacoby **Uncertainty and the Dangers** of Monocultures in Regulation, **Analysis, and Practice**

DP 16/5 A. Reurink Financial Fraud: A Literature

Review

DP 16/4 R. Mayntz Illegal Markets: Boundaries and

Interfaces between Legality and Illegality DP 16/3

L. Elsässer, A. Schäfer **Group Representation** for the Working Class? Opinion Differences among Occupational Groups in Germany

DP 16/2 M. Dewey Porous Borders: The Study of Illegal Markets from a Sociological Perspective

DP 16/1 L. Haffert **Permanent Budget Surpluses** as a Fiscal Regime

DP 15/11 M. Höpner, A. Spielau Diskretionäre Wechselkursregime: Erfahrungen aus dem Europäischen Währungssystem, 1979-1998

DP 15/10 A. Maatsch **Empowered or Disempowered?** The Role of National Parliaments during the Reform of European **Economic Governance**

DP 15/9 E. Carter Constructing Quality: Producer Power, Market Organization, and the Politics of High Value-**Added Markets**

DP 15/8 P. Korom, M. Lutter, J. Beckert The Enduring Importance of Family Wealth: Evidence from the Forbes 400, 1982 to 2013

DP 15/7 A. Leendertz Das Komplexitätssyndrom: Gesellschaftliche "Komplexität" als intellektuelle und politische Herausforderung in den 1970er-Jahren

MPIfG Books

J. Beckert **Imagined Futures:** Fictional Expectations and Capitalist Dynamics Harvard University Press, 2016

T. Ergen Große Hoffnungen und brüchige Koalitionen: Industrie, Politik und die schwierige Durchsetzung der Photovoltaik Campus, 2015

B. E. Fulda Immer weniger Kinder? Soziale Milieus und regionale Geburtenraten in Deutschland Campus, 2016

L. Haffert Freiheit von Schulden -Freiheit zum Gestalten? Die Politische Ökonomie von Haushaltsüberschüssen Campus, 2015

A. Leendertz, W. Meteling (Hg.) Die neue Wirklichkeit: Semantische Neuvermessungen und Politik seit den 1970er-Jahren Campus, 2016

P. Mader The Political Economy of Microfinance: Financializing Poverty Palgrave Macmillan, 2015

Ordering Information

MPIfG Discussion Papers

Order printed copies from the MPIfG (you will be billed) or download PDF files from the MPIfG website (free).

MPIfG Books At bookstores; abstracts on the MPIfG website.

www.mpifg.de Go to Publications.

Consult our website for the most complete and up-to-date information about MPIfG publications and publications by MPIfG researchers. To sign up for newsletters and mailings, please go to Service on the MPIfG website. Upon request to info@ mpifg.de, we will be happy to send you our Recent Publications brochure.

FRΡΔ

MPIfG Discussion Papers and MPIfG Working Papers in the field of European integration research are included in the European Research Papers Archive (ERPA), which offers full-text search options: http://eiop.or.at/erpa.

Das Max-Planck-Institut für Gesellschaftsforschung ist eine Einrichtung der Spitzenforschung in den Sozialwissenschaften. Es betreibt anwendungsoffene Grundlagenforschung mit dem Ziel einer empirisch fundierten Theorie der sozialen und politischen Grundlagen moderner Wirtschaftsordnungen. Im Mittelpunkt steht die Untersuchung der Zusammenhänge zwischen ökonomischem, sozialem und politischem Handeln. Mit einem vornehmlich institutionellen Ansatz wird erforscht, wie Märkte und Wirtschaftsorganisationen in historische, politische und kulturelle Zusammenhänge eingebettet sind, wie sie entstehen und wie sich ihre gesellschaftlichen Kontexte verändern. Das Institut schlägt eine Brücke zwischen Theorie und Politik und leistet einen Beitrag zur politischen Diskussion über zentrale Fragen moderner Gesellschaften.

The Max Planck Institute for the Study of Societies conducts advanced basic research on the governance of modern societies. It aims to develop an empirically based theory of the social and political foundations of modern economies by investigating the interrelation between economic, social and political action. Using primarily an institutional approach, it examines how markets and business organizations are embedded in historical, political and cultural frameworks, how they develop, and how their social contexts change over time. The institute seeks to build a bridge between theory and policy and to contribute to political debate on major challenges facing modern societies.

