

The Growth and Diversity of US Associations, 1956-2004
Analyzing Trends using the *Encyclopedia of Associations*

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Abstract

This working paper summarizes the results of an analysis of the *Encyclopedia of Associations* and its web-based analogue, *Associations Unlimited*. This rich source of information has been published on roughly an annual basis since 1974, and before that was published every two or three years, with the first edition appearing in 1956. The directory attempts to list every national voluntary association in the United States and provides information such as the address, staff size, areas of activity, membership, and a short abstract about the activities of each association listed. Therefore it can be a useful tool for sociologists, political scientists, and others interested in tracing the growth and development of the associational universe. This paper summarizes trends in the size of the directory and the numbers of groups listed in each of its sections. It develops measures of size and diversity of the associational universe.

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The Encyclopedia of Associations

Since 1956, Gale Research, later Thomson/Gale, has published a printed volume entitled the *Encyclopedia of Associations*.¹ The database on which the book is based also serves as a web-based research tool available through libraries and entitled *Associations Unlimited*. While not originally designed with the idea of dynamic analysis in mind, the accumulated volumes of the *EA* in fact allow a researcher considerable opportunity for analyzing trends over time. The purpose of this paper is to assess the value of the *EA* for trend-based analyses and to derive some measures of the overall size and diversity of the US associational universe. First, I discuss the method used to develop the estimates, then I provide an overview of the organization and changes made to the *EA* over the years, especially in the earliest editions. This makes clear that the directory can be used to analyze trends over time as its organizational structure has been very consistent. I then present estimates of size and diversity of the organizations listed.

The numbers and analyses reported here are simply counts of the numbers of associations listed in each volume of the *EA*, broken down by section. Each volume is divided into approximately 20 sections, analogous to chapters in a book. So trade associations, agricultural groups, health care associations, Greek letter societies, fan clubs, public affairs organizations, and other types of groups are all listed in a section devoted only to them. By counting the number of organizations listed in each section, I provide a simple way of measuring the sizes of these sections and therefore also of the size and diversity of the entire associational universe. Analysis is limited to national organizations of the United States.

For the most part, counting the associations listed in each section is completely straightforward. Forty editions of the *EA* have been published from 1956 to 2003. From the 9th edition (1975) onwards, each association has been listed with a sequential identification number. Noting the first and last ID numbers in each section provides a rapid method of counting the number of groups in each section. For the first 8 editions, however, no such ID number is available; groups are simply listed on a page with no ID number that could be used as a counter. For these editions, I estimated the number of entries based on the number of pages in each section. In order to get the estimate of the number of entries per page, I first used the 10th edition, simply counting both the pages and the entries in each section. This yielded an estimate of about 11.46 entries per page. There was considerable variation around this average, however, with the sections ranging from fewer than 10 entries per page to over 15. While this would work for a rough estimate, it is quite rough. The differences between my estimated numbers for entries in each section and the actual numbers were generally low but four of the 17 sections were off by 15 to 23 percent; quite substantial numbers in this context. Subsequent to this first rough estimate, an assistant read through each volume from numbers 1 through 8 and made a separate estimate for each section based on ten randomly selected pages (or five pages if there were fewer than 10 pages in the section). This analysis showed that there were even more substantial

¹ This material is based upon work supported by the National Science Foundation under Grant No. SBR-0111611. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.

differences in the numbers of entries listed on each page across the sections. This was because some types of groups typically were listed with very short entries (e.g., Chambers of Commerce, where there is little need to provide detailed information about what they do) and others were listed with a longer description of their activities. In any case, this separate estimate of each section across the first eight editions of the *EA* provided a mean estimate of 13.2 groups listed per page with a minimum of 7, a maximum of 57, and a standard deviation of 8.2. So there was quite substantial variation here, and the separate estimates, which were quite time consuming to collect, are much more accurate than earlier efforts.²

What follows, then, is an analysis of the numbers of groups per section in the 40 editions in the *EA* starting in 1956. For editions 1 through 8, these are estimates based on the numbers of pages in each section and the average number of groups listed on each page.³ For editions 9 through 40, they are actual counts.

In this paper, my focus is on overall numbers of groups listed per year. Each entry in the *Encyclopedia* is not updated each year. While the compilers of the *Encyclopedia* attempt to update it regularly, not every organization sends in new information each year. Information from year 1 is retained in year 2 if no new information is found, and updated only in that year when new information is received or found through an active search of web sites, for example. Thus, in analyzing information concerning individual organizations over time, since it does not appear that most organizations update their information annually, the information reflected in the *EA* is likely to overestimate somewhat the inertia in various organizational processes. Looking at individual records over time shows that many remain fixed for many years then shift to another set of values in one year, where they remain again for several years. Of course, some individual organizations update their information more often than others. In any case, these individual-level processes should not, on average, affect the overall trends which are my focus in this paper.

Background

The *Encyclopedia of Associations* first appeared in 1956.⁴ It was designed to be a directory of trade associations. The first edition listed almost 5,000 associations, broken down as follows:

² In an earlier estimate, I used a single estimate of about 11 entries per page and adjusted it only where my assistant noted that there were “clear” or “obvious” differences from this average. Thanks to Beth Leech, these more accurate data were collected. Overall numbers for the annual totals do not differ much from the earlier estimates, but many of the individual sections do.

³ Specifically, these section estimates equal the number of pages in the section times the average number of entries per page plus the actual count of the number of groups listed on the last page of the section.

⁴ This paper is part of the Policy Agendas Project (www.policyagendas.org). As such, I appreciate the comments and feedback of my collaborator on the larger project, Bryan Jones. Similarly, John McCarthy has worked closely with me in the development of this project, and Beth Leech has been involved over the years as well. The National Science Foundation supported aspects of this project through grant # SBR-0111611. Daniel Jones-White, Andrew Martin, Jonathan Schrier, and Beth Leech all helped collect some of the data on which this paper is based. Finally thanks to Jennifer Bernardelli of Thomson/Gale Research for helping me be in

- 1,850 Trade, Business, Agriculture and Government Organizations
- 255 Scientific and Engineering Associations
- 490 Educational and Social Welfare Associations
- 236 Medical and Health Associations
- 281 General Associations
- 89 National/ International Chambers of Commerce
- 1,444 State/ Local Chambers of Commerce

- 4,645 Total
- 3,201 Total not counting state and local chambers of commerce

The Second Edition appeared in 1959. It used a much more complete set of sections, as follows. With only a few changes, this set of sections remained relatively constant in future editions of the book. Therefore we can trace simply the number of groups in each section to get a sense of the relative growth in the numbers of organizations of each time over time. Groups listed in the second edition:

- 2,215 Trade Business Commercial Organizations
- 336 Agricultural Organizations and Commodity Exchanges
- 158 Governmental, Public Administration, Military and Legal Organizations
- 300 Science, Engineering and Technical Organizations
- 545 Educational and Cultural Organizations
- 241 Social Welfare Organizations
- 442 Health and Medical Organizations
- 117 Public Affairs Organizations
- 123 Fraternal Organizations
- 211 Foreign Interest, Nationality and Ethnic Organizations
- 291 Religious Organizations
- 86 Horticulture Organizations
- 108 Veterans' and Patriotic Organizations
- 99 Hobby and Avocational Organizations
- 126 Athletic Organizations
- 106 General Organizations (not elsewhere classified)
- 225 Labor Unions
- 99 National/International/Bi-National Chambers of Commerce
- 2,587 State/Local Chambers of Commerce
- 312 Greek Letter Societies
- 63 Received too late to be listed

- 8,790 Total
- 6,140 Total not counting state and local chambers of commerce or those received too late to be listed.

touch with the team of researchers at Thomson/Gale who actually put together the data in the annual volumes which I analyze here.

Roughly this same format for listing organizations was used in future editions. Important adjustments included the following:

- State and Local Chambers of Commerce were discontinued after the 4th edition.
- Education and Cultural Organizations were given separate sections beginning in the 8th.
- Horticultural organizations were no longer listed in a separate section after the 7th.
- There was no longer a section called “general organizations” for those groups not listed elsewhere after the 7th.
- A new section called “Fan Clubs” was included for the first time in 1987, with the 22nd edition.
- The 5th through 8th editions listed sometimes several thousand organizations as “inactive or defunct.” Earlier and later editions did not include this listing.
- The 2nd through 4th editions included small numbers of groups “received too late to classify.” Later editions did not include such a section.

Forty editions of the *EA* appeared between 1956 and 2003. For the first eight editions, publication was on a periodic basis, as follows: 1956, 1959, 1961, 1964, 1968, 1970, 1972, and 1974 (8th edition). Since 1974, the volumes have appeared annually. However, in three years (1979, 1999, and 2001), two volumes appeared bearing the same copyright date. In the analyses that follow, these have been treated as having been published in 1999.33 and 1999.67, etc. Finally, note that the copyright date does not always correspond to the date on the spine and cover of the book, which is often for a subsequent year (that is, the volume published with copyright of 2003 may advertise on its cover that it is the “2005” edition. In any case, with some care, we can trace the growth of the group system over time using this data source. Considering the time it takes for the editors of the directory to update their information and the lack of annual updating for each group in any case, dates are not likely to be entirely precise. But we can confidently aggregate track trends over time using this data source.

Trends over Time

Overall Numbers

Figure 1 shows the total number of national groups listed over time.⁵

(Insert Figure 1 about here)

The apparent rapid growth of the associational universe in the earliest years of the figure can probably be partially attributed to greater completeness of coverage by the compilers of the *Encyclopedia* though it also certainly reflects real growth in the underlying trend as well. Still, it stands to reason that the earliest editions would be increasingly accurate, especially in the areas beyond trade associations (the original focus of compilers of the directory). By the 5th edition, published in 1968, the directory included over 10,000 associations and the number of groups listed changed very little between the 5th and 6th editions, suggesting that fewer previously

⁵ The figure excludes state and local chambers of commerce, which were listed only in the early editions.

overlooked organizations were entering the database. We can be relatively confident that trends from that point on reflect real growth in the numbers of groups in existence (and most likely the bulk of the increase in the period from 1956 to 1968 as well).

The total number of groups grew steadily from about 10,000 in the 5th edition (1968) to over 22,000 by the 25th edition (copyright 1990; 1991 is the date on the spine of the book). The series reaches a peak of 23,003 in the 31st edition (copyright 1996), drops as low as 22,048 in the 35th edition (1999) and finishes the series at 22,436 with the 40th edition (2003).⁶ In sum, we see steady growth from the 1960s to about the 1990s, with no further growth since then, but no significant decline either. In any case, the fact that the number of organizations listed has stopped growing for almost the last 10 years is a significant feature of the data and is not likely to be any artifact of measurement by those involved in compiling the directory.

Growth by Section

Figure 2 shows the size of each section of the *Encyclopedia*. The figure omits the first edition because its classification of groups into sections was not consistent with later editions. It does not include state and local chambers of commerce or other sections that were later discontinued, those that were received too late to be classified, inactive and defunct groups, or fan clubs (listed only in the 22nd edition and later). It lists educational and cultural groups as separate series even though these were listed together in the first to the 8th editions (for editions 2 through 7 they were assigned proportionately based on the proportion of the total that each represented in the 8th edition).

(Insert Figure 2 about here)

The figure is relatively difficult to read because there are so many types of groups listed. However, general trends can certainly be discerned, and some particular sections can be seen to have grown dramatically. Others can be seen to be relatively stagnant.

Figure 3 presents the same data as a stacked area graph. The total numbers correspond almost but not exactly to those presented in Figure 1 because a small number of associations were listed in Figure 1 but were not in consistently defined sections over time so are not listed in Figure 3.

(Insert Figure 3 about here)

Together, figures 2 and 3 make clear that there has been not just growth, but quite differential growth over time in the associational landscape. While most types of organizations have grown in number, some sectors have seen much more growth than others. Public affairs organizations grew from just 117 groups in the 2nd edition to 2,161 in the 27th edition before declining slightly to 1,847 in the 40th edition. Labor unions and other similar associations, on the other hand, numbered 225 in the 2nd edition and just 216 in the 40th. No one will be surprised at the growth

⁶ The *Associations Unlimited* electronic data base includes state/local and international associations as well as national associations. In recent years printed volumes including these entries are also available, in addition to the volumes that include only national entries.

of health-related organizations, from 442 in the 2nd edition to 2,742 in the 40th. But the figure makes clear that each organizational sector did not go through a similar process. While many grew, others stagnated or even declined. Another apparent characteristic of the data is that the relative importance of trade associations in the associational landscape has declined. While trade associations remain the largest section of the *Encyclopedia*, they have declined as a proportion of the total number of groups listed in each volume. This decline has been relatively steady as well. Recall that the *Encyclopedia* began as a directory of trade associations, so there is some reason to expect that it was more complete in its coverage of trade groups than other types of associations in its earliest years. However, since the 1970s at least, the *EA* has been a general directory of all kinds of associations and the decline in trade associations as a proportion of all associations listed is not likely to be only an artifact of the way the data were collected.

The Diversity of the Associational Universe

A pie-chart is the simplest way to see the relative make-up of data across nominal categories. Figures 4 through 9 present a series of simple pie-charts showing the relative distribution of the associations listed across the sections of each volume.

(Insert Figures 4-9 about here)

Figures 2 and 3 gave an idea of the numbers of groups per section; Figures 4 through 9 give an idea of the relative diversity of the associational universe. Note that data for the first edition are not strictly comparable to the later volumes because there were fewer sections in the *Encyclopedia*. Later editions show dramatic changes in the direction of greater diversity, however, and these trends are not due to any artifacts of how the *Encyclopedia* is compiled. We can look at this issue in more detail, and more accurately, in the following manner.

An “entropy score” is a measure of spread of observations across nominal categories. The value is based on the proportion of all observations in a given category times the log of that value, times -1 for convenience. A value of zero indicates that all the values are in a single category. The higher the entropy value, the greater the spread of observations across categories. Thus, the entropy score can be used as a single index for the diversity of a series of data when viewed across nominal categories as we have here. Let us call this an Index of Diversity. I calculated this index for each of the volumes from 2nd to 40th, and present the results in Figure 10.

(Insert Figure 10 about here)

Dramatic increases in the diversity of the set of groups listed in the *EA* are apparent from the beginning of the series until the 8th edition in 1974. From 1975 to about 1986 there is virtually no movement in the series, and then it begins a ten-year upward drift culminating in 1996, when the series reaches its greatest diversity. Since then there has been a slow decline in diversity though the system has remained quite diverse by historical standards. The year of greatest diversity, 1996, is also the year when the greatest number of groups were listed in the *Encyclopedia* (see Figure 1, above). Figure 11 shows that the diversity and the size of the organizational system covary quite strongly.

(Insert Figure 11 about here)

The US associational system grew by leaps and bounds from the 1950s to the mid-1990s. The *Encyclopedia of Associations* listed more groups in each successive edition, and, further, the groups listed were more evenly spread across the sections. This indicates that the group system grew at differential rates with the greatest growth coming in those sectors that were previously the smallest. The result was a bigger and more diverse system each year for some 40 years. Since 1996, however, these trends have stabilized or reversed.

Conclusions

This paper has laid out data relating to the coverage of the *Encyclopedia of Associations* over time. It developed estimates of the number of groups overall and within the various sections of the *Encyclopedia*. It showed that the data source can be used to trace the size and diversity of the US associational system. While the early editions of the association showed considerable variation in coverage, by the 1960s the *Encyclopedia* appears to have moved to relatively complete coverage and also to have stabilized in the organization and presentation of the data. In this paper I have provided no outside assessment of the completeness of the coverage of the *Encyclopedia*. Rather, I have simply described the trends apparent in the data. In another project, John McCarthy, Andrew Martin, and I have assessed the completeness of the labor unions section of the *Encyclopedia*. When compared to data available from the Department of Labor, which attempts to have a complete census of unions, *EA* coverage is very complete. Among unions with more than 10,000 members, coverage in the *Encyclopedia* overlaps with the Department of Labor data in 95% of the cases. (Coverage is lower among smaller unions but overall remains above 75% even including smaller organizations; this compares favorably with using a telephone directory, for example.) Thus there is some reason to have confidence that these data reflect accurately the social trends that generate the tens of thousands of associations that are listed in the *Encyclopedia*.

In a directory as large as the *EA* there is little reason to expect the numbers to be perfectly accurate. However, as an on-going publication operating according to certain routines of administration we can compare the values from one year to the next with relative confidence. Users should be aware that the source described here is likely to be most accurate for larger and well established organizations; virtually all large and long-lasting groups operating at the national level are likely included. On the other hand, newer and smaller groups are more likely to be missed. And, of course, groups that are not national in scope are not listed at all. An estimate by Erik Johnson of the lag between reported founding dates and eventual inclusion in the *EA* for national environmental associations puts it at an average of 6.2 years. (That is, it takes this long for a newly created organization to be listed in the *Encyclopedia*. Groups that are very short-lived or which never reach a certain level of organizational strength may be entirely missed.) Information on inclusion lag times and their variation across types of associations will be important in helping to interpret patterns of growth and decline in the associational landscape in the later years of these series. With a complete *EA* dataset we can compare the reported founding dates of all organizations with the year in which the group was first listed in the directory. Such an analysis shows that it typically takes several years for groups to be listed. Once listed, however, groups typically remain in the directory. This means that the *EA* is likely

to be quite accurate in relatively stable domains of organizational life and among the largest organizations. It is of course harder to keep up to date if organizations are constantly mutating, emerging, and transforming.

The goal of this paper is simply to describe some new measures, explain the techniques used, and provide these estimates for the scholarly community. I hope that this new data source will be of wide interest to political scientists, sociologists, and others.

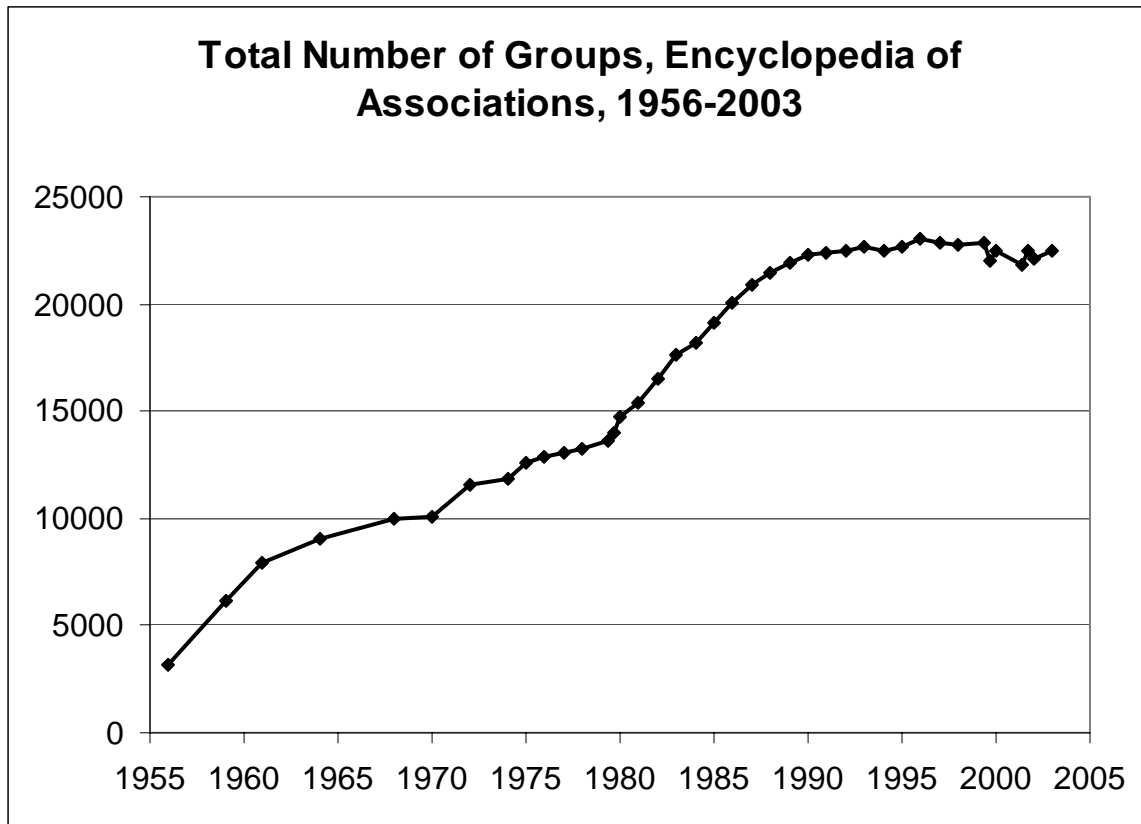


Figure 1. Total number of associations listed, 1st to 40th editions, *Encyclopedia of Associations*.

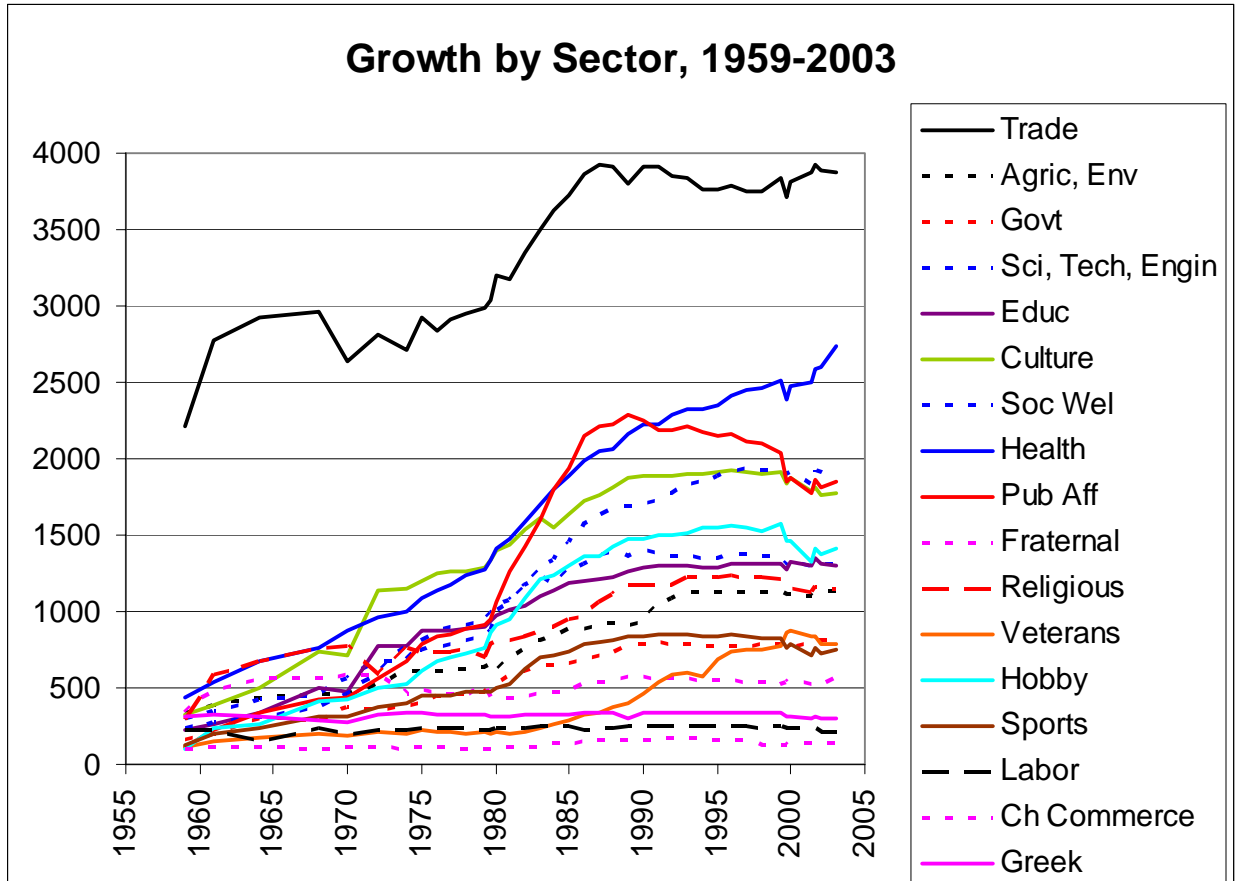


Figure 2. Associations per Section, 2nd to 40th editions, *Encyclopedia of Associations*.

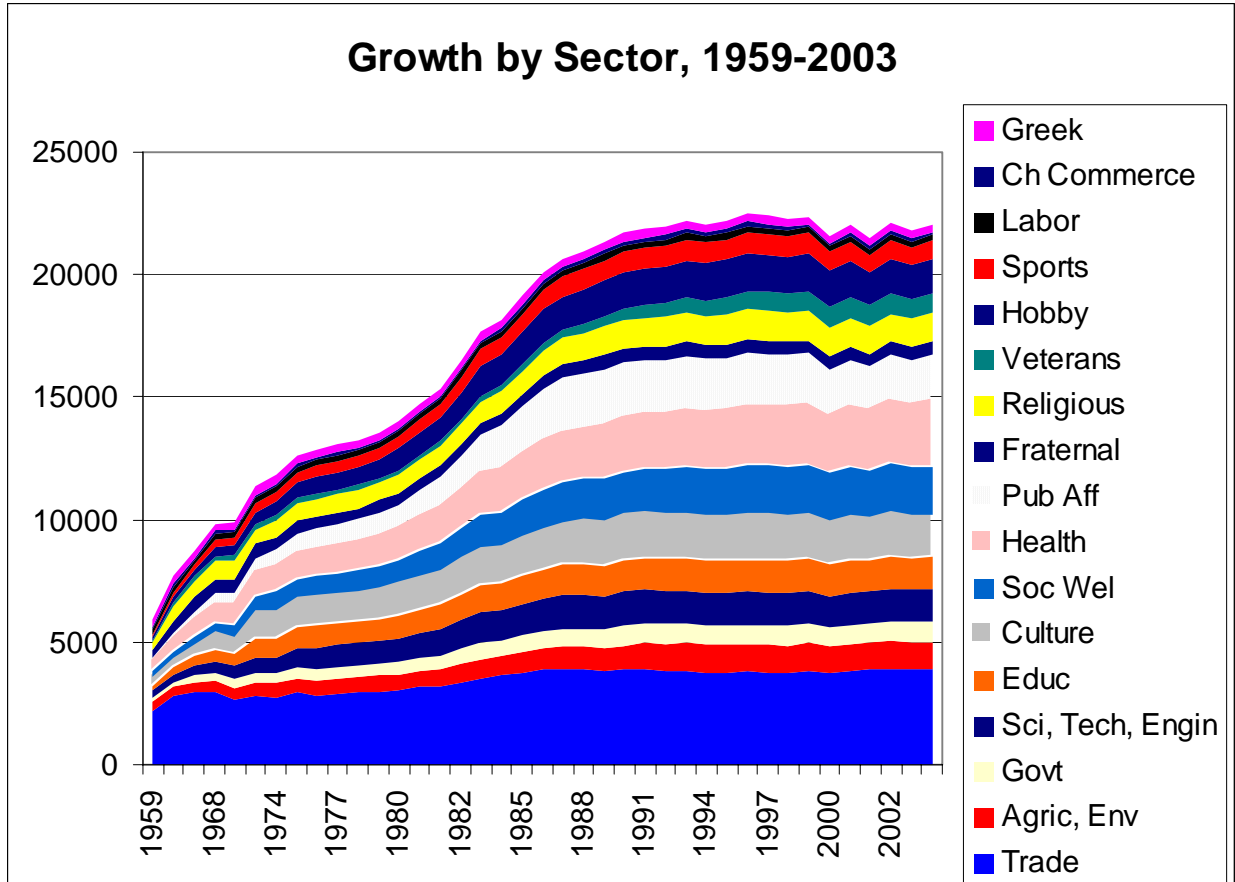


Figure 3. Associations per Section, 2nd to 40th editions.

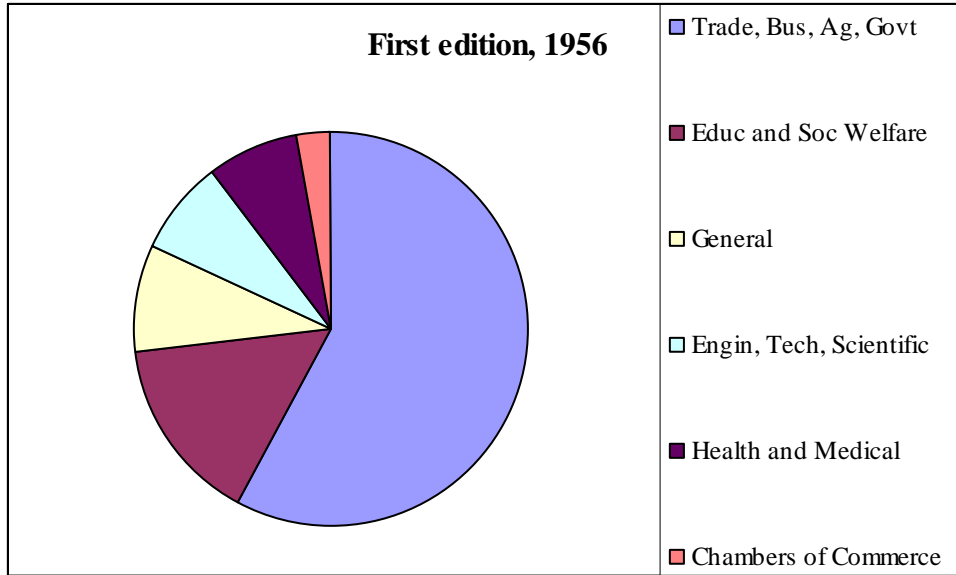


Figure 4. Associations per Section, 1st Edition, 1956.

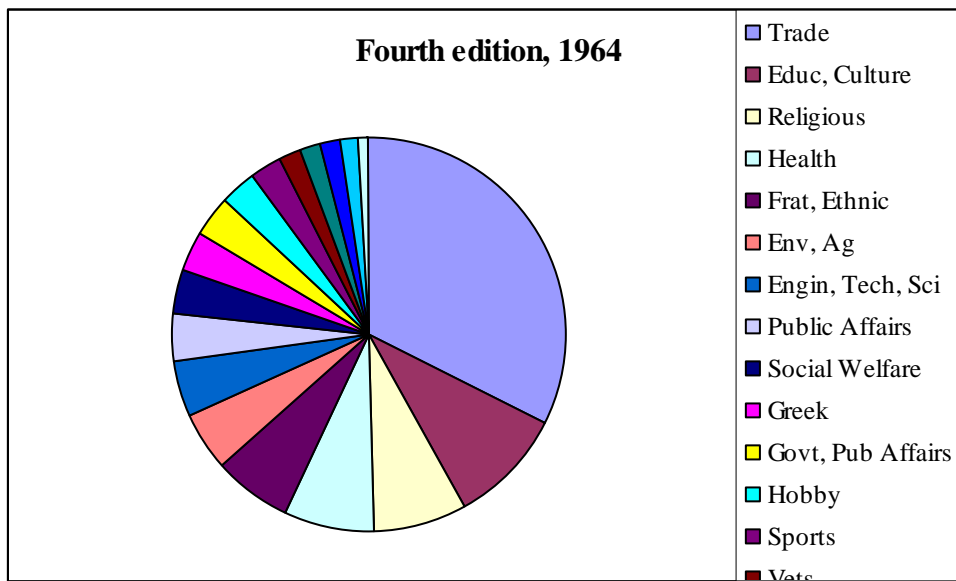


Figure 5. Associations per Section, 4th Edition, 1964.

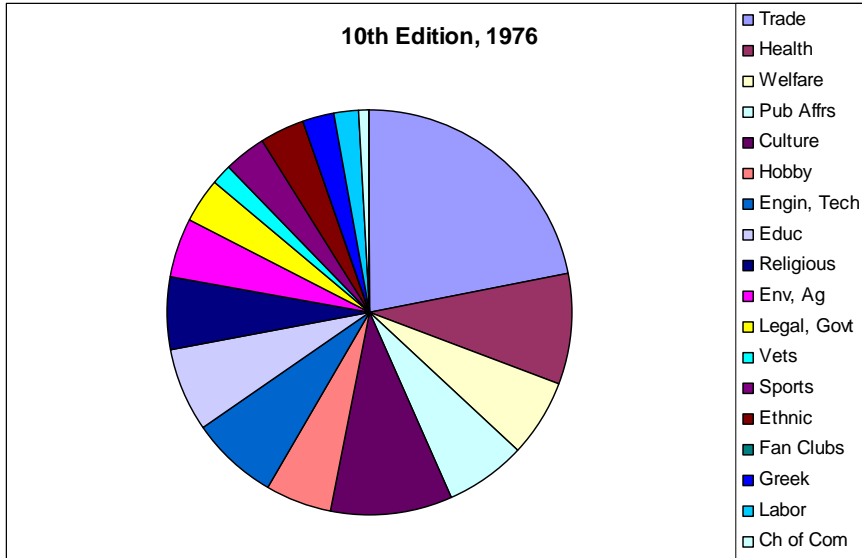


Figure 6. Associations per Section, 10th Edition, 1976.

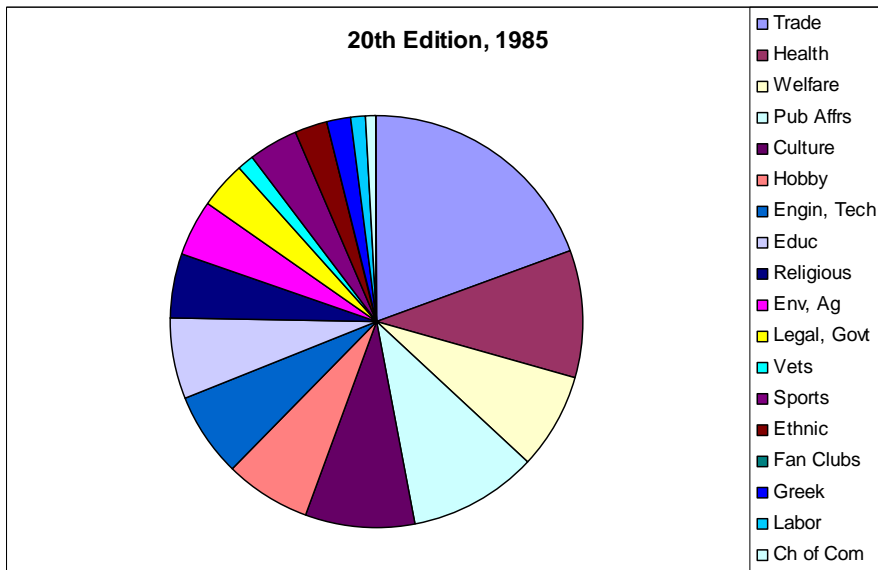


Figure 7. Associations per Section, 20th Edition, 1985.

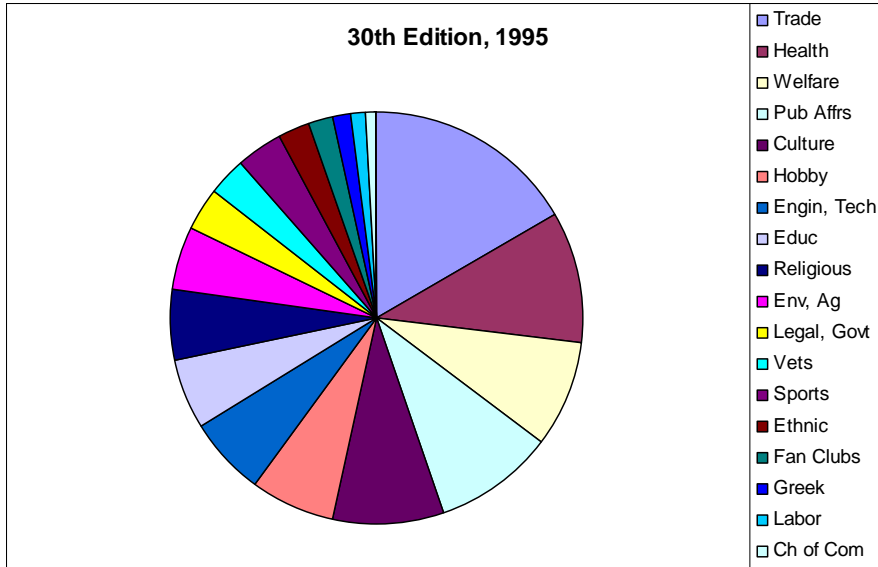


Figure 8. Associations per Section, 30th Edition, 1995.

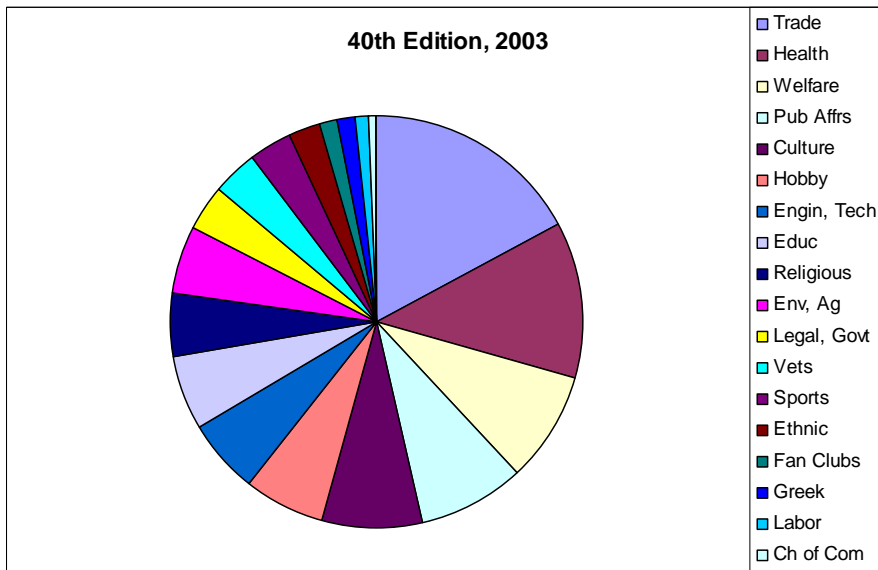


Figure 9. Associations per Section, 40th Edition, 2003.

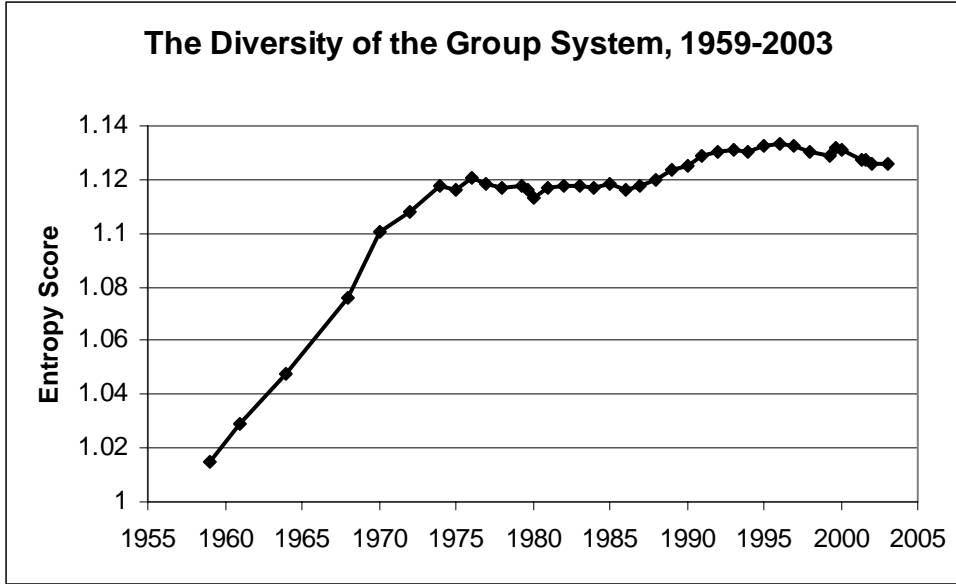


Figure 10. An Index of the Diversity of the Associational Universe, 2nd to 40th Editions.

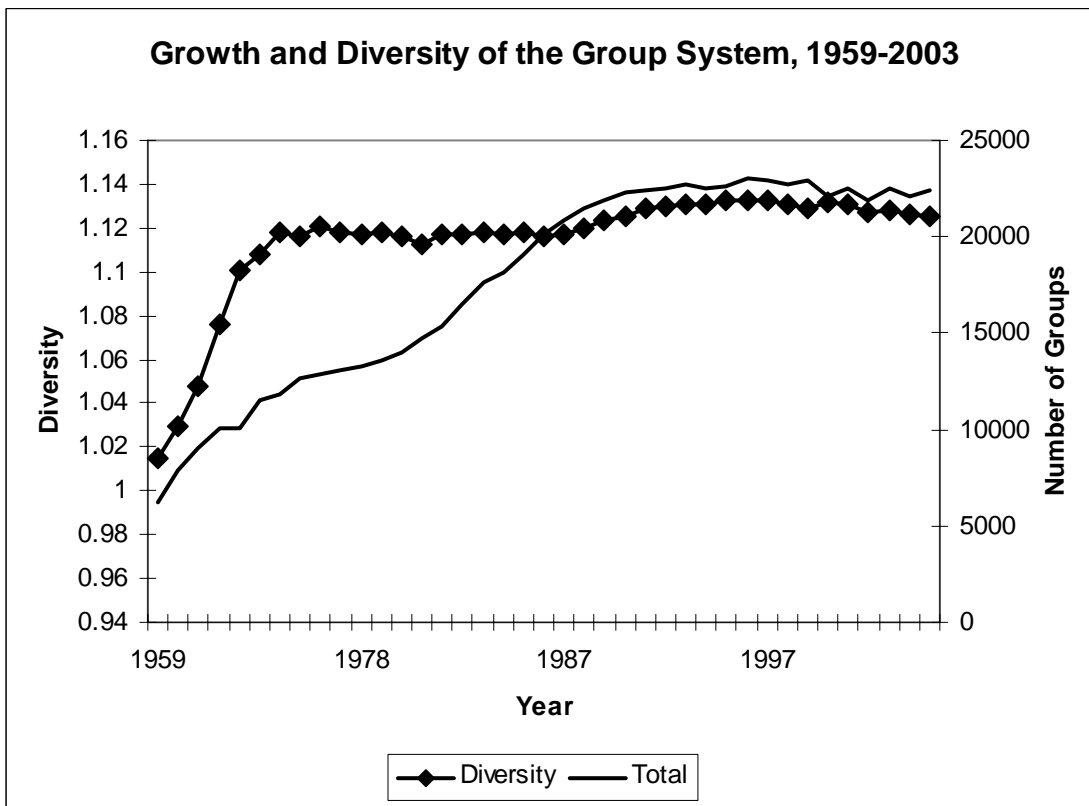


Figure 11. The Size and Diversity of the Associational Universe, 2nd to 40th Editions.