

## Chapter V Summary of Findings

What are the collecting patterns or trends in acquisitions which are evident in the analysis of the nine years of data from the 1997 OCLC/AMIGOS CACD? The data in Table V-1 display the measurements from the variables in the study for the four peer groups

The overall trends by total number of titles by imprint year indicate a slight rise in acquisitions from 1987 through 1993. The total number of titles decreases in all peer groups in 1994 and again in 1995. The pattern of increase and decrease in the total number of titles is similar in all three academic library peer groups, but there are differences between peer groups for the other variables.

Table V-1  
Summary Data for Four Peer Groups, 1987-1995

While the number of unique titles in the ARL group and the database track the overall totals by year, the percentage of unique titles decreases in the two non-ARL peer groups as the total decreases. In the ARL, the percentage of unique titles to total steadily increases until 1993. The aggregated database of PG14 has the least amount of fluctuation in percentage of unique titles and has virtually the same percentage in 1995 as in 1987.

By mean number of holding libraries, the variations are slight over the nine years; all but PG7 have the same mean number of holding libraries in 1995 as in 1987.

In the ARL, as the number of titles declines in 1994 and 1995, the percentage of unique

titles increases and the mean number of holding libraries remains steady at 12 libraries per titles which represents 13% of the ARL libraries. But the percentage of titles held by 1-5 libraries increases substantially by 3 percentage points from the initial year, 1987. In 1995, nearly 60% of the titles are held by five or fewer libraries in the AR. While the percentage of unique titles is less than the other two academic library peer groups, the concentration seems to fall in the 1-5 holding library range. With a low percentage of unique titles and a low percentage of titles owned by more than five libraries, the overlap in collecting is in the 2-5 library holding range. With 60% of titles having less than six holding libraries on the average, the indication is that the level of collecting agreement for the same titles is fairly low. The low percentage unique titles along with 60% of titles being owned by 1-5 libraries indicates that the ownership ratio is very low.

In PG4, the diversity in resources declines over the nine-year period with both the total number of titles and percentage of unique titles declining. These declines are reflected in the decrease in the number of 1-5 holding libraries in that there are fewer titles, but a larger number of the titles acquired have more than six holding libraries, resulting in a concentration of fewer titles and more collecting agreement on those titles.

PG7, the medium-sized academic libraries, exhibits the greatest fluctuation by all measures of the three academic library peer groups. The percentage of unique titles closely tracks the increase and subsequent decline in the total number of titles by year. For PG7, the mean number of holding libraries does not remain relatively steady as in the two other academic peer groups. From a high of 15.81 holding libraries per titles in 1987, that measure declines by 2.5 libraries. For the nine-year period the number of titles in 1995 is almost virtually identical to the number of titles in 1987, but the average number of holding libraries decreases by over two libraries per title. The number of 1-5 holding libraries remains fairly constant throughout the time period. The collecting in PG7 shows a pattern of concentrating on a tighter core of titles as the

total number of titles declines, the percentage unique declines, the mean number of holding libraries declines, and the percentage of 1-5 holding libraries tracks the increase and decrease in the total number of titles.

The percentage of titles with 1-5 holders is only higher in the two non-ARL academic library peer groups until 1994 when it decreases so that in 1995 there is only one percentage point difference in the three peer groups for that measurement.

The mean number of holding libraries is a much lower percentage of the total number of libraries in the two non-ARL peer groups, because those two peer groups each have a larger number of libraries than the ARL. Comparatively, the non-ARL peer groups have a higher percentage of unique titles but a lower mean number of holding libraries than the ARL group. But the absolute numbers of titles are less than the totals for the ARL group. The non-ARL libraries have more diversity within each peer group than the ARL, but the diversity is spread over a smaller number of titles. There is less agreement in acquisitions for the non-ARL peer groups.

The database, PG14, has the lowest percentage of the four peer groups in titles with 1-5 owners. These findings and the low mean number of holding libraries as a percentage of total libraries for PG14, indicate that 50% of the titles in the database are not widely held among the 2,646 libraries. It would seem that over 2,600 libraries would have a much higher mean number of holding libraries per title and a much different percentage of 1-5 holding libraries than the three academic library peer groups. But despite its size, the 1997 CACD database is predominantly a reflection of the large number of titles collected in the ARL peer group.

Further summation of the findings can be accomplished by answering the research questions posed for the study.

### Research question one

Are there differences among peer groups of U.S. academic libraries in collecting patterns for monographs by subject and language groupings?

Yes,

There are differences in the acquisitions patterns for the four variables by subject and language groupings among the three academic library peer groups.

- The highest percentage share of total for the arts and humanities are in the ARL libraries.
- Peer groups 4 and 7 are very similar in the percentage of totals for the four knowledge divisions and do not follow the same patterns as the ARL and PG14 groupings.
- For peer groups 4 and 7, the percentage of totals for the broad knowledge groupings are close together with the sciences having a much higher percentage of total than in the ARL and PG14 groupings.
- In the ARL group, PG1, approximately one in four titles is owned by only one library. meaning that 75% of titles in the ARL group are owned by more than one library.
- In the non-ARL library peer groups, the ratio of unique titles is one in three. Thus the two non-ARL peer groups have a much higher ratio of unique titles than the ARL libraries.
- The number of unique titles does rise in the ARL libraries in the 1990s.
- For unique titles, the ARL libraries hold the preponderance of unique titles in the arts and humanities.
- the medium-sized academic libraries have more unique titles in the social sciences than in the humanities.
- The mean number of holding libraries is highest in the ARL peer group as a percentage

of the total peer group. The medium-sized library peer group, PG7, has the smallest percentage of libraries on the average owning a title.

- The libraries in PG7, the smallest size libraries of the three peer groups, have the highest percentage of titles with 1-5 holding libraries, meaning the lowest percentage of titles with over five owning libraries. The indication would seem to be that in PG7 there is far less agreement on the acquisition of the same titles than in the two larger academic and research library groups, but the agreement becomes stronger throughout the time period of the study.
- For PG14, all of the libraries in the CACD database, the sciences maintain the highest mean number of holding libraries; there is more agreement on a core of titles in the sciences.
- The two non-ARL library peer groups have a much lower level of collecting of foreign language materials in comparison with the ARL group. In PG1, English language titles have three times as many holding libraries as non-English titles. The ratios are much higher for English language titles in PG 4 and PG7 than in PG1 and PG14.
- The two non-ARL peer groups and PG14 have the largest percentage share of total in the social sciences and a larger percentage share of English language monographs in the social sciences than PG1.
- German, French and Spanish are the only significantly collected foreign languages in the non-ARL libraries. The collecting is negligible or non-existent for other language groupings.

#### Research question two

Have collecting patterns for monographs in U.S. academic libraries changed as a

consequence of the serials crisis beginning in the mid 1980s?

Yes,

- By broad knowledge grouping, while not dramatic, there does seem to be a slow but steady shift in monographic collecting to the social sciences. These subjects are the professional fields and those disciplines engaged in cultural, community and sociological studies.
- Over the nine-year time span, the collections in all four of the peer groups have an increase in the ratio of English language monographs to non-English language monographs.
- In PG1, the ARL, the humanities have a larger proportion of foreign language titles than English language titles in 1987, with a 35/65 ratio of English to non-English. The social sciences have a 51/49 ratio and the sciences 80/20. In the humanities the number of English language monographs increases nearly two percentage points by 1993. English language titles in the sciences increased by 5 percentage points over the nine years. Thus, non-English language titles in the sciences decreased by 5 percentage points.
- In PG1, the social sciences remained static in English to non-English language ratio. English language monographs increase by 3% in PG4 and less than 2% in PG7 in the social sciences.
- In PG14, as the total number of acquisitions increased in the first years of the 1990s, the number of titles increased correspondingly in Germanic languages, Spanish and Chinese. The number of titles remained static in French, Arabic, and Japanese. Russian language materials declined throughout the time period.
- Acquisitions appear to have concentrated into a shorter time span which causes the total number of imprints per year to have risen in the 1990s even though the reported number

of monographs purchased continued to decline.

### Research question three

Do the aggregated collections of the ARL libraries have a higher level of diversity of resources than those of non-ARL libraries?

Yes and no,

- The ARL libraries have a lower percentage of unique titles than the other two academic library peer groups across nearly all subject areas, but because the collections are larger, the ARL libraries have the highest absolute number of unique titles. The ARL libraries hold the preponderance of unique titles in the arts and humanities, but the large and medium-sized academic libraries have more unique titles in the social sciences. For the nine years, in the ARL libraries the sciences remain static with a more agreed upon core of titles while the humanities and social sciences were gaining in diversity of titles.

The size of the libraries appears to affect the percentage of unique titles. The research libraries appear to have less diversity within the peer group because they have larger collections and more funding than the libraries in the non-ARL peer groups. Thus, the research libraries have greater overlap because each is able to buy a larger volume of titles. With smaller budgets, the large and medium-sized libraries are buying fewer titles, resulting in less overlap or agreement on a core of titles within those peer groups. And although the non-ARL libraries have more diversity of resources within their peer groups, that diversity disappears when all of the academic libraries are subsumed into PG14, the 1997 CACD database, in which less than one fourth of the titles are unique. In this study, the ARL libraries have a higher diversity of resources in number of titles by virtue of their larger collection size. The two non-ARL peer groups have a higher level of diversity in that they have less agreement on lower absolute

numbers of titles.

While there are few similar studies with which to compare the findings, generalizations which have been reached through overlap studies may provide some comparisons. Merritt reached similar conclusions from his findings in the 1940's on the collections of 46 ARL libraries. He summarized his findings as “the larger a library in terms of the volumes it holds, the more apt it is to include the holdings of other libraries, and the more apt it is to own works that other libraries have not acquired.”<sup>i</sup>

Both Potter and Medina’s summaries of findings indicate that the “degree of overlap is related to the level of acquisitions with libraries that add a high number of volumes being more likely to duplicate the holdings of other libraries.”<sup>ii</sup> The findings of this study are in agreement with the statements by Merritt, Medina, and Potter. The ARL, the largest research library peer group, has the highest level of overlap or mean number of holding libraries as a percentage of the total number of libraries in the peer group. The lesser sized libraries have lower mean numbers as a percentage of total libraries in the group. There is more diversity in titles, although a lower total number of titles.

In Medina’s summary of the findings of overlap studies, a higher rate of duplication was found among the social sciences and humanities than other subjects. This study has found the greatest agreement in acquisitions among the sciences, not the social sciences and humanities.<sup>iii</sup>

Potter’s summary of the findings of overlap studies gives the proportion of unique titles at 50 to 86% percent of total titles. The findings in this study put the percentage of unique titles for the 1997 CACD database at 23%, with the non-ARL libraries having 30-33% in unique titles.<sup>iv</sup>

It is unfortunate that data on unique titles by academic library peer groups and by languages are not available for a longer span of time. The comparison with smaller studies conducted many years before would seem to indicate that the percentage of unique titles has

declined. While the findings of this study point to “collection convergence” for a diminishing core of titles and contraction of diversity with only a few libraries owning most titles, the absence of like longitudinal data does not let us assess if these are shifts in collecting patterns or, if these patterns in collecting have existed for many years. But placed within the context of earlier studies, it would seem that there has been a trend toward collection convergence.

## **Summary**

This study has provided a more detailed and comprehensive profile of academic library collections than any heretofore. It is the only study comparing the three size groupings of academic libraries and also the only study to analyze the holdings contained in the CACD product. While focusing on an aggregated “national collection,” it has provided summary data and benchmarks for the analysis and comparison of individual library collections. Since the CACD was discontinued a year after the 1997 edition utilized for the study, the analyses in this study will stand as an historical record of the state of academic library collections for the period 1987-1995. What can we learn from this study of aggregated collections? Do the findings point to “collection convergence” when 75% of the titles are owned by more than one library and less than 25% of titles are unique? Or does it mean that the national collection for “loaning but not owning” has dangerously low overlap when 50% of titles are owned by fewer than 5 libraries and, if the across-the-board average of 23% in unique titles is subtracted from that 50%, it means 27% of titles have 2-5 owning libraries and the remaining 50% have more than five owning libraries. Do low mean numbers of holding libraries indicate that there is more diversity in collections, or just less agreement on a core of materials? Does the variety of types of institutions and missions in the non-ARL library peer groups lead to more diversity in collections? If so perhaps an agreed upon core is not desirable for heterogenous institutions?

Does the “aggregation,” the averaging simply cover up the diversity of individual collections?

When viewed across the nine years, on the whole, the absolute numbers and percentages of share for the same variables in each of the four peer groups do not fluctuate substantially.

While the absolute number totals vary according to the number of libraries in the peer group, the similarity in percentage share by knowledge grouping and subject fields across the nine years in each of the four peer groups is remarkable.

Further analysis can be conducted by comparing the study findings to other available data. Interpretation of the findings continues in chapter VI.

## Notes for Chapter V

---

i. Leroy C. Merritt, "The Administrative, Fiscal, and Quantitative Aspects of the Regional Union Catalog," in Union Catalogs in the United States, ed. Robert B. Downs (Chicago: American Library Association, 1942),77.

ii.Sue O. Medina, "Duplication and Overlap Among Library Collections: A Chronological Review of the Literature," in Advances in Collection Development and Resource Management v.1, ed. Thomas W. Leonhardt (Greenwich CT: JAI Press, 1995), 46-48.

iii. Ibid., 46-48.

iv. William G. Potter, "Studies of Collection Overlap: a Literature Review," Library Research 4 (1982): 19.