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# Greek University Libraries in the European context:

# a Comparative Evaluation.

By

## **GEORGIOS ZACHOS**

A Doctoral Thesis Submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of the Loughborough University of Technology 1994

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I hereby declare that this thesis is my own work. Neither the thesis nor the original work contained therein has been previously submitted to the Loughborough University of Technology or any other institution for a degree.

Georgios Zachos

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#### Dedication

## To my Family and my Parents

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#### Abstract

The aim of this study is to provide a comprehensive examination of university libraries in Greece seen in the European context. To this end, the thesis:

i. discusses the context in which Greek university libraries have developed and the challenges they face;

ii. examines the factors that affect their operation and development;

iii. assesses their role in university education in supporting the informational, educational and research needs of the academic community;

iv. compares their position with similar libraries in other member states of the European Union and in Scandinavia;

v. suggests actions needed in order that university libraries in Greece should develop further and play their role better.

In this study a standard model for university libraries is developed and performance indicators and methodologies which are proper for this model are used. University libraries are examined as open, dynamic, multi-goal seeking and purposeful systems. They consist of resources which are transformed into outputs for the benefit of their users. Inputs, outputs and outcomes can be measured in a greater or less accuracy but measurement itself is meaningful only if it is placed in some kind of context. University libraries operate within a given environment. They receive their inputs from this environment, and their outputs are used by people or other systems in the environment. They are also constrained by factors in this environment such as the social, economic, educational, technological, etc. In this study not only the performance indicators themselves but also the relationships between them that are indicative of performance were analysed.

The main findings of the study are related to the environment within which Greek University Libraries operate, the organisational structures, and administrative practices applied, issues concerning staff and the way they affect library development, the provision of library material, the organisation of technical services, and the reader services that are provided. Library performance is assessed in a number of ways. The indicators produced and comparisons with the state of development of university libraries in other European countries show that Greek University libraries fall behind them in terms of almost all indicators used. It appears that Greek University libraries are weak in meeting the needs of their users in both education and research.

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## List of acronyms

# 1. GREEK UNIVERSITIES

Acronym	University
AUT	ARISTOTELIAN UNIVERSITY OF THESSALONIKI
AAU	ATHENS AGRICULTURAL UNIVERSITY
HSFA	HIGHER SCHOOL OF FINE ARTS
MUES	MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES
NCUA	NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS
NTUA	NATIONAL TECHNICAL UNIVERSITY OF ATHENS
PUPSS	PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES
TUC	TECHNICAL UNIVERSITY OF CRETE
UC	UNIVERSITY OF CRETE
UESA	UNIVERSITY OF ECONOMIC STUDIES OF ATHENS
UI	UNIVERSITY OF IOANNINA
UP	UNIVERSITY OF PATRAS
UPES	UNIVERSITY OF PIRAEUS
UAE	UNIVERSITY OF THE AEGEAN
UION	UNIVERSITY OF THE IONION
UTHES	UNIVERSITY OF THESSALI
UTHR	UNIVERSITY OF THRACE

## 2. COUNTRIES

Code	Country
В	BELGIUM
D	GERMANY
DK	DENMARK
E	SPAIN
EUR	EUROPEAN UNION
F	FRANCE
FL.	FINLAND
GR	GREECE
1	ITALY
IRL	IRELAND
L	LUXEMBOURG
NL	THE NETHERLANDS
Ρ	PORTUGAL
SW	SWEDEN
UK	UNITED KINGDOM

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## **CHAPTER 1**

#### Background of the study

#### 1.1 Introduction

Evaluation studies aiming to quantify library performance in terms of goals achieved and services delivered in individual libraries are becoming a common practice in the management of libraries in European Union member-countries. Studies aiming to evaluate academic libraries in a national context have appeared recently. In the UK such a study took place in 1989-1990 with the main objective of examining the importance for academic research of university libraries and how well these libraries meet research needs<sup>1</sup>.

The aim of this study is to produce a comprehensive work on the university libraries of Greece. To this end, the study will :

a) Present the context within which Greek university libraries have been developed and the challenges they face,

b) Present and analyse the factors affecting library development in Greek universities,

c) Present a coherent picture of their situation and development,

d) Assess their abilities to play their role in university education by supporting the informational, educational and research needs of the academic community,

e) Reveal their position compared with similar libraries in other member states of the European Union and Scandinavian Countries and

f) Propose actions needed in order that university libraries in Greece may be developed and play their role better.

The study has a triple purpose as it aims to reveal the situation of Greek university libraries in a national, cross-national and international context: national because it aims to present their state of development within Greece; cross-national because it aims to compare Greek university libraries with those of other countries; and international because it aims to put Greek university libraries within a larger international system (the European Union) in which they belong<sup>2</sup>.

The reasons for doing this comparative study have their roots in different kinds of forces. The major external reason initiating comparisons within Greece is the belief that the results of this study may promote actions by funding bodies and library decision makers. However although this study has the character of cross-national comparative research, Greece remains the main object and the main interest of the study<sup>3</sup>.

Another reason is the growing internationalisation and the concomitant export and import of cultural and educational practices across the national borders of Greece. In a changing environment where researchers and students are moving freely within the European Union, and there are emerging common educational policies and educational practices, comparative studies are tools which will assist the creation of a unified environment.

The presentation of problems is another reason for undertaking this comparative research in the European context as it may reveal problems common to university libraries in more than one member state. Within librarianship the study aims to reveal the practice of librarianship in Greece in general whilst focusing upon Greek university libraries in particular and seeking to measure the performance of the latter.

In any attempt to present the state of a university library and to compare libraries, we need to create a number of indicators or measures which describe the state of development of a specific university library, and which can then be entered into the theoretical statements and hypotheses that we are testing. Among the indicators we may identify are the quantitative, which are measured with numerical data such as collections, staff, funds, number of users etc. and the qualitative for the representation of variables which are impossible to measure numerically, e.g. the quality of cataloguing practices, efficiency of management practices, design of library buildings etc. Inter-library comparisons between one country and another are notoriously difficult because of considerable national differences in economic development, social practices, historical events and ways of organising and funding tertiary education. In order to compare a variable across different library systems it is necessary to have confidence that the indicators used, and the properties being compared, are in fact the "same" or at least indicate something equivalent. As in the case of other social science studies "a great deal of observational flexibility must be used to get into the systems so that comparisons can be made"<sup>4</sup> and comparisons must be done to as close as possible equivalents. For this reason indicators used must be based in data which are affected to a lesser extent by existing national differences. In order to minimise methodological problems arising during international comparisons, for the purposes of this study comparisons were made mainly with the use of indicators which measure as closely as possible the same quantity within different environments.

Growth of libraries in general and university libraries in particular is affected by their historical, cultural and educational environment. The present situation in Greece is an outcome of its political, economic and educational history, while universities and their libraries have developed and been influenced by these historical events. To be in a position to understand not only the historical development but also the present state of development of Greek universities and their libraries, it is very important to have at least an outline picture of historical events and facts which have affected the economic, social and educational development of Greece.

In Chapter 1 the study hypotheses and a literature review are given. All factors which affected Greek University Libraries, are presented and analysed in Chapter 2. The internal environment of Greek University libraries is presented and analysed in Chapter 3. The environment and the state of development of university libraries and academic librarianship in other European Countries is given in Chapter 4 so that it may be used as a measure of comparisons with Greek University Libraries. In Chapter 5 the study models and both the methodology used and techniques for collection and analysis of data are presented. The results of the study are given in Chapter 6. The findings include inputs (staff, funds, collections, buildings). library processes (acquisitions and access to collections), management practices and outputs (reader services). Greek university libraries are evaluated using performance measures, opinions of experts and comparisons with other European university libraries. In Chapter 7 the main conclusions of the study are given. In this chapter the results of the study are related to the former literature and both recommendations for improvements and areas in which further research is needed are given. In Appendix I an English translation of the main questionnaire used and the most important data collected are given. In Appendix II a list of libraries which provided data is given.

#### 1.2 Hypotheses

The study aims to test the hypotheses that the university libraries in Greece: a) face many problems and are very weak in meeting the present needs of their users, b) have fallen behind the university libraries in other European Union countries, c) can learn from other European countries and d) are not in-line with trends and developments in other European Union countries.

In order to test these main hypotheses two sets of questions are to be answered. Those questions are about: a) the present situation of Greek university libraries, and their ability to fulfil their role and b) comparisons with other European university libraries.

For assessing the present situation the following questions are to be answered:

What are the roles of the university libraries in Greece?

Is there any national policy for university libraries in Greece?

Are the funds given to Greek university libraries adequate to fulfil their purposes?

Are existing organisational structures of university libraries in a position to offer efficient services?

Do Greek university libraries employ enough staff with the proper qualifications to fulfil their role?

Are existing collections of any kind comprehensive enough to meet the research and educational needs of both staff and students?

Are technical services organised in an efficient way?

Are the reader services provided in sufficient quantity, and in an effective way?

Are library buildings in Greek universities suitable in terms of area and location for offering an attractive environment to their users and for meeting increasing demands and use?

Do Greek university libraries use new information technologies in their operation?

Are services offered in a position to support the present and future educational and research needs of the Greek academic community?

The comparison with other West European countries aims to answer the question of how closely Greek university libraries are linked with university libraries in other European Countries and with particular members of the European Union.

#### 1.3 Literature review

The measurement of the performance of libraries has been studied and discussed more and more intensively over the last few decades<sup>5</sup>. The motivation for this interest was the belief that a detailed knowledge of how libraries are performing can help them make more informed decisions, and can satisfy the increasing need for libraries to be able to demonstrate their accountability to their users and the various bodies responsible for their funding.

A number of different definitions of the evaluation and performance measures have been proposed. For individual libraries with stated goals and objectives Hernon and McClure define evaluation as:

" The process of identifying and collecting data about specific services or activities, establishing criteria by which their success can be assessed and determining both the quality of the service or activity and the degree to which the service or activity accomplishes stated goals and objectives"<sup>6</sup>

Mackenzie defines performance measurement as:

"the systematic measurement of the extent to which a system has achieved its objectives in a certain period of time"<sup>7</sup>

Other definitions include the effectiveness of services provided, the resources that are available and the relationships among various library activities towards accomplishment of goals and allocations of resources<sup>8</sup>. Line pointed out that libraries are being judged more on their services rather than collections and came to the conclusion that the most valid indicator of an academic library's performance is :

" the extent to which it [the library] contributes to the achievement by users of their objectives of teaching, learning and researching"<sup>9</sup>

However, even for the evaluation of individual libraries a number of methodological problems still exist. Among authors there are differences in the concept of library effectiveness or goodness, the components that determine library effectiveness, in the approaches of viewing effectiveness, in the performance measures used, the information needs of users and in the methodologies of implementing an evaluation study. Van House, Weil and McClure<sup>10</sup> stressed also the importance of library and environmental factors which affect output measures.

A pioneer work on performance evaluation is the work of Orr who first described the relationships among resources, and beneficial effects of library services. Orr distinguishes two basic aspects of library "goodness": quality (how good is the library) and value (how much good does it do?)<sup>11</sup>. Because quality and value are difficult to measure, Orr relates both to a basic flow of cause and effect. Greater resources are likely to result in greater capability for providing library services (quality) and greater capability can be expected to result in greater utilisation, although utilisation will depend very heavily on the demand for services. Increased utilisation can be expected to result in increased beneficial effects (value) and the perception of increased beneficial effects may result in increased resources. Line also stressed the difficulties of defining library goodness and concluded that:

"there is no absolute perception of goodness"<sup>12</sup>.

For library effectiveness a number of different definitions have been proposed including the extent to which a service or activity accomplishes stated objectives<sup>13</sup>, efficiency of internal operations<sup>14</sup>, success in acquiring needed resources, satisfaction of key constituent group preferences, and internal health of the organisation<sup>15</sup>. Different approaches strengthen the view that effectiveness is a multidimensional construct and no single measure is capable

of measuring it fully. Efficiency is defined as performing library activities with the least expenditure of resources<sup>16</sup>, the appropriateness of resource allocations<sup>17</sup> and getting something done quickly and with least expenditure of resources<sup>18</sup>.

Evaluation of libraries may take place at a number of different levels. In less developed libraries or countries the use of libraries depends to a great extent on expectations which in most cases are low. As a result use of performance measures<sup>19</sup> developed with data collected from these libraries may give misleading results. In such cases a general evaluation - if possible with the use of specific performance measures - of a situation or a library is more accurate. The same is true in evaluations of library systems where data for construction of specific performance measures are not available<sup>20</sup>. In more developed library systems where libraries have stated goals and objectives and take needed actions to achieve those goals an overall evaluation is possible. This is possible with the use of more quantitative indicators of performance.

A number of different approaches for performance measurement have been proposed. Line<sup>21</sup> identified two levels of evaluation of libraries: in macro and micro terms. The macro evaluation is the assessment of the effectiveness, namely, their effect on the performance of their users. The micro level of the evaluation is the assessment of performance, namely, to assess how well libraries are carrying out prescribed activities and how efficient they are. In evaluations of this level library performance cannot properly be measured until it is known what libraries are aiming to perform and what objectives they wish to achieve. Therefore, each library should prepare a 'mission statement' of its purpose, aims and objectives before its performance is assessed.

Knightly<sup>22</sup> identified five classes of evaluation : a) effort (inputs), b) processes, c) effectiveness (outputs), d) impact, e) cost-effectiveness and f) cost-benefit. Measures for the evaluation of the first two are defined as activity measures as they indicate the level or the amount of various kinds of activities within the library, while the latter indicate what was accomplished or what purpose or objectives were achieved. Poll reviewed the use of performance indicators in German public and Academic libraries and described the performance measures used in a test experiment in a number of academic libraries: availability, document delivery, collection use, acquisition speed and book processing speed<sup>23</sup>. The adequacy of the collection in meeting user needs and availability of material when users need it form a large part of the measures proposed<sup>24</sup>. Other approaches include the system survival goal, where effectiveness is measured according to success in obtaining funds, and the personnel attitude approach which is concerned with the staff's views on their library's role<sup>25</sup>. The most difficult of all evaluation efforts is the measure of outcomes derived from the operation of libraries. Efforts for practical applications of such measures were not very successful, resulting in opinions such as those expressed by Line that:

"unfortunately, this kind of evaluation is exceptionally difficult to carry out. I know only a few attempts to evaluate libraries in this sense, and of no truly successful ones"<sup>26</sup>.

The same view was expressed by Lancaster who concluded that:

"In short, one would do well to abandon the idea of using desired outcomes as direct criteria for the evaluation of libraries"<sup>27</sup>.

Research conducted has yielded a substantial collection of measures for use in the evaluation of academic libraries<sup>28</sup>. Goodall in her historical survey of library performance assessment found however, that research in this topic is more circular and collateral rather than cumulative<sup>29</sup>. Measures proposed and used refer to library inputs, internal operations, facilities, outputs, and outcomes. In his review on measures that have been used Lancaster<sup>30</sup> categorised the range of services to be evaluated. Quantitative (size and growth) and qualitative (expert judgement, bibliographies and analysis of actual use) methods are used for the evaluation of the collection, catalogue use, availability, document delivery, question answering, literature searching and resource sharing for library efficiency. Cost -effectiveness and cost-benefit analysis are used for the evaluation of internal activities and library outputs. Ralli<sup>31</sup> reviewed performance and analysed their role and the difficulties in applying them in real situations. Revill<sup>32</sup> found that the reader visits, book stock, book circulation, failure studies and market share or penetration were being used. An increasing literature on performance evaluation includes also studies that employ techniques from operations research considering library effectiveness in relation to a given set of users and book availability<sup>33</sup>. Winkworth<sup>34</sup> summarised past and current indicators used in the UK academic libraries and concluded that:

"sensible use of performance indicators is the key to effective, efficient and economical operation "<sup>35</sup>

Line proposed a schema for evaluation of academic library's performance based on: a) resource allocation, b) resource utilisation, c) quality, d) efficiency and e) market penetration<sup>36</sup>. Schönberg and Line applied this schema for the evaluation of a specific library and concluded that " by now [performance indicators) are virtually indispensable tools for the management of libraries"37 Van House<sup>38</sup> divided performance measures into several kinds which reflect the performance of specific library activities: resources used; measures reflecting the internal operations and processes; productivity (the ratio of outputs to inputs); output measures for estimating the extensiveness and effectiveness of services delivered; and outcomes, the effects of the services provided on the clients and society. Bloor<sup>39</sup> defines four groups of performance indicators each based on one of the main parts of the library system. Operational performance indicators which examine the internal efficiency of the library relating inputs to outputs; the resources used by the library in relation to what it provides. Effectiveness indicators which relate outputs to use; what the library provides in relation to the use that is made of it and the level of satisfaction with it. Costeffectiveness indicators relate use to inputs; the use of the library in relation to what it costs.

Availability of books when wanted by library users affects the capability of the library to provide library services. Buckland<sup>40</sup> studied the theoretical and practical aspects of this problem and concluded that:

"Whatever the future may bring in terms of better and more effective provision of library materials, it is difficult to envisage much progress without an understanding of the facts affecting book availability in relation to library use"<sup>41</sup>.

Hamburg at al.<sup>42</sup> based their analysis on library performance considering "Exposure of individuals to documents of recorded human experience" as the most important aspect of university library objectives. Under the assumption that the basic objective of a university library is to maximise exposure to documents (direct or indirect, in the library or outside the library) proposed measures of library performance based upon document exposure. These are exposure counts, item-use- days, and exposure time. When any one of these measures of exposure is related to the costs or inputs, measures of performance are derived. However taking into account that users in university libraries are seeking specific materials or information they proposed narrower performance measures such as proportion of user demands satisfied and document retrieval time which they thought "may be preferable to measures of document exposure"<sup>43</sup>. Leimkuhler<sup>44</sup> observed that circulation records are a measure of service performed by a library and went on to construct mathematical models to describe the growth in book stock over a number of years, to predict the average circulation rate for the whole collection and to predict the average circulation rate for one copy of a text. Warwick<sup>45</sup> proposed 'user utility' as a principal measure of library effectiveness and used it as principal measure for the behavioural model of student borrowing.

Lines<sup>46</sup> proposed a model of the way performance measurement could be tackled and identified factors which influence her approach to monitoring performance. In her model setting objectives, systematic planning, institution's academic profile, supporting data on budgets and price indices must be taken into consideration. Revill<sup>47</sup> used Kantor's<sup>48</sup> method on estimating the availability of stock in Liverpool Polytechnic Library Service and concluded that availability studies "should be adopted as a future component of academic libraries' performance assessment"<sup>49</sup>. Kantor<sup>50</sup> used availability and accessibility of materials and delays in interlibrary loan delivery as the main performance measures for academic libraries. Ford<sup>51</sup> used the same performance measures and concluded that availability, accessibility and delay are direct and indirect indicators of quality. Ford found also that question answering success rate is a useful indicator of service quality<sup>52</sup>.

A number of attempts were made to develop an overall measure of library effectiveness<sup>53</sup>. Rzasa and Baker<sup>54</sup> suggested an overall measure of academic library performance based on the number of users, materials used, users studying their own material, reference questions and total potential users in the library's population. They proposed weights in each of these factors and the overall results summed to a single figure of library performance. However these attempts were criticised as having a number of methodological and conceptual problems<sup>55</sup>. Ford<sup>56</sup> concluded that it is unlikely to derive a single measure of the performance of a library as a whole but a series of indicators which will change in any one library with time. The same view is expressed by Line who stated that there are no absolute measures of performance but much of the value of indicators is relative and lies in their ability to compare like libraries with like as well as the same library over different years<sup>57</sup>.

Efforts for overall evaluation of inputs, processes and outputs in Academic Libraries also took place. In the UK this started in 1985 when the Jarratt

Report stressed the need for the effective integration, resource allocation, budgetary control, and accountability and recommended that :

" A range of Performance indicators should be developed, covering both inputs and outputs and designed for use both within individual institutions and for making comparisons between institutions"<sup>58</sup>

Going further the CVCP/UGP Performance Indicators Steering Committee<sup>59</sup> proposed the following indicators :

Library expenditure as % of general expenditure.

Publications expenditure as % of library expenditure.

Pay expenditure as % of library expenditure

Library expenditure per FTE student

Library expenditure per FTE academic staff

Book expenditure per FTE student

Periodicals expenditure per FTE student.

The Jarratt Report was followed in 1988 by the National Audit Office recommendations<sup>60</sup> on the way universities set objectives, plan and monitor performance. As a result university libraries in the UK had to look for more efficiency and value for money. Efforts for evaluation of outputs also took place through assessment of research quality using peer review or Bibliometric Indicators. Such a study in the UK showed that budgetary constraint in research libraries has a negative impact upon academic research<sup>61</sup>. In the same country a more recent user study<sup>62</sup> in specific research areas found that when there are constraints in library provision, less research is conducted and was conducted around a narrower reference base, with increased difficulty in keeping in touch with developments in the field or in moving into new areas. Line<sup>63</sup> assessed the situation of Nordic academic, research and special libraries giving special attention to factors which affect them and the changes and main trends related to the international trends in the field. For this assessment Line used his personal knowledge gained during visits he made to libraries in those countries and reports and articles dealt with libraries, research and higher education. Despite the fact that he used only a few factual data Line came to conclusions about the present and future developments in Nordic Countries and suggested specific actions needed for their improvement.

Another approach to determine the quality of library services and / or their effectiveness has focused on user studies aiming to measure the extent to which the library impacts upon and meets the needs of its users<sup>64</sup>. A large literature is available for this subject<sup>65</sup>. Lancaster<sup>66</sup> pointed out that library surveys are shifting their emphasis toward the library user, patterns of library use and the degree to which user needs are being met. The Association of Research Libraries published the so called SPEC kits in 1976 and 1981 in an effort to give tools for evaluation of library services in terms of user response to those services<sup>67</sup>. A number of methodological problems exist in user studies<sup>68</sup>.

"The literature on "user needs" has been confused by imprecise use of terms"69

Two of the terms most commonly used have been "use" and "user". Zweizig<sup>70</sup> pointed out that there have been relatively few studies that had restricted their attention to the actual user as opposed to considering use as well. Ford<sup>71</sup> pointed out that user studies should focus not on what is happening in libraries but on information seeking behaviour and information needs of the users.

For most measures proposed application in real life situations was difficult. Only a small number of applications of evaluations in real situations exist and a few, limited performance indicators have been used<sup>72</sup>. The need for practical guidelines has emerged. In an effort to provide libraries with detailed directions on how to quantify their services Van House, Weil and McClure<sup>73</sup> designed a manual to help academic and research librarians to qualify services. The evaluation process they proposed consisted of: definition of effectiveness, the goals of the library against which performance is to be judged, the criteria and measures to be used, data to be collected for each measure and finally the comparison of data with the goals in order to assess library performance.

The measures proposed are:

General satisfaction of users

Materials availability and use (Circulation, in-library use of materials, total materials use, materials availability, requested materials delay).

Facilities and Library use (Attendance, remote uses of the library, total uses, facilities use rate, service point use).

Information services use (reference transactions, reference satisfaction, on-line search evaluation).

Bodies such as the Association of Research Libraries in the USA and the Standing Conference of National and University Libraries (SCONUL) in the UK also developed standardised procedures for measuring materials availability, and accessibility and measures for expenditures and library operations in order to determine the adequacy of university library funding<sup>74</sup>.

In an effort to provide tools for self-evaluation of library performance compared to library and university goals a number of library standards have also been proposed<sup>75</sup>. Nationally promulgated standards, or standards decided upon by individual or a group of libraries, were used as criteria for effectiveness<sup>76</sup>. However after an analysis of whether library standards could be used as performance measures Kantor<sup>77</sup> concluded that existing library standards tend to be neither objective nor performance measures but rather either descriptive rules for "proper" management or are quantitative rules for "minimum" inputs of materials, personnel and physical facilities. As a result standards represent a static concept pointed towards the evaluation of library resource inputs, do not focus on the outputs of library service and fail to provide a basis for meaningful evaluations of library performance.

The conspectus methodology<sup>78</sup> as proposed by the Research Libraries Group in the US provides a framework for libraries to record the strength of their existing collections and of their current acquisitions, largely in subject terms, in a standardised quantified form. The data produced by participating libraries are thus broadly comparable: relative strengths and weakness may be ascertained, and possible under-provision in particular subjects identified within the group. However, conspectus may be seen as an attempt to measure quality only as it has a large element of subjectivity<sup>79</sup>.

Any attempt at evaluation of library performance needs the collection of valid and accurate data which would be used for the development of performance indicators. Different techniques have been used for data collection. Revill<sup>80</sup> found seven methods used: questionnaires and recorded schedules, interviews, surveys, diary studies, observations, counts and simulation.

The literature on Greek libraries and librarianship is sparse. Although there are some works which describe the libraries of ancient Greece<sup>81</sup>, separate books and articles in international journals dealing with the situation of libraries in modern Greece are very few. A small number of English language articles have appeared recently covering library matters of Greece<sup>82</sup>. After a visit to

Greece James Krikelas<sup>83</sup> presented some aspects of university library development in Greece and mentioned that:

"missing from the literature is any extensive treatment of academic libraries"84

Studying closely the library at the University of Thessaloniki, Krikelas, found that approximately 200 quasi-autonomous libraries were active in this university. The conclusions he reached were that collection dispersion in Greek universities is due to lack of facilities as well as decisions to share the universities in different campuses, the large amount of collections on "permanent loan" to the faculty, the educational practices and the behaviour of professors. Krikelas found that there was a poor physical and bibliographic organisation of collections. He concluded that this was the result of lack of union catalogues, standards in filling catalogue cards and lack of trained librarians due to :

" the absence of an adequate program of education for librarianship in Greece and the peculiar staffing practices in the country"<sup>85</sup>

Nancy Birk and Dimitris Karageorgiou<sup>86</sup> presented some observations on the situation in a number of Greek universities and outlined some of their problems, mainly the dispersion of the collections, the lack of co-operation and the lack of trained library staff. Birk, Karageorgiou and Shafer<sup>87</sup> in a study on Greek public libraries mention also problems related to Greek university libraries. Based on the experience of spending the fall semester of 1989 at the University of Thessaloniki Michael Kreyche<sup>88</sup> presented the activities on library automation in this university and the University of Crete as well as observations on the prospects for library automation in Greece in general and the efforts for the development of in-house library automation software at the University of Crete. He concluded that little development in library automation is due to poor telecommunications, lack of sufficiently trained staff, lack of standards on creating MARC records and using the Greek character set. Korobili discussed issues about collection development and interlibrary loan in Greek University Libraries and concluded that

"one can say that there is a general feeling that Greek academic libraries do not meet user needs"<sup>89</sup>.

Morereli-Cacouris<sup>90</sup> presented a historical account of library education in Greece along with a description of the current library science program at the

Technical Education institute in Thessaloniki and concluded that the education provided by this department is improving and its graduates contributed positively to the development of both public and academic libraries in Greece. A number of cases studies on individual libraries are also included in Keller's collection of articles<sup>91</sup>.

The literature on the development of libraries and librarianship in the University libraries in the European Countries is extensive. In all European Countries journals devoted to library and information science topics are published by Library Associations and Publishers. A general bibliography from the angle of comparative librarianship is given by Silva Simsova and M. MacKee<sup>92</sup>. English language articles on specific countries may found in the Encyclopaedia of Library and Information Science, the International Library Review and in the Journal of Librarianship. The European Union has financed also a report on library economics which includes data on Academic Libraries<sup>93</sup>. Xuereb<sup>94</sup> reviewed the situation of libraries in the universities of Southern Europe and identified as main problems the lack of educated staff and the organisational practices applied. Separate reports and reviews for specific countries have also been published<sup>95</sup>.

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# **CHAPTER 2**

## Greek University Libraries : External Environment

### 2.1 History and economy of modern Greece

Greece traces its roots as a nation back over three thousand years. In reality however modern Greece is a new nation. After the occupation of the Byzantine Empire by Ottomans, Greece remained under Turkish occupation for more than 400 years. During the occupation of their land the Greeks revolted many times against their conquerors. The revolution resulting in the formation of modern Greece started in 1821. Five years later in 1826 Russia, England and France created an alliance, the so called "Triple Alliance", in order to intercede between the insurgent Greeks and their Turkish overlords. The refusal of Turkey to give a form of autonomy to Greece resulted in a military intervention by the Triple alliance which in the naval battle of Navarino (20th October 1827) destroyed the Turkish Navy and forced Turkey to accept the autonomy of Greece in 1829.

In 1827 the Third National assembly of Greeks in Trizina elected loannis Kapodistrias - a former minister of the Tsar - as governor of the liberated areas. Kapodistrias made the first efforts at creating a public education system and organising the new state.

After the assassination of Kapodistrias in 1831, the Allied forces, in a conference which took place in London in 1832, issued a protocol declaring the establishment of modern Greece, and imposed as the form of government an absolute monarchy. They chose as King Prince Otho of Bavaria, son of Louis I. Otho was seventeen years old, so he was not yet of age personally to assume the rule of the new kingdom. For this reason a Council of Regency was established. This consisted of three Bavarians only, an arrangement which effectively excluded the Greeks from any real share of government<sup>1</sup>.

The organisation of the state was left in the hands of the King and the Council of Regency. The Regency based the establishment of public education on

current Bavarian practice. The idea of establishing a university in Modern Greece belongs also to the Regency. In 1833 Regent Mauer prepared all the legislation needed for establishing a university in Athens, but due to his recall to Bavaria the implementation was postponed. In 1836 the first Royal Decree for the establishment of the university was published but because the decree was published while the King was absent, after his return the King abolished the previous decree and published a new one in 1837<sup>2</sup>. The first university was named "Othon's University" after the King's name, and its organisation followed that of German universities<sup>3</sup>. The university was under the supervision and control of the government and the King. The King appointed the first professors and had the right to suggest professors at any time in the future.

The monarchy failed to solve the basic needs of the people while its style of government hurt the feelings of the Greek people. This resulted in such discontent and unrest that in 1843 a revolt occurred in which the people demanded the establishment of a purely Greek government and Constitution.

From 1856 onwards a slow but steady economic recovery of the devastated country took place. In 1862 after a further revolt King Otho was deposed from the Throne and Prince George Glysbourgh was chosen as a new King of Greece (1863).

The new Greece was restricted to the Peloponnese, Central Greece, and the islands of the Cyclades, the northern frontier being drawn from the Gulf of Arta to the Gulf of Volo. This state was the nucleus of today's modern Greece. The Balkan Wars in 1912, and then World War I, followed in 1920 by the Asia Minor war, resulted in the doubling of Greece and its population (2,187,208 inhabitants in 1889, 5,016,889 in 1920 and 6,204,674 in 1928)<sup>4</sup>. Greece assumed its present area in 1947 with the liberation of Dodecanese Islands.

During World War II Greece took her place alongside the Allies against the Axis; a large part of its population lost their lives and many cities and villages were destroyed. The liberation from the German occupation was followed by a civil war between the Communists and forces of the Right wing. Britain and the U.S.A. supported the Rightists and civil war ended in 1948 with their victory. The economic recovery and development started in the '50s. In 1967 a military junta took control of the government and abolished any political activity. In 1974 a new democratic government was established and in 1981 Greece became the 10th member of the European Community.

The history of modern Greece has been marked by chronic instability in internal politics, economic difficulties and devastating wars both international and civil. The result of wars and political instability has robbed the country of any development strategies. The short life of governments - since the establishment of modern Greece the country has been run by more than 150 governments - has not permitted the design and implementation of social, economic and educational planning nationally. It is within this inhospitable environment that we must view university library development in Greece.

Greece is among the smaller countries of Europe (Table 1), with a population of 10.2 million people in 1991. It occupies 131,957 square kilometres (50,950 square miles).

Country	Population (In millions)	Area	Population Density		
GREECE	10.123	131920 km2	77		
PORTUGAL	9.868	92389 km2	107		
BELGIUM	9.845	30519 km2	323		

Table 1 : The smaller European Union countries in 1990

The total national Gross Domestic Product (GDP) of Greece was 51.9 Billions ECU in 1990. Gross Domestic Product per capita in units of Buying Power was 6823 in 1990. From figures 1 and 2 we see that in 1990 among the member states of the European Union Greece was in the 9th position in terms of GDP and in 12th position in terms of GDP per inhabitant.



Fig. 1: GDP in billions of ECU in 1990.

Source: Eurostat. 29th ed. Luxembourg: Statistical Office of the European Communities, 1992. p. 39

Fig. 2: GDP per capita in EU countries in 1990



Source: Eurostat. 29th ed. Luxembourg: Statistical Office of the European Communities, 1992. p. 40.

Statistics released in 1986 showed that functional illiteracy in Greece stood at 36%<sup>5</sup> and total illiteracy was between 8 to 9 %<sup>6</sup>. Those figures put Greece in 11th position among the twelve European Union members (Fig. 3).

## Fig. 3: Illiterate population in South European Union-Countries



Source: UNESCO, Statistical Yearbook, 1992

R&D funding in Greece covers 0.25 % of GNP and is done mainly by government funds. Compared with other European Union countries funding from private sources is almost non-existent. Only during recent years due to European Union R&D programs has there been a tendency for more funding from sources other than the government. From Fig. 4 we see that in 1988 Greece was in the last position among European Union countries in financing of R&D.



R& D Financing

Source: EEC/EURONET DATA BANK, Feb. 1990 Government financing of research and development, 1980-1989 (Eurostat), p.53

Public expenditure on education is also very small compared with other European Union countries. From figure 5 we see that Greece was in last position in terms of public expenditure on education as % of the GNP.

Fig. 4: R&D financing as percentage of the GNP in 1988.





Public Expenditure on Education

Source: UNESCO, Statistical Yearbook, 1992.

Public current expenditure on 3rd level education in 1988 was 19.6% of spending on education.

# 2.2 Historical development of Greek university libraries

At the establishment of the first university in Greece in 1837 there was a strong consensus that the creation of a library was very important for the development of the university. As the new University was housed in a small building in Athens (the so called house of Kleanthis) a room of this house was devoted to the library.

Due to financial difficulties the development of the library's collection was left to the patriotism of rich Greeks and philhellenes who lived abroad. The first books were gifted by Mr. Winthrop, a philhellene, Governor of Massachusetts, who sent the first 52 books (in English)<sup>7</sup>. Many other gifts followed, and in less than four years the library's collection reached a total of 15,000 volumes<sup>8</sup>. The development of the library's collection was very fast. In 1842 the library had

16.000 books and pamphlets while by 1857 it had reached 90,000 volumes. Donors included the Kings of Greece and Sardinia, the Great Duke of Toskane, the University of Guttenburg, the British Museum and the Royal Geographic and Archaeological Society of London. Books were stamped with two seals, the library's and the university's<sup>9</sup> and in 1852 began the practice of sealing the books of a gift with a specially designed seal in which was included the donor's name<sup>10</sup>.

Gifts alone could not solve the needs of the new university and in 1844 the university dean Asiopios commented that:

"...books gifted to the university are not always those we really need...We need new scientific books"<sup>11</sup>.

In a short time the position and size of the university building was not enough to provide space for the library and other university collections<sup>12</sup>. For years existing space remained insufficient for housing the library collection<sup>13</sup>. The inability of the university and the state to provide enough space for the library resulted in many books having to remain in boxes or being placed in inaccessible locations.

The operation of the library was primitive. Government bureaucrats from the Ministry of Education were responsible for creating the library's regulations and creating posts for library staff<sup>14</sup>. Library staff were very limited<sup>15</sup>, their positions were not permanent and their salaries were very low. Library staff were replaced almost every six months. As a result they could not be trained in their duties or in the proper running of the library<sup>16</sup>.

For many years the library remained without a catalogue of its collection, classification or even arrangement of its books in the shelves<sup>17</sup>. Every new "Library Keeper" (librarian) attempted to organise the library with personal organisational decisions. In 1866 classification of the library's stock was started, using a home-produced classification system. A year later the new keeper decided to introduce a German classification and cataloguing system. The introduction of the new system was not without problems and the library decided to employ Aimil Steffenchagen, a German librarian for this task. After four years the library showed an improvement in its organisation with the creation of a subject and author catalogue. Following the tradition of the German universities the library published for the first time a classified catalogue of its collection<sup>18</sup>.

The slow development and inefficient organisation of the university library and the problems it was facing resulted in the creation and rapid development of "private" library collections in professors' offices and other educational units such as the observatory of Athens<sup>19</sup>.

The realisation by the academic community that there was a need of books for both the education of students and scientific research forced the University Senate to establish a special account for purchasing of new books and in 1864 the university started to devote part of its budget for the purchase of library material. Funds for new acquisitions were allocated to each school or individual professor who was responsible for the purchase of library material for "his chair" library<sup>20</sup>. At that time was laid the basis for the departmental organisation of the university library.

The imitation of the German educational practice also affected the creation of many small libraries within the university. The belief that teaching was not enough for the education of new scientists - especially high-school teachers - and that teaching had to be supplemented by studying in seminars resulted in the establishment of small book collections near professors' offices<sup>21</sup>. We shall see that this practice affected also the development of such collections in all universities established since the establishment of the University of Athens.

For decades the university educational system in Greece was negative in attempts at developing central university libraries. Teaching practices also played a part in this. Studies in Greek universities consisted of lectures and seminars. The aim of seminars was to educate students in small groups in order to help them understand the lectures, to teach ways and methodologies of doing research and to educate students in the use of library material. Seminars took place in specially designed classrooms called "Spoudastiria"<sup>22</sup>. Spoudastiria had both teaching facilities and a book collection. Seminars which took place in a particular Spoudastirio were devoted to a particular scientific topic. Library material was related to the topics of the Seminar. The result of this way of study and organisation of libraries was the creation of many small collections within a university campus or even in the same university building. The same pattern was bequeathed to Faculties in which there were no Seminars, such as Medicine or Science<sup>23</sup>.

For the government and university administrators Spoudastirio was an educational unit rather than a library. The establishment of a Spoudastirio needed the approval of the Ministry of Education<sup>24</sup>. After a proposal of a chair

the Minister of Education permitted the creation of a Chair's Spoudastirio. The purpose of establishing a new Spoudastirio was not always clear. In some cases the reason was the desire to establish new staff posts in order to recruit Professor's assistants rather than to provide better library services to the academic community. The administration of a Spoudastirio was in the hands of the teaching staff. The professor, head of the chair, was also the director of that chair's Spoudastirio<sup>25</sup>. In the case where a Spoudastirio was used by more than one chair the director was elected by all professors of chairs for a three year period<sup>26</sup>. The director was responsible for everything related to the Spoudastirio, even the recruitment or dismissal of that Spoudastirio staff. In universities with such organisation of libraries the identity of their library structure is not clear as there is not even a clear consciousness that there is a university library. In those universities the majority of the academic staff seem to believe that existing libraries belong to specific educational units and are not part of the university's library system.

Until 1932 there was no specific policy on the organisation of spoudastiria and their staffing. An attempt at clarifying the role of a Spoudastirio and its staff within university structure took place in 1932 and in 1968<sup>27</sup>. Every Spoudastirio was organised as an independent educational unit of the university. It had its own budget, its own positions of staff and could develop its own regulations, library procedures and cataloguing practices and apply its own classification system. Library material might be borrowed only during seminars which took place in the Spoudastirio. In most cases external borrowing of books was not permitted. Only on very special occasions could a book be lent, but in any case it needed the approval of the spoudastirio director. In any Spoudastirio there was at least one keeper called "Voithos Spoudastiriou"28. Where a keeper had a Post-graduate Degree (Didactoriko) he was called "Epimelitis Spoudastiriou"<sup>29</sup>. In any case the keeper of a Spoudastirio had to hold a degree related to subjects covered by the Spoudastirio<sup>30</sup>. Staffing structure was progressively changing. Accumulation of more books in seminar libraries and the need for Voithos Spoudastiriou and Epimelitis Spoudastiriou to spend more of their time in teaching and research duties created a number of organisational and administrative deadlocks. As a result the Ministry of Education created posts for support staff - as a rule one in every Spoudastirio in order to help in every-day operation of libraries. Supporting staff were members of the administrative staff of the university or chairs' secretaries. The result of these developments is that today staff in university, departmental

libraries and Spoudastiria may belong either to the Administrative or to the Special and Technical Administrative Staff.

The strict government control on university matters also affected the development of central university libraries. In the case of the university of Athens the Ministry of Education decided in 1866 to unite the university library with the public library and to create the National Library of Greece. The characterisation of the library as both public and university created problems in its organisation and operation. The publishing of a Royal Decree which determined that "the public and the university library are unified in a National Library" and that "Any purchase of new books for the national library must be done after a proposal by the library's keeper and the approval of the Ministry of Education"<sup>31</sup> caused the reaction of the Senate. The opposition of the university to Ministerial decisions on the nature of the library and the procedures for purchasing new library material resulted in continuous changing of librarians. The position of the librarian became a political one as every ministerial change was followed by a change of the librarian<sup>32</sup>. The result was that the university of Athens library became part of the National Library<sup>33</sup> and even now the university of Athens is still without a central library. The only connections which exist today between the National Library of Greece and the University of Athens are the borrowing privileges which university professors have and their participation in the governing board of the National Library. In 1864 the University Senate decided to establish a new library for university professors only<sup>34</sup>. This library was developed with books from the public and the university library and had a collection of 12,000 books. It had a readingroom and its material was classified by teaching staff<sup>35</sup>.

The failure of the first university to create its own central library affected the organisational pattern of libraries in other universities established after the University of Athens. The establishment of libraries was the result of haphazard ministerial decisions rather than of any planning. The examination of existing legislation has shown that the establishment of university libraries was not the result of planning. In almost all universities the development of libraries started years after the establishment of the university. The establishment of any new university was followed by the creation of their libraries in a way almost identical to that of the University of Athens. The nuclei of many library collections were gifts of books to the university. As in the case of the University of Athens every professor could create his own seminar library attached to his chair.

Efforts at creating central libraries were made in single-subject Higher Schools nowadays universities - such as the Higher School of Economic and Commercial Studies in Athens in 1926 and the Higher School of Agricultural Studies in 1920. However even in these institutions the creation of central libraries was the result of their size rather than realising the need for proper library planning. An effort to create a more centralised library structure took place with the establishment of the university of Thessaloniki in 1925. In this University there was a provision<sup>36</sup> for creating both Spoudastiria and a Central University Library. The role of the central library was to co-ordinate and facilitate the running of all spoudastiria. The central university library was responsible for all new acquisitions, cataloguing of all library material and the operation of two reading-rooms, one for students and one for the faculty. A Presidential Decree determined the administrative structure of the central library by establishing a library committee, determining the number of staff positions, the role of the library's director, library regulations and many other details on organisational and personnel issues. This pattern was applied in the Universities of Ioannina and Patras. However internal factors and the dominant power of professors created a climate negative for centralised services or even co-ordination of existing libraries. As a result the role of Central libraries became very weak and today they house only the acquisition department and old material. Due to the fact that the Universities of Thrace, Crete, Aegean and Thessali have developed in more than one city it was impossible to apply this structure in those universities. The only universities with only one recognised library are the Single-Subject universities: University of Economic and Financial Studies of Athens<sup>37</sup>, Panteion University of Political Studies, Agricultural University of Athens, University of Economic Studies of Piraeus, Higher School of Fine Arts and the Macedonian University of Economic Studies of Thessaloniki. However even in these universities small collections outside the main library still exist. A breakthrough in the organisational structure took place with the establishment of the University of Crete in 1972. Despite the fact that departments in this university had as a tradition the operation of Spoudastiria, in this university they were moved to a main university library.

# 2.3 National library policy

According to Michel Menou<sup>38</sup> a policy is a set of principles which guide a regular course of action and consists of: a) A purpose or set of purposes, which are to be achieved or pursued; b) Specific means by which the realisation of goals is to be achieved; c) The assignment of responsibilities for implementing the means, and d) A set of rules or guidelines regulating the implementation of the means.

The need for the existence of a national policy on provision of library and information services in a country has been expressed by many librarians in different countries<sup>39</sup>. The aim of a national policy on library services is to make possible cultural progress primarily on national and, secondly, on international level through supportive library services<sup>40</sup>.

A national library policy may determine:

i. The establishment and development of a national legal deposit and general objectives for acquisition services.

ii. Co-ordination of collection development in the country's libraries.

iii. Formulation and implementation of a policy and plan for cataloguing of information sources.

iv. Compilation of a national bibliography, register of publications in the country, and a register of manuscript and archival collections.

v. Co-ordination of the production of specialised bibliographies and catalogues, development of national translation services, formulation and implementation of a policy and plan for delivery of information services from the home country as well as from other countries.

The creation of a national policy needs the setting up of a body responsible for planning, development and co-ordination of the library system in a costeffective way<sup>41</sup>. A policy may be established de facto from existing patterns of behaviour among the various parties concerned, agreed in documents (formalised policy) or imposed de jure by legal acts<sup>42</sup>. Responsibilities for planning and co-ordination may be given to the National Library or to a government department<sup>43</sup>. The implementation of national library policy needs :

a) An efficient management of national library services through the design and development of the necessary organisational structure.

b) Obtaining the required managerial information through reports, statistical data and research concentrating on problem solving and development of librarianship.

c) Support of development of library services in the country and promotion of librarianship.

d) Developing the technical infrastructure needed for support of all library and information services.

e) Standards of services that should be performed. The determination of guidelines for collection development, cataloguing, reference, document delivery, international liaison and technical activities is a precondition for the efficient functioning of these services.

An attempt at national planning of public libraries was made with the help of U.S. services at the end of the civil war<sup>44</sup>. In the legislation produced, the only body responsible for determining a national policy - mainly on public libraries was the "Γενικό Συμβούλιο Βιβλιοθηκών" (General Council of Libraries) with a role to a) express its view on all matters related to libraries in Greece, b) supervise libraries, and c) carry out research projects on librarianship<sup>45</sup>. In the legislation for the foundation of this council there was a provision that later decrees would determine national policies on collection development, interlibrary loans, cataloguing rules and development of union catalogues. The fact that these decrees have never been published, has resulted in this council being without responsibilities; moreover the council has had hardly any effect on the state of either libraries or librarianship in Greece. In order to discover which bodies now have some responsibility in the development of national policies we review the legislation related to libraries. The examination reveals that there are dozens of laws, Presidential Decrees and Ministerial Decisions related to library matters, but no legislation to formulate and express a national library policy. There is not even a body to which a request for such a statement can be properly directed, or to act as a liaison between Greece and International organisations such as UNESCO and IFLA. The National Documentation Centre, The National Library of Greece, The Directorate of Libraries at the Ministry of Education are supposed to take decisions on a national level but none of these bodies has national planning responsibilities. In practice there is not even any co-ordination of the activities of these bodies. There is not even a forum for consultation on development of technical and bibliographic standards for the libraries. The National Standards Organisation (EAOT), the Technical Chamber of Greece and the Greek Library Association are producing "standards" on librarianship without consultation with other interested bodies. There is no co-operation or representation of Greek interests in the development and maintenance of international standards and standardised information exchange systems, exemplified in the work of such organisations as IFLA, ISO, ISDS and FID.

# 2.4 Greek educational system

According to Greek law, education constitutes a basic state mission. All Greeks are entitled to free education in public schools. The terms and the prerequisites for the foundation and the functioning of educational institutions not belonging to the State are decided by legislative regulation. Foundation of higher education institutions by private individuals is prohibited.

The educational system of Greece is divided into three levels. Education is compulsory for children aged 5.5-12 years old (primary education), and starting with the school year 1980/81, compulsory education became nine-year (primary and high-school education). Second level (secondary) education is divided into general, technical, vocational and ecclesiastical streams. Secondary general education comprises Gymnasium and Lycea. Children having graduated successfully from primary schools can enrol in Gymnasium without examination. Attendance lasts for three years. Graduates of three-grade Gymnasium can enrol in Lycea without entrance examinations. Attendance lasts for three years. Third level education includes a) Technical Education (Technical Educational Institutions (TEI) and b) Higher Education (Higher Education Institutions (AEI). Entrance to higher education institutions requires: successful participation in special entrance examinations and the certificate of a Lyceum or an equivalent second level educational institute.

The educational system is highly centralised. With a plethora of legislative arrangements the government tries to solve all minor and important educational

matters. The Ministry of Education and Religious Affairs prepares or at least approves the decisions of the governing bodies of all educational institutions. The lack of long-term educational policy has resulted in continuous changes in the educational system. According to Saitis:

"Greek governments spend more time changing the laws of their predecessors than they do thinking about the improvement of the education system itself"<sup>46</sup>.

The result is that while there is legislation for almost all aspects of the education much of it is never implemented. It seems that despite detailed directives Greece remains without a clear overall policy and sense of direction in its educational system.

According to the Greek Constitution higher (tertiary) education is under the supreme supervision of the State and it is conducted at State expense<sup>47</sup>. State supervision and control are carried out by the Ministry of Education and Religious Affairs. The Ministry of Education is the highest administrative unit of education in Greece and is directly under the jurisdiction of the government. Universities are "Completely self-governed" institutions (Corporate Bodies of Public Law), under the supervision of the state. In theory this means that universities may manage their business as they wish. In practice, however, the sense of "self-administration" is very weak as many university decisions need at least Ministerial approval<sup>48</sup>.

The internal structure of their administration and its operation, the system of introducing new students, the methods of recruiting and promoting the teaching staff, their grades and responsibilities, the way of distributing text-books, the student unions, the program of studies and many other topics are regulated by many Laws, Presidential Decrees, and Ministerial decisions. All universities are funded by the state and their administrative and teaching staff are public servants.

As an outstanding educational institution a university has specific purposes of existence. Despite different opinions which may be voiced, the fact remains that in any country a university has to fulfil a number of different purposes. Those purposes range from enriching and interpreting the national culture to providing highly qualified manpower for industry, administration and scientific research<sup>49</sup>.

Greek universities have followed the historical developments of Greece. As a result of these developments roles given to university education have changed

many times. There have been periods in the history of Greek universities when the preservation of the cultural heritage of the past has been thought of as the chief duty of university education<sup>50</sup>. In fact the main purpose voiced during the establishment of the first university in Athens was affected by the memories of the old glory of Greece and the dominant ideology at that time. For those who inspired the establishing of a university in the new Greek State the main ideological reasons justifying it were the revival of the cultural tradition of Ancient Greece and the transfer of "...the Greek spirit to the East"<sup>51</sup>. Ideological reasons also had an influence in establishing new Schools and Faculties and in the way of teaching<sup>52</sup>. Together with those ideological purposes universities had to carry out some more simple and practical duties such as the education of students to provide the necessary manpower for the new independent state.

According to existing legislation the purposes of university education in Greece are:

"- to produce and transmit knowledge by the use of teaching and research.

- to develop the arts.

- to help in the creation of responsible people with scientific, social, cultural and political consciousness and to provide all needed resources in order to assure their proper education for a scientific or vocational career.

- to help in facing the social, cultural and development needs of the country.

- to help in fulfilling the needs for continuing education of the people"53.

Until 1982 the basic legislation for university education followed the old German ideas of university education<sup>54</sup>. Despite efforts to change the old system especially during the discussions on the establishment of the University of Thessaloniki in 1926 - all newly established universities followed the same structure which was based on the existence of a chair, a chair's Spoudastirio and a Laboratory or Clinic. Personnel relations created in such a structure were based on a supervisor- inferior relation. The professor was the only person among the teaching staff of the chair who had the right to decide without any criticism on courses given, teaching methods, selection of chair's staff and allocation of chair's funds for the purchase of books and library equipment<sup>55</sup>. In such a structure teaching instead of learning became the main characteristic of the educational system<sup>56</sup>. The reproduction and transmission of knowledge was done in an authoritative manner. The chair structure prevented the renewal of course topics, teaching methods, and limited the degree of pluralism in presenting a scientific topic. A professor's dominant position discouraged critical comparisons of different scientific aspects.

Since the establishment of the first university in Greece teaching has been based almost exclusively on lectures<sup>57</sup>. In such cases the simple procedure of taking notes by students became a fatiguing business of writing down word by word all professors' lectures. In many ways the educational practices in Greek universities have maintained this nineteenth-century tradition of "Ex-cathedra" teaching that has created a barrier to the use of library material by students and the development of university libraries.

For years in Greek universities disputes dragged on between advocates of the old traditional teaching practices and university structures, and those who demanded more liberal organisation of studies and new organisational structures in universities. After a series of strikes and student protests the Government introduced in 1977 new legislation on university education<sup>58</sup>. The new legislation aimed at making some minor changes but left many other problems untouched. The new legislation was opposed by students and the majority of the teaching staff. As a result of this opposition the Government was forced to repeal its law. In 1981 the Government promised to introduce new university legislation which passed Parliament in 1982. The new legislation (Law 1268/82) was a breakthrough in Greece's university education. With the new legislation, chair structure was replaced by sectors. Every sector covers a specific scientific subject. A number of sectors create a university department. Two or more departments create a School. The new legislation introduced four ranks of teaching staff: Lectoras (Lecturer), Epikouros Kathigitis (Senior Lecturer), Anaplirotis Kathigitis (Assistant Professor), Kathigitis (Professor). Every member of the teaching staff has equal teaching rights and responsibilities. The power on teaching and administrative matters was allocated to all Faculty members.

For the organisation of libraries the law determined that:

" The Senate has the right to create departmental libraries. Proposals for creation of libraries and positions for library staff rests on Faculty's Board or the general assembly of the department"<sup>59</sup>.

This article was replaced by a new one in 1983<sup>60</sup>. According to this in every university is established a university library comprising a central university library and departmental libraries. The Spoudastiria in each department belong to the library of the department in which former chairs were placed. Details on the organisation of libraries within each university was left to be directed by Presidential Decrees, to be issued six months after the publication of the law. However no such Presidential Decree has yet been published. This legislation

had little impact on the organisation of libraries in Greek Universities as it does not specify the means by which existing libraries will be unified.

# 2.5 The Universities

Universities in Greece are of comparatively recent origin. The oldest university dates back to 1837 but all of the rest have twentieth century beginnings. Greek universities may divided into two broad categories: a) multi-subject and b) single-subject Universities. The formal titles of universities and statistical data on students and staff are given in Table 2.

In figure 6 it can be seen that six universities with 43.3% of the academic population (students and teaching staff) are located in Athens area and two in Thessaloniki with 31% of the academic population and nine in other parts of Greece. This means that more that 3/4 of the academic population is concentrated in those two cities.





Table 2 : Universities in Greece

							<u> </u>	<b></b>
University	Year of Est.	Location (City/ies)	Teaching staff	Students (*)	Postgradu ate students	Total Libra <i>r</i> y Users	%Acad. popula- tion (Wi)	Depart- ments
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	1925	Thessaloniki	2395	49757	247	52399	26.6	34
ATHENS AGRICULTURAL UNIVERSITY	1920	Athens	145	2124	-	2269	1.2	6
HIGHER SCHOOL	1910	Athens	35	466	-	501	0.3	1
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1958	Thessaloniki	85	8425	7	8517	4.4	. 2
NATIONAL CAPO- DISTRIAN UNIVERSITY OF ATHENS	1837	Athens	1916	59507	283	61706	31.6	23
NATIONAL TECH- NICAL UNIVERSI- TY OF ATHENS	1914	Athens	572	9127	65	9764	5	8
PANTEION UNIVERSITY OF POLITICAL AND SOCIALSTUDIES	1936	Athens	197	6540	7	6744	3.5	8
TECHNICAL UNIVERSITY OF CRETE	1977	Chania	52	551	-	603	0.3	2
UNIVERSITY OF CRETE	1973	Heraklio & Rethymno	172	4432	75	4679 .	2.4	14
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1920	Athens	146	8279	8	8433	4.3	4
UNIVERSITY OF	1970	loannina	419	7363	84	7866	4	9
UNIVERSITY OF	1964	Patras	553	10378	67	10998	5.6	15
UNIVERSITY OF PIRAEUS	1958	Pireus	127	10892	19	11038	5.7	3
UNIVERSITY OF THE AEGEAN	1984	Mitilini, Xios, Samos, Rhodes	33	1157	39	1229	0.6	2
UNIVERSITY OF THE IONION	1984	Kerkyra (Corfu)	31	442		473	02	7
UNIVERSITY OF THESSALI	1984	Larisa, Volos	7	267	6	280	0.1	4
UNIVERSITY OF THRACE	1973	Kornotini, Alexandrou- poli, Xanthi	295	7281	71	7647	3.8	7
TOTALS	l	1	7180	186988	814	1949866		149

(\*) Enrolled students Source: Statistical service of the Geek Ministry of Education and Religious Affairs, 1991

The way a university campus is organised and its administration structure affects the organisation of libraries and their ability to provide effective library services. Of the seventeen universities, 9 are housed on a single campus each, 5 in a number of locations within the same city, and 4 are located in more than one city. Three universities (lonion, Aegean, Thessali) are administered by governing boards instead of being self-governing bodies. For a better understanding of the situation in each university a brief presentation of each is given<sup>61</sup>.

# Multi-subject universities

## 1. ARISTOTLE'S UNIVERSITY OF THESSALONIKI

" Aristotle's University of Thessaloniki", named after the famous philosopher Aristotle, was established in 1925. It is the largest university of Greece, with 34 University Departments organised in 8 Faculties. With the exception of some minor university units the university is located in one large campus in the centre of Thessaloniki.

#### 2. NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS

This is the first university of Greece. Established in 1837 as "Othon's University of Athens". Later, in 1862, changed its name to "National University". In 1911 the Faculties of Theology, Law and Philosophical studies established the "Capodistrian University" named after the first governor of modern Greece. In 1932 the two universities united and created the "National Capodistrian University of Athens". It has 23 Departments in 5 Faculties. It is located in a number of buildings in Athens area. Since 1963 there has been a programme of creating a university campus for the entire university, but at the time of writing (1992) the programme of building is still incomplete.

#### 3. NATIONAL TECHNICAL UNIVERSITY OF ATHENS

The development of the Technical University of Athens started in 1836 with the establishment of "The School of Arts". In 1887 it changed its name and became "School of Industrial Arts". In 1914 it was given university status and

named "National Metsovio Technical University" because its campus was built from donations of people from the town Metsovo. The new university institution was under the supervision of the Ministry of Internal Affairs and later the Minister of Communication. Since 1940 it has been under the supervision of the Ministry of Education. It has 8 Departments in one Faculty. A new campus outside Athens has been under development since 1972. At the time of writing (1992) it is housed in two campuses, one in the centre of Athens and the other in Zographou (area of Athens).

## 4. UNIVERSITY OF CRETE

The University of Crete was established in 1973 and started operation in 1977. It has 14 University Departments organised in three Faculties. Eight departments organised in one School are located in Rethymnon and six departments organised in two Faculties are in Heraklion. The university administration is in Rethymnon. Departments in Rethymnon are housed in a building built for a technical school. There is a program under development for the building of university campuses in both Rethymnon and Heraklion.

#### 5. UNIVERSITY OF IOANNINA

The University of Ioannina started operation as an annex of the University of Thessaloniki in 1965. In 1970 it became independent with a structure similar to other universities. For years the university was housed in a building of a technical school. It has 7 departments organised in 3 Faculties, and two independent departments. The university is housed in a number of buildings in three locations of Ioannina. A new campus is under development outside Ioannina. A large part of the university has moved into the new campus but there are still university departments in the city.

## 6. UNIVERSITY OF PATRAS

The University of Patras was established in 1964 and started operation in 1966. It has 13 departments organised in 3 Faculties and two independent departments. At first the university was housed in a building constructed for a high school. Since 1968 a new university campus has been developed in Rio (a suburb of Patra). Almost all university buildings have now been completed.

#### 7. UNIVERSITY OF THE AEGEAN

The University of the Aegean was established in 1984. The university administration is in Athens (Governing Board) with some administrative functions in Mytilini (The main town of the island of Lesbos). The university has 7 departments housed on four islands of the Aegean Sea. Three departments are in Lesbos, one in Chios, one in Samos, and two in Rhodes.

#### 8. UNIVERSITY OF THE IONION

The University of the Ionion was established in 1984 and started operation in 1987. The university administration is in Athens (Governing Board) with some administrative operations in Kerkyra (Corfu). The university has two departments housed in two old buildings in Kerkyra.

#### 9. UNIVERSITY OF THESSALI

The University of Thessali was established in 1984. The university administration is in Athens (Governing Board) with some administrative operations in Volos and Larissa. Three of the university's departments are located in Volos, and one in Larissa. The university is housed in old buildings in Volos and Larissa.

#### 10. UNIVERSITY OF THRACE

The University of Thrace was established in 1973. The university administration with three departments are in Komotini. One Faculty with two departments is in Xanthi and two departments in Alexandroupolis. Since its establishment the university has been housed in the buildings of high schools. There are, still under development, university campuses being built in both Komotini and Xanthi.

# Single-Subject universities

# 1. ATHENS AGRICULTURAL UNIVERSITY

The "Athens Agricultural University" was established as a university level institution called "Higher School of Agricultural Studies" in 1920. In 1990 it changed its name and is now called "Athens Agricultural University". Its campus (a large building) is located in Athens (Votanikos). The university has six departments in one Faculty.

# 2. HIGHER SCHOOL OF FINE ARTS

The Higher School of Fine Arts was established in 1910 from a division of the "School of Industrial Arts" (former name of the National Metsovio Technical University). It is housed in a section of the old buildings of the National Technical Metsovio University in the centre of Athens. The Higher School of Fine Arts is a single faculty institution.

# 3. MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES

The Macedonian University of Economic and Social Sciences was established as a higher education Institution in 1958 with the name "Higher School of Industrial Studies of Thessaloniki". In 1990 it changed its name and now is called "Macedonian University of Economic and Social Studies". It has two departments organised in one Faculty. For years the School was housed in a rented building in the centre of Thessaloniki. In 1990 it transferred to its own buildings in the centre of Thessaloniki.

# 4. PANTEION UNIVERSITY OF POLITICAL AND SOCIAL STUDIES

Established as an independent institution of higher education School of Higher Education in 1936. According to legislative Decree 696/41 and law 540/43, the aim of the School was to "offer a general political and wide intellectual education, to as broad a segment of the Greek nation as possible ... and to prepare cadres for the public service and in these ways to develop the cultural and educational level of the nation. In 1951 it was organised in a way similar to other universities and in 1963 became equal to them. In 1989 it changed its name and is now called "Panteion University of Political and Social Studies" after the name of the person (Pantos) who contributed the money for its buildings. It has 8 departments in one Faculty and is housed in a complex of buildings in Athens.

### 5. TECHNICAL UNIVERSITY OF CRETE

The Technical University of Crete was established in 1975 and started operation in 1977. It has 2 departments organised in one Faculty. A program for building a university campus outside Chania is under development. The university is administered by a governing committee.

#### 6. UNIVERSITY OF ECONOMIC STUDIES OF ATHENS

The University of Economic Studies of Athens was established in 1920 as "Higher School of Commercial Studies". In 1926 it received the name "Higher School of Economic and Commercial Studies", and in 1990 was re-named "University of Economic Studies of Athens". It has 4 departments organised in one Faculty. Since 1935 the University has been housed in a complex of buildings in the centre of Athens.

#### 7. UNIVERSITY OF PIRAEUS

The University of Piraeus was established as a higher education institution in 1958 with the name "Higher School of Industrial Studies of Piraeus". In 1966 the School was organised in a way similar to universities and in 1990 was named "University of Piraeus". It has 3 departments housed in a building in Piraeus (port of Athens).

### 2.6 Campus organisation

We have seen in the previous section that the Universities of Athens, Ioannina, Technical University of Athens and Ionio have no unified campus while located each in its own city. The universities of Thrace, Thessali, Aegean and Crete are each located in more than one city. Among multi-subject universities only two - those of Thessaloniki and Patras - have unified campuses. The result of this situation is that for those universities the development of a single central university library is impossible.

The practice of establishing universities as appendices of former universities resulted in the copying of library practices from one university to another. This was the case for the Universities of Ioannina, Thrace, Ionion and Crete. This practice resulted in the transfer of the "library culture" from one university to other universities. Forward planning of libraries in a systematic way, with the development of strategic plans, is almost unknown in Greek universities. Decisions on library development are taken rather hastily. Examination of the situation in all Greek universities proved that decisions on campus development were detrimental to efficient library development. Examination of this aspect of library development in all universities has shown that only the universities of Crete, Aegean and Thessali have developed any forward planning for their libraries but even they face many problems in implementing them.

### 2.7 Educational practices

Because universities are concerned with the search for truth, the extension of knowledge, enrichment of minds and training, the demands on their libraries reflect a university's attitudes toward these aims. Postgraduate students, faculty members and research workers depend almost entirely on recorded scientific information, and teaching practice must give students the opportunity for investigative work. For all these reasons libraries are an indispensable aid in an activity which is directed at the expansion of human knowledge.

There is a clear relation between a sizeable and appropriate collection, geared to student and research material, and the quality of library services provided, to the quality of research and learning within its parent organisation. The library is a requisite for the fulfilment of teaching and research needs of the university. According to Rogers and Weber:

<sup>&</sup>quot; In a quite literal sense, the center of [universities'] effort [research and teaching] is the faculty, supported by requisite library and laboratory facilities"<sup>62</sup>.

Student education in Greek universities depends almost solely on lectures and lecture-notes. In the Greek academic community there is not a general consensus that students have to use the library if they want to achieve better education. Students believe - and the educational system supports this opinion - that digesting notes taken during lectures or reading the professor's text-book is quite enough for their educational needs and there is no further need to pursue a wide and varied consultation of library resources. In such a situation as this the demonstration of the value of modern library services is very difficult. Some individuals who have studied abroad and have seen the benefits of modern library services have agitated for improvements upon their return. However the resistance they face is formidable. For many of them the demand for creating larger library collections with free access to all material is an attack upon the present system, which they believe is the most appropriate to Greek university needs<sup>63</sup>. Other are reluctant to support any change simply because they feel comfortable with the status quo regardless of any weakness. The vicious circle is evident. Without an excellent library service, a library's value can not be appreciated and without such appreciation support for changes will continue to be scarce.

Since completion of most courses involves only the successful memorisation of information contained in professors' notes, and passing semester examination on that material, most students do not attend classes and seldom, if ever, visit libraries. There is a small percentage of members of the teaching staff only who use the library in their teaching process by giving students assignments which need use of the library, and who consult the librarian on ways of providing special material and bibliographical tools for use by their students. For those members of the faculty a library is an extraordinarily helpful source of assistance in their teaching and research. They are acquainted with existing material and library services, and can help the library by participating in efforts to improve library services.

## 2.8 The one text-book practice

Since the establishment of the first university in Greece, university professors used to write text-books and lecture-notes which were sold to students either directly or through booksellers. This practice created many unacceptable practices where professors were pressing students to buy their books<sup>64</sup>. In an attempt to stop this unacceptable situation and in order to improve its low popularity and have an ideological control on students' readings the military government imposed in 1972 a new system in which the state became responsible for paying authorship rights to authors and for disseminating free of charge all text-books to students. Since then universities have been obliged to distribute to all of their students free of charge at least one text-book or set of lecture notes for every course.

The distribution of books to students by the university helps students financially but creates a number of educational side-effects. The provision of a "one basic text-book" to every student and for every course helps in the development of a "school-syndrome" in university education. Students expect to have a basic text-book in every course, to read and reproduce it in their final examinations with a final purpose to "pass" the course. This practice establishes intellectual monopolies by introducing a one opinion authenticity in university education; it rewards memorising, limits academic freedom by determining the number of pages permitted in every text-book, and creates intellectually and ideologically underfed students<sup>65</sup>.

According to Prof. Babiniotis:

" [because of the one text-book tradition] students stop visiting university libraries... today our libraries have the silence of a cemetery"  $^{66}$ 

The distribution of free text-books to students by the university provides faculty members with supplementary sources of income from authorship rights. There are members of the teaching staff who double their salaries by the author's rights which are paid to them<sup>67</sup>. Such members of the teaching staff are not keen to accept any change, nor to work for the development of adequate libraries. Speaking in economic terms Prof. Lianos expressed the view that:

"The tradition of free textbooks started as part of our educational policy and very soon became part of the income policy by receiving money from taxpayers and giving it to professors, publishers and students"<sup>68</sup>.

This is another reason for members of the teaching staff to be reluctant to give a more prominent role to library use. The obligation of any member of the teaching staff to write a text-book or lecture-notes for the course he teaches results in an increase in the number of published books but a decline in their quality<sup>69</sup>. Faculty members tend to believe that departmental or sectional libraries belong to them, and that nobody else has the right to interfere in the operation of "their" library, while the fact that in many cases library staff have not received a library education gives faculty members an excuse to interfere in librarians' matters.

Another factor which affects university libraries is the attitude of potential library users towards reading in general<sup>76</sup>. There are many factors which contribute to the reading activity of a specific population. McClellan<sup>77</sup> divides those factors into two broad categories - the personal and the environmental. The personal factors include: psychological<sup>78</sup>, neurological, mental ability, mental and emotional disorders as distinct from intelligence level, and lack of appreciation of the usefulness of skills in language and reading. The environmental factors include : a) the home (the cultural background of the home, familiarity with books and the status of reading in home), b) The economic situation of the family, c) the school experience, d) teaching methods and policies in regard to reading, e) the scope that may exist in the life situation for the stimulation of active interests.

Many of the above environmental factors affect the reading practices of Greek students in a negative way. Most students and faculty members have never experienced proper library use as their school experience does not help the development of reading habits. There is also a marked disinclination to read in Greece in general. A survey revealed that only 20% of the population reads books "occasionally" and 90% of them have never borrowed a book from a public library<sup>79</sup>. Trying to explain this phenomenon Guy St Clair believes that it is due to cultural differences between Greek and Western nations, as for most Greeks library service is a privilege and not a right to be automatically expected, and that:

"For most Greeks, living in a society not too many generations removed from totally agrarian culture and one in which education and reading itself were often restricted to a small minority, books are still very precious things"<sup>80</sup>.

In an attempt to find why the modern Greek does not utilise his public library Nancy Birk and Dimitris Karageorgiou reached the conclusion that this is due to the fact that for the average Greek, the library is the place where one can find "serious" literature and that the library is perceived as a non-essential facet of public service within the community<sup>81</sup>. It is evident that the reasons behind such behaviour are complex as they range from the psyche of the individual to more practical reasons such as hours of opening of libraries, climate, and library services provided. Any attempt to explain attitudes toward libraries in Greece must take into account the educational system which does not support the use of libraries, the large percentage of illiteracy, the inadequate library resources and the ill-trained and inadequately-supported librarians.

The majority of teaching staff show very little interest in library matters. They do not include the library in the teaching and educational process of the university, nor does their teaching practice encourage students' curiosity and critical approach to knowledge, since they tend to believe that if a student has learned his text-books or lecture-notes he has already received enough knowledge from their courses. For them the role and importance of the library is very limited as they see the library as an instrument for their own research or even as a store-house for research material accumulated for their own personal use. Students are accustomed to this way of thinking. They tend to be without any intellectual curiosity for learning more than "what is needed for the examinations"<sup>82</sup>. On a national scale only occasionally have senior university and government officials expressed publicly the importance of university libraries, and only once, in the 1987 Session of the National Council of Higher Education, has the Minister of Education honoured the importance of university libraries<sup>83</sup>. In that meeting the Minister of Education, Mr. Tritsis expressed the view that:

" The library and the reading room are very important in the organisation of a university. The library is the main characteristic of a modern university ... [and] plays a vital role in the creation of an academic community climate in a university ... For the government there is the task of organising university libraries and reading rooms in order to bring the whole academic community in contact with world-wide literature"<sup>84</sup>.

Despite such opinions the Ministry of Education has not transformed such views into practical decisions. A proposed plan in 1988 to reorganise the university libraries in order to replace the system of disseminating free textbooks and other reading material through the development of university libraries was not realised. The failure was a result of many factors such as the cost involved, absence of educated library staff, resistance of students and members of the teaching staff, and reluctance of the universities to move in such direction. The need to organise university libraries is still in every discussion and proposal for the improvement of university education in Greece<sup>85</sup>. The awareness of the economic importance of scientific and technological information is also low in Greece. The same can be said for the

delay with which the Greek government had become aware of the impact of scientific and technological research, as a means of industrial and economic development.

# 2.10 University administration and the library

During their historical development Greek universities complied with many University Laws. Today all universities follow the Law 1268/82<sup>86</sup>. The administrative structure and the decision making processes are similar in all Greek universities<sup>87</sup>. According to this Law Universities are divided into Schools (Faculties). Each Faculty has a number of Departments which are further divided into Sectors. Sectors are composed from the amalgamation of a number of former chairs and represent the various subject components that make up a broader discipline.

The highest governing bodies within a university are the Senate and the Rectorial Council. Senate has a principal authority in academic and financial matters comprising the Rector, the two Vice-Rectors, the Deans of the Faculties and representatives from all university staff: teaching and research staff, administrative and technical staff, and students. The Rectorial Council is responsible for the implementation of the university's policy as laid down by the Senate; and the making of everyday decisions on almost all matters related to the university, such as approval of financial requests, and decisions on matters related to university staff. The Rectorial Council comprises the Rector, the two Vice-Rectors and representatives from both the administration staff (as adviser) and the students. The universities of Thessali, Ionion and Aegean, are still administered by governing boards comprised of members from the teaching staff of older universities. At the level of faculty, department and sector, there are the following bodies: the Faculty Board (Kosmitia), the General Assembly of the Faculty, the General Assembly of the Department, the Board of the Department and the General Assembly of the Sector. All those bodies include members of the teaching staff, special administrative staff and students of the Faculty, Department or Sector. Turning to university officers; there are the Rector and two Vice-Rectors, each elected for a three year term. The Dean of the Faculty is elected by members of the Faculty and appointed for a three year term; the Head of the Department and the Director of the Sector are elected by the members of department and sector, respectively. The Head of the Secretariat is elected by the Senate, for a three year term. All officers members of the University bodies - are appointed by the Minister of Education on the nomination of the Senate. Administrative work may be supplemented by a number of Committees appointed for consultation or decision making on specific matters such as libraries, buildings etc. In most cases decisions of such committees need the approval of higher bodies such as the Senate and the Rectorial Council.

An in-depth study of all governing bodies and the way they act makes it evident that :

i. University officers of every level have only limited power. Their power lies with a decision-making body comprising either the whole staff of the unit they manage, or at least bodies with representatives from all or some categories of the staff.

ii. The collective bodies do not include members from outside the university. All decisions on administrative matters are taken by members of the teaching staff, students and supporting staff.

iii. Administrative work is allocated to a number of bodies. University bodies constitute a chain which rests final decisions with the upper level bodies, the Senate and the Rectorial council.

iv. The university librarian is not included among university officers. The university librarian is included among directors of the administration directorates.

Despite the fact that there is a fair democratisation of the decision-making process this structure poses questions about the efficiency of the administration in Greek Universities<sup>88</sup>. For the university library or libraries the existing administrative structure does not provide a clear path of communication between the library and the university administration. In any case, and especially when a library belongs to a Department or Sector, decisions on library matters may be taken by a number of bodies and individual persons. The law determines that in Greek universities "libraries are self-sufficient and decentralised services of the universities"<sup>89</sup>. However the fact that decision making is in the hands of a number of boards with little or no connection at all with the library makes that statement meaningless. In Greek universities libraries are treated as any other service of university administration. In all

universities the library is a directorate of its administrative services. On a national level the "Simvoulio Anotatis Pedias" (Council of Higher Education) and the "Sinodos ton Pritaneon" (Standing Conference of Rectors) play an advisory role on policies in University Education. There are no links with, or participation of, university libraries in those councils. Discussions on library matters are based on the views of members of those bodies without any consultation with university librarians.

In every organisation the authority and responsibilities of its director must be clear. The director of a library needs a proper clarification of his/her position in the web of organisation and services of which he or she is a part. The flow of authority from the dean of the university to the librarian, the relation of the library committee to the operation of the library, the placing of all funds for purchase of library material in the library budget, the establishment and administration of departmental libraries, the control of the location of library materials, the selection of the staff and other considerations, all must be clarified with formal codification or guidelines of the university. In the everyday work of most Greek library directors there is no formal clarification of their authority and duties<sup>90</sup>. As a result of these ambiguities most university librarians are continuously under pressure from members of the teaching staff who in many cases insist that the librarian has to follow their own particular "opinions" and ideas. No university library in Greece has been able to report clarification of responsibilities and the chain of authority between university and library administration. In some cases it is tradition, and the personality of a library's director, which determines his authority and responsibilities rather than any agreed specific rules and procedures. The influence of persons involved in decision making can also affect the flow of authority. It is evident that such personalised management practices do not permit decisions to be taken after explicit study of all aspects of a problem.

In every university the librarian must aim to secure adequate funds with which to provide proper library services and sufficient resources. He must have the power to keep a balance between the different elements of library expenditure. To achieve this he should be a powerful officer of the university. In fact this is the case in many European and American universities, but not in Greek universities. In a Greek university the librarian is treated as an ordinary university employee. Decisions on library funding are taken almost exclusively by collective boards without even consulting the university librarian.
In Greek universities the relationship between the library and the university is determined by laws, custom or tradition. The common characteristic of applied practices is the limited power of the librarian in any decision-making process. The law stipulates that every university has to create regulations to deal with everyday administrative problems, and to clarify the power of the librarian and other administrative bodies. However, up until now no university has created any such regulations.

#### 2.11 Future trends in Greek university education

The university library functions first of all within the context of the university. Any issues that are specific to the library must therefore been seen from the perspective of the university and in the frame of reference of the problems and changes that the university itself may face. As part of the European universities, Greek universities will in the future, have to fulfil more functions than those stated in existing legislation<sup>91</sup>. They are expected to weave international networks around both teaching and research. They are moving towards a combative environment also. In this environment they should identify their own particular strengths in teaching and research, by which they could clearly differentiate themselves from their nearest competitors in order to become centres of excellence instantly recognised by students and their community. As it is expected that in the future they could be funded not only by public but also by private sources this recognition would optimise their resources. In their contacts with other institutions, Greek universities are becoming increasingly international. No university can now afford to limit itself to purely national contacts and exchanges, but must maintain relationships with at least some foreign universities. During the last year the pressure for contacts at least within the European Union have been increased. A major reason for this is that European Union has launched schemes such as ERASMUS and LINGUA, under which universities may set up so-called Inter University Co-operation Programmes (ICPs) for the exchange of students and lecturers, and for the integration of courses. Research programmes funded by the European Union also aim to encourage links between universities, industry and business. It is expected that within the European Union common research policy such relationships would expand and improve.

The pressure of the number of students in almost all Greek universities affects the quality of education given to them. Classes with more than 100 students are guite normal. This means that teaching is based on lectures, with little student-teacher contact. The common practice is that the lecturer talks, the student writes, or, if absent, gets hold of duplicated or printed notes. The problem has been made worse by the fact that many teachers do more than one job, so that their university work may suffer. In consequence there is often disproportionate emphasis on bare facts rather than on original thinking. Students are assessed by examinations only. If a student fails in some, he or she must repeat the course or the year, but there is no threat of expulsion from the university. There is evidence that this situation is going to change. The recent legislation which introduced two-circle undergraduate studies and permitted the employment of part-time teaching staff is expecting to move the emphasis from teaching to the learning process. The new process would require students to be more self-sufficient. In other words, the student would receive a broad statement of what is required of him and he would be left to couple his own initiative with the exploration and rationalisation of the information resources open to him. Such a move is expected to move the centre of academic gravity from the classroom to other places of the university with the most serious candidate being the university library. In the near future libraries may become a hybrid, which will manage the learning process by defining for the student appropriate areas of study, introducing him to relevant resources and thereafter acting as counsellor.

Information technology already affects research activities in universities. Increasingly computers are used in research in traditional topics such as social sciences and humanities. But beyond the use in research there is an increasing use in the education process. The use of computer and computer networks is going to affect the nature and the way of learning<sup>92</sup>. In the UK the government is exploring the reduction of cost of teaching by such programmes as the Computers for Teaching Initiative. Line suggested a similar programme for libraries, a "Libraries for Teaching Initiative," to examine the scope for allocating some resources to libraries that are at present allocated to teachers, on the grounds of cost-effectiveness<sup>93</sup>. Distance learning through Open universities is already well established in other European Union countries. The planning of such an open university is under way in Greece. It is expected that in near future a number of courses will be provided this way<sup>94</sup>. Until now postgraduate studies in Greece were conducted without the operation of formal postgraduate courses. After a great debate over the form of the postgraduate studies there now exists the legislative framework for the establishment of postgraduate courses. As postgraduate research needs more information sources it is evident that this development is going to affect university libraries. Cources and research projects which will cover more than one subject of the same or more than one scientific fields are expected to increase and as a result departmental libraries would be meaningless.

Together with those macro-issues a number of micro-issues must be faced by universities and will affect university libraries. Most of them would be related to academic focus and emphasis such as more student interest in science over human topics, shift in the social sciences from qualitative to quantitative research, etc. The expectations of teaching staff and students for information and for speedy access have risen dramatically and will continue to do so. University libraries would be under pressure for qualitative improvements which are going to affect all university education and pressures for greater economic and output accountability in a long-term period of stable or declining resources.

Greek university libraries must face present and anticipated external forces and respond to them. As a response to present challenges in higher education their role is going to change<sup>95</sup>. Recent changes in university education will force Greek university libraries to pay more attention to the needs of their students. As a result of this in the near future Greek university libraries should become more customer oriented and try to serve the information needs of all members of the academic community as far as possible. In order to do this they must orient their collections to the real needs of the whole academic community.

The control of the administration of university finance by the government has always been a matter of criticism by university administrators. Recently the Ministry of Education granted universities greater freedom in the allocation and use of government resources. It is expected that this tendency will continue in the future. This is going to affect library funding as libraries will have to compete with other cost centres within the university and they will face pressures for greater accountability. All these developments are expected to affect libraries as they would need to determine clearly their objectives and targets and measure their efficiency. The Ministry of Education is considering the introduction of performance measures for the universities. The need for cuts in spending of public money together with pressures for more accountability is expected to continue in the future and this is going to affect the development of university libraries. The fact that the task is not easy could mean that universities may seek to apply their first measures in apparently simpler sectors such as libraries<sup>96</sup>.

In a situation when larger number of users are going to use libraries the design of library buildings, the arrangement of the stock and the design and content of the catalogue should be customer-oriented. Moving in this direction university libraries should support the academic programs better, and be actively and directly involved in implementing the mission of higher education: teaching, research and community service<sup>97</sup>.

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13 Report of library's keeper G.K. Typaldos.

14 See for instance the first library regulations of the Public and University of Athens library. Presidential Decree 31.12.1856 (No. 89).

15 Fifty years after its establishment (1873) the library had a staff of nine (One keeper, two bookkeepers (A' & B'), four assistants and two users).

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19 Help towards the development of this library was given by donations from European, American and Australian universities. <u>Ibid</u>, p. 174.

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21 For the developmet of such a seminar (Filologico Frontistirio) see: Πανταζίδης, I. <u>Χρονικόν της Πρώτης Πεντηκονταετίας του Ελληνικού Πανεπιστημίου</u>., 1889. (Chronicle of the first fifty years of the Greek University), p. 120.

22 For the aims of spoudastiria in Greek universities see: Presidential Decree 11-7-1929 and the Law 5343/1932.

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24 There are many laws, presidential decrees and ministerial decisions which establish spoudastiria in universities, determine their role, create positions of staff and try to determine almost all administrative matters. For example see for the University of Athens the Law 3825/1911 Article 18 §1.

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26 Law 3823/1911 Article 23 § 1.

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# **CHAPTER 3**

#### Greek University Libraries: Internal Environment

### 3.1 Library administration

A University library is an organisation with specific goals and objectives. In order to achieve those goals it has an administrative structure which can be defined as:

"The means by which management channels and directs work-flow through operating units; establishes lines of authority, supervision, and controls; and coordinates relationships for the accomplishment of the goals for which the library exists"<sup>1</sup>.

The administrative structure of a university library must be such as to help in the success of the purposes of its parent organisation, and must be considered in the light of the structure of the university in which it belongs. Administration as used in this context calls for adequate communication among different subdivisions, and for the appropriate joint planning and effort. One way of organising the work in a library is by grouping together in a department all activities which are logically related. The relationship between different work activities determines the lines of communication and the flow of work within departments and the library as a whole. The factor which influences the setting of a department is its functional autonomy in relation to other departments of However, departmental organisation is difficult to impose in the library. institutions which have library units in different and sometimes distant locations. Another problem is that the staff, having in mind - quite naturally - the objectives of their own department, may de-emphasise basic objectives of the library as a whole, and this may result in conflicts between departments. Critics of this organisational structure have also pointed out that the qualifications of staff have not been used to their full potential, resulting in inadequate service and frustrated staff, and that career and administrative structure tends to be hierarchical<sup>2</sup>.

Another way of work allocation is by format. In this smaller units take on all basic functions of their parent unit, but for only one form of material such as serials, maps or books. As a result staff develop a high level of competence with that particular form of material such as cataloguing of books or serials, are used more effectively and the operations are more efficient. The problem is that this structure is useful in large central units or in very large branch operations, but not in small units. The management is to a great extent similar to functional departmentation with a bibliothecarios or bibliotheconomos responsible for every form of material or for specific sections. There is no Greek university library organised by format.

The administration of libraries in Greek universities has been the result of happenstance or a consequence of institutional development rather than of a careful analysis of library needs of the academic community. With the exception of the University of Athens, in all other universities the library is an administrative directorate of the university's administration. As such the libraries are organised in traditional organisational structures following the the principles of office hierarchy and of levels of graded authority<sup>3</sup>. The organisation of work by creating specific departments is followed only in some The Universities of Thessaloniki, Patras, Crete and university libraries. loanning have departments devoted to specific tasks, but even then without clear lines of authority and responsibility. In all such departments there are no department directors. The co-ordination of work of all different departments depends upon the personal qualities, the character, intelligence and ability of the university librarian.

We have seen already that, in universities with a decentralised library structure, the university library consists of a number of small libraries attached to different educational units. The size of the collections in these libraries and the number of staff employed make the creation of departments in these libraries meaningless. All those small libraries perform their library procedures without setting up separate departments. Their staff are responsible for performing all library functions, from the most technical to the most menial. In most cases those libraries have an autonomous operation and little or no connection with other libraries. The position of these libraries in the university library structure is not clear. Where their personnel belong to the administrative staff, they come under the authority of the Directorate of the Library; but if the staff belong to educational units the University Librarian has no power over them at all. As a result the organisational chart - if any - determines the structure of the

Directorate of Libraries and does not take into account the existence of the departmental libraries.

Despite differences between various libraries, in every one there must be a division of labour: people are given tasks or jobs, there is a hierarchy, and a grouping of functions. These relationships are presented in the organisation chart of the library, which determines how the work and resources should be divided (structure of the library) and secondly, once the division has been made, what ways must be followed for co-ordinating these efforts in the most effective way. The organisational chart can be a useful management tool if it reflects factors affecting both departmentalisation, and span of control and gives a clear picture of the formal lines of communication within the library<sup>4</sup>. There are no university libraries in Greece with a modern organisational chart. At the time of writing (1993), all universities are in the process of creating new organisational charts. Discussions on how libraries should be organised are on everyday agendas but so far no library has had a formal organisational chart approved by the Ministry of Education.

In Greece only the Ministry of Education has the power to change the organisational chart of a university library. A number of university and government bodies are involved in the process of creating a new chart or of modifying an existing one. The university has to establish a committee comprising faculty and members of the administrative staff to propose an organisational chart to the Senate. The Senate approves or modifies the chart and sends it to the Minister of Education for approval. This process is very slow. This is because of the methodology employed during compiling and approval and the overall government policy. As a rule a new organisational chart includes proposals for the creation of new positions of library staff and after its approval universities will ask government to approve the recruitment of new staff for the library. At times when the policy of the government is to reduce the number of public servants there is a reluctance to approve the creation of new public servant positions or new departments in libraries through the approval of new organisational charts. For these reasons organisational charts may remained unchanged for decades, or even since the establishment of a Greek university, and any developments which have taken place are not reflected in the organisational chart of the library. For instance in existing charts there is a provision for "traditional" staff only.

University libraries are today complex organisations and no-one is capable of making all the decisions required or of controlling all functions and needs. Sharing of responsibility and authority has become a necessity<sup>5</sup>. Committee systems and staff meetings have been found to be a feasible method of providing employees with motivation and of improving consultation and communication. The degree of staff participation in decision-making processes depends on the individual university librarian's management style and on the organisational structure of the library.

A number of diverse opinions may be voiced on the role of the library committee. However all writers agree that in any library it is wise to use a committee at least in policy determination or even in discussions on administrative matters<sup>6</sup>. In such cases members of the library committee must have a genuine interest in helping the librarian in his decisions and should not act as his supervisors, or as Maurice Line expressed it:

" library committees should hand over many of their functions to the graduate library staff ... it is not much use offering an assistant librarian an equal salary to that of the university lecturer if he is to have far less independence and say in the running of his department's affairs"<sup>7</sup>.

In any case the general feeling is that library committees have an important role to play as a liaison between the library and the teaching staff. Library committees serve also as a channel of communication between the library and faculty. They can supply the library with information on educational developments which are taking place in the library's parent institution and they can help in the development of a better collection and services. Through the committee the library informs the Faculty of its policy, its plans and problems it faces. Library committees may help in preventing misunderstandings and keep the library from being isolated. The idea is that after serving as committee members the teaching staff will be familiar with the work which takes place within the library; they will understand better why decisions on library matters were taken, and can inform their colleagues about the reasons which caused these decisions.

For years the hierarchical model was prominent among university libraries. Their administrative structure consisted of different levels of authority with a University librarian at the top and a number of sub-managers (sub-librarians and assistant librarians) in lower positions. During recent decades the management problems faced by university libraries have become acute. In the minimum requirements regarding the levels of academic as well as theoretical and practical library competence<sup>12</sup>.

There are no common qualifications required of anybody applying to work in a university library in Greece. For senior positions most universities want candidates to hold a university degree, "knowledge of librarianship", and a foreign language. The fact that the study of librarianship is only a fairly recent innovation in Greek institutions has meant that most library staff have no relevant theoretical or practical qualifications for their profession. As a result Greek libraries were suffering from lack of educated staff. According to Palmer:

"The country's library services are suffering from a severe shortage of professional librarians"<sup>13</sup>.

During the last decade, however, the quality of staff entering the profession has shown an improvement in terms of library qualifications as library school graduates have started working in university libraries. Conditions in Greek university libraries do not encourage large numbers of highly qualified graduates to enter the library profession. Only a very small number of librarians have completed postgraduate studies in librarianship or information studies abroad.

Due to lack of library staff, and to restrictions on recruiting civil servants imposed by the government, various different and devious ways of recruiting library staff are practised. The most common is for members of the teaching staff to propose "research projects" with the ostensible purpose of investigating topics related to their libraries but in reality of recruiting new library staff for their particular educational unit library.

There are generally two categories of staff in a university library: librarians or professional staff, and clerical assistants. According to Down and Delzell a professional position is defined as one in which:

"Mature judgement is required, or in which the incumbent is assigned certain types of administrative authority and responsibility, or is expected to initiate and develop policy, or is expected to possess a thorough acquaintance with the bibliographic apparatus of research libraries, or may need a highly specialised subject of linguistic background, or may be called upon to plan new programs in library technology"<sup>14</sup>.

The establishing law of the majority of universities in Greece determines among other matters the maximum number of positions of staff in every library, the entrance in service grades, their qualifications, categories etc. Members of staff of a university library in Greece may belong to one of a number of employment status and staff categories. First they may occupy a permanent or a non-permanent staff position. Staff with a permanent position are public servants. They may be members of the administrative staff or belong to the Special Administrative Staff of the university. Staff with a non-permanent status have a contract of employment with the university that may be for unspecified time "Aoristou Chronou" or for specific time "Orismenou Chronou". When the library has urgent needs it may employ staff on contract work.

The fact that Greek university libraries employ library staff who belong to different categories creates a number of administrative and operational problems for the library. The university librarian has authority only over the Administrative Staff, and not over Special Administrative and Technical Staff (E. $\Delta$ .T. $\Pi$ ). This staff are under the authority and supervision of the faculty and have privileges not accorded to library staff who belong to the administrative staff. For example Special Administrative and Technical Staff have more liberal working conditions and no formal procedures of checking their arrival and departure from work. This is not the case for the administrative staff. Conflicts of interest between the two kinds of staff are not uncommon, and where a library is staffed by people from both categories, working conditions may be tense and suspicion prevalent.

#### 3.3.1 The University Librarian

The qualities required of the directors of university libraries are of major significance to the future of the library system regardless of its size. The university librarian is the key element in any effort to develop and strengthen the position of the library in the university. A university librarian needs a variety of qualifications such as training in librarianship and information matters, and of course library experience. Highly important qualifications also are his intelligence, his judgement and his strength of willpower.

In the founding laws of only four universities in Greece was there a provision of special requirements for someone to become university librarian. For instance the University of Thessaloniki and the University of Economic Studies of Athens stipulated that the university librarian should have a university degree from

specific faculties, experience in a library, knowledge of two foreign languages and "some" knowledge of librarianship.

Today there are no special gualifications needed for the selection of a university librarian. The university librarian comes from the library staff in service. In 14 universities the university librarian belongs to the administrative staff. All belong to the rank of Bibliotheconomos. Selection of university librarians follows the same rules and procedures and legislation as in the selection of a director in any other directorate of university administration. Total years in service are the most important qualification needed by members of the library staff to become university librarians. Candidates are selected from among graduates who have more than ten years in library work. Interviews by appropriate special selection committees for detecting personal capabilities are unknown in the selection process, but in promotions to upper ranks, including this of the university librarian the Service Committee "Epiresiako Simvoulio" must take into account professional qualifications in librarianship<sup>15</sup>. University librarians (library directors) in 15 universities are without any formal qualifications in library and information science<sup>16</sup>.

#### 3.3.2 Academic related staff

Formal recognition that professional librarians belong to the academic staff in the form of assigned or equivalent faculty ranks and titles along with comparable salaries and privileges is an important factor for recruiting well qualified university graduates<sup>17</sup>. Many arguments for providing faculty ranks to library staff have been voiced. Among them is the full involvement of library staff in the educational process of the university, the recognition of librarianship as a learned discipline, or even a way of improving salaries and image. According to Gelfand:

"The lack of such recognition is one of the major obstacles for recruiting a competent library staff"<sup>18</sup>.

We have seen in the preceding chapter that during their historical development Greek university libraries have seen many staffing patterns. The most important of these was the establishment of library positions for staff with teaching and research duties. A breakthrough in staff restructuring occurred in 1982. In legislation passed that year, the academic related staff *Voithos Spoudastiriou* and *Epimelitis Spoudastiriou* were given research and educational duties only, while the everyday running of these libraries was left almost entirely in the hands of Grammates Spoudastirion staff previously clerical who had little knowledge of organising and operating a library. Only a small number of assistants and scientific fellow-workers who failed to produce a Ph.D. in a specified time period and become lecturers were given the right to become members of the special Educational and Technical Staff (E $\Delta$ T $\Pi$ ) and to be employed in a library. Former clerical staff of libraries - mainly in Spoudastiria - became also members of the special administrative and technical staff<sup>19</sup>. This change affected the staffing practices of many libraries. Many such libraries were left with very few or no staff at all. The result was that all university libraries lost a large number of their gualified staff as they became members of the teaching staff. In many universities such as loanning, Thessaloniki, Athens and the Technical University of Athens, the lack of staff in departmental or sectorial libraries created strong pressures on the main library to transfer members of its own staff to those small libraries or left many departmental libraries unstaffed. Since the abolition of this category of university staff Greek university libraries have had no staff with any form of academic status. Proposals for granting academic status even to the university librarian have never been voiced. Lack of any form of academic status for the library staff has affected the position of the library within the university.

The provision of efficient reader services needs professionally trained graduates with an adequate background of subject knowledge and understanding in order to have the confidence of the teaching staff in their ability to discharge their duties satisfactorily. Library staff with high qualifications and expertise in specific subjects may know university teachers' and research students' needs better; they can be responsible for book selection and stock building; give bibliographic help; conduct courses on library use, and prepare library guides. The dearth of library staff with high educational qualifications in Greek university libraries, and the low perception of librarians among Greek academic community are both negative factors for the provision of efficient reader and reference services in Greek universities.

# 3.3.3 Administrative staff

Library staff who belong to the administrative staff may belong to one of three categories: *Bibliotheconomos* with a University degree (PE- Bibliotheconomos), Bibliotheconomos with a degree from a Technological Institution (TE-

Bibliotheconomos ) and *Bibliothecarios* ( $\Delta E$ - Bibliothecarios) with a High School degree<sup>20</sup>. Qualifications needed for the category of PE-Bibliotheconomos are the possession of a university degree, knowledge of a foreign language and passing of a written examination on librarianship. A TE-bibliotheconomos must hold a degree from a school of library studies and speak a foreign language, while Bibliothecarios must hold a high school diploma, speak a foreign language and have typing skills. Administrative staff work five days a week, seven and a half hours per day, and they receive 23 working days holiday leave. Their insurance and medical care are similar to those provided for all civil servants in Greece.

### 3.3.4 Special Administrative and Technical staff

According to law Special Administrative and Technical Staff (E $\Delta$ TII) provide specialised administrative and technical services, and support the educational and research duties of the faculty<sup>21</sup>. They are divided into three categories: PE (those with a university degree), TE (with a degree from a Technological Institution) and ME (those with a high-school degree). Staff in each category are scaled (2-9) according to time in service, category and appraisal reports. Promotion takes place after every three years in service and is based on the opinion of an evaluation committee. Posts for special administrative and technical staff are allocated to universities, departments, sectors, laboratories and clinics of the university. Responsibility for the placing and promotions of this staff rests with the administrative bodies of the educational unit in which the position belongs.

Special administrative and technical staff of the libraries are under the control of the sector or department to which the particular library belongs. In many cases, due to a lack of clerical staff, this staff also supports the administrative needs of educational units. For library staff working under such conditions library duties seem to be regarded as inferior to other duties they have. A sector's director or the sectorial colloquium may take many decisions related to their work duties and responsibilities, such as determining working hours, holiday leave, etc.

The allocation of such staff in libraries is based on ministerial decisions which establish such positions in educational units of the university. Positions belong to educational units. If the university wants to transfer a member of staff from one departmental or sectorial library to another it must fulfil a number of presuppositions such as the decision of the education unit in which the member of staff belongs, and a ministerial approval<sup>22</sup>. For recruitment of such staff there must exist a position in an educational unit and approval by the Ministry of Education, the Ministry of the Presidency and other government bodies. If all these requirements are fulfilled the educational unit in which the position belongs may then announce that a vacancy exists in this post. Any such advertisement should include : the unit in which the position belongs, the category of the position, the grade offered and the gualifications needed<sup>23</sup>. Selection is done by a selection committee. The committee has as members: the president of the department or the faculty or even the vice-rector of the university; a representative of the teaching staff; and a representative of the special administrative and technical staff of the university chosen by the trade union of the special administrative and technical staff. Candidates are graded according to educational and social criteria. The most highly-graded candidate is given the position. During their first three years in service the recruited persons are in a probationary status. At the end of this period a special committee composed of the administrative council of the department, faculty or the university, and a representative from the special administrative and technical staff decides on the confirmation in post or dismissal of the member of staff concerned.

The educational qualifications needed for the recruitment of special administrative and technical staff in libraries are:

i. For the university education category (PE): a university degree, knowledge of a foreign language and knowledge of librarianship. Knowledge of librarianship may be proved by presenting the relevant qualifications or by previous service in a library.

ii. For the technical institution category (AP) : a degree from a school of librarianship of a Technological Institution (TEI) or an equivalent foreign institution, knowledge of a foreign language and experience in a similar position.

iii. For the ME category: holding of a high-school diploma; skill in Greek and foreign typing, and two years experience in a library. Only persons less than 40 years old may be recruited into a special administrative and technical staff position.

The university administration has little power over special administrative and technical staff. The university is responsible for their payment but in almost

every other aspect responsibility rests in the hands of teaching staff of the educational unit in which they belong. The university librarian and the library committee have no authority over special administrative and technical staff as this staff depends solely on faculty for their professional development. Library staff who belong to special administrative and technical staff may receive sabbatical leave to pursue post-graduate studies or attending specialised courses related to their particular duties. If studying abroad they receive, as in the case of the administrative staff, double their salaries.

# 3.3.5 Library assistants

The practice of employing undergraduate and post-graduate students as supplementary clerical and technical library assistants is common in many European and American university libraries<sup>24</sup>. In Greek universities post-graduate students who receive state grants - called Special Postgraduate Students (E.M.Y.). are obliged to spend one day a week in a departmental or sectional library and to assist undergraduate students in the use of libraries for their studies<sup>25</sup>. There are no data on the extent to which these students are employed in libraries. By using a number of sources we arrived at the conclusion that about 15% of departmental and seminar libraries employ post graduate students as supplementary library staff<sup>26</sup>.

# 3.4 Job motivation and appraisal

The quality of services provided in any university library is affected by the competence, motivation and effectiveness of its staff. High quality and job productivity of their staff correlates positively to the quality of services. Job productivity is highly related to the personal development and job satisfaction of each of a library's employees. Personal development is a key motivation for any individual. Motivation of staff is an important factor in enabling goals to be achieved. There are studies<sup>27</sup> which suggest that librarians respond positively to such motivation factors as the sense of achievement, recognition and work that is intrinsically satisfying.

In Greek university libraries the movement of staff from one position to another is difficult. The prospects of promotion are very limited especially after the last

legislation imposed by the government to all public services. The duties of senior library staff (Bibliothekonomos) and supporting staff (Bibliothecarios) are not clear. This situation does not support motivation and leads to a high risk of stagnation and unwillingness to change. Library staff in Greek university libraries have never received special pay. Their salaries are similar to equivalent positions in other public services. During recent years, due to the "economic stabilisation programme" of the government their position has worsened as salaries have increased very little compared with inflation. This affects the self-esteem and the productivity of the staff.

Staff appraisal can be defined as any procedure which helps the collecting, checking, sharing, giving and using information collected from and about people at work for the purposes of adding to their performance at work<sup>28</sup>. Staff appraisal procedures have also other purposes such as evaluation, auditing, discovering training needs, and checking the effectiveness of personnel procedures and practices. Appraisal procedures are related also to training, communication, and the involvement of all staff<sup>29</sup>. For an appraisal scheme to be successful it must be clear to all concerned what relationship exists between appraisal, promotion and staff discipline<sup>30</sup>.

Greek university libraries must follow the formal staff appraisal scheme introduced by the government for all public servants. According to this scheme there are a number of predefined criteria which are rated by the director of the library and the general secretary of the University. In each of these criteria the employee is rated on a scale d to a. Contacts with library staff in different universities revealed that there is no clear view of the overall aims and objectives of the library and the way staff motivation fits in with those objectives. In most cases appraisal of staff is thought of as a procedure required by the law rather than a technique for staff development. In Greek university libraries years in service is the main factor for promotion, results of appraisals and overall job efficiency hardly being taken in account. Appraisal procedures are applied in an informal way and not as tools for the improvement of staff performance and prediction of future capabilities of the staff.

The realisation of the importance of motivation has resulted in proposals of techniques for job enrichment and encouraging staff participation in the management. It is believed that employees are motivated by participating in the decision making process and that they tend to relate their personal goals to those of the library<sup>31</sup>. In most university libraries in Greece there is no clear

distinction of staff duties in the daily run of the libraries. Also the description of professional and non-professional activities similar to those of the American Library Association<sup>32</sup> is unknown in Greece.

## 3.5 Library education

Today university libraries have become complex organisations living in a fast changing world. Their volume of library material, the diversity of existing formats, and the changing needs of their users are all factors contributing to the need for more highly specialised staff. At the same time the administration of the library has become more scientific. The growth of professionalism among university library staff is having a profound influence on the development of efficient library services. The establishment of graduate or post-graduate schools of librarianship under university or other educational institutions' auspices has been an important move for the creation of highly skilled library staff.

Interest in the establishment of schools and seminars for the education of librarians was and still remains prominent in any proposals for improvements in Greek libraries and the status of Greek librarians. A number of librarians realised, before the state did, that the establishment of a library school was a national need. They decided to establish a school for library studies. In this effort they received help from the Young Women's Christian Association (YWCA)<sup>33</sup>. The school started work in 1961. There were courses of one year only. Everyone with a high school diploma, a university degree or at least experience in a library, could after passing enrolment examinations, be admitted in the school. A basic requirement for the admission of a student was the ability to speak a foreign language. Curriculum followed similar programmes in English speaking countries. In 1964 the Ministry of Education recognised the school and its diplomas but the fact that the school existed outside the formal educational structure affected its funding and the achievement of recognised professional status for its graduates. The YWCA Library School ceased its operation in 1977 when a three year educational programme started as part of the vocational-technical education. The first attempt at creating a public school for the education of library staff took place in 1949. According to an Emergency Law<sup>34</sup> the National Library of Greece

became responsible for the provision of library studies in Greece. The studies would be up to one year and took the form of practical training courses (cycle of seminars). Because Royal Decrees were needed to determine in detail all matters related to the proposed library studies nothing came of the edict. The only development was a series of library training workshops organised by the Ministry of Education in co-operation with the (then) United States Information Services (USIS) Library in Athens<sup>35</sup>. In 1959 the Greek Government sought assistance in assessing the state of library development and library education from the United Nations Educational, Scientific, and Cultural Organisation (UNESCO). UNESCO responded by sending two experts (Leon Camovsky and P. Kirkegaard) to Greece to conduct assessment surveys. In their reports both experts strongly supported the establishment of a formal programme of library education<sup>36</sup>. A fresh assessment of the needs of Greek librarianship took place in 1978. With financial assistance from the U.S. Educational Foundation in Greece - the Fulbright programme - Richard Palmer (then a Fulbright lecturer at Cairo University) visited Greece in 1978 and produced a report in which he recommended the creation of graduate programmes at the Universities of Athens and Thessaloniki. Despite an obvious need the creation of state controlled library schools has only recently taken place. Since 1977 the education of librarians has been carried on in two departments: in the Technological Institutions (TEI) of Athens first and Thessaloniki later (1981). The two departments belong to the School of Management and Economics<sup>37</sup>. Studies last for three years (six terms). During their studies students may attend 54 courses. Studies deal with "classical librarianship" rather than modern aspects of libraries and information. Studies are accompanied by work in laboratories but little attention is given to the information aspect of libraries or to topics such as human resource management and information retrieval. So far 870 trained librarians have graduated from the two Library Schools (400 from Thessaloniki and 470 from Athens)38.

In a sample of 65 central and department libraries Moreleli-Cacouris<sup>39</sup> found that in 139 members of library staff 1.4% hold a Ph.D. (no library qualifications), 2.9% an M.L.S., 3.4% TEI L.S. plus BA in other disciplines, 20.1% are TEI graduates, 0.7% BA in L.S, 31.7% BA in any discipline except Library Studies, 2.1% YWCA Library School Diploma and 37.4% a High School Diploma.

A number of proposals for the reorganisation of the existing programme have been voiced. In his assessment of existing library schools Palmer concluded that:

"This programme should provide some personnel for school and public libraries, but is an inadequate programme for the preparation of university and special librarians"<sup>40</sup>.

The establishment of a university level library school has been a matter for controversy also among the Greek library community. The Greek Library Association and others<sup>41</sup> suggested the adoption and expansion of the existing training programmes within TEI. Because there is no legislation for such a move university libraries proposed the operation of the university level department at the University of Ionion<sup>42</sup>. The recommendations of foreign experts<sup>43</sup> and the presures of Greek librarians led to the establishment of a graduate programme at the Ionion University in Corfu. Only in 1993 the "Department for Librarianship and Archives" at the Ionion University, admitted its first students. As a result Greece is last among members of the European Community in establishing a university level library and information school. There are a number of reasons for this situation. Most of those responsible for taking decisions in government or academia hold librarianship in low esteem. As a result librarianship is not recognised as a separate profession and the government fails to see the importance of creating a university level school of library studies. For an individual to become a member of the teaching staff in a university department he or she must hold at least a Ph.D. degree and be a Greek citizen. The fact that there are no persons with such qualifications makes the operation of such a department very difficult.

#### 3.6 Professional development and in-house training

Professional development activity in the form of meetings and conferences devoted to topics on librarianship and information work are organised by the Greek Library Association (EEB), the National Documentation Centre and occasionally by other organisations such as the Technical Chamber of Greece. Almost all such activities take place in Athens. Universities pay travel expenses and a daily allowance to members of their library staff to attend such meetings. In many cases real expenses are far greater than the compensations given. As a result library staff are reluctant to participate.

Library staff who hold a university degree, are civil servants and have at least five years in service may receive a one or two years' leave for completing library and information studies abroad. The Senate is responsible for the approval of the leave but a ministerial confirmation is needed. Library staff who belong to the Special Administrative and Technical Staff may be granted a sabbatical leave to pursue postgraduate studies. In order to cover differences in living costs between Greece and abroad the university pays the individual a double salary. However if the individual has a fellowship from a Greek or foreign institution he receives less than double his salary.

In the eyes of a new member of staff the university library is a complex organisation. Working in such an environment he tends to feel frustration and a sense that what he is doing is isolated and meaningless. A university library may run a programme to explain its structure, the relationships of departments and applied procedures. Induction training of new library staff results in greater understanding of library procedures and a confidence that working in a library contributes to better education and research in the university, and it helps trainees to become part of the group socially<sup>44</sup>. For Greek university libraries procedures and means for orientation of library staff are very rare. Only 3 libraries (University of Crete, Central Library of the University of Thessaloniki and the Central library of the University of Patras) provide new staff members with an orientation in respect to the organisation, services and facilities of the library in which they are going to serve. In-service training is achieved by observing how their colleagues perform their duties or through a series of experiences in different departments of the library.

No Greek university has a staff manual with detailed descriptions of all administrative and operational matters of the library. Lack of a staff manual and orientation affects the ability of new library staff to perform their duties in an efficient way. The final result is to create staff with little interest in their job and inefficient in its duties. The great majority of libraries leave new library staff to find their own way without any formal training and orientation. No proper instruction in their specific duties is given. In such cases new staff are not given even a general view of the duties they have to perform. Only the libraries at the Universities of Ioannina, Thessaloniki and Patras reported staff meetings to discuss matters related to their job, such as decisions on library policy, introduction of automation, new services etc. In universities with departmental structure staff meetings are the only way for direct communication between the university librarian and the library staff.

### 3.7 Professional associations and trade unions

University librarians in Greece are members of the Association of Greek Librarians, "Enosi Ellinon Vivliothekarion" (EEB). As in the case of other library associations in other European Union countries EEB has special groups devoted to the interests of academic librarians. Recently there has been a move for the establishment of an Association of University Librarians. The first meeting took place at the University of Ioannina in 1992 and the second in 1993 at the University of Patras.

There are no trade unions in Greece solely for library staff. Library staff belong to the trade unions acting in the institution they serve. Library staff who belong to the administrative category are members of the trade union of the administrative staff of the university while special administrative and technical staff belong to the special administrative and technical staff belong to the special administrative and technical staff belong to the special unions of the administrative staff belong to the federation of the university administrative personnel, "Omospondia Diikitikon Hipalilon Anotaton Ekpedeutikon Idrimaton" ( $\Pi O \Delta \Pi$ -AEI) and local special administrative and technical staff of Greek universities. Both federations are members of the Federation of the Federation of Civil Servants ( $A\Delta E \Delta Y$ ).

#### 3.8 The Budget

Universities in Greece receive their funds directly from the State. Only a very small percentage of university funds are received from commercial firms, research institutions or research funding organisations in the form of research grants and contracts. Occasionally universities receive non-recurrent grants for improving their administrative infrastructure. University budget is divided into two parts, one for operational expences (Τακτικός) and the second mainly for

constructions (Δημόσιες Δαπάνες). The university library is not concerned with the source of its income as all library funding is provided by the university mainly through the operational budget of the university. Together with the usual funding, libraries may receive non-recurrent funds for specific needs such as automation or construction of a new library building. In many cases the library is competing with other university units for such funds. Possibilities of success exist only for well prepared projects, presented with sound arguments and based on adequate information and estimates. Personal contacts and proper communication are key factors for the success of a library's projects. In such cases the librarian personally and the library as a whole tests his reputation and standing within university. As the standing of the library within Greek academic community is low, and the majority of the library staff have little experience in report writing, proposals for non-recurrent funds - especially for the introduction of less traditional services - face difficulties in gaining approval by the decision making bodies. In fact only a few libraries, those at the universities of Crete, Patras, Ioannina, Ionion and Technical University of Athens reported funding for such projects.

Another possible source of library funds is through research grants given for projects financed by the Greek government or the European Community. In order to participate in such projects libraries have to sacrifice resources, whether of staff, time or finance, to get anything from the granting body. The fact that research projects are directly or indirectly related to the use of modern information technology and that most Greek university libraries have no qualified staff, resources and technical expertise means that they are at a great disadvantage compared with the rest of their European Union counterparts when participating in such projects. Only the university libraries of Crete, Patras and Ioannina have participated in such projects.

Library income may come from donations of wealthy and well-disposed individuals, national trusts or research institutions<sup>45</sup>. Almost all Greek university libraries - especially those of Athens and Thessaloniki - have benefited from donations of library material but no library has ever reported donations of money<sup>46</sup>. Income from penalties to borrowers, e.g. fines levied for late return of books, or for losses of material, is very small. In fact most libraries have no such income at all. This does not mean that there are no losses of library material or delays in returning borrowed books. The reason is that in most libraries there are no procedures for claiming and encashment of money by the library. We have found libraries where library users want to pay for the replacement of library material lost by them and the library can not accept the money because there are no procedures for doing so.

Greek university libraries have never attempted to quantify funds in terms of a university's overall spending. Even in the case of creating a new university or university department, where an estimation of the library budget is fairly easy. there is no such formula. Libraries are struggling for funds like any other sector of the university and in many cases the library is given lower priority than other educational units. In all university libraries in Greece the estimation of funds needed is very difficult. The lack of a clear policy on collection development means that a university librarian is forced to rely only upon his previous year's figures as a guide. Based on those figures the university librarian simply asks for a percentage increase using as an argument the inflation rate, the devaluation of the Greek currency or the establishment of new departmental libraries. This haphazard method of expenditure planning assumes that the expenditure of the library in previous years is a reasonable reflection of the actual needs of the university. However, since in almost every previous year libraries were underfunded, and the library has never received the full amount requested, the inevitable result is permanently underfinanced libraries. Such a strict and highly bureaucratic accounting system creates imbalances, in the allocation of library funds to the library as a whole, and to different expenditure sectors proportionately<sup>47</sup>. In situations like this the university librarian must be able to inform and warn the university administrators of the possible consequences of unbalanced and unreasonable financing. The administrative structure of the university and the position of the university librarian within it does not offer clear channels of communication between the library and the university administrators. But even where there are such channels of communication, through a library committee or through personal contacts, the librarian needs accurate estimation of funds needed for any library operation.

# 3.8.1 Budget Management

Among Greek universities there are differences in the procedures for allocating library funds to their educational units. The most common is to divide funds equally among each department. Allocation of funds in an equal proportion to each department or sector does not take into account important factors such as the special characteristics of scientific subjects, the need to buy text-books and reference material, and the overall development of the university library collections. In some cases funds given to a department are related to the influence that this department has on decision making bodies rather than its real needs.

Departments with only one departmental library spend funds centrally through their library. Most departments allocate funds given to them in their sectors. Many sectors allocate funds given to them equally to their teaching staff. Any member has the right to use a part of it without any consultation with other members. In any case funds are spent almost exclusively by the teaching staff. In universities with more than one library, funds are allocated to existing departmental or sectorial libraries. The aim is to ensure that all needs of the departments are met as fairly as is financially possible. Decisions on these allocations are taken by the Senate and the Faculty Board.

The way funds are allocated affects the attitudes of the teaching staff towards libraries. Faculty members tend to assume that library material ordered by them is their "property" and members of a sector or a department assume that they have property rights and authority on library matters. This attitude creates resistance to any attempt for change such as the establishment of a central supervision and financial administration of all libraries in the university. In such cases library users among the university staff use available resources for fulfilling their own personal needs and pay no attention to a comprehensive development of library collections and provision of funds for building adequate library collections for use by undergraduates or postgraduate students. In a number of cases the allocation procedures create conflicts between departments and sectors. The main concern of members who have been given an amount of money to acquire library material is how to spend "their" money before the end of the fiscal year. They believe that:

"We must spend the money as quickly as possible otherwise we shall lose it"48.

Allocation practices and lack of control on acquisitions prompts those users with the privilege of ordering library material to think in terms of cash rather than of needs. The main concern becomes how to order more books within the available budget rather than how to buy the most important titles for the development of the library's collection. In many libraries there are no funds left for ordering text-books or reference books. Where the university has an undergraduate library, it creates a special expenditure sector for the acquisition of material for this library. Universities with centralised or co-ordinated library structures have created a special expenditure sector for the acquisition of reference material. However money allocated for such purposes is very little. The result is that Greek university libraries are very weak in reference material and in books of general interest. (See special chapter).

Subscription to periodicals presumes that the library has to spend annually an increasing amount of money for this and for every year to come. The library must be sure that money will be available to pay its subscriptions even if it receives less than adequate resources. All Greek universities estimate needed funds for periodical subscriptions on their previous years' figures. In l universities with a central or co-ordinated library structure their periodicals fund is included in the first allocation of funds to the library. Funds for periodical subscriptions are administered by the acquisitions department. In universities with an uncoordinated library structure each library has to divide funds provided to it into two parts, one for books and one for periodicals. Some universities apply both procedures. The University of Ioannina applies a central administration of periodical subscriptions to medical and natural science periodicals, and an uncoordinated administration of periodical subscriptions for the humanities periodicals.

Due to price increases coupled with inadequate financing, there are many libraries which have been forced to stop buying books for some years in order to find the money to pay periodical subscriptions. In such cases arts and humanities departments are in an unfavourable position as they are dependent on books vis-a-vis science departments which depend rather more heavily on the up-to-date-ness of periodical publications. Cancellation of subscriptions is another way of coping with the lack of funds. However if it is easy for the librarian to send fewer book orders it is almost impossible for him to decide independently which periodical subscriptions to cancel. The inability of libraries to decide on periodical subscriptions while at the same time lacking the funds to pay for them leads to libraries being in debt to booksellers and publishers. A vicious circle develops whereby a library, unable to meet the previous year's debt, must stay with the same supplier for the current year in order to pay off the previous year's subscriptions - but this simply creates yet another debt for the following year. Thus libraries are trapped, and they lose the ability to change their periodicals suppliers or to look for more economical ways of acquiring library material.

In interlibrary loans and the use of on-line information retrieval services the university pays the overheads (telephone charges, postage etc.) and the user's educational unit such as sector, clinic or laboratory pays the Database Producer. Due to lack of data and applied practices there are no figures for these kinds of expenditure. From personal contacts with the directors of the libraries we conclude that this kind of expenditure is about 5% of the acquisitions expenditure.

Staff of Greek university libraries receive their salaries from state money paid by the university. There is no provision for salaries in library funds. Running or operational costs such as for stationery, postage, telephone charges, furniture and maintenance are covered centrally by the university budget.

### 3.9 Collection building

Collection building in an efficient way is closely related to the fundamental principles of the existence of any university library. According to The American Library Association:

" A written collection development policy statement is for any library a desirable tool which enables selectors to work with greater consistency toward defined goals, thus shaping stronger collections and using limited funds more wisely"<sup>49</sup>.

The acquisitions policy equals the planning of the library's inputs and as such it is determined by the library's final aim. A university library may have a written policy or at least must bear in mind a positive policy for the building of its collection. This policy may describe various levels of collecting intensity, and there must be agreement among all parts of the academic community that selection will be an aim in the overall development of the university collection<sup>50</sup>.

There are many factors affecting the collection building within a university. The most important of these are the courses offered and the research interests of the faculty; the educational and research responsibilities of the parent educational unit; teaching practices; the proximity of the library to other library collections; and the extent to which the library co-operates with other libraries in sharing library resources.

Collection building policy must be accompanied by specific selection procedures to guarantee the effective fulfilment of its purposes. A well organised selection procedure is a key element in the creation of an adequate collection, since it affects library spending and the intellectual importance of the library. Ill-chosen titles mean a waste of library funds, and unsatisfied library users. Selection requires a good knowledge of existing literature in a number of scientific subjects. Library staff may be employed in the selection process only if they are subject-specialists. That presumes that the library employs highly educated staff with research interests apart from their educational qualifications. Close co-operation between the library staff and the faculty is vital in selecting library material. The fact that in Greek university libraries there is a lack of subject specialists affects the participation of library staff in the selection process. Selection of library material is left almost exclusively to the teaching staff.

The responsibility of any university library in the world is to keep up with the literature in the university's fields of study and to fill any gap in the existing holdings. An investigation of library collections in Greek universities proves that there is no balanced development of all fields of study. Even in departmental or sectorial libraries some subjects are covered sufficiently while others are neglected. Inadequate funding, poor selection practices and the way funds are allocated are the main reasons for existing gaps. The only "method" for filling gaps in a particular research area is the appointment of new members of the teaching staff whose research interests cover the neglected subjects. New courses of teaching may disclose gaps in the holdings of the library. Even then the library cannot fill the gap in its collection as it is up to the faculty to do this. The practice of allocating funds to each member of the teaching staff results in the belief that money has been given for personal spending on material related to their research topic, and so the library collection may remain weak in a particular subject for years. If a library wants to stimulate demand in order to maintain a balanced acquisition programme it must have established proper procedures. In Greek university libraries at present there exist no such procedures. Generally library staff have no clear picture of the strengths and weaknesses of their library's collection. When they do realise that their library is weak in a particular subject they must refer to the library committee - if any or persuade individual members of the faculty to make recommendations. It is up to these individuals to fill in request forms and to hand them to the library. Where library funds are allocated personally or to educational units, members

of the teaching staff are very reluctant to sacrifice "their" money for the development of the library's collection outside their own research interests.

Every university library must aim to satisfy the library needs of undergraduates as well as of research students. As a rule libraries in Greek universities do not pay proper attention to the needs of undergraduate students. There is no consultation either between libraries and departments at the start of research projects undertaken by research students or courses offered. In any case students have to ask members of the teaching staff for help.

A university library needs to acquire both broadly and in depth. The library must be in a position to cover both the educational and the recreational needs of its users. The lack of a clear acquisition policy, the way library funds are allocated and financial needs mean that Greek university libraries cannot even think about covering the recreational needs and the cultural development of their users.

The starting point of any selection process is the examination of existing literature in subjects covered by the library and their availability for purchase. General or specialised bibliographies and publishers' catalogues give notification of the existence of a title, its price and information on its availability. For selection of foreign publications larger libraries use foreign national and commercial bibliographies. However in most libraries these publications are seldom used. More use is made of publishers' catalogues which are sent to the library. Most libraries receive either directly or through booksellers a vast amount of publisher and bookseller information on available titles. Some retain these catalogues in a well-organised file of such information, but most libraries treat it simply as advertising material and pay no attention to it. Publishers and booksellers have realised that most libraries do not pay proper attention to their catalogues and so are sending them not only to libraries but to university departments, sectors or even to individual members of the teaching staff. The result is that in some departments it is usual to find a member of the teaching staff ordering books of a particular publisher simply because his name is included in the mailing list of that publisher. References from books and articles are used extensively for the selection of library material. In many cases this practice leads to the acquisition of old and useless material.

For the selection of Greek material there is but a limited number of selection tools. According to Mairi Papagiannidou:

"... in bibliography matters we are at the bottom of the table among developed countries"<sup>51</sup>.

A number of attempts at bibliographic control of Greek publications have previously been made by government bodies and individuals. Such a bibliography of books written or published by Greeks is the four volume "Bibliographie Hellenique, ou Description Raisonnée des ouvrages publiés en grec par des Grecs aux XV et XVI siecles"52. "Bibliographie Hellenique, ou Description Raisonnée des ouvrages publies par Grecs aux dix-septieme siécle. 1884-1903"; and "Bibliographie Hellenique, ou Description Raisonnée des ouvrages, publiés par des Grecs au dix-huitiéme siécle"53, and "H Ελληνική Βιβλιογραφία<sup>354</sup>. For retrospective selection there exist "The National Bibliography"55 and "The Greek Bibliography"56 edited by the Bibliographical Society of Greece. Its use is for retrospective collection building as the 1972 volume appeared in 1975, 1973 in 1976 and 1976 in 1977. The arrangement is by broad Dewey category and full bibliographical information is given. For foreign librarians the Greek National Bibliography is valuable as a cataloguing aid<sup>57</sup>. As this work is based on legal deposit, only about 50% of material published in Greece is registered. The incomplete character of the National Bibliography makes it a tool of limited value. The only annual trade bibliography in Greece is "Ελληνικά Βιβλία" (Greek Books) published by the Greek Association of Publishers and Booksellers with the financial support of the Ministry of Culture, which includes information gathered by booksellers and publishers. This bibliography has reached its second issue recently but is "obviously incomplete"58 as many important publishers are not included. A Bibliography which does try to be complete is the bibliography of the Magazine "Ιχνευτής" (Ichneftis) which is based on research among publishers. There are also a number of special bibliographies such as the Bibliography of the 19th century published by the Bibliologico Ergastiri and the bibliographies of Elitis, Ritsos, Kavafis and Seferis, and others. Book reviews exist in a number of journals such as the monthly Diavazo 'Διαβάζω", a specialist journal devoted to books and literature, "Σύγχρονη Εκπαίδευση", "Το ρόδι" a monthly children's periodical, "Ευκλείδης" published by the Greek Mathematical Society, "Αντί" a fortnightly politics review and the newspapers "Βήμα', Έλευθεροτυπία", 'Ta Νέα" and "Καθημερινή".

The practice of employing members of the teaching staff to assist the university librarian in his selection as in other European university libraries is unknown in Greek university libraries. The only task given to library staff is to ensure that items selected for acquisition are not already in the collection, and to provide more accurate bibliographic information if needed. In some libraries the librarian may turn down an order if the requested material is already in stock. The university librarian has no power over the selection process in order to ensure that a balanced acquisition policy is implemented. The development of the overall collection of the university in a balanced way is left to the research interests of the faculty. Where the university has more than one library this is supposed to be obtained through the inbuilt specialisation of the existing collections. In most libraries, members of the teaching staff are free to order any title they want. The only presupposition is that the library or their educational unit has the money to pay for such orders. Most departmental and sectorial libraries send an order only if there is an approval by the director or the assembly of the sector or department. In 23 (15% of those answered) libraries their library committee plays a role in acquisition by checking proposals for acquisitions. In universities with co-ordinated library structures the main concern of the central library is the proper spending of library funds. The acquisition department accepts any order for acquisition until it runs out of funds, in which case the librarian will call a halt, deferring any further order until the next financial year. A harmful result of this practice is that material needed urgently might not be provided in time.

For most university libraries the cost of subscriptions to periodicals is higher than the cost of acquisition of new books. This fact alone is enough to show the need for wise selection of periodicals. In universities with a central or coordinated library structure any department may request a new periodical, but it is up to the university library to take the final decision which will be based on the availability of funds. In uncoordinated library structures decisions on periodicals are taken by the educational unit, sector or department in which the library belongs. In cases where all library funds are allocated to departments or sectors, the ordering of any new periodical needs the approval of the sector or the department. Decisions are taken without any consultation with other libraries. The only concern is the availability of library funds. This freedom to order new periodicals may result in duplications of subscriptions within the same university. This happens not only to periodicals of a general character but also with expensive periodicals. In many cases libraries have to re-evaluate their collections, or cease the purchase of books entirely<sup>59</sup>. There exist many techniques for conducting a review of periodical subscriptions. Three of them: a) the utilisation of a purely subjective judgement; b) utilisation of circulation records; and c) devising systems that are as objective as possible and which take into consideration all important and measurable factors are the most common among university libraries<sup>60</sup>. There are no specific techniques common to all Greek university libraries. From contacts with a number of libraries we conclude that most libraries use subjective judgement and circulation must be made.

Most libraries acquire their new stock through local or foreign booksellers<sup>61</sup>. Every year or two a library will issue a call for tenders, and the firm offering the most economical conditions will be chosen to supply material to the library. The legislation that obliges libraries to call for tenders obliges them also always to choose whichever firm adds the smallest surcharge on top of publishers' price. A small number of libraries purchase library material directly from publishers instead of using an intermediate. These libraries believe that direct acquisition is a better way of purchasing library material because it arrives faster and at reasonable prices. For a direct acquisition programme to be successful there needs to be a well organised and productive acquisitions department which must be staffed by a foreign language speaking staff. Correspondence with a large number of publishers both in Greece and abroad inevitably raises telephone charges and postage, while payment of many publishers needs a well planned financial service both in the library and in the university. Given that most university libraries are inadequately staffed and lack well organised acquisition departments, direct acquisitions are not without problems. From personal contacts with staff in libraries which apply the direct method in their acquisition we found that the argument for speedy delivery seems to be justified more easily than the financial one. In cases where needed library material is published by less known publishers, book suppliers must make more effort and have a greater knowledge of the book trade at home and abroad. Local library suppliers are usually only small businesses with limited capabilities and expertise in the book trade. As a result there are times when they are unable to identify ordered material or they make no efforts to provide such material because it does not provide sufficient profits. Foreign suppliers offer better economic terms and promise better services. However Greek university libraries seem to be reluctant to use foreign suppliers. Most libraries have not the expertise to prepare proper international calls for tenders and to follow all
bureaucratic procedures needed. Among library staff there is an insufficient number of staff able to speak a foreign language and to communicate with foreign partners easily. But the most important reason seems to be financial. Many university libraries are in debt to local booksellers. In order to change their suppliers libraries need to pay off their debt and the cost of current acquisitions during a single fiscal year. For libraries deep in debt it is extremely difficult to reach such a happily prosperous position. The majority are trapped into remaining with the same bookseller for years.

Another method of acquisition is the "blanket order technique", an arrangement under which a vendor is authorised to send a copy of each publication of research significance, within certain restraints or with certain exceptions. There are no university libraries in Greece using blanket orders for selection and ordering of all library material they need. Only some libraries use a standing order to acquire specific book series. The "on-approval" technique is employed by many university libraries in Europe and the United States. Using this technique, the library decides to order a book after its examination. Some publishers - especially foreigners - have tried to introduce this technique in a number of libraries but they have failed. The main reasons were both the lack of library experts to evaluate the importance of such books, and selection and acquisition procedures.

Long delays are evident in the acquisition of library material from publishers and booksellers. In their calls for tenders libraries lay down a specific period of time for delivery of both Greek and foreign material. However in most cases book suppliers fail to comply with this requirement. Delays in receiving ordered material seem to be common in all university libraries but there are no available data on this matter from all universities. In order to estimate delays in receiving ordered books we examined a sample of 250 titles ordered by the University of loannina libraries. This exercise revealed that the average time elapsing between ordering a book and its arrival in the library is over 8 months, and in some cases more than a year might go by. Delays result in unsatisfied library users. As Mrs Tsivakou expressed it:

"The procedures which must be followed by libraries in the acquisition of new library material are very slow and frustrating"<sup>62</sup>.

One result of such long delays is that a library cannot possibly be in a position to estimate its annual expenditures correctly. The acquisition programme has all the appearance of a gamble. If the book supplier works fast and provides

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# **CHAPTER 4**

#### University libraries in other European countries

## 4.1 Library policy and planning

Most other European countries have determined and implemented national library plans for the development of their library infrastructure. In some European countries an information policy was also set up<sup>1</sup>. National planning affected the development of university libraries by giving to them specific roles within the national infrastructure of each country's libraries<sup>2</sup>. The Nordic countries have been notable for library planning, both on a national and a Nordic scale. Numerous committees and working parties have been set up, by ministries or by library associations to investigate both general and special aspects of libraries. Offices and advisory bodies are the machinery for library planning. NORDINFO, which is funded by the Nordic Council of Ministers, has a general oversight and co-ordination over Nordic Countries. In the Netherlands the "Nederlands Orgaan voor de Bevordering van de Informatieverzorging (NOBIN)" was established in 1971 by the government in an effort to develop a national information policy. In 1975 a library council was set up to co-ordinate the national library policy (Bibliotheekraad)<sup>3</sup>. In the UK there is no written library policy but bodies such as SCONUL formulate guidelines for university library development. The British Library also plays an important role in the development of libraries in the UK<sup>4</sup>.

In Germany the Bibliotheksplan'73 determined four different types of libraries (libraries with stage 1 to stage 4) with specific roles and policies on acquisitions, co-operation, administration and services<sup>5</sup>. Libraries with stage 1 functions are designed to supply immediately the most frequently requested books and other information sources. Libraries with stage 2 functions are expected to meet the more specialised and advanced demands in all fields. Libraries with stage 3 functions are expected to stock in particular all the

monographs in German that are relevant to leaning and research and a critical selection of those in foreign languages. Libraries with stage 4 functions are expected to provide the general supraregional coverage of literature and information by acquiring comprehensive stocks of works in all fields of learning including highly specialised research literature and information material from home and abroad. University libraries belong to a certain type and have specific roles. Since the Bibliotheksplan was published, structural and development plans for individual regions have reflected the suggestions of the plan. The higher education commissions of the ministries in Landers issued guidelines for the collection developments in the new universities in 1960's and early 1970's<sup>6</sup>. In many instances those local plans were accepted by others and created a national policy. An overall plan for Academic Libraries was developed for Baden-Würtemberg in 1975 which determined their collection development policies<sup>7</sup>.

For years university libraries in Italy were organised without recognised policies on the role of the central and departmental libraries<sup>8</sup>. However during recent years action has been taken for the implementation of a specific policy and a plan for the development of a national library service (SBN) is under development. This plan was the first agreement between State and Regions in this field<sup>9</sup>.

In order to encourage the use of research published in universities, the automation of the university libraries, expansion of co-operation and reduction in the dualism of the university libraries and the libraries in educational units (Unites d' Enseignement et de Recherche) attached, in most cases, to former faculties, the French government implemented a national policy on university libraries<sup>10</sup>. Since 1968 a number of reforms have been implemented with the integration of university libraries with universities and the creation of central co-ordinating bodies. From 1982 until 1989 the Direction des Bibliotheques, des Musees et de l'information Scientific et Technique (DBMIST) in the Ministry of National Education, was responsible for implementing this policy<sup>11</sup>. Since 1989 university libraries are under the "Sous-direction des Bibliotheques" which assumed the role of the DBMIST.

For years the government and decision making bodies in Portugal failed to realise the importance of information and libraries in the development of the country. The country had no national library policy; this resulted in waste of resources, inefficient methods of work, the existence of different bodies with the same objectives and performing the same tasks, and lack of co-operation and co-ordination between even similar institutions<sup>12</sup>. However during recent years some measures have been taken for the creation of a national policy on library and information such as the formation of library networks, development of communication infrastructure for on-line communication, etc.

In many European Union countries offices, committees and library councils exist for the planning and building of their national library and information infrastructure. The Deutsche Bibliothek Institute (German Library Institute) founded in 1978 is the central institution for the development and services in all libraries in Germany. The Institute is financed by the Federal Government and all Federal States jointly, and it is commissioned to conduct development projects, to create standards and specifications, to develop and produce central services and to offer continuous professional training. Another institution with great influence on university libraries in Germany is the Deutscher Forschungsgemeinschaft (German Research Society) which initiated the construction and ensured the continuing financial support of the hierarchical network of inter library lending, the financial support of model projects, support of library research and advice in professional and political library problems. The Wissenschaftstrat (Advisory Science Council) has also issued many regulations at a federal level on the development of learned and scientific libraries in learned institutions (1964); core collections in universities (1985) and recommendations for repository library space for university libraries (1986). In Denmark the Danish Library Bureau has supported the development of libraries and the establishment of a national library policy while library provision in universities is under the direction of the Advisory Council for Research Libraries which is recognised by the Ministry of Cultural Affairs<sup>13</sup>. In an effort to coordinate better all library activities these two bodies have recently combined and today a central council is responsible for the development and co-operation between Danish Libraries.

University libraries in other European Union countries have realised the need for the discussion of matters of particular concern to them. For this reason they have created bodies for the exchange of views by those responsible for their administration, on policy matters, and to present their corporate opinions to outside bodies. It is believed that such opinions are more accurate and carry greater weight thus than when expressed individually. As a result of this in a number of European Union countries there are associations and Standing Conferences of university librarians. In the United Kingdom the Standing Conference of National and University Libraries (SCONUL), founded in 1950, aims to promote the work of the national and university libraries. Today SCONUL plays an important role in studying problems facing the university libraries. In the Federal Republic of Germany academic librarians established their own association (Verein Deutscher Bibliothekare e.v. (VDB)), founded in 1900, with the statutory purpose of fostering contacts between German librarians, and to watch over their professional interests, to assist in the exchange and extension of their professional knowledge, and to promote the work of academic libraries ; for this purpose they form a working group of academic librarians (Arbeitsgemeinschaft der Hochschulbibliotheken)<sup>14</sup>. In the Netherlands the chief librarians of all universities are members of the State Advisory Committee on Library Affairs. In Belgium the Conference of University Libraries, founded in 1972, has been fruitful in the field of interlibrary contacts and of collection development<sup>15</sup>. The library associations are playing an important role too. According to Bowden:

"effective and dynamic library developments have taken place where there is a strong and effective library association"<sup>16</sup>.

In most European Union members, library associations such as the Dutch Association of Librarians in the Netherlands and the Library Association in the UK are consultative bodies on library matters and played an important role in the development of libraries and librarianship in general not only nationally but also internationally.

The importance of collecting statistical data on their libraries has been acknowledged in most other European Union countries<sup>17</sup>. Special services and statistical units have been set up for the collection and analysis of data on libraries. In the United Kingdom there are a number of services<sup>18</sup>, involved in this activity such as the SCONUL, and the Library and Information Statistics Unit (LISU) at the Loughborough University. In Denmark, and in other Nordic countries, the National Library authority publishes annually a series of library statistical reports of academic and research libraries are published by Centraal Bureau voor de Statistiek (Central Bureau for Statistics). Since 1974 similar reports have been issued in Germany by the Deutsches Bibliotheksinstitut. The need for specific standards in the collection of library data in order to be useful for comparison purposes has been realised by many countries, and so national library authorities, library associations and international bodies such as

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the UNESCO and ISO have published standards and guidelines for the collection of valid and reliable library data<sup>19</sup>.

# 4.2 Organisational structures and management

There are two main organisational patterns of library structures in European Union universities. The centralised structure, which is composed of a Central university library and few - if any - branch libraries under the control of the central university library. Such a structure exists mainly in the United Kingdom<sup>20</sup> and Ireland and to a lesser degree in universities in Belgium, Denmark and the Netherlands and the new universities in Germany.

In the old universities in German and in most French, Italian, Spanish and Portuguese universities on the other hand, a decentralised structure has been applied. There are different variations of this structure but the main pattern is one of a main university library with a number of departmental libraries which have different degrees of freedom in their operation. In most cases departmental libraries are tasked with

"... the provision of research material for senior academic staff in order that they might have such material immediately at hand, without the necessity of going to the University library"<sup>21</sup>.

German universities created a series of libraries (Seminar or Institutbibliotheken) completely independent. Each of these libraries was to serve the work of one department<sup>22</sup>. University professors consider the autonomy of their institute libraries very important and imposed this structure<sup>23</sup> but soon after the Second World War older German universities started changing their library structures. University administrators realised the need for a central university library and today in older universities library provision is accomplished by a "two-track" library system, with both a central university library and decentralised libraries occasionally combined into larger units (Institute Libraries). By a number of concrete recommendations they improved the operation of their library systems through reduction of the purchase of multiple copies, creation of union catalogues and periodical lists, adoption of standard cataloguing rules, opening of departmental libraries to non-members and establishment of large textbook collections<sup>24</sup>. Today older German universities have a main library and a number of institute libraries. The university and institute libraries are heavily used both by the teaching staff and the students. but the university library is mainly for home loans and the institute libraries for reference purposes. Acting in this way, one part of the system is being complemented by the other. As a result of this action central libraries became large storehouses of knowledge satisfying thousands of requests in their reading rooms or through interlibrary loans. Increasingly the director of the Central Library has come to be regarded as the librarian of the entire University with his responsibilities for all library matters laid down by university legislation<sup>25</sup>. The realisation that the fragmentation of university libraries in an uncontrolled way has many undesirable effects made new German universities abandon the traditional departmental organisation and move to physically and organisationally unified libraries. So, since the establishment of the university of Bochum in 1965, all universities in Germany have created unified library structures. Where physical limitations make the existence of decentralised book stocks unavoidable those collections are still organic parts of the main university library. Today most new universities have a central library where library services for the entire university are provided, and only in some does there exist only a central processing service and departmental libraries. Progressively the processing units are moving within one of the larger units and form the kernel of the central university library. So what is evident in German university libraries is a move towards the centralisation at least of services and away from the traditionally independent departmental and institute libraries<sup>26</sup>.

In Portugal the old universities have a number of departmental and faculty libraries while the new universities have a central library only. In order to improve library services provided and to achieve greater efficiency of their services every university library set up a department (Documentation and Publication Service) responsible for the co-ordination between departmental libraries and the supervision and in-house training of the staff. The automation of the library and the compilation of a university's union catalogue are also the responsibility of this service<sup>27</sup>. In Spain centralised services within universities include interlibrary loans, the development of the union catalogue, the development of special collections and the library automation<sup>28</sup>. In the Netherlands the older university libraries consist of a central library with a number of departmental ones. Departmental libraries have their own budget but acquisitions and cataloguing of all books is undertaken by the central

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library. In new universities there exist either only one central library or a central library with branch libraries which are under the control of the central library.

Large dispersion of collections exists in Italian universities. However since the beginning of the 1980's many attempts have been made to improve their efficiency. The most urgent need was felt to be the unification of small collections or at least their co-operation. In most universities attempts were made to group together libraries at various levels<sup>29</sup>. Due to local and technical reasons, however, as well as resistance from certain professors, not all attempts succeeded. During recent years the tendency is for each university to establish a co-ordinating office in order to centralise the management and administrative services and to unify the technical services and library procedures. According to Solimine:

"the solution to this problem cannot depend on centralisation but on other forms of co-operation which will uphold the principles of autonomy and centralisation"<sup>30</sup>.

On the average in each French university there exists a central library and about twenty BUER (Bibliotheques d'unites d'Enseignment et de Recherche) libraries. However since 1970 moves for centralisation took place and all libraries were legally integrated into the university, as a common service, and placed under the authority of the president of the university who delegates part of his duties to the library director. Where several universities exist in the same urban area, an inter university library was formed and the different universities are represented on its joint council<sup>31</sup>. A number of recommendations are being implemented aimed at the creation of a union catalogue in each university, the development at each university of a comprehensive and coherent collection policy and the reorganisation of the procedures for the allocation of funds<sup>32</sup>.

During recent years the increasing complexity of university libraries and budgetary pressures have forced university and library administrators in other European Union countries to pay increasing attention to matters of management. The appropriate organisation of academic libraries is now considered to be one of the most important aspects of library management. University libraries continue to experiment with different organisational structures, attempting to balance the desire for the best possible services to users with the reality of a finite amount of money to be spent on these services. The debate over which organisational structure is better still continues. However there seems to be a general view that the operation of many small libraries within a university is a waste of resources (money, material and staff) and that at least some co-ordination is needed. Efforts for changes exist in all other European Union countries<sup>33</sup>. Based on their needs and topical conditions today many universities in the European Union are moving to a rationalisation of their services by grouping together existing departmental libraries at least on a faculty basis. Recently in a number of universities in the UK a new information entity, the integrated information centre, is emerging with a mission to provide informational and technical support to the faculty and staff of the university<sup>34</sup>.

# 4.3 University administration and the library

Today in many European Union countries universities are in the middle of drastic changes to the way in which they are founded, make their decisions, and organise themselves, and university libraries are also involved in this process. For instance British universities are in the process of finding the best way of linking the library with the decision making bodies. In most universities this link is formed by a library committee. In most cases the library committee includes representatives of teaching staff, and students as well as representatives of library staff. Its normal role is to advise the librarian and the Senate on library policy or as in Scotland to play a more active and executive role, with greater control of finances and decision making. During recent years this picture is changing and some universities have moved towards establishing a single committee to handle policy and resource allocation for the library, computing service and media services<sup>35</sup>.

The basic administration practice applied in most European Union university libraries is the setting up of departments within libraries according to function. The University library divides its work and services up into broad areas such as technical services (cataloguing, classification and processing), public (reader), services and administrative activities, such as order, repair, extension, etc. For years this organisation structure was thought to be a logical way of organising activities and services as it ensures that the proper attention is given to the basic functions while it provides more specialisation and efficient use of the staff. However due to new developments which are taking place new administrative practices are increasingly being applied. The participation of staff in decision making is today common in many university libraries while other techniques such as team management and matrix structures are being implemented.

Nowadays most European Union universities with centralised or decentralised library structures are moving to a unified library management with one chief librarian responsible for the management of all library provision within the university. In most European Union universities library committees have a long and honourable tradition and are generally one of the standing committees created by university charters or the university Senate. University library committees are in most universities responsible for policy determination, literature provision, co-ordination between central and departmental libraries and implementation of projects which affect the operation of all existing libraries such as library automation, new library buildings, etc<sup>36</sup>.

The increasing cost of running a university library has forced many universities and government bodies in most European Union countries to pursue costeffectiveness in all aspects of library activity. Special units for providing answers to such matters have been established. In the UK the Library Management Research Unit was established in 1969. The aim of the Unit's research programme was to assist university library staff to obtain the management information they required for ensuring the most efficient use of their resources, for measuring the effectiveness of their existing services and for planning future developments. The Standing Conference of National and University Libraries (SCONUL) also developed a set of measures of expenditures and library operations to determine the adequacy of university library funding and to help libraries negotiate for improved funding<sup>37</sup>. The emphasis on performance measures of universities is based on unit costs and ratios, and attempts at comparative assessment of inputs and outputs in university libraries have been made. The Centre for Interfirm Comparisons has produced ratios for many aspects of library operations and the SCONUL has developed its own statistical database which enables the relating of library finance and operations. The need for reorganisation of university libraries has been faced also by university libraries in other members of the European Union<sup>38</sup>. The links of university libraries with computing and media/audio visual services are developed in other European Union universities. In the U.K. in 45 of 148 libraries there has been an organisational convergence with computing/IT services<sup>39</sup>. In the U.K. in 116 of 157 university libraries have a published mission statement of their aims and objectives and 99 of 153 have a published strategic corporate plan<sup>40</sup>.

### 4.4 Library Funding

In European Union countries most of library funding is done from public funds. However in some European Union countries such as the UK, France and Germany there is a tendency for university libraries to turn to other sources of income from library activities and services they provide. UK university libraries are very active in this area<sup>41</sup>. All libraries raise money from photocopying, fines, on-line searches and some by offering services to external users. Many university libraries are pursuing an active policy of fund-raising, especially with commercial firms, philanthropic foundations or from former students. Old libraries such as the Bodleian library in Oxford University have an income from bequests, endowments, and trust funds. The assimilation of French university libraries into a business environment started in 1974 with the BUTC (Bibliotheque del' Universite de Technologie de Compiegne) as a pilot study. Moving to this direction French libraries increase the resources contributed by the library's activities and services provided. In order to solve problems generated by copyright rights the French government imposed a special tax on photocopy machines and funds collected in this manner are redistributed to the publishing field through an acquisition subsidy to libraries. In Denmark a percentage of research money is given to the library to cover the cost of acquisitions and services when a research grant application is made. Some university libraries in the UK, Denmark, France, Germany and the Netherlands specialise in specific scientific areas and offer paid consultancy services.

Each European Union country has its own practices in funding university libraries. In order to improve the efficiency of library spending most European Union countries established specific procedures for the allocation of funds to university libraries and in libraries within universities. There are two patterns of government funding of university libraries: a) directly to libraries and b) through their parent institutions. The first pattern is applied partly in Germany, France and Denmark and the second in other countries. In the UK funding of libraries is done by the universities after receiving their funding from the Higher Education Funding Council. In Germany funding of the library budgets is done by supportive authorities. Development projects, large investment and supra-regional collections are financed by the Ministries of Research and Technology, Education and Science, and the German Research Society. Building projects in

college libraries the librarian takes the decision on material fund allocation<sup>44</sup>. Some university libraries in European Union countries have a policy to spend a specific amount of their budget on students' material. In Britain the Parry Report suggested the use of such a method based on a "model" library budget submitted by SCONUL<sup>45</sup>. For a model library of medium size universities the Parry Report concluded that a university has to spent about 6% of its budget on library provision. However there are differences between the needs of old and new universities and between the departments within a university, and any standard proposed must take into account all such factors which affect funding requirements.

#### 4.5 Staff

In general, staff in European Union university libraries are divided into professional, academic, para-professional and supporting grades. According to their tradition and organisational structure each country applies its own practices in recruiting and promoting library staff. The ease of movement from grade to grade differs from country to country. However as a general rule, in order to attract specialists and to recruit library staff with better qualifications, university libraries in most other European Union countries apply modern techniques for selecting the proper candidates and offer special salaries and ranks according to their qualifications.

In traditional British university libraries a number of the professional staff hold positions related to existing academic grades and form the academic-related library staff. In French university libraries all library staff are part of the unique personnel system and administered by the Direction des Bibliotheques in the Ministry of Education. In universities with 13,000 to 16,000 students sixty to eighty people are employed, with a director, who belongs to the professional staff of the libraries, aided by the administrative and accounting service. Each section of the library is directed by a librarian of "conservator" rank and has four to six assistant librarians, two secretary-typists and six to eight attendants or stack assistants<sup>46</sup>.

The status of the library director varies from country to country. In British universities the library director (University Librarian) is recognised as one of the senior officials of the university, in some cases has the status and salary of a

professor, in some universities has a seat in the Senate and influence on the decision making<sup>47</sup>. Other European Union countries such as Germany and France are moving in this direction<sup>48</sup>.

With the German university libraries being a prominent example many European Union universities employ subject specialists among their staff<sup>49</sup>. Subject specialists in German university libraries are highly qualified. Their duties include administrative and reference duties and the selection of books in their chosen fields of interest<sup>50</sup>. Many UK university libraries also employ subject librarians. They are usually responsible for liaison with specific departments and their library representatives, but the extent of their involvement in collection development varies, even within the same library<sup>51</sup>. In the UK and other European Union university libraries reference librarians are employed in order to instruct library users in library use, and to answer inquiries on library use and library material and information officers with a main duty, according to Maurice Line, being that of:

"seeing that users are served with the information they require; they are usually subject specialists, they reach out to the user in person (in contrast to sitting at the reference desk in the library), they are user-oriented rather than bookoriented"<sup>52</sup>.

With a prominent example of the British universities, university libraries in other European Universities are becoming part of the Information Services of the university. In this intergrating environment were the library is united with computers new staff structures have been applied<sup>53</sup>. The use of computers in libraries resulted in the creation of posts of systems librarians in many European universities<sup>54</sup>.

#### 4.6 Library education

In most European countries the establishment of schools of library and information studies has a long tradition. Within existing educational systems there is a variety of programmes and schools offering library and information studies<sup>55</sup>, while in some other countries independent universities of library and Information Science have been established<sup>56</sup>.

In the UK library and information education is provided in 16 higher education institutions<sup>57</sup>. In Germany there are 21 institutions (universities, colleges of advanced technology and special library schools or teaching institutes) which offer library courses<sup>58</sup>. Spain is moving closer to other European Union partners with the establishment of university level library schools which provide training of library and information professionals<sup>59</sup>. Information specialists and library professionals are educated and trained in France by various routes, which are organised by universities and other higher education institutions<sup>60</sup>. In Portugal library studies are available at the Universities of Coimbra, Lisbon and Oporto. Studies in the Universitdade de Coimbria have been undertaken for 10 years now, while the Lisbon programme started in 1983 and Oporto in 1985. The three universities admit over 100 students per year and offer library, information and archivist courses<sup>61</sup>. The universities of Coimbra and Lisbon also offer postgraduate programmes. University level schools which provide undergraduate and post-graduate library education exist also in the Netherlands and Belgium<sup>62</sup>. In Denmark library education is provided by the Royal School of Librarianship which has a 3-fold role: to educate and conduct research within the areas of librarianship and information science; to provide training; and to offer a continuing education programme<sup>63</sup>. Library education is given also to teacher-training colleges<sup>64</sup>. In all other European Union countries, professional organisations, and government bodies offer continuous education and training of library staff<sup>65</sup>.

User education is another area to which university libraries in other European Union countries pay attention<sup>66</sup> while the inter-communication of university library staff in most European Union member states is done by the publication of library and information science journals, courses, meetings and conferences<sup>67</sup>.

# 4.7 Collection development

Collection building practices have received special attention by university libraries in most European Union countries<sup>68</sup>. Most university libraries in other European Union universities retain collections of all forms of library material from books to audiovisual material. For instance maps constitute a valuable collection for many European Union university libraries<sup>69</sup>. Collections of theses

are available in every university library in the UK, Ireland, France and Germany. In many European university libraries there is a great deal of activity related to patents. In the UK with the participation of the British Library there is a network of libraries to provide local access and general patent reference collections, backed up by a document supply service<sup>70</sup>. Government and other legal publications also receive special attention<sup>71</sup>.

In a number of European Union countries such as the UK, Germany, France, Ireland and Italy some university libraries act as national libraries and have legal deposit privileges or are responsible for building comprehensive collections in specific subject areas.

Library provision to students is today a main task of the university libraries in all other European Union universities. A few examples of separate undergraduate libraries exist but most university libraries have established special short-loan collections within the main library, comprised of multiple copies of the books most in demand by students. This is a practice applied in many European Union university libraries and in almost all university libraries in UK<sup>72</sup>. German universities provide multiple copies of the most heavily-used books arranged separately in a "Lehrbuchsammlung" (Text-book collection). In most universities these libraries comprise about 30,000 to 80,000 volumes on average. The same pattern is followed in British universities with the establishment of large short-loan collections within central libraries.

Among different European Union countries there are differences in the physical access to collections. With the exception of a very few libraries, UK university libraries have their collections open to their users. Open access applies also in Danish, Dutch and in new university libraries in Germany. Old university libraries in Germany, France, Spain, Portugal and Italy have their collections closed to the public. However the tendency is for moving from closed to open access. The preservation and conservation of library collections is an important activity in many European Union university libraries<sup>73</sup>.

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### 4.8 Bibliographic tools

In all other European Union countries a number of tools for the bibliographic control and support of library activities and services such as cataloguing, subject access and interlibrary loans are available.

National Bibliographies are an important tool for reference, selection and acquisition of library material. All other European Union countries have developed national bibliographies<sup>74</sup>. During recent years all European Union countries have started the retrospective conversion of their national bibliographies to computer readable forms<sup>75</sup>. In Portugal the National Bibliography (Boletim de Bibliografia Portuguesa) published by the Portuguese National Library started in 1935. In 1987 the creation of the national bibliographic database (PORBASE) was started with the co-ordination of the National Library of Portugal. A project for retrospective conversion of the National Bibliography of Portugal is in progress<sup>76</sup>. In Belgium the "Bibliographie de Belgique "Belgish Bibliografie 1875-" started in 1959. It is published in monthly issues with an annual index by the Bibliotheque Royale. In Italy the Italian National Bibliography has been available on-line since 1975. All Nordic Countries have good and up-to-date national bibliographies, produced from machine readable databases by the national library often in cooperation with the Library Bureau of the country<sup>77</sup>. Subject bibliographies and tools for the bibliographic control of different forms of material are common in most European Union countries. Tools for the bibliographic control of other forms of material such as government publications<sup>78</sup> and dissertations have been developed. In the UK, due to co-operation between most universities and the British Library there are available tools for the bibliographic control of theses and efficient procedures for their lending. Aslib publishes the "Index to Theses" while the British Library publishes the "British Reports, Translations and Theses". In Germany the "Jahresverzeichnis der Hochschulschriften" keeps records of theses and the Deutsche Bibliotek has issued the National bibliography of theses since 1971. In France the national bibliography includes a section for Theses. The "Service des Enchanges Universitaires" in Sorbonne is responsible for the distribution of French Theses to foreign libraries while the Bibliotheque Nationale is the centralised deposit library of theses. University libraries are deposit libraries on a subject basis. In the Netherlands theses have been listed under institution in "Catalogus van academische geschriften in

Nederland verschemen" since 1924. In Spain, Belgium, Denmark and Portugal theses are included in their national bibliographies. The development of union catalogues of periodicals has been for a long time a common practice in most other European Union countries. Tools for the selection and acquisition of audio-visual material exist in most other European Union countries<sup>79</sup>.

In Italy the National Library Service (SBN) aims to accomplish the bibliographic control of all Italian publications in a decentralized way and to create a system for collection sharing. In Belgium the two High Councils for the public libraries (French and Dutch speaking) are acting as coordinating committees and have taken several initiatives for the development of standards for descriptive cataloguing, development of thesauri and shared cataloguing<sup>80</sup>.

Centralised cataloguing with the use of on-line services is an old tradition for university libraries in the UK<sup>81</sup>, Germany<sup>82</sup>, and France<sup>83</sup>. In most other European Union countries university libraries increasingly are using cooperative services such as the OCLC, National Bibliographies, Bibliographic and union catalogues for the cataloguing of their library material. The Anglo -American Cataloguing Rules are used by many university libraries but European countries have developed their own cataloguing rules in addition.

In Germany the 'Prussian Instructions' for cataloguing and filing are used by most university libraries<sup>84</sup>. In Portugal the Portuguese Cataloguing Rules were published in 1984, based on AACR2. The international rules and standards covering library practices have been accepted by most university libraries in Spain. ISBD and AACR are employed for cataloguing. A Catalan translation of the ISBD also exists. National MARC formats are used in automated systems (IBERMARC, CATMARC, and DMARC). As part of their national planning of libraries some European Union countries have adopted specific classification systems for the classification of documents in their university libraries<sup>85</sup>. For bibliographic access a number of national standards have been developed, in many cases translations of the Library of Congress Subject Headings. For instance in Portugal university libraries use a Brazilian translation of the Library of Congress Subject Headings.

## 4.9 Services

University libraries in other European Union countries have moved towards making reader services their primary objective. The setting up of machinery for mediating between the research worker and the vast amount of library material by establishing current awareness services, information services for information retrieval from external databases and selective dissemination of information are included in the reference services of many university libraries in other European Union countries<sup>86</sup>. Most University libraries in other European Union countries are active in on-line information while in some countries biomedical libraries are particularly active in on-line information provision<sup>87</sup>.

Training of scientists and students in the use of libraries is already a tradition for many European Union universities. In the UK the need for proper education of scientists in the use of a library was demonstrated by the University and Research Section of the Library Association in 1949<sup>88</sup>. Today most university libraries in UK have a programme of educating students in the use of the library and :

"...it is no longer exceptional to find departments making time available for library staff to give to their classes formal instruction that is specially tailored to their subject interests and their level of attainment"<sup>89</sup>.

A common practice for all European Union university libraries is to publish instructional leaflets aiming to introduce their readers to ways of getting the best use out of the library, their obligations and rights, library regulations, the use of catalogues, etc.

#### 4.9.1 Library co-operation

Formal links to facilitate the exchange of publications and the administration of reciprocal lending among university libraries are a common practice among university libraries in other European Union members<sup>90</sup>. For many European Union countries co-operation among university libraries has a long tradition. Interlibrary lending is the main activity in library co-operation. There are three patterns of organisation of library networks: centralised, semi-centralised and decentralised<sup>91</sup>. For historical and organisational reasons European countries choose one of these three forms of organisation<sup>92</sup>.

In the Netherlands document supply is based on a national system for the supply of scholarly literature and a regional system for supplying a wider range of material mainly between public libraries. The university libraries play an important role in document supply of scientific literature<sup>93</sup>. The central body for interlending in Ireland is the Library Council which maintains and operates a central library and promotes library co-operation. The Committee on Library Co-operation (COLICO) advises the library Council on matters related to library co-operation. In 1990 almost 120,000 documents were received and 20,000 supplied by the libraries in Ireland<sup>94</sup>. Local and regional co-operation is also usual in other European Union Countries and university libraries have been involved in library activities in their local area such as the production of union catalogues, bibliographies, organisation of mobile libraries and interlibrary loans<sup>95</sup>.

The recognition that library budgets do not allow university libraries to be selfsufficient in developing comprehensive research collections has led many European Union countries to share out acquisition efforts among different university libraries. In a number of European Union countries such as Germany, France and Italy a national acquisition policy is in action<sup>96</sup>. ln. Germany university libraries participate in the co-operative acquisition plan (Sondersammlgebietsplan), a supra-region system of resource sharing. Within this system specific libraries have been characterised as Central Back-up libraries (Zentrale Fachbibliotheken) for interlibrary lending activities<sup>97</sup>. Following the example of Germany, France has developed since 1980 a national co-operative acquisition network. The so called CADIST (Centre d' acquisition et de diffusion de l'information Scientifique et Technique) constitutes a network of twenty major libraries which are funded by the government for the acquisition of documents within specific areas. A number of tools are available for supporting interlibrary activities such as the Union catalogue for Serial Publications (Catalogue Collectif Nationale des Publications en Serie) (CCN), the Pancatalogue and Teletheses<sup>98</sup>. In 1988 the ILL traffic between university libraries was 480,000 documents<sup>99</sup>. CADIST aimed also to reinforce already existing national roles for some library collections with special funds and the creation of national acquisition committees<sup>100</sup>. A number of efforts of this kind have taken place also in Britain but with the exception of specialist initiatives, co-operative acquisitions have not been very successful and the British Library became the main source for library interlending<sup>101</sup>. In Belgium there are a number of projects for exhaustively maintaining periodical

collections, collection development (co-ordination of periodical cancellations), shared cataloguing, and the development of cataloguing, subject and machine readable bibliographic formats. A number of bodies such as the national body of funding of research projects (FNRS/NFWO), the conference of University Libraries, the Flemish Interuniversity Council (VLIR), the "Comite de concentration des bibliotheques biomedicales" and the joint council of Flemish universities have been involved in these activities<sup>102</sup>. In Spain the union catalogue of periodical publications with more than 100,000 titles from 1,500 libraries is the main tool for supporting interlibrary co-operation<sup>103</sup>.

Transfer of material from one library to others may give an opportunity to other university libraries, especially those of more recent foundation, to augment and improve their stocks. Such activity goes on in other European countries. In Britain, with the co-ordination of the British National Book Centre and later the British Library, many university libraries benefit from this activity.

In some countries National libraries play an important role in library cooperation and document supply. In the UK the British Library is a prominent example at a European and international level as it is the principal depository for British Copyright publications, producer of the national bibliography, central institution for interlibrary loan, major developer and operator of computer-based bibliographic and other information services, and the country's main source for the support for research in library and information science<sup>104</sup>.

### 4.10 Computer Based Networks and Automation

Use of computers in library functions has a long tradition in most other members of the European Union. Today automated library systems are common in all other European Union countries. In the UK national and local library bodies are promoting library automation and computer based networking. Since 1987 the University Grants Committee has financed a project for linking libraries, and a similar policy is being pursued by the government bodies concerned with libraries<sup>105</sup>. Today a number of local automated library networks are operating. The most important regional networks are the Birmingham Libraries Co-operative Mechanisation Project (BLCMP), the South West Academic Libraries Co-operative Automation Project (SWALCAP), the London and South Eastern Library Network (LASER) and the

Scottish Libraries Co-operative Automation Project (SCOLCAP). On a national basis the British Libraries Automated Information Service (BLAISE) makes available the British National Bibliography in machine readable form and serves libraries with the UKMARC database. The use of the Joint Academic Network (JANET) gives libraries in the UK the opportunity to search all available Online Public Access Catalogues (OPAC) and many other bibliographic databases. So far connection to JANET gives access to more than 61 UK university library OPAC<sup>106</sup>. Germany is developing seven regional automated library networks for on-line cataloguing and information retrieval purposes. The most successful of these are the library system for Nordrhein Westfalen with 30 participating libraries, and SOKRATES in Bavaria with 30 university and research libraries<sup>107</sup>. France adopted a centralised approach to its library networks with the development of a union catalogue intended for interlibrary loans and cataloguing<sup>108</sup>. In order to help the interlibrary loan service in 1982 the DBMIST implemented a union catalogue of Serials (CCN-Catalog Collectif National Informatise des Publications en Serie) by merging previous catalogues. The university libraries constitute the main framework of this system. In 1988 the CCN included the holdings of 2,600 libraries and documentation centres. In the area of monographs each university library reports its acquisitions to the Catalogue Collectif des Ouvrages Etrangers (since 1994, called Biblographie National de France) which is administered by the National Library of France (BN). A database of dissertations has existed since 1982. In 1988 it included 110,000 titles with an approximate addition of 16,000 titles each year. The most ambitious project is the creation of the "Pancatalogue" an on-line catalogue of monographic holdings of all university libraries<sup>109</sup>. In Italy library networking is under development in a number of universities while the National Library Service (NLS) aims to create a national library network (SBN) for sharing cataloguing records among libraries and for management purposes<sup>110</sup>. In 1989, 30 libraries were involved in this project<sup>111</sup>.

A number of networks are in operation such as COBBUL (Latium Universities) and SBN<sup>112</sup>. Smaller European countries have also developed computer based library networks. As in the case of larger countries a variety of solutions have been developed. In the Netherlands the co-operative of Dutch university libraries and the Royal Library created a consortium for a Project for Integrated Catalogue Automation (Pica). Today Pica offers on-line shared cataloguing, interlibrary loan facilities and local systems for library automation and plays a central role in library networking in the Netherlands<sup>113</sup>. In 1992 the central database of Pica included 6.5 million titles, accessed by 1,000 terminals. The

participating libraries are: 125 for on-line shared cataloguing, 150 for on-line retrieval services and 270 for interlibrary loans. The system has an average of 125,000 transactions per year with 1,250,000 publications catalogued yearly. In 1990 Pica libraries were connected to SURF, the research network of the Dutch Universities, and began the development of the open library network by giving libraries direct communication to other libraries for on-line search, cataloguing, interlibrary loans, and by offering a wide range of services such as electronic mail, file transfer, bulletin boards and connection to other networks. The reasons for the growing role of Pica in the Dutch libraries were: the small area of the country, the quality of communication facilities, and financial support by the government<sup>114</sup>. In Belgium an ambitious program, initiated and funded by the Ministry of Science, and aiming at a national shared cataloguing program similar to the Dutch system, Pica, started in 1975. In 1977 the VUBIS system of the Free university library in Brussels was designated to implement the national bibliographic database. In Portugal<sup>115</sup> and in Spain<sup>116</sup> with the firm support of their National Libraries automated library networks are under development. In Portugal the National Library took the initiative to develop the infrastructure for both networking and library automation. The network model chosen includes the creation of a central database in the national library and on-line-access to it by all participating libraries. Those libraries may at a later stage develop their local databases by transferring data from the central database to local systems<sup>117</sup>.

University library automation has a long history in many Europen countries. University library automation began in the UK in the mid-1960s. In 1993 almost all university libraries have automated their operation and all have access to external systems particularly commercial databases available on-line, and through available networks to the library catalogues of other libraries. A number of libraries have also been involved in the development of library software which later became commercial systems. In many UK universities the information technology services committee coordinates efforts and plans for use of computers within university and helps libraries in their efforts to introduce new information technologies. In Denmark the Roskilde University Library has used automated cataloguing systems since 1977<sup>118</sup>. Today most university libraries in Denmark are automated and connected to a national network. In the Netherlands university libraries started automating their operation in the early 1970s. Today almost all libraries have automated their operation and are connected to national and international networks. Attempts at automation of

university libraries in Italy started during the 1980s with the development locally of library automation software. Because most of these attempts failed most libraries moved to commercial products. Today many universities have been automated or are in the process of automating their operation with the main effort being to create union catalogues of collections in individual universities<sup>119</sup>. Today most automated libraries are in the university sector. Library automation in Belgium started at the university of Liege, by the end of 1960s<sup>120</sup>. In 1972 the university library of Antwerp (UIA) started a batch processing system. The automation project in the Catholic university of Leuven resulted in the development of the DOBIS/LIBIS system which is a commercial library software used by many other libraries. VUBIS software was also produced with the collaboration of university libraries. Today most university libraries are automated and a university library network has been created<sup>121</sup>. In 1987 of the 33 universities that exist in Spain 18 begun automation using commercial or in-house software. Compared with other large European Union countries automation in French university libraries started late, in 1983. The DBMIST have developed two computerised aids, one for cataloguing (MOBICAT), the other for lending (MOBIPOP), and introduced them into university libraries. DBMIST assumed responsibility for further development of the Systeme Integre pour les Bibliotheques Lausannoiser (SIBIL) program. With the help of these tools and commercial software, a number of university libraries have been automated so far while others are in the process of automation<sup>122</sup>. Automation in German university libraries started in Bochum university library in 1967<sup>123</sup>. In 1986 54 out of 57 libraries were in the process of automating their services<sup>124</sup>.

Among European Union countries there are differences in the development of the electronic information industry between more and less developed countries (Greece, Spain, Portugal and Ireland). However developments are taking place also in less developed countries and especially in Spain, Ireland and Portugal<sup>125</sup>. New forms of new information media such as CD-ROMs are used today by most university libraries in European Union countries.

#### 4.11 Library Buildings

Library collections in many European Union universities are housed in buildings which are in most cases the most impressive constructions within university campuses. In most universities and especially the new ones, university library buildings are constructed with the use of modern techniques of designing and planning<sup>126</sup>. In UK universities library buildings fall into two main classes: the older universities have large reading rooms with separate stack areas, while the newer and more common group have an open-plan with mixed shelving and seating. In most libraries there are precautions against theft and mutilation of library material, for directing users in using the library etc<sup>127</sup>. In Germany the new library buildings are an indication of ideas on library organisation as they are designed to act as the central libraries of the whole university. Libraries in old universities are housed in old impressive buildings while new universities have built modern ones<sup>128</sup>. In Belgium the library of the University of Ghent is housed in a modern library built in 1947 by the well known architect Henry van de Velde. The library buildings in the universities of Liege and Brussels are also impressive.

Some European Union countries have developed standards on area provided to each library user. In the UK the UGC's 1976 report on Capital Provision for University Libraries<sup>129</sup> set out norms for library space requirements, which have been followed by the UGC (now HEFC) ever since. The basic norm was calculated at 1.25 square metres per full-time equivalent student (half for shelving, one-third for seating, and the rest for administration). According to a directive published in 1962 French university libraries had to provide at least an area of  $1.5m^2$  / student. Due to increase in student population this figure was  $0.87m^2$  in 1984 ( $0.63m^2$  in Paris and  $0.95m^2$  in the provinces).

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# **CHAPTER 5**

#### Methodology

In order to answer the research questions and test the hypotheses of the present study, analysis of the situation of university libraries in Greece individually and as a whole was needed. The use of the systems approach to organisations was found to be proper for the purposes of the study. This approach facilitates the development of an overall framework that integrates the various facets that are involved in understanding a library system. It allows the researcher to consider the major forces and variables both in the external environment and within the system that have a major bearing on how and why a library acts as it does. It also allows the establishment of an integrating framework to identify factors which have an impact on a library system.

University libraries in Greece are affected by the same factors and operate within the same educational and cultural conditions, have organised their services in similar ways and have similar purposes. The result of this is that all libraries in Greek universities as a whole may be seen as a system similar to that presented for an individual library.

## 5.1 Systems approach

In everyday language "system" is a vague word, applied to any complex thing that is organised in some way, but which is difficult to specify precisely. For the purposes of this study the term will be applied to any collection of interrelated and interacting components which work together in an organised manner in order to fulfil a specific purpose or function. A component, or part of a system is called a sub-system.

The use of this definition implies several ideas. First is the concept of interdependency. The parts that make up a library are interdependent. If a change occurs in one part or set of parts such as internal library procedures or

staff structures, it may affect all other parts of the system. A second implication is the concept of holism. This concept requires one to consider the performance of all aspects of the system when introducing changes into one component of the system. A third concept implied by the definition is synergism. This refers to the interactive effect of the parts of the system working together. The actual interactions of the parts create an effect which is greater than the effect of the parts acting separately. The key concept is that as each part of the system performs its role, it enhances the performance of other parts and hence the total performance of the system. Closely related to the concept of holism is the analysis of sub-systems within a system as subsystems are groups of functioning elements within a larger system. The determination of sub-systems depends upon the desired level of abstraction at a given point for a desired type of analysis. Determining what is considered the system and what are considered the sub-systems depends upon the purpose of our analysis.

One major advantage of a systems approach is that its holism enables one to consider an organisation as a whole. The elements of the organisation are clearly specified and changes in one element can be traced through the system to determine their effect on systems performance and output. Sub-systems interface with the broader system while the system's interface with its environment is explicitly considered. The flow of inputs through the inputtransformation- output process is clearly depicted. The sources of inputs and outputs are specified. The role of feedback in the system is given the importance it deserves. Thus predicted consequences of changes made to an input or to the transformation process can be stated more clearly in terms of how these consequences affect other inputs, other parts of the transformation process, outputs, users of outputs, and the quality and type of feedback. The systems approach also allows for model building and so graphic presentation of ideas is made easier. By focusing on flows and interrelationships of elements, we can develop models that better express the operation of the system. These models may be expressed as a flow diagram or as a set of equations. Variables are specified, and the relationships among them are made explicit. Since model building is the first step to empirical research, hypothesis generation and testing are facilitated.



Fig. 7: A systems model of a university library

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The approach also allows for quantification of relationships between elements. Using a systems approach each individual university library may be represented by a system model. This model was used because it conveys the idea that libraries are made up of parts which interact with each other for some purpose or reason. Greek university libraries as a group may also be represented by a similar system model. A model of a university library is given in Figure 7.

Systems may be either dynamic or static. A static system is one in which no change takes place, while a dynamic system is one whose state changes over time<sup>1</sup>. University libraries change over time and are thus dynamic systems. However, for a given time interval at a given level of analysis, they may be considered rather static.

A disadvantage of a systems approach is that can oversimplify organisational relationships. As a systems approach relies heavily on conceptual and analytical models and we may not be able to express adequately all the relationships that are developed, models of organisations tend to be oversimplifications of the reality. For this reason models developed from a systems approach :

"Should be considered as tools for understanding a complex reality rather than as total representations of reality"<sup>2</sup>.

#### 5.1.1 Systems environment

Any real system of any nature will rarely, if ever, be self-sufficient. Each system interacts in some way with other systems and is therefore a component in a wider system. One way to conceptualise the interaction of a system with its environment is to use the micro-intermediate-macro environment distinctions<sup>3</sup>.

By using the systems approach, we are better able to explain how libraries interact with their surroundings. Using the micro-intermediate-macro approach, the relationship between the library and its environment becomes a series of interchanging processes.

Fig. 8: Library environment



The micro environment is the system itself. The intermediate environment is the system or network of systems that connect the system to its macro environment and macro environment is the total surrounding of the system.

The micro environment of the library includes : a) the library's mission and the types of work undertaken to accomplish the missions and objectives of the library; b) library structure, organisational design and c) the human factors such as interpersonal relations that exist within the library: role behaviour, motivation, perception and leadership. Each library has an organisational structure, applies specific management practices and has an internal culture. All these are part of the micro environment of the library and affect the library's performance.

The intermediate environment includes systems such as the university in which the library belongs, the material supply system (book-sellers, publishers etc.), the postal and telecommunication systems which are the means for communication between the library and its environment, the technology system and its products and services, the service system which provides services to the library such as personnel services of the university and utilities (electricity, heating etc.). The pressure-group system made up of various pressure or power groups and the relationships they hold with, and the effects they have on, university libraries (unions, civic groups etc.).

University libraries exist within a macro environment that exerts considerable influence on their composition and operation. The macro environment is made up of at least three major systems: economic, educational and cultural. The economic system affects costs of both input and outputs; the educational system influences the roles given to the library; while the cultural system influences the roles, norms of behaviour and the values sought by library staff and society itself.

# 5.1.2 Inputs- Processes-Outputs

Systems interact with other systems, and hence with the rest of the world, by means of inputs and outputs. The inputs represent the influence of the rest of the world on the system, and outputs the influence of the system on the rest of the world. In most cases outputs from one system become inputs to other systems.

Input-output analysis involves the examination of a flow of material, ideas, concepts, money, people and so on from beginning to the end and through the system. This analysis has six facets, as follows<sup>4</sup>:

- i. Determination of inputs.
- ii. Determination of sources of inputs.
- iii. Determination of the transformation process
- iv. Determination of the outputs
- v. Determination of the users of outputs
- vi. Determination of feedback process

Inputs are the major and minor resources coming into the system. They are what the system must have to operate. Library inputs consist of essential resources such as: financial resources, library staff, buildings, equipment, library data, ideas etc. As the aim of this study is not simply to describe but also to explain the operation of Greek university libraries, a functionalist approach is followed; that is, libraries are looked at in terms of structures, processes and functions in order to understand the relationships between these components and to have a better representation of the real situation.

The transformation process is the process that works on the inputs. It changes the inputs, hopefully, by adding value to them. It does this to produce outputs or the end results of the system. These outputs are then used by the environment or by other systems or sub-systems. In university libraries outputs are services provided to library users while outcomes are the impact of the outputs on the library's environment.

#### 5.1.3 Feedback

Feedback can be generated from the users of the outputs and from other external sources, or it can be generated by an internal source within the system. Feedback is provided to the system that may change the inputs and/or transformation process of the system. In university libraries feedback is generated by opinions of users, for changing or providing specific services. Libraries inform their users about their functions and then ask for user feedback.

#### 5.2 Performance evaluation

The analysis of system behaviour is aimed at predicting the output which occurs as the result of given inputs. The input-output relations for a component or system may be thought of as a cause effect relation, with input regarded as cause and output as effect. Output can thus be treated as one or more dependent variables, with inputs as one or more independent variables. The analysis to determine the input-output relations proceeds typically by progressively breaking the system into simple components and sub components. The performance of each component and in particular the way it transforms its own input into output, can then be studied separately. If the behaviour of a component is too complex for direct analysis, it is broken into sub components. From a systems perspective, evaluation of libraries may examine inputs, processes, outputs, or outcomes. Evaluation of outcomes is

the most difficult part of any evaluation exercise and for this reason, as Hernon and McClure express it:

"Typically, the library as an organisation fails to consider the outcomes or impacts of its programs on the environment"<sup>5</sup>.

Performance measures are used mainly to assess the extent, effectiveness, and efficiency of library operations and services. They can assist in determining the degree to which the library accomplishes its goals and objectives, and in demonstrating library effectiveness to funding and decision making bodies<sup>6</sup>.

Library effectiveness is defined as the achievement of library goals. The fact that university libraries have many constituencies, with different needs and demands, makes the development of a unified set of goals difficult. For this reason we measure effectiveness by measuring the quantity and quality of services provided to the library's main user groups. Evaluation is based also on inputs and processes (technical and reader services). Evaluation of inputs is done in relation to the purposes they are intended to serve and the needs of the academic community. For this study we assume these measures will place upper limits on the outputs<sup>7</sup>.

Evaluation can take place at the level of the library sub-unit, the library, or a library system. The measures used in this study assess the performance at the level of library system. The following quantitative and qualitative measures and techniques have been used:

- a. For evaluation of inputs and outputs
  - i. Library funding/ Library user (FTE student and teaching staff)
  - ii. Volumes / Library user (FTE student and teaching staff)
  - iii. Total additions to the library
  - iv. Total additions / Library user (FTE student and teaching staff)
  - v. Acquisitions expenditure / Total library budget X 100
  - vi. Acquisitions expenditure / Total university budget X 100
  - vii. Total library expenditure / Total university budget X 100
  - viii. Staffing Expenditure / Total library expenditure X 100
  - ix. Staff / Library users
  - x. Staff / Total book stock

- xi. The fill rate.
- b. For the evaluation of processes

i. % of users in individual libraries and all university libraries for which a particular library service is available.

- c. For the evaluation of availability and services
  - i. Separate studies in individual libraries
  - ii. Services provided
- d. Library accommodation
  - i. Seats/ Users
  - ii. Area/ Users

In order to estimate the future trends we investigate the trends of a number of performance indicators over a number of years.

In evaluating the adequacy of an individual library or a group of libraries one obvious criterion is the size of the collection. One reason for this is the importance of the collection to all library activities and the fact that the collection is something measurable and so may easily be used for purposes of evaluation and comparison. In inter-library comparisons, even if all other factors which affect library provision are equal, we expect that the greater the collection the larger the likelihood that it will contain a particular item sought by a user. There is evidence that there exists a positive correlation between the size of the collection and a number of library objectives: collection completeness, document availability, browsability, circulation as a measure of utilisation, reading and awareness<sup>8</sup>. Those objectives depend also on the current acquisitions and on appropriate acquisitions. This is especially true in academic libraries<sup>9</sup>.

However in any attempt to estimate the minimum size of the collection needed we must take into account a number of factors. The most important of these are:

- i. Student population, its composition (undergraduates and postgraduates) and their socio-economic and intellectual background.
- ii. The general intellectual climate.

- iii. Size of the Faculty. Their specialisation, involvement in research and their attitudes toward library use.
- iv. Number of departments.
- v. Number of courses.
- vi. Proportion of practical (laboratory) work to theoretical courses.
- vii. Methods of teaching. Extent and use of textbooks. Reading assigned. Independent study.
- viii. Geography of the Campus. Single or multi-campus universities.
- ix. Proximity to metropolitan areas or to other large libraries.

The adequacy of a library's collection is related to and also affected by the characteristics of scientific subjects covered, existing and annual book production nationally and internationally, the needs of the curriculum, and educational practices. Only a few of these factors can be easily and meaningfully measured. The result is that quantitative evaluation of collections is based on a limited number only of factors affecting the required size of collection.

A number of studies have proposed quantitative formulae for estimating the adequacy of academic libraries<sup>10</sup>. Efforts to reach an agreement on standards based on the size of the collection in any meaningful way, or on quantitative criteria for determining the sufficiency of any library collection<sup>11</sup> have not found many advocates. By examining the existing literature on this subject we reached the conclusion that the opinion expressed by the British Association of University Teachers that:

"To estimate the size and nature of the collections which would make a library adequate is extremely difficult, although the experience of established libraries provides guidance"<sup>12</sup>,

gives a final answer.

Proposed formulae are based on a context very different from Greek universities. Any attempt to estimate the adequacy of a Greek university library by using those formulae will give misleading results as they will not take local conditions into account. For all these reasons the importance of the overall size of a university library's collection as a measure of adequacy is indicative only and must be used very carefully. For people working in university libraries it is not the size only which influences the quality and importance of a collection. However, for many university administrators, faculty members and funding bodies the size of a library's collection in absolute number of volumes or booktitles is a symbol of strength and sufficiency. Statistical agencies in Greece and abroad use absolute numbers as measures of library adequacy<sup>13</sup>. Another method of estimating the adequacy of a collection for comparison purposes is to count books per capita. However for an individual library the book per capita index may be a meaningless and very simplistic formula to use in calculating the minimum or optimal size of the collection as it does not take into account the quality of the material and differences in bibliographic support needed by different categories of users<sup>14</sup>. Despite such problems in comparing of university libraries we may suppose that the distribution of material and its quality is similar and that "mean" library users have the same needs for bibliographic support.

For the assessment of the efficiency and effectiveness of library processes such as cataloguing, collection access and library services, quantitative measures could have been applied only by conducting a number of different user studies in each individual library. As this was impossible a number of individual libraries were used as models for estimating the performance of the library system of Greek university libraries. For the assessment of performance, library staff in all libraries were asked by means of a questionnaire to evaluate the quality of these services and to give reasons for their performance. Similar information was collected from library directors through personal interviews.

The comparison of Greek university libraries with those in other European countries was selected as another way of measuring the performance of Greek university libraries.

#### 5.3 Collection and analysis of data

For the purposes of this study library statistics are very important as they are the main source for developing quantitative library performance indicators. Data on library collections, library expenditures and library use, together with management information are very important for the purposes of this study. Library data are also a vital part of administrative activity in individual libraries, library planning and library studies. In individual libraries library managers may use available data to make timely decisions about budgeting, staffing, hours of opening and a variety of internal library activities<sup>15</sup>, while in a national context: "Valid, reliable, and timely statistics about libraries...are essential if our nation is to plan effectively for the utilisation and development of that vast learning resource"<sup>16</sup>.

In order to be useful and to represent the quantities which they measure, data and information collected must comply with two basic requirements: they must be both reliable and valid<sup>17</sup>. Every effort has been made to collect as much and as accurate library data as possible. In any attempt to collect library data on libraries in universities the treatment of small collections is important. For this reason two basic questions have first to be answered. The first is the nature of a collected for central and small libraries. The unit of measurement of collections - whether it would be volume or title or metre of shelves- is also important as it influences the indicators developed<sup>18</sup>. For the purposes of this study collections which complied with the UNESCO definition of libraries were counted as libraries :

"Irrespective of its title, any organised collection of printed books and periodicals or of any other graphic or audio-visual materials, and the services of the staff to provide and facilitate the use of such materials as are required to meet the informational, research, educational or recreational needs of its users"<sup>19</sup>.

By using this definition and the definition for library collections housed outside the main library of the American National Standard for library statistics:

"An auxiliary library service outlet with quarters separate from the central library of a system which has a basic book collection of books and other materials, a regular staffing level, and an established schedule"<sup>20</sup>,

we found and collected data needed for the study.

Most Greek universities have many library collections with an autonomous operation. This fact made the task of data collection more difficult. The only printed source for finding information about libraries in Greek universities is the universities' annual publication called "Enernpic (Epetiris)". As most of these publications have no special chapter on libraries any bit of information related directly or indirectly to libraries and library activities was collected using these sources. Using those printed sources and oral information from library staff and members of the teaching staff 226 units which complied with the above definitions in all 17 Universities in Greece were discovered<sup>21</sup>. Of these libraries 81(35%) are housed in laboratories, 36(16%) in sectors, 9(4%) in Faculties, 38 (17%) in Departments, 51(23%) are seminar libraries (Spoudastiria) and

11(5%) are "central libraries" and 2 (1%) Undergraduate libraries. An estimated number of 132 small collections in different educational units are also in operation. Data on library types are given Appendix II. Libraries in each university are given in Table 3.

## Table 3: Libraries from which data collected

University	Libraries
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	117
ATHENS AGRICULTURAL UNIVERSITY	1
HIGHER SCHOOL OF FINE ARTS	1
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	53
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	8
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1
TECHNICAL UNIVERSITY OF CRETE	1
UNIVERSITY OF CRETE	3
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1
UNIVERSITY OF IOANNINA	19
UNIVERSITY OF PATRAS	5
UNIVERSITY OF PIRAEUS	1
UNIVERSITY OF THE AEGEAN	4
UNIVERSITY OF THE IONION	2
	2
UNIVERSITY OF THRACE	6
Total	226

For assembling data on collections the basic unit used was the volume. Whenever possible a direct count of collections were done, but in cases where this was impossible an estimation based on measurement of shelves was calculated using a mean number of books per metre for this. For the collection of data a structured questionnaire was constructed<sup>22</sup>. Closed questions were used for collecting information from concrete questions for which a choice of possible answers was possible and to make the filling of the questionnaire as easy as possible. All libraries were asked to complete all the questionnaire. During the analysis of collected data we realised that this practice created some problems in the accuracy of data as some central libraries provided data for collections of small libraries which are under their control. This resulted in a careful measurement of data and especially those for collections and acquisitions.

Completion of the questionnaire for the universities of Athens, Thessaloniki and loannina was done by personal visits. Those visits took place in 1991. Collection of questionnaires from the universities of Crete, Patras, Thessali, Thrace and Ionion was done by mail. Questionnaires were despatched in February 1991. All universities replied but some libraries - especially those in which questionnaires were sent by mail- did not answer all the questions. An explanation given for this, was that not all receivers were familiar with library terms and did not know how to reply and that answering of specific questions need the existence or collection of statistical data which were not available in the library. The number of libraries which answer any particular question is given in the analysis of the data. Every attempt was made to collect the most up to date information. For this reason any information about new developments such as automation, buildings, new legislation etc., which took place after the collection of the data were interpolated into the collected data. An English translation of the questionnaire is given in Appendix I.

The fact that most libraries were unable to provide financial data for the whole university resulted in sending a new questionnaire to the Rectors of all universities asking them to provide data for the whole university budget on acquisitions of books and periodicals, binding and operational costs. 13 out of 17 universities replied. Data for the rest of the universities (University of Patras, Ionion, Crete and Thessali) were collected by telephone. Financial data on the operational costs of all universities, and data on numbers of students and teaching staff were collected with personal visits from the statistical unit in the Greek Ministry of Education and Religious Affairs. During the analysis of data collected with the first questionnaire we realised the need for data on library buildings which were not collected from the first questionnaire. For this reason a new questionnaire was sent to 80 libraries in 1991. 73 (91%) of them replied. With interviews with the directors of the University Libraries of 13 universities we clarified answers received with the use of the questionnaires. The interviews took place in 1992. The overall response rate is fully adequate to explore trends and features of the situation.

The software used for analysis of data is Microsoft Works for Apple Macintosh DBMS. Using this a data base with all collected data was created. As this software was suitable for limited statistical analysis only, data from this was grouped and analysed using the MYSTAT statistical software for Macintosh and CA-Cricket Graph for the creation of graphs.

For comparison of Greek university libraries with other European Union university libraries a large amount of data from university libraries in all members of the European Union was needed. Collection of all these data would need the realisation of large separate studies for each individual country. At the same time the differences in economic development, educational practices and library tradition among all these countries could lead to misleading comparisons. For this reason a different approach was followed. By using a number of different sources: national and international statistical services, and mainly bibliographic sources, we collected library data and information which would give as far as possible an accurate and valid picture of the development of university libraries in each particular country. In cases where available data could be used for the creation of performance indicators which would be comparable to similar indicators developed for Greek university libraries, such performance indicators were constructed. In order to estimate whether Greek university libraries are moving closer to or further from other European Union countries a trend analysis was made and comparisons of such trends were done.

In comparisons of library performance the mission, goals and objectives of each library must be taken into account. During the collection and use of the data we were aware that local conditions and decisions about measurement methods may make data non comparative between libraries<sup>23</sup>.

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# **CHAPTER 6**

## **Results of the study**

Inputs

## 6.1 Staff

As a service institution the university library needs sufficient staff, in number and in quality, to provide effective library services. Inadequate staffing affects services offered and it is logical to expect that below a certain point the fewer the staff the less they can meet demand and perform library procedures in a proper way. Data on staff size in Greek university libraries are presented in figure 9.

Fig. 9: Number of library staff



Analysis of data shows that 69 (32%) libraries do not employ library staff, but only a *"responsible person"* who is a member of the faculty upon whom falls the added responsibility of taking care for the library, 49% employ one person only, 10% two persons, 4% three persons, 2% four persons and 3% more than five persons. In many one-person libraries this person carries the key to the room where books are kept and students or other interested persons must use library material within the library only.

Every university library is not the same, and there is no general rule to be applied to every university library. The size of the library, its organisational structure and the services it provides determine the minimum number of staff needed. As a result absolute numbers of staff are not accurate indices of adequacy in staff. Staff per users is a better indicator as it gives a quality indication in the quantity it counts. Data on this indicator are given in figure 10.

Fig. 10: Library users/ staff



The mean value of users/ library staff in all Greek universities is 792 with Standard Deviation 1023 and Range 75- 4365. The large standard deviation and range shows that there exist large differences in staffing level in Greek University libraries. From figure 10 we see that libraries with decentralised structure such as those in the universities of Thessaloniki (4365 users / staff) and Patras (1570 users / staff) have less staff compared both to one-subject

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universities and to new universities. Analysis of data shows that this is not because they applied a better staffing policy but because the number of their users is small.

Analysis of selected data shows that more than 95% of senior library staff hold degrees in Social Sciences or Humanities, and only 5% in Science. Lack of library staff with a technical background affects the ability of libraries to introduce new information technologies. More than 95% of library staff are females giving Greek university libraries one of the highest percentages in Europe<sup>1</sup>. There are currently (1993) only 8 (3.4%) librarians with an MA or M.Sc. degree in library or information studies employed in university libraries. Analysis of available data shows that only 24% of library staff have received formal library education of any form<sup>2</sup>. There are differences among Greek universities on the percentage of their staff who hold library qualifications. The general picture is that new universities employ more educated staff compared to old universities. Data are given in figure 11.





At a time when European universities have understood the need for granting privileges in order to attract the best qualified university graduates for their libraries, Greek universities have made no efforts to follow the same direction. There have been no attempts at giving academic status or faculty ranks to library staff in Greek universities, whereas there are many such cases in other European Union university libraries. Contrary to practices in other European university libraries, the main criterion for promotion in Greek university libraries is years in service. The result is that senior positions are occupied by untrained librarians and most of them are employed in positions insufficient for their responsibilities. Contrary to practices in other European Union university libraries<sup>3</sup>, in Greek university libraries there are no actual posts of reference librarians, information officers or system librarians. The only tasks which members of most libraries would be able to carry out are to assist library clientele on how to use the library's catalogue, where to find bibliographies and indexes - if any - and to answer simple questions. The challenging tasks of giving assistance to students during the preparation of their term papers are unknown in most libraries.

Library administrators and funding bodies in other Western European countries understand the fundamental importance of library staff and develop management techniques and practices to develop their staff. Staff development moves far from conventional training in order to give staff the opportunity to diagnose and solve problems faced in practice<sup>4</sup>. Staff development in Greek university libraries on the contrary is on a very primitive scale.

#### 6.2 Library funds and expenditures

Analysis of financial data shows that library expenditure represents a high percentage of universities' operational expenditures<sup>5</sup>. During the period 1986-1991 Greek universities spent about 17% of their operational budget on libraries. This figure gives libraries a high position among expenditure sectors in universities. In figure 12 a trend analysis of library expenditure as percentage of universities' operational budget is presented.

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Fig. 12: Trend-analysis of library expenditure as percentage of universities operational budget (excluding staff).



Source: Statistical Service of the Greek Ministry of Education

From figure 12 we see that the trend is that increase in library expenditure in one year is followed by a decrease in the following year. In 1987 library expenditure counted for 21 % of university expenditure and in 1988 for 13.6%. An explanation of this tendency is that every year almost all Greek university libraries have a debt. As a result universities are increasing their allocation to libraries to cover previous year debts.

In all universities the cost of purchasing new books and paying periodical subscriptions represent the largest percentage of library expenditure. Data on costs of acquisitions of books and subscriptions to periodicals for the period 1986 -1990 are given in the Appendix II.

In order to estimate the financial capabilities in Greek university libraries and for comparison purposes we must take into account the inflation in Greece during the period of the study, the devaluation of drachma compared to foreign currencies and the mean price of Greek and foreign books. In table 4 the Book Price Index in Greece derived after an analysis of University of Ioannina acquisitions is given.

index		Year									
	1985	1986	1987	1988	1989	1990	1991	Mean			
Greek Books	2156	2459	3113	3816	2940	2081	3037	3086			
Foreign Books (Estimated Data)	3500	4500	6000	8000	9000	12000	15000	8286			
Mean	2828	3480	4556	5908	5970	7040	9018	5542			

Table 4 : Book Price Index	(Based on Universit	y of loannina acq	uisitions)
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During 1985 to 1992 inflation in Greece was + 142 %. At the same period Greek drachma was devaluated compared to ECU by 242 %. Data on inflation, dra / ECU relationship and changes in consumer prices is given in tables 5 and 6 and figure 13 bellow. Those data show that if we take into account the inflation and the devaluation of the drachma., the purchasing power of Greek university libraries is decreasing in real terms.

 Table 5 : Inflation in Greece

1984	1985	1986	1987	1988	1989	1990	1991	1992
	19.2	23.1	16.4	13.5	13.7	20.4	19.5	16.2
100	119.2	142.3	158.7	172.2	185.9	206.3	225.8	242

Source: Bank of Greece

Table 6 : ECU/ drachma

1985	1986	1987	1988	1989	1990	1991	1992
105	137	156	167	179	202	225	254

Source: Bank of Greece

Fig. 13: Increase in consumer prices.



YEAR

Figure 14 presents the total cost of acquisitions for a number of universities which presented accurate data.



Fig. 14: Total cost of acquisitions.

Total cost of aquisitions in the libraries of AUT, AAU, HSFA, MUES, NCUA, NTUA, PUPSS, TUC, UESA, UI, UPES, UTHR (In 3 libraries)

(The mean value of drachma compared to  $\pounds$  during this period was 300 dra=  $\pounds$  1. )

From figure 14 we see that total cost of acquisitions was increasing steadily during 1987-1989. The tendency was changing in 1989.

The trend of acquisitions for each university library is given in figure 15. From figure 15 we see that the trend analysis in each university is different from others. There are universities such as those of NTUA and UI which have a increasing trend but in most others increases were followed by decreases.



Fig. 15: Trends of acquisitions during the period 1986- 1993.

Another area of library expenditure is the cost of binding. Expenditures on binding for the period 1986-1990 are given in the Appendix II. Cost of binding represent a percentage of 3 to 8% of periodical acquisitions. However there is not a general pattern of binding expenditure. There are large differences between universities. From figure 16 we see that each year Greek Universities spend less funds for binding.



Fig. 16: Trend- analysis of cost of binding as % of periodical acquisitions. (Graph is given in log-scale for readability)

Analysis of data and personal communication with library staff in different universities show that the estimation of funds needed for binding is based on periodical volumes completed during a year or according to previous year's expenditure. As a result of inadequate planning and lack of funds binding finance is not enough for binding of all completed periodical volumes. In universities with co-ordinated structure or one central library only, binding funds are administered centrally or allocated to departmental and sector libraries.

During the period 1986-1991 eleven Greek University libraries spent 1493.4 million dra for acquisition of books and 3088 million drachmas for periodical subscriptions (figure 17). Those figures show that subscriptions to periodicals cost more than two times the acquisition of books. Greek university libraries spend almost 67 % of their acquisition budget for periodical subscriptions and 33 % for books. On the contrary in the UK and in old university libraries those figures were in 1987, 60% for periodicals and 40% for books<sup>6</sup>. This is also an indication of under financing as Greek university libraries have to spend every year less money for acquisition of books in order to keep their periodical collection alive.

Fig. 17: Allocation of library funds between books and periodicals during 1986-1991



( Data for the universities : AAU, AUT (excluded from 1986), HFSA, MUES, NCUA, NTUA, PUPSS, TUC, UESA, UI, UPES. )

In figure 18 the trend analysis of acquisitions of books and periodicals for the University of Ioannina Library is given. From this figure we see that the cost of periodical subscriptions is increasing while the cost of book acquisitions is decreasing. It is of interest that in 1990 the library made only a few acquisitions of books and did not pay its suppliers. The same pattern exists in all university libraries in Greece.

Greek university libraries spend very little on undergraduate collections. In figure 19 expenditures on undergraduate collections for the university of loannina are given. Analysis of data for this university show that expenditure per student does not follow a specific pattern. In some years the increase was more than the inflation. However the devaluation of drachma shows that the money spent for such collections is decreasing.



Fig. 18: University of Ioannina acquisition of books and periodicals.





Greek university libraries spent very little money on reference material. In figure 20 data for the University of Ioannina are given. Despite increases in some years the money is very little.





In table 7 below library expenditure at the University of Ioannina is compared with total University expenditure. Those figures show that almost all library expenditure is given for acquisitions. This mean that there are no funds available for introduction of new services.

**Table 7:** University of Ioannina Library Expenditure compared with total

 University Expenditure.

index	1985	1986	1987	1988	1989	1990	1991	Mean
Library Exp./ Univ. Exp. * 100	18	15.8	14.8	14.2	13.8	11.8	14.8	14.74
Acquisitions / Univ. Exp. *100	17.24	15.13	14.31	13.9	12.77	11.2	14	14

Mean cost of acquisitions per user is presented in figure 21 below. Data for each university are given in Appendix II. From figure 21 we see that if we take into account both the inflation and devaluation of drachma and the establishment of new departments during the period 1986-1990 the spending on acquisitions in Greek university libraries worsened during this period. Available information on cancellations of periodical subscriptions shows that the situation is getting worse each year. In figure 22 and 23 trends of acquisition expenditure for the University of loannina library are given.





Fig. 22: Trends of acquisition expenditure at the University of Ioannina library. (percentages)



Fig. 23: Trend-analysis of expenditures and inflation during 1985- 1991.\* (Percentages)



\* (Data for the University of Ioannina Library)

From the above figures it is evident that the expenditure on both book and periodicals acquisitions is decreasing in real terms. This means that the acquisition ability of Greek university libraries is deteriorating year after year. In the UK the mean increase in budget was in 1991/92 : 25.7% for books, 14.4.% for periodicals, 16% for other and 10.5% for staff<sup>7</sup>. If we take into account that inflation in the UK was much lower compared to inflation in Greece we reach the conclusion that the acquisition ability in Greek University is worsening compared to UK university libraries.

In table 8 and figure 24 data on expenditures in Greek and UK university libraries in 1990 are presented. From these figures we may see that Greek university libraries spend three times less money compared to English equivalents. This is an indication that Greek university libraries are seriously under financed. If we take into account that in the UK, libraries receive about 4% of universities' expenditure<sup>8</sup> we have also an indication that not only libraries but also the universities are under financed.

Cost of Books/ All users	Cost of Per./All users	Cost of Binding/ All users	Other Cost/All users	Total Acquis./ All users	Total non pay. Exp/usər	Cost.of Book/ Stud.	Cost of Period./ Stud.	Cost of Books/ Acad. Staff	Cost of Per./ Acad. staff
£ 47	£65.5	£8	£24	£112.5	£134	£51.25	£73.4	£576.7	£826.2
12690	17685	2160	6480	30375	36180	18962	19818	155709	223074

Table 8: UK university library expenditures

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In 1989 French university libraries received according to criteria 37.5 Fr/registered user plus 60,000 Fr/ working unit in letters and Law, 180,000 Fr/working unit in medicine, 240,000 Fr/working unit in Pharmacy, 300,000 Fr/Working unit in Sciences. With these criteria the universite de Technologie de Campiegne with 1965 registered users received 943,688 Fr with a mean 556 Fr/user<sup>9</sup>. Comparison with Greek university libraries show that French University libraries receive two times more funds per user than Greek university libraries.



Fig. 24: Expenditures in Greek and UK Universities.

#### 6.3 Collections

The university library is the main university agency for collecting and organising knowledge for effective use by the faculty and students. As such it must attempt: a) to collect and present to its users, as much information material as possible in order to fulfil their needs, b) to offer sophisticated information services, and c) to assist students and academic staff in the use of the library and in the use of bibliographic resources. Working in this direction the university library provides services for all members of the academic community, giving them direct access to the recorded knowledge which has been accumulated through human history. The form of library material needed by the faculty is affected by the nature of scientific fields. As a rule science departments need more periodicals than books, while humanities departments need more books. However, the character of a university library does not imply the absence of books and periodicals of a general nature for the fulfilment of both the educational and the recreational needs of its users.

An important step in maintaining a library's collection efficiency is the library's inventory. A thoroughly organised inventory is the only way to achieve a clear picture of a library's collection. It will show the number of volumes actually held in the library and other information such as missing volumes, misplaced library material, etc. The production of an inventory is a rare practice in most university libraries in Greece, and so there are no accurate data on library collections in Greek university libraries. The relevant question was answered by 189 libraries; Among these, only 23 (12%) have made an inventory of their collection during the last 5 years. This means that most of the statistical data collected for this study are approximations of the actual collections. The impression we gained is that in most cases the actual size of collection is larger than the one given by the libraries themselves.

In order to estimate the adequacy of library collections in Greek universities we used an indirect method. We compared the total number of collections in Greek universities with those of Denmark. The student populations in these two countries are almost equal while we may suppose that much the same topics are covered by their various universities. We assume that the differences in national languages do not affect library collections to any large extent because the bibliography of most subjects taught in universities today is international. Total book collections in Greek and Danish universities are given in table 9. From this table we see that collections in Danish University libraries are both larger than those in Greece and cover all forms of library material.

 Table 9: Collections in Danish(\*) and Greek university libraries.

Country		Books & Ser.	Mss.	Printed music	Microto- rms	AV Doc.	Graphic Doc.	Cartogr	Electr Media	Other media	Total units
DK	Stock	4903361	19461	95155	373924	541004	276875	45214	81	4974	6261053
DK	Adds	124199	16402	1856	31022	459468	8110	672	14	179	641222
GR(**)	Stock	1994024			20000						2014024
GR(**)	Adds	56000					•••				56000

(\*) Figures would be much higher if we included data for other Higher Education Institutions **Source:** Forskningsbiblioteker (Danish Research Library Statistics), 1989. Copenhagen: National Library Authority, 1990.

(\*\*) Estimated figures

Collections in some other European countries are given in table 10. From tables 9 and 10 we see that contrary to practices in university libraries in other European Union countries, Greek university libraries are very weak in collecting material other than books and periodicals. For most Greek university libraries collection of theses, standards, patents and audio-visual material is unknown.

Country Year	Books (000)	Microforms	AV material	Other Library material
DK 1987	7801	1317700	51091	646130
FL 1986	10108	1097900		
IR 1984	3955	131957	132743	10
NL 1987	22177	1266000		
NR 1987	8375	475744	376122	3501173
PRL 1987	3784	33138	15173	106039
SW 1984	15364	218246	•••	
GR1991	1994	20000		

Table 10: University Library collections in some European Countries

Source: Unesco. Educational Statistics, 1993.

# 6.3.1 <u>Text-book (Student) collections</u>

Among the collections of a university library there are books such as text-books and other library material assigned by the teaching staff in their courses, for which there is a heavier demand. Libraries deal with this material in a number of ways, for example by buying multiple copies, creating special undergraduate libraries, or creating special short-loan collections or reserve book service within the library. In 201 libraries which answered the relevant question, 152 libraries retain material which is relevant to students' needs. Of those 139 (69%) libraries retain a collection of text-books written by members of the educational unit (sector, department, school) in which the library belongs, while 57 (28%) have no such collection. In 68 libraries the student collection has less than 100 volumes and in 84 libraries more than 100. 102 libraries (50%) include in their student collection text-books from other universities. The number of such collections differs. In 89 (44%) libraries the student collection has less than 100 volumes and 13 (6.5%) have a collection of more than 100 volumes.
Among university libraries in Greece there is no common practice on how to provide such collections. The Universities of Ioannina, Thessaloniki and Athens have created separate undergraduate libraries called students' reading-rooms "Phititika Anagnostiria". The collections of these libraries are mainly text-books and material suggested by the teaching staff for use by the students. Their collections also include reference material such as encyclopaedias and dictionaries. These undergraduate libraries amount to 1.35% of total book collections in Greek universities. Data on undergraduate libraries are given in the Appendix II. Analysis of available data shows that the largest such library is in the University of Athens. The "Students' Reading Room of the Students' Club" is located in two separate places in the centre of Athens. It occupies an area of 1200 m<sup>2</sup>. With a budget of 4,000,000 drachmas ( $\pounds$ 15,400) in 1991 the library has a collection of 12,000 books. The mean number of students who visit the reading room every day is about 40 with a maximum of 120 students<sup>10</sup>. The library has a staff of seven and it is open from 8.00 a.m. until 8.00 p.m. The students may borrow material only for use in the library. The physical appearance of the library does not provide a friendly environment for the users. The Central library of the University of Thessaloniki has two separate reading rooms (one for students and one for the faculty). In the University of Ioannina there is a small separate undergraduate library in the administration building. Undergraduate libraries house collections of textbooks, lecture notes and reference material. The inspection of the collections and interviews with library staff revealed that most (more than 70%) of the material in these libraries is old and "useless", covers only part of the curriculum and its location is inappropriate.

Many libraries, especially those devoted to science subjects, divide their collections into two parts. One contains text-books and books written in Greek and the other part foreign language material. Some libraries put on reserve some essential titles from which students may select a few books at a time to study. In most cases these books are text-books similar to those assigned to students by the university.

# 6.3.2 Reference Collections

The reference collection of a university library includes books for consultation and bibliographical instruction such as dictionaries, encyclopaedias, indexes, abstracts, yearbooks, directories, etc. The maintenance of a reference collection in any library is vital to the provision of reference services. The reference collection is intended to meet the needs of the faculty and students. As such it must be developed in accordance with the needs of the library's users. The library must have determined the scope of its reference collection and the process of its development. For this purpose it must make a definite allocation of funds for appropriate acquisition as the development of a reference collection is a continuous process, involving a certain amount of discarding obsolete materials as well as of growth. According to Lyle<sup>11</sup>, there is a relation between the size of the library and that of its reference collection, and a need for the reference collection to cover broader subjects than the specialised ones covered by the rest of the library's collection.

In 203 libraries which answered the relevant question there is neither a clear policy on developing their reference collection nor on what reference sources to collect. Libraries with physical centralisation have a specific location within the library in which to house their reference collection. In universities with many libraries every library is free to purchase reference sources without any consultation with other libraries. In those cases users face many difficulties in locating and using existing reference material in the university. No one library reported the existence of written criteria for weeding out and maintenance of its reference material. The most common unwritten criteria for weeding are related to age and use of materials. Systematic evaluation of reference collection is unknown in Greek university libraries.

The way funds are allocated affects the comprehensiveness of the reference collection in a library. If funds are allocated to every member of the faculty personally there are no funds left for the library to develop its reference collection. If a library wants to develop its reference collection the library staff have to ask for help from a member of the faculty. The decision to buy a particular reference work is taken on financial grounds rather than on the desire to create a comprehensive collection. This inefficiency in the application of procedures for allocating funds to provide the necessary sources of reference has forced libraries to look at alternative methods. Only 5 Greek university libraries have a separate fund for the purchasing of reference sources; for 67 (45%) libraries the only existing reference material they have are encyclopaedias and dictionaries.

#### 6.3.3 Special Collections

The collection of a university library may include rare and irreplaceable books, manuscripts, letters and other sources with archival value or material which requires special treatment<sup>12</sup>. This material comprises the special collection of the library<sup>13</sup>. A special collection may become very important both to the library and to the university. Special collections which cover a particular subject in depth may attract scholars, enrich the university as a centre of learning, stimulate research or even be the reason for setting up a new department<sup>14</sup>.

Old editions of recognised authors, manuscripts, and material of historical interest represent the majority of special collections in Greek university libraries. Special collections originate often as a donation or a bequest. Almost all special collections in Greek libraries are books gifted or bequests to the library. In 210 libraries which answered a relevant collection 12 (5.7%) reported a manuscript collection. Some libraries, like those of the university of Crete in Rethymnon, the central library of the University of Thessaloniki and the "Spoudastirio of Modern Greek History" at the University of Ioannina have a policy of enriching their special collections by purchasing rare books or private collections which cover specific subjects. Because of financial constraints, no library can ever aspire to a comprehensive collection of all the available material on a particular subject. Only a small number of libraries have realised the importance of such collections. For most libraries the development of special collections is not an appropriate function for a university library. Moreover, in Greece the repository function of university libraries, and their duties to share in the preservation of important printed material, are almost unknown. The Universities of Thessaloniki, Crete, Athens, Ioannina and Patras hold the most important special collections in terms of number of volumes, and homogeneity of subject that they cover. Those collections are housed in 12 libraries (4 in the University of Thessaloniki, 4 in the University of Athens, two in the University of Ioannina, one in the University of Crete and one in the University of Patras). In the University of Thessaloniki library collection of manuscripts started with the establishment of the university. In 1939 it included 40 codex and 60 documents of the 18th and 19th centuries<sup>15</sup>. Since 1945 the collection has been enriched by gifts, purchases, and the seizing in 1960 of codex, manuscripts and hand-written gospels stolen by criminal dealers in antiquities from Mount Athos. The main collection of manuscripts is housed in the central library. A small number of manuscripts are held in the Spoudastiria of the School of Theology, Philology and Roman Justice. The most important special

collections in the University of Thessaloniki are: The Forest collection of Samios, the Economics and Law collection of Deligiorgis, the collections of A. Svolos, A. Papanastasiou, K. Konstantinidou, A. Christomanou, M. Triantafillidi (9,000 volumes), the German Government collection, the University of Oxford collection and the collections of I. Tricoclou, G. Streit. A. Delmouzos, A. Siskos and USA Library of Congress. The University of Crete has 16 special collections. The most important of them are: Conis collection with 2,000 volumes on Classical Archaeology and Ancient Greek Art, Moatsos collection with 2,000 volumes on History, Architecture, Literature and Folklore in Crete, Spyridakis collection with 2,000 volumes on Folklore, Orlandos Collection with 7,000 volumes and 4,000 reprints on Classical and Byzantine Archaeology, Prevelakis collection with 6,000 volumes on Art History and literature, Melrier collection with 1,400 volumes on Modern Greek Philology, Arvanitidis collection on Byzantine and Othoman history, de Simony collection with 2,000 volumes with many travellers' texts of 17th, 18th and 19th centuries and Diktaios collection of 5,500 volumes on Modern Greek Literature. The University of Ioannina has 4 special collections.

Special collections require security and protection from theft and fire, as well as proper climatic conditions such as controlled temperature and humidity<sup>16</sup>. Library staff must inspect the material regularly to prevent damage from insects or mildew. Special collections in Greek university libraries have never been afforded the treatment they deserve as part of the national heritage<sup>17</sup>. Greek universities pay little attention to handling their special collections in a proper way. Demands of collection maintenance are neglected or ignored. The only preservation techniques applied are binding, and housing such collections in locked cabinets. Lack of properly trained staff, financial difficulties and lack of policies on how to preserve old and fragile material are the main reasons for the existing situation.

In universities with decentralised structures proper conservation is adversely affected by the library's fragmentation. In most libraries collections of rare and old books are shelved with the library's general collection. Where there are a large number of rare and old books libraries separate and shelve them in locked cabinets. Should old books have their covers destroyed libraries will send them for binding together with periodical volumes without taking or demanding any special precautions. Some libraries catalogue and treat their special collections in a way similar to any other collection while others have not even catalogued these collections. If the special collection is a gift libraries produce special seals in which they include the name of the donor.

### 6.4 Categories of Material

A number of ways for analysing the stock of a university library have been proposed. In general the division of stock in a university library may be based on: a) the dual role of the university: teaching and research<sup>18</sup>; b) the function: Reference, Curricula, General and Research<sup>19</sup>, and c) the physical form (type) of the material<sup>20</sup>. For the purposes of this study we analyse the stock of Greek university libraries using elements of all of the proposed ways. First we examine those parts of a library's collection which have specific common characteristics such as collections devoted to students' use, reference and special collections. The rest of the stock, which comprises the main core of any university collection used for fulfilling teaching and research needs of the university, is divided according to the types of the material, into books, periodicals, newspapers, theses, pre-prints, reports, microforms and audio-visual material, maps and atlases, pamphlets, clippings, and government publications.

### 6.4.1 <u>Books</u>

Up until now no studies have been made to estimate the importance of the overall library collection in measuring the adequacy of Greek university libraries. The Greek library community seems to share the view that the absolute number of volumes determines the adequacy of the library. In answer to a question put to 40 senior library staff members on this matter, only 5 expressed doubts on this.

Data on size of collections of books in Greek university libraries are given in Appendix II. The operation of many small libraries is evident when we analyse the collections to existing departmental libraries. Data on this are presented in figure 25.



Fig. 25: Size of collections in Greek universities.

Fig. 26: Books/ User



Greek university libraries provide few books to their users. Among Greek universities there are also differences in the number of books provided per regular library user. Figure 26 presents the situation in all universities. Those figures show that small and single subject universities are in a better position compared to old and large universities. Analysis of this shows that this is due to the fact that new universities have small faculty and student population rather than large book collections.

A factor which affects the use of collections is the language of the collection. Analysis of data show that in 171 libraries: 18 have most of their material written in Greek, 140 in English, 5 in French, 7 in German, 1 in Italian. Analysis of size of collections shows that 45% of material in Greek university libraries is in Greek, 35% in English, 10% in French, 5% in German, 3 % in Italian and 2% other language.







# Fig. 28 : % of collection in different languages

## 6.4.2 Periodicals

Periodicals are the main means for the rapid communication of research findings and for keeping the faculty, researchers and postgraduate students informed on research which is taking place. Their position in libraries is therefore very important. An adequate periodical collection is an indispensable tool for the research role of the university. Maintenance of an adequate periodical collection is a primary task of any university library. Periodical collections are given in figure 29. From this figure we see that there exists a positive correlation between the size of periodical collection and size of the university.

Fig. 29: Periodical collections



The number of periodicals available for subscription is related to the particular characteristics of research topics. Topics with a national audience such as the history of Greek folklore are covered by a smaller number of periodicals compared with internationally oriented subjects such as mathematics and medicine. The available financial resources also play an important role in building comprehensive periodical collections. In order to be meaningful any interlibrary comparison of periodical subscriptions must take into account at least these factors.

A close examination of data reveals that in most scientific subjects Greek university libraries cover a large percentage of available periodicals. However, the fact that there is neither a national policy nor co-operative collection development leaves the Greek research community with a clear lack of many other periodicals they need.

For many subjects the importance of a periodicals collection is related not only to the number of subscriptions but also to available back issues and their continuity. It has been almost impossible to analyse the starting dates of all periodical subscriptions in Greek universities. However an examination of the periodical collections of the Universities of Thessaloniki, Ioannina and Patras produced evidence that the older the university the older its periodical collection. To estimate the mean value age of back files of periodicals we propose the formula

$$BF = \frac{\sum_{i=1}^{N} vi}{N}$$

N = Number of subscriptions

vi = Volumes of the periodical i

Where we do not know the total number of available volumes but only of bound volumes, instead of N we put cN where c is a constant of the collection equal to the mean number of bound volumes produced by every periodical of the collection. By applying this formula to the periodical collection of the University of loannina we found that the mean age of its periodical collection is 22.5 years (c = 2). Available data did not permit us to apply this formula to the periodical collections of other universities. For this reason we applied the subscriptionstarting technique, in which we divided the time into three : a) prior to 1971, b)1971-1980 and c) 1981-, and counted the number of subscriptions started during each interval. In a random sample of 25% of periodical collections we found that in the University of Ioannina 33% belonged to the first interval, 50% in the second and 17% in the third. By using the same technique in the University of Patras collection we found 31%, 42% and 27% respectively. If we accept this as a sample of the periodical collections of all universities in Greece we must conclude that almost 70% of back issues of periodicals have a life of less than 20 years.

Lack of back issues of periodicals is thought to be a serious problem for libraries. In 134 libraries which provided data on reasons for unsatisfied demand for material, 50 libraries (37.3%) rate the lack of back volumes of periodicals as a serious problem for their services; 16 of them rate this as the first reason for dissatisfaction among users, 14 as second, 13 third, 3 fourth, 3 fifth and 1 sixth. Closer examination of available data shows that new libraries face serious problems in providing bibliographic support because their periodical collections are so new. Analysis of collected data shown that:

a) Central libraries subscribe to 3179 periodicals with a mean value of 289 periodicals and standard deviation=196.5. Of 11 libraries which provided data, 7 subscribe to more than the mean value and 4 to less. In 8 libraries which provided data on bound volumes there are 69,500 volumes with a mean value 8,687.5 and 36 volumes per subscription.

b) The 43 Seminar libraries (Spoudastiria) which provided data subscribe to 3,487 periodicals with 81 subscriptions per library and standard deviation=95. 14 libraries subscribe to more than the mean value of subscriptions and 29 to less. This figure shows that Seminar libraries subscribe to the largest number of periodicals and that they also hold the largest collection of bound volumes of periodicals. In 35 such libraries which provided data there are 105,895 volumes with 3,035 volumes per library (standard deviation=3,673), and 34 volumes per subscription. The large deviation shows that there is a large dispersion of data and many differences between libraries.

c) The 7 School libraries which provided data subscribe to 3,023 periodicals with a mean value of 432 subscriptions per library and standard deviation=274. Four libraries subscribe to more than the mean value and 5 to less. 6 libraries hold a total collection of 90,600 bound volumes with a mean value of 15,100 volumes per library and standard deviation=13,827 and 36 volumes per periodical. The large value of the deviation means that there are large differences between libraries.

d) In 23 Departmental libraries which provided data on periodical subscriptions there are altogether 1874 subscriptions with 81.5 subscriptions per library, standard deviation=78. 10 libraries subscribe to more than the mean value of periodicals and 13 to less. In 12 Departmental libraries there are 38,283 bound volumes giving a mean value of 3,190 volumes per library, standard deviation=4407 and 38.5 volumes per periodical.

e) 36 Sectorial libraries together hold a collection of 1,422 periodicals with 41.8 subscriptions per library (standard deviation=73.6). Seven libraries subscribe to more periodicals, and 29 less than the mean value. For assessing the collection of periodicals we counted the volumes in 30 libraries. These libraries retain a collection of 26,852 volumes with a mean value 895 volumes per library (standard deviation=874.3) and 19.4 volumes per periodical.

f) 73 laboratory libraries together hold a total of 1,096 periodical subscriptions with a mean value 15 subscriptions per library and standard deviation=15 (22 libraries have a collection larger than the mean value and 51 less than the mean value). Despite the small number of collections laboratory libraries retain large collections of bound volumes. In 61 libraries which provided data there are 63,232 volumes with 1,037 volumes per library and standard deviation=1136. 22 libraries have more than the mean value in bound volumes and 33 less, while the number of volumes per periodical is 67.8.

periodicals included in Ulrich's Directory. This gives a high satisfaction rate for the users of this library. It is, however very risky to extrapolate this data to all university libraries in Greece. Collected data reveal that for many libraries the small size of their periodical collections is a serious problem. Of 134 libraries which answered the relevant question 32 rate the small size of their periodical collection as the first reason for dissatisfaction among users.

Today an increasing number of abstracts and indexes are available in electronic format - either on-line or on CD-ROMs (Compact-Disks Read-Only Memory). Only a very small number of libraries (4 %) include CD-ROMs in their collection. A closer analysis of existing CD-ROMs revealed that very few titles (mainly the MEDLINE, 25%) are held in Greek university libraries.

Pamphlets dealing with current affairs and other ephemeral material may be an important source material for historical and sociological research. Only 16 libraries in Greek universities are collecting pamphlets. Usually this material is stored in filing cabinets, arranged in folders alphabetically by subject. There are no indexes of current or old Greek pamphlets.

# 6.4.3 Theses

As a prerequisite for the award of higher degrees, theses are to prove that a candidate is capable of doing and writing original research. In many cases theses are an important source of information as they often contain investigations of an advanced level and reflect the writer's attempts to extend the limits of knowledge in a particular subject area. A number of theses appear in the published literature as journal articles or monographs particularly in the field of social studies. However most theses remain unpublished and are treated as a special form of literature subject to certain restrictions on availability and use. Therefore theses are important resources for a library.

From collected data we see that in 210 libraries which answered a relevant question 143 (68%) include a collection of theses. In most cases these are theses given by the educational unit in which the library belongs. With the exception of the central libraries in small universities no library is attempting to create a comprehensive collection of all theses submitted in the entire university.

The bibliographic control of Greek theses is almost non-existent as there are no printed indexes of theses. Only recently has the National Documentation Centre of Greece started to create in its computer a database of theses. Directories of theses from other countries are held only in a very small number of libraries. From available data is appears that only one library subscribes to "Index of Theses" and three libraries to "Dissertation Abstracts".

## 6.4.4 <u>Newspapers</u>

Newspapers have a long tradition in modern Greece. Even before the start of the War for Independence in 1821 a number of Greek newspapers were published in other European countries<sup>24</sup>. Bibliographic access to Greek newspapers is not an easy task as their bibliographic control needs the use of a number of publications. Information concerning currently published newspapers may be found in the "Annual of Greek Press"<sup>25</sup>. This publication includes information related to identification, description and location of most daily and non-daily Greek newspapers and serials. However, a number of local and professional newspapers and journals are not included. There is also an absence of the various publications of the Greeks who live abroad<sup>26</sup>. The most comprehensive bibliographies of newspapers are "Contribution a l'etude de la presse Helenique by Constantine Zilemenos (Paris, 1967) and G. Koukas, "Bibliographia tou Ellinikou Tipou 1465- 1982" (Athens, 1982). An important source for identification and location of newspaper titles is catalogues of deposit libraries. The only such catalogue for a major national newspaper collection is "Katalogos tis Bibliothikis tis Voulis" V. A' Efimerides Ellinike and V. B' "Periodika Ellinika" (Athens 1900). This work has been superseded by the work of P. Christopoulos "Efimerides tis Periodou 1790-1970 sti Bibliothiki tis Boulis ton Ellinon" which includes more than 5000 titles.

Despite the fact that back files of newspapers represent an important primary source, mainly for historians and political scientists, libraries in Greek universities pay little attention to the collection and preservation of newspapers. The only deposit libraries for newspapers in Greece are the National Library and the Library of Parliament. Of 212 libraries only 24 subscribe to a national or foreign newspaper. The total number of subscriptions is 109. Data on newspaper subcriptions are given in Appendix II.

Newspapers are shelved with current periodicals on flat horizontal shelving. For many librarians the maintenance of newspaper files seems to be a major headache. Consequently they do not show any enthusiasm for building newspaper collections. As in the case of periodicals, microfilming of back issues of newspapers is almost unknown. No library reported use of newspapers in CD-ROMs. There is no co-operative programme in Greece for newspaper collections at all. Clippings from newspapers or periodicals dealing with current affairs may be an important source material for historical and sociological research, yet no library reported any involvement in such activity. There is no Greek newspaper with monthly or annually cumulated indexes.

#### 6.4.5 Pre-prints and R&D Reports

Distribution of research findings before their publication in formal media of scientific dissemination such as periodicals or books is becoming common in many scientific fields. For some scientific subjects pre-prints are already a form of the literature (if not the formal literature). According to the American Physical Society Task Force on Electronic Information Systems, "In some fields like high-energy Physics and High-Temperature Superconductivity, they are perhaps the dominant form for dissemination."<sup>27</sup>

Libraries in universities and research centres attempt to bring order to the haphazard accessibility of pre-prints. For this reason they have created special pre-print collections, pre-print catalogues and pre-print connections with other libraries throughout the world. R&D Reports characterise the special libraries since these libraries collect reports from around the world that are relevant to their interests, but they are also responsible for storing and disseminating the reports issued by the organisations in which they belong. In order to put the world of reports in to some sort of order, libraries need uniformity in report numbering and consistency to help the librarian and the reader<sup>28</sup>. A few libraries in Greece are involved in pre-print activities. Of 218 libraries which answered the relevant question 28 (12.8%) include in their collections pre-prints and technical reports received from other universities. In 18 (8.2%) libraries dissemination of pre-prints and technical reports is included in the libraries reports is included in the library's functions. Of these libraries report numbers are allocated in an

arbitrary fashion without reference to existing series or to any standard format. There is no bibliographic control of Greek R&D reports in any form.

In many cases scientists want to know what conferences, meetings and symposia are going to take place internationally. There are a number of sources which provide such information. Greek university libraries pay little attention to providing such information for their users. Very few libraries subscribe to announcement publications. The university of Economic Studies in Athens subscribes to "Forthcoming International Scientific Conferences", the University of Thrace to "World Meetings" and the Technical University of Athens to "Scientific and Technical Proceedings".

### 6.4.6 Patents & Standards

A patent is a certificate given by a government to the owner of an invention granting him the exclusive rights with respect to his invention for a limited period of time. In many cases patents are an important source of information, consequently libraries are involved in accessing patent documents and making this information available<sup>29</sup>.

Patents and patent-related information services are unknown in Greek university libraries. An examination of the union catalogue of special libraries in Greece revealed that there is no library in Greece with a subscription to any patent related-journal such as the "Official Journal of the European Patent Office" and the "Abstracts of the European Patent Specifications".

Standards are formal rules designed to cover such topics as testing, terminology, definitions and symbols, performance, construction, and codes of practice. The purposes of standard specifications are to simplify the production and distribution of products, to ensure uniformity and reliability, and to specify degrees of quality and levels of safety. According to C. P. Auger "Standards, like patents, are an important feature of any advanced industrial society, and the various collections available, at national and international levels, are clear evidence of the role they play in the manufacturing and commercial world"<sup>30</sup>. As in the case of patents, collections of standards produced by major standard producers such as the British Standards Institution, the Deutsches Institut für

Normung (DIN), the Association Francaise de Normalisation (AFNOR) and the International Organization for Standardization (ISO) are almost unknown. The only catalogue of standards found in a university library is the "DIN-Mitteilungen" at the Technical University of Athens.

### 6.4.7 Maps and Atlases

Maps are an extremely important source of information for geologists, geographers, astronomers, social scientists and historians. They may be supplemented by books presenting graphically certain physical and statistical data which are difficult to present verbally, or they may be an important source of information in themselves.

The Hellenic Military Geographical Service, established in 1889, is responsible for the topographic mapping of Greece and has published complete map series in different scales. Geological mapping of Greece is carried out by the Institute of Geology and Mineral Exploration (IGME), while the Forest Research Institute is producing maps for the evaluation of land capability of the more hilly areas of the country. There is no bibliographic control of such maps published in Greece. The only source of information about existing maps is publishers' catalogues. There are difficulties in acquiring maps directly from state agencies as these agencies have not developed commercial activities<sup>31</sup>. Most of these libraries hold a collection of 5 to 100 maps and the majority fail to catalogue them. They simply arrange maps as part of their reference collection in counter-height cases or in rolls. In most libraries atlases are part of the reference collection. In most cases atlases in Greek are translations of foreign publications.

#### 6.4.8 Government Publications

Government publications such as census reports and other statistical handbooks, proceedings of parliamentary sessions, reports of investigative committees, legislation, regulations etc. are a valuable source of information for political scientists, historians, sociologists, business and economic researchers and even for laymen.

Government publications are very rarely found in Greek university libraries. Most libraries give low or no priority at all to these publications. Lack of specialists on the various kinds of government publications and lack of bibliographic control make any effort at comprehensive collection of such publications very difficult. The most common source for new acts of parliament and presidential decrees is the Continuous Codes of legislation "Diarkis Kodikas Nomothesias". This source is held in 36 libraries. However even in these libraries there is no comprehensive file of this publication.

## 6.4.9 Non-print material

Among the media of storing information microforms (microfilms and microfiches) play an important role. Microfilms in rolls of 35 mm are used mainly for preserving files of periodicals and newspapers, for the reproduction of rare books and manuscripts, and for the economical acquisition of rare material. An important use of microforms is in the publication of lengthy works, newspapers, or of highly specialised material such as theses and reports. Despite problems related to their use microfilms still play an important role as a storing medium<sup>32</sup>. By producing microfilms of their periodicals back files libraries may save an enormous amount of space and spend less in binding.

The practice of microfilming library material for preservation is unknown in Greek university libraries. No university library has the necessary equipment or staff to create its own microfilms<sup>33</sup>. There are no indexes to existing microfilms of Greek material. Selection of foreign microfilms is done by means of publishers' catalogues. Libraries buy microfilms of Greek material from abroad or from Research Institutions such the Institute for Byzantine Studies and the Library of Parliament.



### Fig. 30: Non-print forms of library material

Analysis of collected data show that libraries in Greek universities pay little attention to microfilms. This is due to the fact that their collection of periodical back files is small; there is no policy for developing comprehensive periodical collections by replacing bound volumes with their microfilm equivalent, nor have the staff any experience in the acquisition and use of such material. Only 5 (2.5%) libraries have noteworthy collections of microfilms. Most microfilms in these libraries are of rare material such as old manuscripts. Microfilming of periodical collections is almost unknown in Greek university libraries. As existing collections of microfilms are very small, libraries pay little attention to their proper cataloguing and physical organization.

Microfiches have more advantages than microfilms. Their use is easier as they are readily available for direct reference. Production of microfiches is unknown in Greek university libraries. Of 198 libraries which answered the relevant question only 4 (2%) reported the existence of a considerable microfiche collection. Microfiches in these collections are mainly foreign book-catalogues and periodicals.

Colour or black and white slides are used in a variety of teaching activities. In medicine, astronomy, arts and social studies slides are important educational means. There is a tendency for a wider use of slides in Greek universities.

However the role of libraries as a depository for slides is limited. Faculty members produce or buy slides for their own use and keep them in their offices or in a common room of their educational unit (Sector, Clinic, Laboratory) instead of in their library. On the arts side slides are produced in many cases by photographing book pages or art objects, while in medical studies, slides are either bought or are produced by direct photography. Of 198 libraries 24 (12%) reported holdings of slides in their collections but there are no available data on the numbers of slides in these collections. No libraries reported the possession of prepared programmes of slides linked with sound tracks or tape cassettes.

Films used in education are mostly 16 mm or 8mm wide. In the educational process of some courses motion-pictures or video tapes may play an important role. Films, video tapes and slides are valuable media for showing cultural events, historical events or lectures. Of 198 libraries 8 (4%) maintain a film collection. Organising a film collection needs proper equipment such as special shelving for vertical storage of the reels of film, special climatic conditions etc.

Music librarianship is very rare in Greek university libraries<sup>34</sup>. There are no catalogues of Greek audio-visual material for collection building. As a rule acquisitions are based on firms' catalogues only. Of 198 libraries 29 (14.6%) include a music material (cassettes, video tapes etc.) collection. Music rooms within libraries are unknown in Greek university libraries.

There are a number of teaching devices which may be used for educational and research purposes such as motion pictures, slides and overhead projectors, video-recorders and television. A modern university library may have some responsibility for storage and circulation of such instructional media. The library may also be responsible for production of slides and transparancies for overhead projectors needed for education purposes. A university library may also be in a position to supply audio-visual material for curriculum and recreational purposes. A library may have a special room to house musical and visual material such as records, cassettes, compact disks, video tapes and listening equipment such as TV's, video players, and cassette players. Nowadays the importance of motion films as teaching devices is reduced. Video-tapes tend to be the only audio-visual material used for educational Only 9 libraries reported possessing their own video-tape purposes. collections. Twenty nine libraries reported computer software in their collection. Available data do not permit evaluating the role of libraries in these types of activities. However, from contacts we have had with libraries we conclude that libraries in Greek universities play but a slight role in these kinds of activities. For many libraries such activities have nothing to do with libraries but are the responsibility of the educational units only<sup>35</sup>.

## 6.5 Library Buildings

The importance of library buildings is obvious, regardless of whether one is thinking of teaching and research needs of the university or in terms of library expenditure. According to Metcalf:

"A poor building can seriously handicap students and professors; a good one can contribute to the intellectual health of the whole institution....a poorly planned and constructed building may force a library, year after year to spend much more on operation and maintenance than would be required by a better one."<sup>36</sup>

At present only the Central Library of the University of Thessaloniki is housed in a building designed specially as a library. In this university after a series of meetings of a professorial committee construction started in 1964 but ten years had to elapse before the library could begin to function as intended. This library has four floors, two of them underground. It is 14.4 m high, covers a surface of 2,910 m<sup>2</sup> and has a volume of 54,000 m<sup>3</sup>. The library has a number of reading rooms and 18 carrels. Library catalogues are on the ground floor. On this floor there is also a lecture room. There is a room for the display of new books, five reading rooms, a room for reading of microfilms, and a room where photocopies can be made. The University of Crete is also in the process of constructing a separate library building in Rethymnon. Plans for the construction of library buildings exist at the Technical University of Athens, the University of Patras and the University of Thessaly. All other university libraries are housed in adapted buildings.

In comparison to other European universities space per library and library user is much lower in Greek University libraries. Space per library is two times less compared to UK universities and three times less compared to Danish universities. Space per library user in also lower. Greek university libraries provide 0.3 M<sup>2</sup> per user while in UK university libraries it is 3.5 times more<sup>37</sup>.



From figure 32 we see that small and new universities are in a better position compared with old and large universities.

Fig. 32: Area / User



Fig. 31 : Library space per university

Greek university libraries provide a very small number of reading places for their users and especially for students. In a Greek university one library seat is provided for 32 library users. The comparable figure for UK university libraries was in 1991/1992 one seat for 8 users<sup>38</sup>. Data on users per seat are given in figure 33. From this we see that new and small universities are in a better position compared to old and large universities.

Fig. 33: Library users/ seat.



131 ( 58%) libraries have reading facilities close to their collection. Separate reading rooms for use by students exist in the universities of Thessaloniki, Athens, Ioannina and Panteion. In the university of Thessaloniki there are two reading rooms, one for students and one for scientists. The students' reading room holds a collection of textbooks and other material related to their studies. The scientific reading room is for use by members of the teaching staff and other scientists of the University of Thessaloniki. Students and other scientists have to have special permission from the director of the library in order to use the scientific reading room. The main reading room of the University of Athens (Student' s Club) has seats for 1,100 in a total student population of 62,854 and 35,884 active students. The Spoudastiria in the School of law have a total surface of 792m<sup>2</sup> and seats for 198 students in a student population of 13,167 students or 4,027 active students<sup>39</sup>.

The furniture industry in Greece does not find the library market large enough to invest in the production of furniture designed for libraries or in the development of modern shelving systems. As a result of this the interior of most libraries is very poor in terms of specialised furniture, quality and aesthetic<sup>40</sup>. Planning of library buildings as part of the whole campus development and fitting them in with the surrounding buildings and environment is something so far unknown to Greek universities<sup>41</sup>. Other members of the European Union on the other hand are developing new university library buildings using modern techniques of design and planing<sup>42</sup>.

## 6.6 Library Management

By contrast with practices in most other European Union university libraries, management practices in Greek university libraries are out of date, and this, combined with very low efficiency, makes the development of university libraries difficult. Unlike in other European Union universities directors of libraries in Greek universities have very little power in the everyday running of existing departmental libraries.

Of the 150 libraries that responded to our questionnaire, 107 (71.3%) have library committees. For 87 (81%) of these libraries the term library committee means one or two members of the teaching staff who have been given the responsibility by the educational unit in which a library belongs to take all needful actions in order to solve the problems of the library. The analysis of data shows that most seminar, sector and laboratory libraries belong in this category. In most departmental libraries the department creates a library committee with three to five members. The role of library committees is not clear in all libraries. The general feeling is that these committees play a role of liaison between the library and the department. However, many library committees do not forbear to interfere in the everyday affairs of the library and in such cases the library committee acts as an administrative rather than advisory body. In many cases this interference creates hostility from the library personnel. In most libraries the librarian's role is to present the topics for discussion only and not to participate as a full member of the committee.

By contrast with the situation in Greek universities, university and library administrators in universities of other members of the European Union have put

the improvement of communication and co-ordination of existing library collections as one of their first priorities<sup>43</sup>. Most European Union universities with decentralised library structures are moving towards a unified library management through one chief librarian rather than collegial directorship. A central library committee is responsible for policy determination, literature provision, co-ordination between central and departmental libraries and implementation of projects which affect the operation of all existing libraries such as library automation, new library buildings, etc<sup>44</sup>. By contrast with practices in university libraries in other European Union countries no university library in Greece has prepared even a mission statement of its purpose, aims and objectives. The Universities of loannina, Patras, Thessaloniki, Athens and Technical university of Athens have, however, not even a central library committee.

## 6.7 Organisational Structures

Existing organisational practices of libraries in Greek universities make their division into categories difficult. We may distinguish four patterns of organisational structures<sup>45</sup>: a) Physically and operationally centralise; b)Operationally Centralised; c) Decentralised, but still co-ordinated and d)Uncoordinated, decentralised. In table 11 the universities and their organisational patterns are given.

From table 11 we see that only the single-subject universities have a physically and operationally centralised structure. It is noticeable however that due to historical and educational reasons even in those universities there still exist many small collections outside it. Limitations on space and on personal decisions have played an important role in this. In some universities there has been provision for a centralised library structure since the early years of their establishment. The University of Economic Studies of Athens is typical among universities with only one library. According to its organisational chart the university has only one library

"... with its own budget for acquisitions, binding of periodicals and purchase of library furniture and has its own reading-room"<sup>46</sup>.

Table 11:	Patterns	of Organ	isational	Structures.
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University	Organisational Pattern	
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	1.Operationally Centralised (Acquisitions, Union catalogue)	
ATHENS AGRICULTURAL UNIVERSITY	Physically and operationally centralised	
HIGHER SCHOOL OF FINE ARTS	Physically and operationally centralised	
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	Physically and operationally centralised	
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	Uncoordinated, decentralised.	
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	1.Operationally Centralised for a number of libraries.	
	2.Uncoordinated, decentralised for a number of libraries.	
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	Physically and operationally centralised	
TECHNICAL UNIVERSITY OF CRETE	Physically and operationally centralised	
UNIVERSITY OF CRETE	1.Operationally Centralised in each campus.	
	2. Uncoordinated, decentralised.	
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	Physically and operationally centralised	
UNIVERSITY OF IOANNINA	1.Operationally Centralised for a number of libraries (Acquisitions).	
	2.Uncoordinated, decentralised for a number of libraries	
UNIVERSITY OF PATRAS	1.Operationally and physically Centralised (Central library)	
	2. Uncoordinated, decentralised (Departmental libraries)	
UNIVERSITY OF PIRAEUS	Physically and operationally centralised	
UNIVERSITY OF THE AEGEAN	<ol> <li>Operationally Centralised (Acquisitions)</li> </ol>	
	2.Uncoordinated, decentralised.	
UNIVERSITY OF THE IONION	1. Operationally Centralised (Acquisitions).	
	2.Uncoordinated, decentralised.	
UNIVERSITY OF THESSALI	Uncoordinated, decentralised.	
UNIVERSITY OF THRACE	1.Operationally Centralised in each campus.	
	2. Uncoordinated, decentralised.	

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Operational centralisation of some activities - mainly acquisitions - exists in seven universities. In this form of organisation the university has a number of departmental libraries scattered around the university campus or campuses but certain operations are performed centrally in a single place by library personnel responsible for the various units of the system. Local conditions and historical reasons have created various types of such centralisation. In seven universities there is only one acquisition department responsible for the acquisitions of most library material. In the universities of loannina, Patras and Thessaloniki this service is housed in the "central library". In the universities of loannina, Patras, Crete, Ionion and Aegean the acquisitions department is responsible for the financial administration of the acquisitions of some departmental libraries only. In these universities departmental libraries are also ordering their acquisitions by themselves. In the University of Thessaloniki centralised operations include also the development of a union catalogue. In the Universities of Thessaloniki and Ioannina the Central library is also responsible for the operation of the undergraduate library (students' reading room) of the university. In the Universities of Patras and the National Technical University of Athens there are main university libraries which retain the general objects of teaching and research needs of a large part of the university, and departmental libraries in other different buildings. In the University of Thessaloniki the material is bought and processed by the main university library in conformity with the library's system and their use is supervised by a member of the university library staff seconded to the departmental library, or the departmental libraries are run by a secretary of the department.

Co-ordinated decentralisation is the system that has to be followed by all Greek universities<sup>47</sup>. However existing legislation does not determine the exact role of the central university library and its connection with departmental libraries. In practice every university has been left free to apply its own co-ordination in its libraries. The degree of co-ordination differs among universities. For instance in the University of Ioannina the "Central Library" has power over only some departmental libraries. The universities of Crete, Ioannina, Patras, Aegean, Ionion, Thessali and Thrace have a partly co-ordinated structure while the University of Athens have made very little effort to co-ordinate the operation of their libraries. In universities with co-ordinated decentralisation, library services are provided by both the main and departmental, sectional or laboratory libraries which may or may not be treated as branches of the central library. In the University of Thessaloniki 3 out of 17 libraries are under the control of the university librarian. In the University of Patras the university librarian has authority over only two libraries. In the University of Crete, Aegean, lonion, and Thessali existing libraries have loose dependencies upon each other. All these libraries are under the supervision of the central university library and the university librarian. Their budget is administered centrally. Departmental libraries communicate with library suppliers and publishers through the acquisition department of the central library. If there is a union catalogue for all university library material these libraries must justify any order for material which is already held in another library of the university.

The authority of the main university library and the university librarian over library staff in departmental libraries differs. In the Universities of Ioannina and Thessaloniki only some of the departmental libraries are under the supervision of the university librarian. In Athens Agricultural University, Higher School of Fine Arts, Macedonian University, Panteion University, Technical University of Crete, University of Economic Studies of Athens and University of Piraeus the university librarian has an overall control over existing library collections and the library staff.

Uncoordinated decentralisation prevails in the university of Athens and partly in the Universities of Ioannina, Thessaloniki, Patras, Technical University of Athens, and Thrace. In this system the university has a number of libraries attached to sectors, clinics, labs, university departments and professors' offices. Each library has its own acquisition policy, organises its material in its own way and applies its own regulations and library practices. The material of individual libraries is organised according to different systems and is underrepresented in any union catalogue. In the University of Athens there is no central service at all but only a number of independent libraries. The University of Athens is the most characteristic member of this organisational structure. In this university there is a lack of any form of co-ordination between libraries, not even a knowledge of what libraries exist in the university. In answer to a question the Director of Studies replied that "He does not know where the libraries are in the university"<sup>48</sup>. Each of those libraries is running independently of the others.

In almost all Greek universities existing libraries and library collections do not form an integrated library service. For library provision the main role is given to departmental libraries with a central library - if there is one - in a secondary role. Contrary to the Greek situation, universities in other European Union countries created central libraries which became large storehouses of knowledge satisfying thousands of requests in their reading rooms, and in local and interlibrary loans. Departmental libraries - if any - are supplementary to the central library.

# 6.8 Physical Organisation

The absence of barriers between readers and library material is today a common practice in modern university libraries. By giving open access to their stacks libraries give readers the opportunity to go directly to the shelves, to compare books dealing with the same topic, and to select from them according to their needs and interests. Free access is the opposite of the closed stacks in which users select books from library's catalogue and apply for them at the circulation desk. Data on access to library stacks is shown in table A19 in Appendix II.

The analysis of collected data shows that of 208 libraries 138 (66%) keep their stacks open to their readers and 34% closed. Libraries with closed stacks are mainly in sectors (35%) and in laboratories (57%). Most of them are small collections of less than 1,000 volumes (81%); (12%) have a collection of between 1,000 and 5,000 volumes; and 5(7%) libraries have a collection of more than 5,000 volumes. Only one library (Central library of the University of Thessaloniki) has a collection of 300,000 volumes. The main reason given for having their stack closed is the lack of library staff to supervise the library. Almost all of these libraries are operated by a secretary or member of the teaching staff who keeps the keys of the library room. Larger libraries keep their stack closed in order to maintain great security of the material and because the classification system they use does not provide any help in open stacks.

# 6.9 Centralisation vs. decentralisation

There are two underlying theories in the organisation of libraries in universities: a) bringing the library users to books in large central libraries and b) bringing the books to the users. The first applies in large central university libraries and the second in decentralised library structures.

In Greek universities, there are no large central libraries. In 11 universities there are libraries named Central. Of those, 7 are the libraries of single-subject universities and 4 are in multi-subject universities (universities of Thessaloniki, Patras, Ioannina and National Technical of Athens). In universities with decentralised structures it is the housing of technical services and co-ordination functions - if any - rather than the importance of these libraries which gives these libraries the term central. The central library of the University of Thessaloniki houses the collection of old and obsolescent material, students' reading rooms, and the technical services (acquisitions, cataloguing and information services). The central library of the University of Ioannina houses a small reference collection only, and is responsible for acquisitions and for the University of Patras is housed the collection of some subjects only, and it is responsible for only part of the university's acquisitions. The same situation obtains in the central library of the Technical University of Athens.

The Encyclopaedia of Library and Information Science defines the Departmental library as:

"A subject collection in an academic institution, housed either in a separate room of the main library or in some building outside the main library and administered either as a part of a centralised library system or as a part of the academic department it serves" <sup>49</sup>.

Speaking on the purposes of small collections in universities Carl White expressed the view that:

"The seminar library is designed best to serve the private interests of a small group, whereas we now live in a day when library service must, in fairness to all scholars and all taxpayers, be planned to serve the greatest good of the greatest number at minimum cost"<sup>50</sup>.

Libraries in Departments, Faculties, Sectors or even "professor's offices" are common in most universities in Greece<sup>51</sup>. In most cases these libraries are specialised subject collections housed in different buildings within the university campus. Contacts with many such libraries revealed that their main purpose is to fulfil the library and information needs of members of a department, sector or laboratory. In most cases these libraries are almost autonomous units operated by the educational units independently from the rest of the libraries of the the books to the users. The first applies in large central university libraries and the second in decentralised library structures.

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In order to be operational, every small collection, regardless of its size, needs staff, equipment, material and organisation of its services. As a result duplication of staff, material and processes are unavoidable. Where there are shortages of library staff - as is the case in most universities in Greece - this insufficient staff is allocated to many small libraries. The dispersal of staff creates problems of morale, supervision, and communication. Staff shortages and a lack of properly educated library staff mean that the guality of technical services and organisation of material in those libraries is low. Paucity of staff also affects times of opening and services provided. The supervision of many small libraries is deficient and this results in serious losses of material. Together with those practical problems there are also other substantial problems. Modern science is characterised by interdisciplinary scientific subjects and the boundaries between scientific subjects have become unclear. In all universities in Greece researchers have to visit many different libraries in order to gain access to the whole university collection<sup>52</sup>. At the same time many departmental and seminar libraries do not lend library material to members from other educational units of the same university. In such cases users from different departments or educational units face many obstacles in using library material from different libraries. As a result of this they press "their" library to duplicate library material or refrain from using other libraries.

One of the consequences of having many small libraries operating in a university campus is unintentional duplication of materials and efforts. The autonomy of the departmental libraries in book selection results in the acquisition of multiple copies of expensive library material in the same university by several libraries and, similarly, multiple subscriptions to the same periodicals. In decentralised library structures, the provision of students' material is more difficult because of the waste of money due to duplication of acquisitions and the operation of many small libraries. In order to have an indication of duplication of material in Greek university libraries we organised a separate study at the libraries of the Department of History and Archaeology in the University of Ioannina. In this department there are in operation 3 libraries (Spoudastiria). Those libraries are located on the same floor in the same building. In a random sample of 500 books from the "Spoudastirion of Modern Greek History" we found that almost 20% of the sample was also in the collection of the "Spoudastirion of Medieval Studies", and 5% in the "Spoudastirio of Folklore Studies". In a similar study for the reference collection in the same departmental libraries we found that there is also a serious duplication of reference material.

So far there have been no specific policies established on the role of the Central Library and Departmental Libraries. The university librarians and the Greek Library Association have expressed the view that the government must produce the necessary legislation which will determine this role and the communication channels between the central and departmental libraries. In cases where a university library has to live with libraries which are not under its control it must try to create ways of improving the relationships and obtaining some form of co-operation<sup>53</sup>. In most Greek universities the communication between library units within the same university is poor. Contacts with library staff in libraries of different universities have shown that in universities with decentralised organisation of their libraries there is a need for regulations and procedures for the improvement of the communication and co-operation of the libraries in each university. The annexation of collections by specific educational units creates many problems for the university librarian and the Almost every important decision relating to university administration. departmental libraries must be approved by the teaching staff who supervise those libraries. As there is no clear allocation of responsibilities and authority between the university librarian and the teaching staff, there are in many cases conflicts of view between the university librarian and members of the teaching staff54.

In co-ordinated library structures there are considerable delays after the arrival of new material in the university in forwarding it to the departmental libraries. This is due to inefficient internal procedures in the acquisition departments, to paucity of staff, or even to the staff's low productivity. Analysis of such delays at the University of Ioannina shows than the mean time for the transfer of library material from the central to departmental libraries is more than a month. Where there is centralised cataloguing of all university acquisitions delays may become very serious. For instance the central library of the University of Thessaloniki is under continuous pressure to stop creating its union catalogue because of serious delays in forwarding books from the central library to departmental and sectorial libraries. These delays affect the development of union catalogues. A similar service at the University of Ioannina stopped trying to create a union catalogue in 1983 for the same reason.

The foregoing paragraphs on departmental libraries reveal that the departmental organisation of libraries in a university has a number of serious and undeniable drawbacks in library and information provision. Those drawbacks resulted in the belief that central libraries are a better way of organising libraries in Greek universities<sup>55</sup>. This view has also been expressed by university librarians in other European countries<sup>56</sup>.

However, the creation of larger libraries is not without problems. Members of the teaching staff are very reluctant to approve any move from small collections to larger ones. The main argument for the existence of small collections attached to sectors, laboratories or clinics is the convenience they offer to their users. For teaching staff sectorial or seminar libraries are treated as personal libraries and many of them remain strongly attached to the system for this reason. There are cases which justify the resistance of the teaching staff to any attempt to create larger collections. In large campuses or universities dispersed in buildings located in different parts of a city it is evident that it is more convenient for the Faculty to have the material they need near their office rather than in buildings far away. In fact such a situation exists in the universities of Athens and Ioannina. In departmental libraries we have better communication between users and the library, a personal service for the user. a convenient use of the library and a more self-assured and confident staff. The nature of these collections also affects the possibilities of their embodiment into larger collections. If the material is of a very special subject there are justified reasons for its remaining near the users.

This organisation creates serious problems to researchers. Speaking of the problems facing a researcher in a multi-library structure, Prof. Beis expressed the view that:

<sup>&</sup>quot;The search for bibliography in such a library system is a journey full of surprises and troubles. Magazines are dispersed among a number of 'Libraries'. Universities must move to more centralised systems and must create a national system of university and research libraries"<sup>57</sup>.

The provision of library material for students is an important function of the university library if the library is going to play its educational role within the university. According to Maurice B. Line:

"Undergraduate provision must therefore be rated as the first priority of a university library" 58.

Separately housed undergraduate libraries were conceived primarily to provide services to undergraduates. Such libraries are to provide services and collections to correspond to the academic needs of the undergraduate curriculum. As such they must be relatively small, flexible collections that should reflect the curriculum. The establishment of separate undergraduate libraries devoted to the task of simplifying and centralising services to undergraduates has been a controversial matter in academic librarianship. There are advocates and opponents of this practice<sup>59</sup>. Greek universities have applied different policies on this matter.

#### Library Processes

#### 6.10 Acquisitions

The size alone of the collection gives only an indication of the adequacy of a library to meet user needs. The rate of collection growth is also a very important measure of the adequacy and vigour of the library. The rate of growth may be considered in terms of number of volumes or percentage increase<sup>60</sup>. In order to evaluate library collections using collection growth we used responses supplied by 88 libraries. Between them, they reported a total collection of 1,103,273 volumes (mean value =12,537 and standard deviation=27,867) and 43,013 new acquisitions in 1991 (mean value =534 and standard deviation=1,318). Those figures give an annual increase of 4%. If we exclude libraries which started operation in this year the increase rate became 3%. These figures show that libraries in Greek universities have a very slow increase of their collection. The increase in libraries which cover scientific subjects is even smaller because many libraries had to stop ordering new books in order to save money for subscriptions of periodicals. New acquisitions correlate with available funds and the state of library development. New

universities have a large increase in acquisitions during their first years. In all Greek universities but mainly in old universities the increasing cost of periodicals and the increase of the periodicals/books ratio have serious effects on the renewal of book collections. Student provision is also affected since students rely mostly on books rather than on periodicals. A trend-analysis of acquisitions at University of Ioannina library is given in figure 34.



Fig. 34: Trend-analysis of acquisitions (University of Ioannina Library).

It is of interest to show the acquisitions of specific departmental libraries. Such an analysis shows that in the library of the Physics Department during the period 1973-1991 new acquisitions were about 200 books/year. It is evident that this figure is very small for the subject covered by this library. The same is true for almost all departmental libraries in Greek universities.



Fig. 35: New books/ Student in 1985-1991 (Data for the University of Ioannina)

From Fig. 35 we see that renewal of students' collections is very small and that provision of material to students in Greek libraries is very low.

A number of university libraries may save large amounts of money through formally agreed rationalisation of their acquisition policies. There is no such activity among university libraries in Greece. Occasionally such proposals have been voiced but so far no such scheme has been implemented in Greece.

# 6.11 Access to Collections

The essential functions of any university library are to acquire, organise and assist in the retrieval of bibliographic and other material. Effectiveness in the acquisition and retrieval of materials depends directly on the system of bibliographic control used to organise them. Bibliographic control will be used in this chapter to include descriptive cataloguing, subject cataloguing and classification.
## 6.11.1 Cataloguing

For every library, regardless of its size, the catalogue is the most important aid to its use. The catalogue is the key to a library's stock and a point at which the user starts the systematic exploration of a library's collection. Library catalogues may be found in a number of physical forms such as book, cards, COM (Computer Output Microfiches) and in computer memory. Data on form of library catalogues in Greek University libraries are given in figure 36.





Depending on how cards are arranged the card catalogue may take the form of a dictionary, a divided, and a classified or systematic catalogue. In a dictionary catalogue the arrangement of all main entries such as author, subject, title and forms of literature are combined in a single alphabetical order. Dictionary catalogues are easily maintained and are used in small or medium size libraries. Such catalogues exist in 37 libraries.

As libraries and their catalogues grow the dictionary catalogue becomes difficult and complex to use, so the divided catalogue, which in most cases consists of two files (author-title and subject), has been introduced in order to overcome the difficulties faced by users of large dictionary catalogues. Divided catalogues exist in 34 libraries. The classified or systematic catalogue has similarities with divided catalogues but subject entries are arranged according to the classification system symbols. This catalogue resembles the subject section of the divided catalogue in that it offers several class numbers for a single book provided that more than one subject will lead to that book. To be effective the catalogue must be supplemented by an alphabetical subject guide which leads to specific classification or shelf numbers. Classified catalogues exist in 39 libraries.

COM catalogues may be seen as a variation of the computer printout catalogue. In this case printing is done in a microform instead of on paper. COM catalogues may be reproduced easily but we need to produce a series of COMs each time we want to update the catalogue. COM catalogues are unknown in Greek university libraries. Computer based catalogues exist in 27 libraries.

Of 212 replies 184 (87%) libraries have a catalogue of their periodicals. Almost half (43%) of them maintain this catalogue on cards, 46 (21.6%) in book form, 4 (2%) by cardex, 14 (7%) in computer memory, and 48 (23%) in other forms. However there are 28 libraries (9 in the University of Athens and 19 in the University of Thessaloniki) without a periodical catalogue. Fifty libraries include the lack of library catalogue among the main problems they face. Ranking of their answers in given in figure 37.

Fig. 37: Lack of catalogue as library problem



Cataloguing of library material follows local as well as international rules. Of 184 libraries which answered the relevant question 82(44.5%) do not follow any

cataloguing rules. Cataloguing is based on personal experience and personal decisions. As a result of this practice catalogues in these libraries are not consistent with any determined rules. 57(31%) libraries use the AACR I, 30(16.3%) use their own cataloguing practices but try to follow international standards, and 15(8%) libraries use other standards. In many libraries the quality of their catalogues is low. Data for 40 libraries which include the quality of their cataloguing among the problems they face are given in figure 38.





Cataloguing is affected by the library's structure. In universities with centralised structure the cataloguing department of the central university library prepares and maintains the union catalogue for all library material. Among universities with more than one library only those of Thessaloniki, Crete and Aegean have created such a union catalogue. However, the University of Thessaloniki has reported that, because of the reduction in staff numbers, their library has been experiencing serious backlogs, and all processing is very slow. The University of Ioannina was forced to abandon development of its central catalogue in 1983.

In the universities of Thessaloniki, Ioannina, Patras, Thrace, Thessaly, Ionion and Aegean, departmental and sector libraries catalogue their own material. In these libraries card catalogues are typed, filed and reproduced without any consultation with the central university library. The result is that in the same university the user may find a diversity of catalogues. There are libraries which are very scholarly in their card production, providing on a card as much information as possible, while others follow a simplified practice giving basic bibliographic description only.

Any library needs filing rules to enable users to find their way to entries. For a catalogue to be manageable by the average reader an intelligible order is needed in the physical organisation of main entries. Data on main entries are given in the Appendix II.

Organisational structures affect the relative importance of a library's catalogue. Where the library has a small collection its users - in most cases a handful of scholars - tend to be very familiar with the material already. They go directly to the shelf rather than to the catalogue. In such cases there is little pressure for creating well organised catalogues.

## 6.11.2 Subject Access

From data collected we found that Greek university libraries use a wide variety of classification systems. In universities with more than one library, and especially in universities with an uncoordinated library structure, almost every library has developed its own classification system quite independently without taking into account the need for conformity with the university's other libraries. Almost all libraries make free use of the classification system adopted by amending it to suit the circumstances of the individual library. In 187 libraries with a classified collection 65 (35%) libraries use international systems. Of them 22 (34%) use DDC, 11 (17%) use UDC and 32 (49%) use LC, two libraries use the classification system of the United States National Library of Medicine. 120 libraries are using rare classification systems developed inhouse or imported from other libraries. Of these libraries 42 (35%) arrange their collection in the stacks by establishing their own subject categories. In most of these libraries categories are general without further divisions. 4 (3.3%) use accession numbers as location symbols, 13 (11%) arrange their collection according to the author's surname, 5 (4%) use as location symbol the first letter of author's name followed by a number which shows the number of books in this particular letter, 26 (21.6%) use a letter to indicate a subject area and a number which shows the number of books in this subject, 20 (16.6%) have created their own classification schemes which they think "is suitable for

the characteristics of their collection", 9 (7.5%) libraries use an old German classification scheme called "The jumping numbers scheme".

There is not enough information to explain the origins of all uncommon systems. employed. There is evidence that most of them are imported by faculty members who have spent time abroad, or the schemes have been developed internally. Regardless of what classification system is in use it is important for the library to have a clear policy on library classification and to produce instructional material for the education of its users. With the exception of international classification schemes there is no information material for the diversity of classification systems in use. Only a few libraries have produced brief information leaflets describing the classification system in use or giving a list of subject categories. Where a library uses a home-made classification system there are no updates or even written rules of the system. When new staff come to the library they have no written instructions on how to classify new acquisitions. As the inventors or importers of these systems had no clear appreciation of all matters related to proper classification of library material, they introduced systems which were inappropriate for the library in which they are applied. For instance, systems proper for closed stacks may be in use in open ones and vice versa. A more detailed study of these schemes shows that 43 libraries with open stacks use schemes that are originally intended for libraries with closed stacks. In all those libraries the user needs to have specific bibliographic details to access the collection, while the catalogue must be supported by well organised catalogue entries in order to provide subject access. In most of these libraries however the catalogue is in a primitive form. Moreover subject access in those libraries is at a primitive stage. In most cases the user has to go to the stacks, to find, on his own or with a librarian's help the general subject category in which the book he is looking for probably belongs. and then he must look at all available books in this subject to find one related to the specific topic he was looking for.

From available data we found that in 46 libraries which reported the use of subject headings, 23(50%) use published subject headings (19(83%) the LC Subject Headings and 4(17%) the Sears), 10(22%) libraries produce subject headings using entries from the classification system they use, 6(13%) produce their own subject headings, and 7(15%) use different sources such as the lists of subjects compiled by abstracting services or research institutions.

Any attempt at creating subject headings within an individual library is a difficult task. In the case of Greek libraries this task is even more difficult as it is related to many aspects of library development in Greece. For instance in fields such as mathematics, physics or chemistry, most scientists publish their research findings in foreign languages. In those scientific fields there are not even official translations of scientific terms, and this makes the creation of subject headings in Greek for such subjects very difficult. Another problem is the lack of library staff with expertise in creating thesauri in different scientific fields. As a result of these difficulties most libraries organise their catalogues in a classified form or use subject headings in English. In-house produced subject headings are in most cases simple lists of subjects without any attempt to be comprehensive, and without cross-references or word relationships.

## 6.12 Bibliographic Tools

For a considerable number of libraries in Greek universities perception of the importance of following library standards is very moderate. In most of these libraries there is no a real appreciation that library processes such as cataloguing is an expensive process and that early mistakes may create the need for revisions which may need a disproportionate amount of time and effort.

Realising the importance of having standards in guiding readers in the use of library catalogues, many countries have their own standards on filing library cards and catalogue entries. Despite the fact that in Greek libraries decisions on how to fill library cards are more crucial because of the differences between Greek and Latin alphabets, there is still no generally accepted standard for filing catalogue cards. University libraries follow one or other of two techniques in filing catalogue cards for Greek and foreign language material. Many libraries create two card catalogues, one of foreign and one of Greek material, while others use as a basis the Latin alphabet and insert the cards of the Greek material in it. Most of these latter libraries follow the phonetic equivalents of the Greek letters rather than the national standard of transliteration of Greek letters to Latin.

No matter what form the catalogue takes, there must be a means of using the library's stock through subject access. Published subject lists, or those

produced in-house, are used to assign subject reference on catalogue cards in a standard way. So far there have been no published subject headings in Greek<sup>61</sup>.

In Greece there are no official cataloguing rules or standards for descriptive cataloguing. A translation of the first edition of the Anglo-American Cataloguing Rules does exist<sup>62</sup> but only few libraries use them. The fact that this translation takes no account of the special requirements of the Greek language makes their use difficult.

Centralised cataloguing is an old tradition for many university libraries in Europe. Many European university libraries may use centralised cataloguing services for ordering ready-made catalogue entries on-line or printed. With the use of such services libraries reduce the routine and time-consuming work of cataloguing. This kind of joint effort for providing centralised cataloguing on a national or district scale is unknown in Greek libraries. Centralised cataloguing is unknown in Greek university libraries. The only libraries in Greece able to report the use of international services are the libraries at the University of Crete and the library of the Physics department at the University of Thessaloniki. Those libraries buy catalogue cards and MARC records from the Library of Congress and OCLC.

Tools for bibliographic control of publications are almost non-existent in Greece. It is not far from the truth to say that Greece has no national bibliography as known in other European countries. By contrast, all other European Union countries have well developed national bibliographies. The existing state of its National Bibliography gives Greece the lowest position among European Union countries. The bibliographic control of Greek theses is almost non-existent as there are no printed indexes of theses. Directories of theses from other countries are held in only a very small number of libraries. From available data it is found that only one library subscribes to "Index of Theses" and three libraries to "Dissertation Abstracts". Only recently has the National Documentation Centre of Greece started to create in its computer a database of theses. The legislation determines that every candidate is responsible for sending a copy of his or her thesis to the National Documentation Centre of Greece but only a small number of candidates are doing so. Contrary to other European Countries where there are tools available for the selection and acquisition of audio-visual material<sup>63</sup> there are no such tools available in Greece.

The creation of union lists of the holdings of several libraries, descriptions of the resources of a number of libraries and the maintenance of union catalogues in multi-library systems are important means for supporting library co-operation and networking. We have seen already that of all the universities with decentralised library structure only the University of Thessaloniki has a union catalogue. In all other universities there are no union catalogues of any form. As a result bibliographic access to material, even within an individual university, is very difficult. Recently the universities of Thessaloniki, Patras, Crete, Aegean and single-subject universities have produced union catalogues of their periodical collections. On a national level in 1985 with the help of UNISIST there was started the creation of a union catalogue of periodicals held in Greek research libraries. In its fourth edition in 1992 this catalogue included the holdings of periodical collections of 103 libraries<sup>64</sup>. Among them were the libraries in the universities of Ioannina, Thessaloniki, Thrace (Faculty of Engineering), Technical University of Athens, University of Economic Studies of Athens, Agricultural University of Athens and four departmental libraries of the University of Athens. A computerised version of this catalogue is available online in the Greek National Documentation Centre. Despite raised expectations the creation of a union catalogue has not speeded up library co-operation because it was not followed by formal arrangements for co-operation. As a result the union list has an informational value only as it is not part of a plan for the development of a library network<sup>65</sup>.

There are no comprehensive directories of Greek university libraries to help scientists to identify existing libraries. The only available source is a list of special libraries in the Athens area which includes some academic libraries<sup>66</sup>. A list of university libraries exists also in a published report<sup>67</sup>. Descriptions of library resources may be a valuable source for informing scientists of areas of special strength as well as any special collection held in individual libraries. Greek university libraries, however, have no such descriptions.

6.13 Binding

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The nature of a periodical with its sequence of issues published each year and the need for fast and easy retrieval of information from its back file creates a need for proper binding. A good-quality binding will prevent any loss of separate issues, extends the life of a journal, and speeds up the finding of needed information. Binding must take into account a number of requirements such as the type of the material and its use. It may be permanent - with hard covers for each volume - or less expensive "flush binding" in which the volume is trimmed flush with buckram on the spine but not on the sides, and with a less durable end paper and hinge construction.

In 206 libraries which answered a relevant question 134 (65%) bind their periodical collection. All of them employ permanent binding. 72 libraries - especially those with a small collection of periodicals - do not bind their periodicals. Most of them store periodicals in file-boxes. Lettering of bound volumes follows the same pattern in all libraries. In most cases there is an abbreviated journal title, plus volume and year. Where a volume is bound in more than one cover there has to be an indication of part of volume, or of pages.

Binding is closely related to preservation of other library material such as old books and newspapers. Despite the fact that most libraries are concerned with the binding of periodicals very little attempt is made at repairing old or paperback books.

#### 6.14 Library Automation and Networking

The fact that libraries have to maintain large files of bibliographic records and to follow specific operational procedures makes them an "ideal" place for the introduction of information technology in their processes and services. The use of computers in libraries may contribute positively in solving operational problems and can help to provide more, and more reliable, services to their users. The first attempt at the introduction of computers into a university library in Greece was made at the University of Thrace in 1977. The aim was to produce catalogue cards using MARC records supplied by the Selective Record Service of the British Library<sup>68</sup>. Due to financial difficulties this project stopped some years later.

Analysis of data provided by 220 libraries revealed that 149(67%) have introduced computers in their services. Of these libraries almost all use computers for word processing and the development of small data-bases. Twenty five libraries have automated some of their library functions or are in process of automation. In most libraries the hardware in use is a microcomputer. Only 35 libraries have more than one terminal connected to a large computer. The most serious attempts at the introduction of automation in libraries have taken place in the universities of Crete, the University of Economics and Finance of Athens, the Technical University of Athens, the central library at the University of Patras, the Library at Panteion university, the University of Ioannina, the Macedonian University of Social and Economic Studies, the Ionion University and some departmental libraries at the University of Thessaloniki. Some attempts at the development of library software were originated in university libraries. The Computer Centre of the University of Crete in co-operation with the university library has created a library automation software package produced in Greece. A similar attempt took place at the University of Patras library. The National Documentation Centre developed library automation software which is running on a microcomputer. This software has limited capabilities. As a result it is used by departmental and small collections rather than university libraries. So far 23 libraries in universities have taken a copy of this software. A number of libraries in universities are using also the library automation software provided by UNESCO. The University of Economic Studies at Athens and the University of Ioannina have taken funds from the European Community to install software

and hardware. Both universities are in the process of automation of their libraries.

In contrast to developments in other member states of the European Union Greek university libraries and Greece in general have so far suffered a noticeable delay in the process of automating information services and of implementing library networks<sup>69</sup>. Unlike practices in other European Union countries no university library in Greece has so far automated all its services and operations. Library networks like those in other European Union countries are also unknown. There are not available data on how much Greek university libraries spend on computer system development and information technology. However the state of their automation show that spending on this is very low compared to other European Union countries<sup>70</sup>.

## Outputs

## 6.15 Circulation

Circulation of library material is a basic service provided by every university library. The tasks of the circulation desk are similar in every library regardless of its size and location. A good circulation service needs an efficient charging system. The system must work with a reasonable speed and economy and must be capable of showing easily what books borrowed are due for return, and what an individual borrower has on loan from the library. Of 184 libraries which gave data on the loan system they use, 103 (56%) use the pocket system, and of these 56 (30%) use one bookcard, 30 (29%) two and 17 (16%) three book cards. 15 (8%) libraries use loan slips. 62 (34%) libraries use a book in which they register loans. 3 (2%) libraries use a computer for the support of their loan system. Only one library uses a lightpen and barcode reader to register loans. 11 (6%) libraries which answered a relevant question, 187 (90%) pay little attention to overdue books and 53 (28%) concentrate on the number of books allowed to each user.

Not all users in Greek university libraries enjoy equal borrowing status. Both the number of volumes they may borrow and length of loan time are related to

the user's position. In most libraries members of the teaching staff may borrow library material. However many libraries impose obstacles to the borrowing of books by students<sup>71</sup>. Of 218 libraries which answered the relevant question, 202 (93%) lend material to faculty members, while only 109 (50%) permit borrowing by undergraduates. The circulation of the text-book collections is different. Of 107 libraries 78 (72%) circulate text-book material and 29 (18%) do not circulate them.

Most libraries have no lending policy. Of 218 libraries only 67 (31%) have a lending policy in which they determine categories of users and borrowing rules. In most libraries faculty members may borrow as many books as they want for an unlimited period of time. The examination of library regulations in 67 libraries which lend books to students shows that most of them allow students to borrow up to five volumes for two weeks at a time. Faculty members may borrow up to thirty volumes for six months, or for an unlimited time period. Data on library regulations are given in the Appendix II. Due to the lack of proper library regulations or control on borrowed material, members of the faculty tend to think that books are their own property. In many cases books change hands without notice to the library. This situation makes the recall of borrowed material very difficult. As a result only very few libraries have a reservation service.

Among library users there are some who remove books from the library without following the library rules on borrowing library material. Thefts - the permanent removal of books from the library by a reader - and illegal borrowing - the temporary removal of books without completion of the necessary formalities - are problems faced by many university libraries. There are no data on offenders in university libraries. In most universities there are no procedures and means of reporting and punishing library offenders. Replies given by library staff show that theft and mutilation of material is a serious problem for many universities in Greece. From discussions we had with library staff from different universities we estimated that around 15% of library collections are missing. As a detailed census in Greek university libraries could show the magnitude of the problem this probably explains why only a few libraries are doing a stocktaking of their collection on a regular basis, and the reluctance of university officers to speak freely about library material losses.

Some libraries try to prevent and detect theft and illegal borrowing, either by examination of readers' belongings at the exit, or by having readers leave their

cases and coats in a cloakroom outside the control point. The installation of detection devices for reducing losses is a common practice in many European university libraries. Only 7 university libraries have installed such devices, and only the library of the University of Crete in Rethymnon has installed a closed-circuit TV.

Lack of statistical data on loans prevent us from estimating the volume of book lending in Greek University libraries. Analysis of loans in three libraries at the University of Ioannina (Physics, Mathematics and Folklore) shown that annual loans per Academic Staff in 1992 were 30 books and loans per student 2 books. Comparison with data from UK university libraries show that Greek students borrow 13 times less material than UK students<sup>72</sup>.

## 6.16 Reference and Information services

In every university library there is always a need to provide reference and information services to its users. Through reference work library staff act as interpreters of their library's material and especially of the reference literature held in the library for consultation.

Well provided reference services form an important element in the success of the library as a whole<sup>73</sup>. For new-comers to the library the reference service provided may be an important reason for the acceptance of the library as an integral part of the educational process.

Among library staff in Greek university libraries there is no general perception that reference service is an important function of libraries. As a rule Greek university libraries follow the traditional view of Mackenna that:

"For the university librarian...assistance to readers is to an unusually large degree a matter of providing the necessary facilities to enable readers to solve their own problems by their own efforts"<sup>74</sup>.

In most Greek university libraries reference work is at a primitive stage or else completely non-existent.

Data on reference services provided are given in the Appendix II. Of 218 libraries, only 21 (9.6%) provide reference and information services to the faculty. Of those, 16 (7%) libraries are involved in the preparation of bibliographies on specific research topics and courses, 2 (1%) in selective

dissemination of information<sup>75</sup> through manual procedures, and 3 (1.4%) provide services of bibliographic information retrieval from external databases. Other services provided include suggestions on existing bibliographies or how to use specific information services. Technological development has enabled even small university libraries in other European Union countries to provide information retrieval services to their users. Today the use of on-line information services is something common in university libraries of other European Union countries<sup>76</sup>; the reverse is true of Greece, where only 15 libraries offer such services. The setting up of machinery for mediating between the research worker and the vast amount of library material by establishing current awareness schemes or retrospective bibliography searching of the available literature is an important part of reader services. Of 218 libraries which answered the relevant question only 3 reported the operation of a current awareness service.

In many cases a university library is the biggest library in an area and many individuals, libraries, businesses, firms and organisations call on it for reference assistance. Modern university libraries may provide reference and information services to outsiders as part of their daily work. A library provides such services both for public relations purposes and as fulfilling its main purpose, namely the unconditional offer of knowledge and information to everyone who needs it. Reference services to outsiders are very rare in any Greek university library. On the contrary University libraries in other European Union countries provide reference and information services to outsiders.

## 6.17 Library Co-operation and Networking

Networking among all types of libraries is not a recent development. It dates from the early recognition that libraries are interdependent and no library can stand alone in meeting the demands of its users<sup>77</sup>. According to the FID/DC working group the establishment of a network of specialised libraries is a main element of a national system of library and information services<sup>78</sup>. University libraries should be part of the national network in order to cover information needs in specific fields of science and technology<sup>79</sup>. Of 208 libraries which answered the relevant question, 52 (25%) reported some form of co-operation with other libraries. In 49 (94%) of those libraries co-operation is based on informal arrangements between libraries. Only 3 (6%) libraries reported the existence of formal arrangements for co-operation. 22 (45%) libraries co-operate with libraries in other Greek Research Institutions, 12 with other Greek university libraries, 4 with libraries of foreign Institutions in Greece (British Council, Institute Francaise etc) and 10 with foreign university and other libraries.

There are many activities in which libraries co-operate. Thompson and Carr<sup>80</sup> identified the following: Interlibrary lending, national library initiatives, interlibrary study facilities, co-operative storage schemes, transfer of material, local and regional co-operation, research library groups, mechanised co-operatives, library research organisations, professional associations. To this list we may add: information and user information exchange, exchange of staff, development of service tools, training, co-operative research and co-operative publishing<sup>81</sup>.

Each of these activities has its own merits in improving the services of individual libraries and in establishing an effective library network. Lending of material from one library to another:

"is the most important, the most common and certainly, as far as library users are concerned, the most evidently productive aspect of library co-operation"<sup>82</sup>.

Comparison on interlibrary loans between Greek and Danish University libraries is given in figure 39.



Fig. 39 : Interlibrary loans.

From this figure we see that contary to practices in other European Union university libraries interlending of material from one university library to another is an activity almost unknown to Greek university libraries. Only a few libraries reported the lending of material to another library on a "personal basis", which means that a library would lend material to a known person of the other library rather than to the library as an institution. There are no formal arrangements for interlibrary lending between libraries. In some universities faculty members receive material from foreign libraries such as the British Library. In most of these cases this activity is not a part of the library's services but the interested person must follow the procedures needed by the lending library. Recently in some libraries there has been an increase in the sending and receiving of photocopies of journal articles.

Of 208 libraries 33 (16 %) send photocopies to other libraries and researchers, 24 (11%) receive photocopies, 12 (6%) co-operate in interlibrary loans and 14 (7%) participate in other forms of co-operation. These figures show that this is the main co-operative activatity among university libraries in Greece. Data on activities of library co-operation in Greek university libraries are presented in figure 40.



For library staff lack of co-opearation is a serious problem. Analysis of answers received is given in figure 41.

Fig. 41: Lack of library co-operation as library problem



Fig. 40: Activities of library co-operation

The use of resources of one library by users of another:

"Is a logical extension of the idea of all libraries in the country being regarded as component parts of what is really a national system"<sup>83</sup>.

This aspect of co-operation does not exist among university libraries in Greece. In fact, the practice has never been raised. In practice any researcher may use any library, but only on a personal basis. This means that it is up to the staff of the library to permit the use of the library or not. In any case the researcher may use the material only inside the library as he has not the right to borrow library material or to use any information services. So far there have been no formal arrangements between libraries for this facility.

In university library practice there are cases in which some may wish to dispose of material from their collection to other libraries. If other libraries need this material the donor library sends it directly, or through a co-ordinating agent, to the recipient. The transfer or redistribution of material needs bibliographical control of the items being disposed of and collection of information from interested libraries with the items they want. There are no activities of transfering library material from one library to another among the Greek universities. There are many reasons for this such as the small collections in most libraries, the decentralised structure of the libraries in large universities, lack of co-ordination, and legal issues. All these reasons are used to excuse libraries from participating in this kind of co-operation.

Existing libraries in a given area may co-operate in providing study facilities for all library users of their area, establish co-operative acquisition and storage schemes, and exchange of library staff and consultation. In other European Union countries university libraries have formal links with other libraries in their geographical area. Greek university libraries in general do not participate in any such co-operation. Some libraries such as the library of the University of Crete in Rethymnon and two seminar libraries in the University of the loannina reported some form of co-operation with other libraries in their region. Some departmental libraries reported contacts with other public libraries but only as a result of personal initiatives rather than as a deliberate policy of the university library.

Another form of co-operation may be the setting up of working parties and research groups with members from a number of libraries to deal with research on librarianship and information science matters, library automation, development of computer software, etc<sup>84</sup>. There is a very small number of such

efforts in Greek university libraries. The University of Crete Library has been involved in a project for the development of library automation software, and similar efforts took place between the Library of the University of Patras and private firms. Recently with the financial support of the European Community 4 libraries participated in European Union- funded projects. Among them the library of the University of Crete co-operated with King's College Library of the University of London in a project for retrospective conversion of bibliographic records and the University of Patras library took part in an education project with the university libraries of Barcelona (Spain), Tilburg (the Netherlands) and private firms.

Library networking<sup>85</sup> at all levels is being dramatically changed by the use of technology, especially the computer. With the rise of the bibliographic utilities and the participation of all sizes of libraries in shared cataloguing and on-line interlibrary loan transactions, the networking scene has changed. Most existing consortia are now moving forward with the new technological developments, to offer other areas of co-operative activity, including circulation and the shared development of on-line systems. Up till now there are no computer based library networks in Greece. The only opportunity for a university library is to be connected through the use of the public network HELLASPAC, to the bibliographic databases hosted at the National Documentation Centre in Athens. So far the only available databases hosted there are "The database of Greek Theses", "The Union List of Scientific Periodicals" and "The Greek Medical Database (IATROTEK)". Of the134 libraries which answered the relevant question, 24 are connected or are in the process to being connected on-line with these databases. Two libraries are connected online and four reported the use of the European Academic Network for exchange of information and interlibrary loans.

By contrast with practices in university libraries in other European Union countries, in Greek universities there is a lack of acquisition policies. As the coordination of the acquisition policies of different libraries of a country creates the national acquisition policy, so lack of acquisition policies among individual university libraries, and lack of co-operation in collection development, has led to a lack of any national acquisition policy in Greece.

## 6.18 Copy Services

Copying machines have had a great impact on libraries. With the use of such machines library users can reproduce library material quickly and easily, while libraries improve their efficiency and services. Today photocopying of library material is thought to be part of a library's overall services. However, copying machines are not available in all Greek university libraries. Of 214 libraries which answered the relevant question 176 (82%) have a copying machine.

In all libraries photocopying by faculty members is free of charge. Photocopying of library material by students and scientists from outside the university is not easy. Among libraries with a photocopying machine only a few permit students of their educational unit to photocopy library material and the same applies to scientists from outside the university. The cost of photocopying led universities to apply different practices for controlling the use of photocopying machines. Four universities produce special photocopying coupons. These coupons are given free of charge to faculty members. With the use of coupons faculty members "pay" for their photocopies. Only in recent yeras have Greek university libraries started installing copying card machines for use by external users.

### 6.19 Hours of Opening

Analysis of collected data on hours of opening of libraries per working day revealed that of 175 libraries which provided data, 45 (25.7%) are open for five hours or less, 49 (28%) for six hours, 41 (23.4%) for seven hours, 11 (6.3%) for eight hours and 29 (16.6%) for more than eight hours. Only 4 (2.28%) of the libraries are open for some hours on Saturdays and only one library is open for a few hours on Sundays. We found also that there exists a positive correlation between the category of the library, and its size, to the hours of opening. Libraries which belong to smaller academic units (laboratories, clinics and sectors) are open for shorter times than libraries which belong to larger units (departments and faculties). Physically centralised libraries are among those libraries with the maximum opening hours. Figures on opening hours from other European universities<sup>86</sup> show that opening hours in Greek university libraries are far less compared to similar libraries in other European countries.

## 6.20 Stock Use and Effectiveness

For many library readers the existence of a book in the library when it is needed is the great desideratum and the form of library organisation which can easily provide it is the one to be desired. According to Revill:

"The indications are that 'availability' may become an expected measure of academic library performance"<sup>87</sup>.

The Parry Committee recommended that there should be a high percentage of immediate availability of material in any university library<sup>88</sup>.

There are no studies assessing the effectiveness of library stocks in Greek university libraries. From answers to a relevant question posted to a sample of 28 libraries (12 Spoudastiria, 5 Departmental, 3 Central, 8 Sector) it appears that in only two were library staff familiar with techniques for evaluation of stock effectiveness such as "failure rate surveys" and the estimation of library's "capability index". No library was able to report the results of any such survey and to obtain a precise statement of its failure rate.

In order to estimate the failure rate of Greek university libraries we organised a separate failure survey<sup>89</sup> at three departmental libraries at the University of loannina (Physics, Chemistry and Mathematics). The aim of the study was to measure the stock failure rate: namely, the success or failure experienced by library users (Faculty members) when looking for library material in these libraries. The results are given in table 12.

	Physics	Mathematics	Chemistry	Totals
Number of Interviews	56	45	39	140
Titles looked for	72	59	65	196
Titles not found	32	25	16	73
% not found	44%	42%	24.6%	mean ≈ 37%

Table 12:	Overall Failure	rate	by	Faculty
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An analysis of reasons for failure shows that a high percentage of reader failure was because needed material was on loan (55%), while 37% was because needed material was not held by the library.

	Physics	Mathematics	Chemistry	Totals
Books not held by library	9	10	8	27 (37%)
On Loan	21	13	6	40 (55%)
Reader Error	2	2	2	6 (8%)

Table 13: Reasons for Failure.

This study revealed that borrowing practices in these libraries affect to a great extent the availability of library material and the majority of library users do not look for certain materials because they know from experience that the chances of success are not good. The available data on acquisitions and borrowing practices from many libraries suggest that the same tendencies exist in all Greek university libraries. During the study we realised that expectations of users from these libraries were low. It is evident that this affects the availability found. It is expected that a study which took into account the expectations of the users would give less availability.

In a sample of 20 institutions in UK the success rate in supplying immediately on demand in 1991/1992 was 65% for undergraduates, 68% for postgraduates and 57% for research<sup>90</sup>. Comparison of these figures with results of the present study show that success rate in Greek university libraries is lower compared to UK university libraries.

Another measure for assessing a library's effectiveness is to measure the "capability index", namely the library's ability to supply the items on a list such as a library catalogue, a bibliography or a specially devised list. The estimation of the capability index of Greek university libraries would need the organisation of separate research which goes beyond the scope of this study. For the estimation of the capability index the total number of collection, the acquisitions and comparisons with other libraries must be used.

One way of evaluating the adequacy of a library's collection is to have the collection examined by a specialist member of the institution itself or by an external consultant<sup>91</sup>. We applied a variant of the expert judgement method by asking the directors of libraries to give their opinion on the extent to which the size of collections held in their libraries creates problems in the provision of

effective library services. Of 134 libraries which answered, 56 (43.2%) expressed the view that the size of their library's collection was too small to satisfy basic user needs. From those libraries 40 rank the size of collection as the first problem of their library, 3 the second, 8 the third and 5 the fourth. Rating of small collection of books and periodicals as a library problem is given in Figures 42 and 43. A closer analysis of data revealed that there is a positive correlation between the type of library and librarian assessment. Libraries in small academic units (laboratories, clinics, sectors) have a lower satisfaction rate than libraries in departments, faculties and universities.

Fig. 42: Small Book Collection as library problem



Fig. 43: Small Periodical back issues as library problem



The lack of statistical data prevented us estimating the market penetration in all Greek university libraries. By using data from six departmental libraries of the university of loannina we found that 5 to 15% of students do use these libraries.

The mean number of students in those libraries was less than 20 per day. These figures are near to those of the university's dean who estimated that 5 to 10% of students have visited the university library at least once<sup>92</sup>. The same figure was apparent for the university of Thrace<sup>93</sup>. In comparison to UK university libraries where students visit library on avarage 3-4 times/week,<sup>94</sup> those figures show that Greek university libraries are used far less than similar libraries in UK universities.

An obstacle to the use of libraries by students is the fact that in many libraries, especially in science, almost all material is in a foreign language. As a result, many students are unable to use this material. To overcome this problem the Rector of the Technical University of Crete proposed that all students should know at least one foreign language<sup>95</sup>.

## 6.20.1 Evaluation by individuals

Among both the academic and library community in Greece there is a strong perception that Greek university libraries face many problems and are far behind the university libraries in other European Union countries. This view is a general motive in any discussion on university libraries and educational practices in Greek universities. In 1987 the Rector of the University of Athens speaking for his university expressed the view that:

"Our Libraries are insufficient in terms of space, number of books and librarians"<sup>96</sup>.

The same view was also expressed by higher government officials. In 1987 the former Minister of Education had stated that:

"Today there is a serious vacuum in the organisation of our universities. We know that our universities have no libraries...the knowledge we offer in our universities is not enough because the bibliographical support we provided is so small. The student, even if he wants to can not contact the international literature in his or her subject of study. The university studies in this country need bibliographic support"<sup>97</sup>.

Five years later the Minister of Education, speaking in Parliament for the reforms he was proposing for university education expressed again the view that:

"Our universities have no libraries"98.

A number of library experts have also expressed their view on the abilities of Greek university libraries to support teaching and research in Greek universities. After visiting a number of university and other libraries and interviewing university officials, professional librarians, and other interested persons in Greece, Richard Palmer concluded that:

"The quality of library services in the country is seriously deficient by Western standards"<sup>99</sup>.

Assessing the library at the University of Thessaloniki the same expert concluded that if students in this university decided to make use of its libraries equal to that in most libraries in Western institutions of learning, then the facilities, collections and services:

"would prove grossly inadequate"100.

The weakness of collection dispersion is more obvious to observers outside libraries that are being evaluated. A number of foreign experts evaluated the situation of libraries in Greece and specific universities and have recommended certain actions needed to achieve improvements<sup>101</sup>.

Within this study library staff were asked to give their opinion on whether the library they are serving is satisfying the needs of their users. In 157 (69%) libraries which gave an answer 31 (20.5%) think that their library has not sufficient operation, (33%) is partly sufficient and 73(46.5%) sufficient. Results are presented in figure 44.





#### 6.21 Interaction with users

Bibliographic instruction for library users is an important service provided by university libraries<sup>102</sup>. By providing such a service the library helps users by introducing them to the specialised information resources of the scholarly disciplines. The instructions of the ACRL Bibliographic Instruction Task Force in the USA is an example of the importance accorded to students' familiarity with library organisation and the principal reference tools<sup>103</sup>. According to Thelma Freides, bibliographic instruction may be seen as:

"A practical means of coping with the floods of students, and a way to rescue the reference librarian from the endless wasteful and mind-deadening repetition of basic search procedures at the reference desk"<sup>104</sup>.

A public relations programme may explain what the library is for and point out the educational needs to which the library may make a real contribution. By actively marketing its services the library may also reach more potential users, encourage its use, and work towards becoming an indispensable source of information for the community it serves<sup>105</sup>. Of 146 libraries which answered the relevant question only 8 (5.5%) reported the provision of a library instruction programme. Of 187 libraries only 5 (3%) reported having a public relations programme. There are many reasons for Library staff have no clear consensus on the importance of such a this. programme. They tend to believe that public relations has nothing to do with a library but is an activity confined to personal contacts by senior library staff only. Only occasionally do libraries use personal contacts with faculty members and administrative officials to stress the importance of the library and to ask for a solution to the library's problems. The result of such a personalised public relations programme is that libraries remain without any organised activity aimed at developing a consensus within the university on library functions as a whole. In cases where there is no clearly authorised allocation for such contacts, personal contacts result in unhealthy competition between library staff since many of them see such contacts as improving their personal images and leading to better treatment in promotions. Data of this study show that feedback and user instruction has a low priority in Greek university libraries. On the contrary such activities are important services in other European university libraries<sup>106</sup>.

The library structure affects the public relations activity. In universities with many small isolated units, there are no staff with the necessary expertise or training, nor is there any funding, to run a public relations activity.

Good communication among the staff of the university library and its users is essential for achieving good feedback from library users in order to achieve coordination of efforts for the development of the library. In Greek universities there is a clear lack of communication between libraries and faculty. Faculty has only a very limited knowledge of its library's functions or of library staff activities. In universities with a number of small libraries there is also a lack of communication between libraries of the same university. Often it is only much later that decisions and developments which take place in one library are made known to other libraries. Unlike university libraries in other European Union countries, where publicity and interpretation of the library's services is by means of leaflets, or organised public relations programmes, such promotion is almost unknown in Greek university libraries. Feedback from users is taken only in libraries which have a library committee. No university library has established other means of communication (library bulletin) or organised separate studies for receiving user feedback. There are no staff bulletins or library newsletters in any Greek university library. The only method of communication between university librarian and library staff is by sending a personal invitation to each person employed in the library. But even in this case the possibilities of organising a meeting of all staff are limited. The existence of two categories of library staff - administrative and special administrative and technical staff - affects the participation. Special administrative and technical staff library staff are under the supervision of the faculty. Even if they have an invitation from the library director to attend a meeting they must still ask for permission from their library committee, or the director of the sector in which their library belongs. In many cases teaching staff have no real consensus of a library's needs and prefer to have the library open all the time rather than allow library staff a couple of hours of working time in which to participate in staff meetings.

Annual library reports are important in recording activities which have taken place during the previous year (growth of collections, staff and services offered etc.) and announcing future developments. Only 3 Greek university libraries publish an annual report. 17 libraries publish library leaflets. No university library in Greece publishes a staff handbook. Library staff are included in the general staff directory of the university.

Greek universities publish annually a handbook called "Epetiris". In this they include general information on courses offered, university regulations, organisation of administrative services, etc. In 23 such publications inspected 8 had a small chapter devoted to the library or libraries of the university or department, while in 15 of them an interested person has to browse the whole publication in order to discover information - if any - related to libraries.

Seven libraries publish lists of recent acquisitions. They may be published annually (University of Thessaloniki), monthly or at irregular intervals. The aim of these publications is to inform library users of what books are being added to the library collection. Format and arrangement of acquisitions lists varies. Arrangement according to call number or author's name is the most common. In union catalogues of decentralised libraries there is an indication of the library which holds a particular book. Many libraries have produced book lists for a period of time but have been forced to stop it by lack of personnel and resources. The use of microcomputers seems to offer new hope for producing book lists.

The practice of publishing library bulletins in order to explain the work of various library departments and procedures is unknown in Greek university libraries.

Another medium for interpreting library services is the bulletin board. It may be used for calling attention to specific library services, special resources or new acquisitions by displaying book jackets, posters, pictures and other informative material. Most libraries are using this medium for informational purposes.

A library needs good instructional signs to direct the movement of its users. Signing in Greek university libraries is very poor. Most libraries have very few signs to help library users to find their way about the library. Existing signs are of low quality and aesthetics. They are produced by library staff or by professionals with little experience in producing signs for libraries.

Exhibitions of library material may call attention to material belonging to the library, present celebrations or anniversaries (associated with famous individuals or events), or display material on a particular subject. Exhibitions of this kind are very rare in Greek university libraries. 18 libraries reported permanent exhibitions of old books and other library material.

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# **CHAPTER 7**

# Conclusions and recommendations

# 7.1 Results of present study in relation to former literature

The present work is a first attempt to study in detail and to evaluate the Greek university libraries. For the first time in Greece have been compared with similar libraries in other European countries. For the purposes of this study data related to all activities of in Greece have been collected and analysed for the first time.

The study shows that university libraries are complex organisations affected by many factors. A single performance measure stresses only one aspect of library activity. Several measures are needed if we want to have an accurate measurement of library performance. A variety of methods is needed also for their evaluation. As was mentioned in the literature review some of the more sophisticated techniques cannot be used easily where the state of development of libraries is low. This is because demand is in most cases severely constrained by poor availability. The study found that the state of development of Greek university libraries is low and in most cases expectations of users of them are low. In Greek university libraries there is also a lack of stated goals and objectives while their use by both researchers and students is affected very much by expectations about their ability to meet user-needs. For all these reasons the study accepted the definition of performance given by Cotta-Schonberg and Line<sup>1</sup> and made a general evaluation of their performance<sup>2</sup> rather than an detailed evaluation. However in cases where indicators were not affected by user - expectations a number of performance measures were also constructed.

The study follows the analysis of Orr<sup>3</sup> and Buckland<sup>4</sup> in order to estimate the goodness and availability of Greek university libraries. The measurement of availability in a single day does not give a reliable picture of the normal level throughout the year<sup>5</sup>. This is particularly true for small collections which have a
very moderate day use. For this reason the estimation of the availability in the libraries used in this study was done during a period of a normal term week.

University libraries have an impact on the educational and research performance of their users, the whole higher education system and hence on the development of the country. Despite the difficulties of measuring this impact the study demonstrates that weak libraries have a negative impact on their users, and that as other studies show<sup>6</sup> restriction of library provision in Greece result in both less research conducted around a narrower reference base. Weak libraries affect also the quality of education provided to students.

The study took the view that the study of libraries in different countries cannot be done in isolation from the background of the countries in which they have developed. The physical geography of a country influences its means and degree of communication of people, while the character of its economy (agricultural, industrial or service oriented) influences the needs for education and information. Differences in cultural and recreational habits also play their role<sup>7</sup>. The importance that governments and other responsible bodies attach to libraries, and the availability of resources, impel or retard the development of libraries in any particular country. The differences of economic growth also affect library development. All these factors need to be taken into account when the library system in a country is to be evaluated but most importantly when comparisons are to be made<sup>8</sup>. The study was in accordance with the Van House, Weil and McClure<sup>9</sup> view that performance indicators are affected by a number of library and environmental factors. The most important factors identified and analysed in this study are:

- i. Historical and political factors such as wars and political instability.
- ii. Economic factors such as economic difficulties and low development of R&D.
- iii. The attitudes of people towards reading and use of libraries.
- iv. The educational policy in general and in higher education in particular.
- v. The educational practices applied.
- vi. The free provision of text-books to students.
- vii. The perception of libraries and library use by the majority of the Greek academic community.
- viii. The legislation under which universities and their libraries operate.
- ix. The organisational structures of Greek university libraries .
- x. The administrative practices applied in universities and their libraries.

- xi. The availability of staff capable of increasing the efficiency of existing services and introducing new services.
- xii. The availability of bibliographic tools.

The indicators proposed by the CVP/UGC<sup>10</sup> in the UK together with others have been used in this study. However in order to have a picture of other indicators, such as availability, separate studies were organised in three departmental libraries.

The study shows that due to administrative and organisational practices efficiency as defined by Revill<sup>11</sup> and Hernon and MacClure<sup>12</sup> is low in Greek university libraries. In comparison with the picture presented by Kreyche<sup>13</sup> the situation in Greek university libraries is changing. The Universities of Crete, Patras, Ioannina, Economic University in Athens, Panteio, Ionio, Macedonia and Aigaion and some departmental libraries at the Universities in Thessaloniki and Athens are in the process of using computers in their operation. Some of the barriers to telecommunication are also being removed.

Comparison between the results of the study and the figures given by Krikelas<sup>14</sup> show that there is less dispersion of collections in Greek university libraries now compared with this a decade ago. The study shows also that the state of Greek university libraries in terms of educated staff has shown an improvement during recent years. The education program in library schools today has been improved<sup>15</sup> compared with ten years ago<sup>16</sup>. Bibliographic tools are still not available in Greek university libraries as Krikelas<sup>17</sup> mentioned. However the use of information technology has helped some universities such as Panteio, Economic University in Athens, Crete and to a lesser extent Patras and Ioannina to develop union catalogues and organise better the bibliographic control of their collections.

The study found that size of collections as quoted by Krikelas<sup>18</sup> were overestimates of the exact numbers. The study found that the sample used by Krikelas<sup>19</sup> to estimate the language distribution of collections in Greek university libraries did not give the actual picture if used for the estimation of language distribution in all Greek university libraries. Krikelas found that 5.35% of the collection was in Greek university libraries and 94.65% in a foreign language while this study found that those figures are 35% and 65% respectively.

The experience we gain from this research has shown that use of questionnaires remains the main source of data for such studies. However,

interviews with library staff and users may give a better picture and clarify points which cannot become clear from the replies to questionnaires. Reports and articles may be used for the assessment of university library development in other countries<sup>20</sup>. For the estimation of the size of the collections direct counts of collections or shelf space may be used. However in the case of using counts of shelf space used, an agreed number of books per metre is needed in order for the data to give a good approximation and be used for comparisons.

The experience we gained from using performance measures in this study led us to the statement expressed by Van House:

"Much remains to be learned about output measures and their determinants... Continued methodological development is also needed to ensure that the measures used are valid, reliable, precise and practical"<sup>21</sup>.

The character of standards and their inherent methodological problems as measures of performance<sup>22</sup>, prevent us from using them for the evaluation needed in this study. Conspectus<sup>23</sup> methodology in measuring the strength and weakness of collections was not used as this would need collaboration with library staff in all Greek university libraries and the study of collections in all libraries. However, the need for co-operation and the financial difficulties encountered in all libraries show that conspectus is an issue to be addressed by the Greek university libraries.

The present study found that most Greek university libraries do not provide their users with a number of services such as reference services, on-line information retrieval and access to non-print material. This makes irrelevant any discussion about the evaluation of on-line searches<sup>24</sup>, reference satisfaction<sup>25</sup>, reference transactions<sup>26</sup>, remote use of the computerised library and information networks<sup>27</sup> or delays in inter-library loans<sup>28</sup>.

## 7.2 Conclusions of present study

The study found that the environment within which Greek university libraries operate is unsuitable for, if not detrimental, to the development of . The main environmental factors, which are inter- related, are:

i. The lack of recognition by the government of the importance of the university libraries for education and research and for the development of the country.

ii. The lack of a national plan and policy for library development and coordination of library and information activities. The lack of such policies and strategic plans for library development has prevented library services in Greece from developing in accordance with any coherent and comprehensively considered plan.

iii. The lack of leadership in developing the library infrastructure of Greece. The National Library might be expected to provide this leadership but contrary to the situation in other European Union countries the National Library of Greece is lagging behind other National Libraries in European countries in helping the development of a national library policy and library infrastructure<sup>29</sup>.

iv. The educational practices in Greek university education which seems to be without vision of the development of university libraries. Teaching methods also are antiquated and do not encourage the use of libraries by students. The allocation of free text-books to students which affects the use of libraries by students and the attitudes of teaching staff to the use of libraries.

v. The legislation under which Greek universities and their libraries operate which make difficult the introduction of new information services and the application of new administrative methods.

The study found that:

1. Under financing is one of the most serious problems facing Greek university libraries. Greek university libraries receive far fewer funds than their European Union equivalents. Moreover as funds assigned by the government to universities dwindle in real terms due to high inflation and economic difficulties, so the purchasing power of Greek university libraries becomes even weaker. The study shows also that, due to administrative practices, budgets in Greek university libraries are not used to best effect and the purchase of material is not always cost-effective. In many universities the allocation practices of money do not help the overall development of collections and have negative effect on the development of undergraduate collections.

2. Staffing levels in Greek university libraries are very low. Lack of staff in number and qualifications makes changes in Greek university libraries difficult<sup>30</sup>. Lack of staff results also in less efficient library services. As most libraries are understaffed, their staff are concerned with basic library services rather than providing reference and information services to users. Lack of positions for properly educated library staff and specialists in library and information matters affects also the ability of Greek university libraries to introduce new information services and use the information technology. The internal workings in many Greek university libraries is characterised by unmotivated staff lacking direction.

3. The study found that because the collection in Greek university libraries is smaller compared to universities in other European countries, their book availability is small and as a result of this their capability in meeting user demands is less. Material other than books and periodicals such as theses, patents, government publications, pre-prints and non-print material are almost non-existent. Cancellations of journals, and the limited acquisition of new journals and monographs is a practice in almost all in Greece. Binding practices affect also the physical availability of periodical collections as recent issues of periodicals may be distant from the library for long periods of time.

4. Availability of collections to students is much lower compared with availability for academic staff. A comparison of users to available collections and space revealed that undergraduate collections are unable to play the role intended for them.

5. Space provided for libraries in Greek universities is little. Comparisons with other European countries show that space allocated to libraries in Greek universities is far less than those in other European countries. The interior and exterior appearance of library buildings is also worse.

6. Collections in Greek universities are almost exclusively used by teaching staff.

7. Greek university libraries are used very little by students. In many libraries, book provision for students is treated as a painful necessity and a waste of money. Use of libraries by students is affected by the research character of collections, the small number of Greek books, the lack of textbooks, the short hours of opening, and the lack of space and proper environment. Existing separate undergraduate libraries are very few and used very little by students.

8. Greek university libraries offer only a few and of lower quality reader services. To most library users in Greek universities services provided do not go far beyond circulation. While libraries in other European universities provide new information services to their users<sup>31</sup>, there have been only a few similar moves in Greek university libraries. A small number of libraries only, offer reference and information services to their users.

9. Contrary to the situation in most European Union countries, where researchers may use effective inter-library loan systems and enjoy better communication with other libraries to obtain journal articles or books, Greek researchers are denied this alternative because very few libraries are involved in inter- lending activities.

10. The study found that in Greek university libraries there is a lack of an acquisition policy. Contrary to university libraries in most other European Union countries there are no links between courses offered and collection development. In many cases new courses start or even new departments start operation without the library being consulted or even informed. The same applies to research projects which are started.

11. The examination of the organisational charts and management practices in Greek university libraries shows that in most cases: a) The organisational charts fail to plan properly for contemporary needs; b) There is a failure to clarify relationships and lines of authority and communication both within and between departments.

12. Organisational structures applied in most Greek university libraries affect the span of both control and decision making. The study shows that in all Greek university libraries the effectiveness of the decision making process is low. In universities with a number of libraries in different campuses or buildings the effectiveness of the management is even lower. Hierarchical structures as

applied in all university libraries in Greece were found to be not only unhelpful but actually inimical to existing needs.

13. Collection dispersion is one of the most serious problems faced by Greek university libraries. In most Greek universities the existence of many small libraries is an uneconomic and inefficient form of organising library material and of offering effective library services. In cases of interdisciplinary research, frustration of researchers who have to visit many small libraries has been recorded.

14. Delays in providing needed material are usual. This is due to inefficient internal organisation of work within library systems or in the case of inter-library requests, is due to lack of proper organisation of library networks and inter-library arrangements. The study shows that in most Greek university libraries and especially in libraries with decentralised structures the accessibility<sup>32</sup> is low.

15. Feedback from users is low. Greek university libraries are not effective at marketing their services, monitoring the quality of their services or at bringing the best out of the people who work for them.

16. In the use of information technology Greek university libraries lag behind similar libraries in other European countries. The creation of library files is in most cases the result of personal efforts by some members of the library staff rather than part of library development plans.

17. The study found that by contrast to the situation in other European Union university libraries only a few bibliographic tools are available to Greek university libraries. The lack of bibliographical tools was found to be an obstacle to the creation of library networks and the efficient operation of university libraries. Moreover in bibliographic records, subject access and machine readable records made so far in Greek university libraries only a few libraries have followed international standards. Co-operative cataloguing is also non-existent in Greece.

18. The study shows that in all performance indicators used Greek university libraries lag behind similar indicators in other European countries.

19. The study found that during the last decade Greek universities have experienced a change in their structure which has created a more competitive climate. Researchers are expected to participate more in research and to produce scientific results more often and more quickly. In the near future, teachers individually and universities as institutions, are also going to find the quality of their teaching being evaluated formally. As a result university libraries in Greece are today challenged by the changing needs and the increasing demands on libraries imposed by the faculty and students and the changing ways in which information is accessed, especially with the use of modern computer technology. The study shows that the state of development of Greek university libraries does not permit them to meet existing and new demands and responsibilities. However if needed actions will be taken there are many opportunities for Greek university libraries to offer more services to their users, to improve their efficiency, to optimise the use of the total library budget, to consider ways of earning money from the services they provide<sup>33</sup> and to prove that they are the main organ for the support of research and education activities in universities.

## 7.3 Recommendations and further research

Improvement of the situation of Greek universities needs a number of actions to be taken by: a) the government, b) the universities and c) the university libraries themselves.

# 7.3.1 The Government

In order for Greek university libraries, to play their role as the main organ for the support of the scientific, technological, economic and social development of the country<sup>34</sup> and to approach their European counterparts, at a national level, there is a need for:

- i. More funds for university libraries
- ii. The establishment of new university libraries
- iii. Recruitment of more library staff in university libraries.
- iv. More use of libraries in the educational process
- v. The establishment of library networks including international contacts.
- vi. Better education for university library staff

- vii. A policy for the availability of publications and funding of some university libraries to become depository libraries in specific subject areas.
- ix. Development of technical and bibliographical tools.
- x. The place of university libraries in the total library system of the country, and their relationship with the National Library.
- xi. The preservation of both print and non-print library resources<sup>35</sup>.

It is evident that the fulfilment of all these needs would take a number of years. For this reason there is an urgent need for:

- i. Planning and construction of library buildings in Greek universities.
- ii. Acquisition of library material for meeting the needs of both faculty and students.
- iii. Recruitment of library staff with proper qualifications.

1. The money needed for these needs may be given within a co-ordinated university library development plan to ensure that it is well-spent. The plan should be for at least four years and needs to have specific targets to accomplish.

2. After the completion of the library development plan the practice of allocating free text-books to students should change and undergraduate provision needs to be the responsibility of the university libraries. The result will be greater use of libraries by students and hence the provision of better university education.

3. The most effective way for getting advice and planning properly would be by means of a National Committee on University and Research Libraries (NCURL) consisting of librarians, members of the teaching staff, researchers and the Ministry of Education. The NCURL should be the driving force for library policy by suggesting to the government any legislation and actions needed. The NCURL may seek the advice of experts on library matters from Greece and abroad.

4. The recommendations of the NCURL should also be used by the government as guidelines for new legislation on matters related to libraries in general and university libraries in particular. The most important issues are those related to:

i. Proper library staffing for the successful operation of university libraries<sup>36</sup>. The government needs to give universities permission for recruiting

staff for their libraries. As the introduction of new information technologies into libraries would make changes in the ways Greek university libraries are organised and managed unavoidable, new positions for library staff such as systems librarians, information specialists etc. will be needed. In order to provide this staff, changes in courses in library schools are needed.

ii. The professional status of library staff and the university librarian. The aim should be to raise their status following the example of other European Union countries such as Britain and Germany.

iii. Criteria for the allocation of funds in university libraries. The practices in other European Union countries such as France and the UK could well be used as examples.

iv. The organisational structures of university libraries, the role of the Central Libraries and its relation with other libraries within university etc.

v. The issues of scientific documentation and dissemination of information and library networks.

### 7.3.2 <u>The Universities</u>

1. There is a need for a mission statement and a strategic plan for library development in every university in Greece. The plan should:

- aim to study their priorities, allocation of resources and use of information technology and in effect to transfer university libraries in Greece from nineteenth century practices to those appropriate to the arrival of the twenty first century. Representatives of the whole academic community and the library need to participate in the development of this plan.

- present the organisational framework of effective modern library services and be able to estimate the funds for their achievement<sup>37</sup>.

- identify areas of mismanagement and propose cost-effective operation of activities.

2. A major question to be answered by Greek universities is, which organisational pattern should they select for the efficient running of their libraries. What is evident in all Greek universities is the need for better co-ordination of existing libraries. In every university all libraries need to be under

the authority and control of the director of libraries, and their staff should belong to the library staff rather than to the departments or sectors.

3. Greek universities need to move from decentralised structures of their libraries to more centralised ones. A first move would be the creation of libraries at least at departmental or school level. The idea of a central library functioning principally as a nerve centre of a system of departmental libraries could be the solution for the Universities of Athens and Ioannina where the university is located in a scattered campus. The departmental libraries could be for the support of research needs and the central library for student and multi-subject material. The unification of as many small collections as possible would ensure that Greek university libraries are in a position to offer better and cost-effective services. For universities with many departmental libraries the merging of departmental libraries into larger units may offer a full range of services and could be properly staffed.

4. The existing trend in other European Union universities towards integrating the management of library and computing services may suggest that Greek university libraries need to consider this development in the future too.

5. The new demands on university libraries should be accompanied by extra resources. The addition of more money for every new course, "topslicing" of research grants that are likely to result in additional demands on the libraries as applied in other European Union countries, would help libraries financially.

# 7.3.3 The University Libraries

# First priority actions

1. University libraries need to present themselves as the main providers of scientific information and be in a position to provide it. A mission statement and strategic plan is needed for all university libraries in Greece. A strategic planning mentality and thinking among library staff also needs to be developed.

2. All Greek university libraries need to develop collection development plans, which should also include policies for disposals. University libraries have to play a role in preserving the theses at least of their parent institution.

3. In order that Greek university libraries can respond to rapid changes which will occur in their environment as well as in their operation, different management structures should be looked at, including matrixes, parallel structures, diagonal structures, etc<sup>38</sup>. New structures need to be capable of facilitating rapid response, with maximum involvement and commitment of their staff. In most universities there is a need for a new structure for their libraries and a new style of organisation which should then be reflected in a new organisational chart. As in the case of Nordic libraries Greek university libraries need to:

" beware of being process-driven, and to think in terms of objectives, both longand short-term"<sup>39</sup>.

4. Greek university libraries need to take any action to increase their market penetration and the use of their collections by both faculty and students.

5. As part of a national strategy for providing library and information services to the research and academic community of Greece the university libraries need to participate in co-operative activities with other libraries of the country. The establishment of a national library network is a necessity. Greek university libraries may influence the way library co-operation should be developed. University libraries together with large Special Libraries such as the library of The National Research Foundation and The Centre for Research of Natural Sciences may be central to national resource sharing schemes.

6. In a context which is going to be increasingly cost conscious, libraries should show that they are dynamic and market-conscious units of the university. There is a need for Greek university libraries to become more cost-conscious, more service- and market oriented.

7. To make their staff the best possible, Greek university libraries need to find ways of developing their skills through courses, movement of staff from one position to another, participation in teams, etc. Action is needed to change the underlying attitudes toward changes in work practices entailed by the introduction of information technology.

#### Second priority actions

1. Libraries need to follow changes in teaching practices and take any initiatives in order to proclaim their potential role in the new teaching approaches. 2. University libraries should create union catalogues of monographs and periodicals. The creation of union catalogues in all universities would be a good and useful step towards more centralised library structures.

3. In order to play their future role Greek university libraries should instruct users in the effective identification and use of information resources; bring all library resources to bear on the development of students into lifelong learners; provide access and encourage the use of its resources by residents in the surrounding communities; maintain a collection adequate to meet users' needs; and maintain resource-sharing activities so that its users have easy access to materials not available in the library.

4. In order to improve their finances and to encourage users to use their services properly, libraries need to identify their basic and "value-added" services. The former would be free of charge but the latter may be charged.

5. For most university libraries in Greece a properly organised circulation service is needed in order to provide efficient and accurate circulation.

6. All Greek university libraries need to improve the management of their stack and design library instructions for speeding up the use of their material.

7. Every library should collect data related to its activities. The adoption of standards for the collection of library statistics for the establishment of performance indicators is very important if these indicators are to be used for both decision and comparison purposes.

8. A set of basic performance indicators needs to be agreed for all Greek university libraries. These indicators need to be consistent from year to year in order to be useful in comparisons of different libraries and evaluations of the same library over a period of time. Performance indicators need to be developed and implemented gradually as tools for justifying resources and for improving the quality of management and decision making. Since in Greece there is no expertise in performance indicators and library evaluation, individuals with such expertise might be commissioned to carry out the task or at least transfer their expertise and knowledge to the Greek library community.

9. The performance of libraries needs to be evaluated regularly according to their mission statement using an agreed set of performance indicators.

### 7.4 Further Research

Separate studies are needed to investigate in more detail topics analysed in this study and new ones which are out of the scope of this study.

1. There is a need for a system for monitoring the effects of any steps taken to improve matters.

2. Availability studies are needed in order to determine better allocation between subjects, and between periodicals and books. Those studies may also help in determining a better allocation between provision for researchers and students.

3. Separate studies are needed to estimate the effects on users of cutting acquisitions of periodicals and books and to discover reasons for today's low level of library use.

4. Research is needed in estimating the cost of acquiring, processing, binding and housing less-wanted periodicals compared with the cost of obtaining wanted articles from other external libraries and bibliographic services.

5. More research is needed on the pros and cons of departmental organisation of libraries, and administration practices.

6. Separate studies are needed to estimate the library needs of specific categories of researchers.

7. Separate studies are needed for the estimation of likely effects of changed learning methods on libraries in order that libraries can meet new needs.

8. There is a need to apply specific methodology for measuring library effectiveness and book availability in relation to at least the two main categories of users in Greek university libraries: academic staff and students<sup>40</sup>.

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### APPENDIX I

### QUESTIONNAIRE

# QUESTIONNAIRE FOR COLLECTION OF DATA FROM GREEK UNIVERSITY LIBRARIES (English Translation)

RESEARCHER: GEORGE ZACHOS, M.Sc. INFORMATION STUDIES LIBRARIAN AT THE UNIVERSITY OF IOANNINA 452 21 IOANNINA,GREECE TEL. (0651)45176 & 45169

QUESTIONNAIRE NUMBER	[]	*************	******		
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	·		<u> </u>		
UNIVERSITY ADDRESS					
		<b></b>		========	
LIBRARY				- <b></b>	
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LIBRARY TELEPHONE NUM	BER				
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#### SECTION A.

In this section we are collecting information related to the subject coverage of your library and the size of your collections.

A1. PLEASE INDICATE BELOW THE MAIN SCIENTIFIC SUBJECTS COVERED BY YOUR LIBRARY MATERIAL

(Please be specific but do not try to give many details. For example write Mathematics -not all the subdivisions of Mathematics) .

1
2
3
4
5
6
A2. WHAT KIND OF MATERIAL HAS YOUR LIBRARY ?
1. [] BOOKS
2. [] PERIODICALS
3. [] ABSTRACTS, INDEXES, REVIEWS etc.
4. [] NEWSPAPERS
5. [] PRE-PRINTS, TECHNICAL REPORTS
6. [] MANUSCRIPTS
7. [] MAPS
8. [] DISSERTATIONS
9. [] RECORDS, CASSETTES
10. [] FILMS
11. [] VIDEO-TAPES
12. [] COMPUTER SOFTWARE
13. [] PATENTS
14. [] SPECIAL COLLECTIONS (Such as a collection of the manuscripts of an author or on a specific subject)
· 15. []
16. []
A3. PLEASE INDICATE BELOW THE NUMBER OF THE FOLLOWING MATERIALS IN YOUR LIBRARY

(In case you do not have accurate data give the length (in meters )of the bookshelves covered by your collections. Please give numerically library material which is on loan now).

1. BOOKS (NUMBER OF VOLUMES)

2. JOURNALS (NUMBER OF SUBSCRIPTIONS) (NUMBER OF BOUND VOLUMES) [\_\_\_\_] 3. ABSTRACTS (NUMBER OF SUBSCRIPTIONS) [\_\_\_\_] 4. NEWSPAPERS (NUMBER OF SUBSCRIPTIONS) 5. MANUSCRIPTS (NUMBER) [\_\_\_\_] 6. PATENTS [\_\_\_\_] [\_\_\_\_] 7. \_\_\_\_ A4. WHAT PERCENTAGE OF YOUR LIBRARY BOOKS ARE WRITTEN IN THE FOLLOWING LANGUAGES? 1. GREEK 0-10% { } 11-25% { } 26-50% { } 50-75% { } 75-100% { } 2. FRENCH 0-10% { \_\_\_\_} 11-25% { \_\_\_\_} 26-50% { \_\_\_\_} 50-75% { \_\_\_} 75-100% { \_\_\_\_} 3. ENGLISH 0-10% {\_\_\_} 11-25% {\_\_\_} 26-50% {\_\_\_} 50-75% {\_\_} 75-100% {\_\_\_} 4. GERMAN 0-10% {\_\_\_\_} 11-25% {\_\_\_\_} 26-50% {\_\_\_\_} 50-75% {\_\_\_} 75-100% {\_\_\_\_} 5. ITALIAN 0-10% { } 11-25% { } 26-50% { } 50-75% { } 75-100% { } 6. OTHER (Please specify) 0-10% {\_\_\_} 11-25% {\_\_\_} 26-50% {\_\_} 50-75% {\_\_} 75-100% {\_\_} A5. ARE THERE IN YOUR LIBRARY TEXTBOOKS AND EDUCATIONAL MATERIAL GIVEN TO STUDENTS BY YOUR PARENT ORGANISATION? 1. YES [ ] PERCENTAGE [\_\_\_\_] 2. NO [ ] A6. ARE THERE IN YOUR LIBRARY DISSERTATIONS GIVEN BY THE INSTITUTION IN WHICH YOUR LIBRARY BELONGS? 1. YES [ ] PERCENTAGE OF ALL DISSERTATIONS GIVEN BY YOUR PARENT ORGANISATION 0-25% {\_\_} 26-50% {\_\_} 51-75% {\_\_} 76-100% {\_\_\_}

A7. ARE THERE IN YOUR LIBRARY TEXTBOOKS GIVEN TO STUDENTS IN OTHER GREEK UNIVERSITIES?

2. NO [\_\_]

1.YES [\_\_\_] NUMBER OF TITLES [\_\_\_\_\_]

2. NO [\_ 1

A8. IS THERE ANY READING ROOM(S) IN YOUR LIBRARY ?

- 1. YES [ ] 2. NO [ ]
- A9. IF THERE IS A READING ROOM HOW MANY SEATS DOES IT HAVE ? (INCLUDED SEATS IN OTHER PARTS OF YOUR LIBRARY IF THEY ARE PROVIDED FOR STUDYING PURPOSES)

[\_\_\_\_\_]

SECTION B.

In this section we are collecting information on the way you have organised your library material.

**B1. IS THERE ANY CATALOGUE OF BOOKS IN YOUR LIBRARY ?** 

1. YES [\_\_\_\_] 2. NO [ ]

**B2. IF THERE IS A BOOK CATALOGUE WHAT FORM DOES IT HAVE ?** 

- 1. [\_\_\_] CARD CATALOGUE
- 2. [\_\_\_] BOOK FORM
- 3. [ ] MICROFICHES
- 4. [ ] COMPUTER MEMORY
- 5. [\_\_] \_\_\_\_

**B3. WHICH OF THE FOLLOWING CATALOGUES HAS YOUR LIBRARY ?** (MAIN ENTRY HEADINGS)

- 1. [ ] AUTHOR CATALOGUE
- 2. [ ] TITLE CATALOGUE

3. [ ] SUBJECT CATALOGUE USING NATURAL LANGUAGE

- 4. [ ] SUBJECT CATALOGUE USING CLASSIFICATION SYMBOLS
- (CLASSIFIED CATALOGUE) 5. [ ]
- **B4. WHICH RULES DO YOU USE WHEN CATALOGUING YOUR LIBRARY** MATERIAL?
- 1. [ ] BY EXPERIENCE (NO SPECIFIC RULES)
- 2. [\_\_\_] ANGLO-AMERICAN CATALOGUING RULES
- 3. [\_\_\_] GENERAL PRINCIPLES OF THE ANGLO-AMERICAN CATALOGUING RULES
- 4. [\_\_\_] OTHER \_\_\_\_\_

**B5. IS THE MATERIAL OF YOUR LIBRARY CLASSIFIED ?** 

1. YES [\_\_] 2.NO [\_\_]

**B6. IF YES WHAT KIND OF CLASSIFICATION DO YOU APPLY?** 

- 1. [\_\_\_] SUBJECT CLASSIFICATION
- 2. [\_\_\_] FORM CLASSIFICATION
- 3. [\_\_\_]\_\_\_\_\_

B7. IF YOU HAVE A SUBJECT CLASSIFICATION WHICH CLASSIFICATION SCHEME DO YOU USE ?

- 1. [\_\_\_] DEWEY DECIMAL CLASSIFICATION (DDC)
- 2. [\_\_\_] UNIVERSAL DECIMAL CLASSIFICATION (UDC)
- 3. [\_\_\_\_] LIBRARY OF CONGRESS (LCC)
- 4. [\_\_\_] OTHER SYSTEM (PLEASE DESCRIBE)

B8. IF YOU USE NATURAL LANGUAGE SUBJECT HEADINGS IN YOUR SUBJECT CATALOGUE HOW DO YOU PRODUCE THEM ?

1. [\_\_\_] USING LIBRARY OF CONGRESS SUBJECT HEADINGS

2. [\_\_\_] USING SEARS SUBJECT HEADINGS

3. [\_\_\_] USING THE \_\_\_\_\_\_ THESAURUS

4. [\_\_\_] USING OUR OWN SUBJECT HEADINGS

5. [\_\_\_] OTHER (PLEASE DESCRIBE)

B9. IS THERE ANY JOURNAL (SERIALS) CATALOGUE IN YOUR LIBRARY ?

. 1. YES [\_\_\_] 2. NO [\_\_\_]

B10. IF THERE IS JOURNAL CATALOGUE WHAT FORM DOES IT HAS ?

1. [\_\_\_] CARD CATALOGUE

2. [\_\_\_] BOOK FORM

3. [\_\_\_] MICROFICHES

4. [\_\_\_] IN COMPUTER MEMORY

5. [\_\_\_] (OTHER)\_\_\_\_\_

B11. HOW IS YOUR JOURNAL CATALOGUE ORGANISED ?

1. [\_\_\_] JOURNALS TITLE

2. {\_\_\_} JOURNALS SUBJECT

3. [\_\_\_] JOURNALS SPONSOR

4. [\_\_\_] \_\_\_\_\_\_.

#### SECTION C.

In this section we ask for information on the status of your library and its user population.

C1. PLEASE INDICATE BELOW THE KIND OF YOUR LIBRARY ?

1. [\_\_\_] CENTRAL UNIVERSITY LIBRARY

2. [\_\_\_] FACULTY LIBRARY

3. [\_\_\_] DEPARTMENTAL LIBRARY

4. [\_\_\_] UNIT OR LAB LIBRARY

5. [\_\_\_\_\_\_

C2. WHICH ARE THE MAIN USERS OF YOUR LIBRARY ?

1. [\_\_\_] UNIVERSITY STAFF NUMBER [\_\_\_\_\_]

2. [\_\_\_] STUDENTS NUMBER [\_\_\_\_\_]

3. [\_\_\_] SPECIAL PG.STUDENTS (E.M.Y) NUMBER [\_\_\_\_\_]

4. [\_\_\_] POSTGRADUATE STUDENTS NUMBER [\_\_\_\_\_]

5. [\_\_]\_\_\_\_NUMBER [\_\_\_\_\_]

C3. ARE YOU COLLECTING STATISTICAL DATA ON THE USE OF YOUR LIBRARY?

YES {\_\_\_\_} NO {\_\_\_}

C4. IF YOU ARE COLLECTING DATA WHAT IS THE AVERAGE NUMBER OF USERS VISITING YOUR LIBRARY EVERY DAY?

(\_\_\_\_\_)

#### SECTION D.

In this section we want information on the services provided by your library.

D1. IS THE MATERIAL OF YOUR LIBRARY ?
[\_\_] OPEN ACCESS [\_\_] CLOSE ACCESS

D2. WHICH SERVICES DOES YOUR LIBRARY PROVIDE ?

1. [\_\_\_] LENDING LIBRARY MATERIAL TO STAFF

2. [\_\_\_] LENDING LIBRARY MATERIAL TO STUDENTS

3. [\_\_\_] INTERLIBRARY LOAN

4. [\_\_\_] REFERENCE SERVICES

5. [\_\_\_] CREATION OF BIBLIOGRAPHIES ON SPECIFIC SUBJECTS

6. [\_\_\_] CURRENT AWARENESS SERVICE

7. [\_\_\_] ON-LINE INFORMATION RETRIEVAL FROM EXTERNAL DATA-BASES

8. [\_\_\_] \_\_\_\_\_

9. [\_\_\_]\_\_\_\_\_

#### SECTION E

In this section we collect information on your library funding and the organisation of the services to its users.

E1. WHAT ISSUE SYSTEM FOR LOANS RECORDING DO YOU APPLY IN YOUR LIBRARY? (Please describe)

E2. DO YOU HAVE ANY WRITTEN LIBRARY REGULATIONS ? (In case you have send one copy)

YES{}	NO
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E3. DO YOU HAVE ANY LIBRARY COMMITTEE?

YES {\_\_} NO {\_\_}

E4. WHAT RELATIONS DOES YOUR LIBRARY HAVE WITH OTHER(S) LIBRARIES

WITHIN YOUR PARENT ORGANISATION? (PLEASE WRITE BELLOW ANY ADMINISTRATIVE RELATION SUCH AS SUPERVISION FROM A LARGER LIBRARY, etc.)

\_}

E5. WHAT RELATION DOES YOUR LIBRARY HAVE WITH OTHER(S) LIBRARIES WITHIN YOUR PARENT ORGANISATION ?

(PLEASE WRITE BELLOW RELATIONS HAVING TO DO WITH THE ORGANISATION OF THE MATERIAL SUCH AS CENTRAL CATALOGUING, COMMON PROCEDURES FOR ACQUISITION OF NEW MATERIAL ETC.)

E6. HOW MUCH MONEY DID YOU SPENT FOR ACQUISITION OF NEW MATERIAL DURING 1989?

1. BOOKS {\_\_\_\_\_}

2. PERIODICALS SUBSCRIPTION {\_\_\_\_\_}

3. FURNITURE, BINDING ETC. {\_\_\_\_\_}

E7. NUMBER OF NEW MATERIAL ADDED IN YOUR COLLECTION DURING THE 1 1989 ?

.

1. NEW BOOKS (NUMBER OF VOLUMES) {\_\_\_\_\_}

2. NEW SUBSCRIPTIONS OF PERIODICALS {\_\_\_\_\_}

E8. IS THERE MATERIAL OF YOUR LIBRARY HOUSED OUT OF YOUR LIBRARY?

YES {\_\_\_\_} NO {\_\_\_\_}

E9. IF YES PLEASE WRITE BELLOW THESE PLACES ?

#### SECTION Z.

In this section we collect information on facilities existed in your library.

#### Z1. DOES YOUR LIBRARY HAS?

- 1. {\_\_\_\_} COPYING MACHINE
- 2. {\_\_\_\_\_} MACHINE FOR LIBRARY CARDS REPRODUCTION
- 3. {\_\_\_\_} TYPEWRITER
- 4. (\_\_\_\_\_) MICROFICHE READER-PRINTER
- 5. {\_\_\_\_} MICROFILM READER-PRINTER
- 6. {\_\_\_\_} MICROCOMPUTER
- 7. {\_\_\_}
- 8. {\_\_\_\_}

#### SECTION H.

In this section we are seeking information on co-operative activities developed by your library.

H1. HAS YOUR LIBRARY DEVELOPED ANY CO-OPERATION WITH OTHER(S) LIBRARY(IES)?

YES (\_\_\_\_\_) NO {\_\_\_\_\_}

H2. WITH WHICH LIBRARIES HAVE YOU DEVELOPED CO-OPERATION ?

H3. WHAT KIND OF CO-OPERATIVE ACTIVITIES HAVE YOU DEVELOPED?

1.{\_\_\_} SENDING & RECEIVING PHOTOCOPIES OF JOURNAL ARTICLES

2.{\_\_\_} INTERLIBRARY LENDING

3.{\_\_\_\_} CO-OPERATIVE ACQUISITION OF LIBRARY MATERIAL

4.{\_\_\_} CO-OPERATIVE PROCESS OF LIBRARY MATERIAL

- 5.{\_\_}
- 6.{\_\_\_}

#### SECTION TH.

In this section we ask for information on library automation activities in your library.

TH1. HAVE YOU AUTOMATE ANY FUNCTION IN YOUR LIBRARY?

YES {\_\_\_} WE AUTOMATE NOW {\_\_\_} NO{\_\_\_}

TH2. WHAT PROCEDURES OF YOUR LIBRARY HAVE YOU AUTOMATE?

- 1. {\_\_\_\_} BOOK CATALOGUE
- 2. [\_\_\_\_] PERIODICALS RECORDING AND LISTING
- 3. { BORROWING PROCEDURES
- 4. {\_\_\_\_} ACQUISITIONS
- 5. {\_\_\_}
- 6. {\_\_\_}

TH3. PLEASE WRITE BELLOW THE TYPE AND THE TECHNICAL CHARACTERISTICS OF THE COMPUTER HARDWARE USED IN YOUR LIBRARY AUTOMATION.

TYPE (BRAND SERIES)	 	
TYPE (BRAIND SERIES)	 ··· ·· ···	

MEMORY CAPACITY

NUMBER OF TERMINALS IN USE \_\_\_\_\_

TH4. PLEASE GIVE BELLOW NEEDED INFORMATION FOR THE SOFTWARE USED IN YOUR LIBRARY AUTOMATION.

1. COMMERCIAL NAME OF THE SOFTWARE \_\_\_\_\_

2. OPERATING SYSTEMS UNDER WHICH IT CAN WORK.

3. SOFTWARE ACQUISITION

FROM THE MARKET (\_\_\_\_\_) IN-HOUSE PRODUCTION (\_\_\_)

TH5. WHAT LIBRARY PROCEDURES CAN YOU AUTOMATE USING THIS SOFTWARE?

{\_\_\_} CREATION OF AN OPAC

{\_\_\_} ACQUISITIONS

{\_\_\_\_} LENDING

{\_\_\_}} \_\_\_\_\_

SECTION I.

In this section we want your opinion on the extent to which your library fulfil its role namely the supporting of the educational and research needs of its users.

11. BASED ON YOUR LIBRARY USES REQUESTS HOW WOULD YOU ACCESS THE OPERATION IN YOUR LIBRARY ?

1.{\_\_\_\_} VERY SUCCESSFUL (OUR LIBRARY FULFIL ALMOST ALL OUR USERS DEMANDS)

2.{\_\_\_} MODERATE (OUR LIBRARY FULFIL A LARGE PERCENTAGE OF OUR USERS DEMANDS)

3.{\_\_\_} POOR (A LARGE PROPORTION OF OUR USERS DEMANDS REMAINS UNANSWERED)

12. WHAT ARE THE MAIN REASONS OF YOUR LIBRARY FAILURE TO FULFIL YOUR USERS DEMANDS?

(Please show the importance of any reason writing 1st, 2nd, 3rd in front of each one you select.)

1.{\_\_\_} SMALL BOOK COLLECTION

2.{\_\_\_} SMALL NUMBER OF PERIODICALS SUBSCRIPTION

3.{\_\_\_} SMALL COLLECTION OF OLD VOLUMES OF PERIODICALS

4.{\_\_\_\_} ABSENCE OF ANY CO-OPERATION WITH OTHER LIBRARIES

5.{\_\_\_\_} INSUFFICIENT ORGANISATION OF LIBRARY MATERIAL

- 6.{\_\_\_}
- 7.{\_\_\_}

13. WHAT ARE THE MAIN PROBLEMS (IF ANY) IN YOUR LIBRARY?

1.(\_\_\_) WE DO NOT HAVE ENOUGH LIBRARY STAFF

- 2.{\_\_\_} INSUFFICIENT LIBRARY SPACE
  - 3.{\_\_\_} SMALL COLLECTIONS OF BOOKS AND PERIODICALS
  - 4.{\_\_\_} INSUFFICIENT FUNDING
  - 5.{\_\_\_} LACK OF CO-OPERATION WITH OTHER LIBRARIES
  - 6.{\_\_\_} EDUCATED STAFF IN LIBRARY & INFORMATION STUDIES

7.{\_\_\_} LACK OF LIBRARY REGULATIONS

8.{\_\_}

9.{ }\_\_\_\_\_

14. HOW MANY EMPLOYEES HAS YOUR LIBRARY ?

{\_\_\_\_}

15. HOW MANY OF YOUR LIBRARY EMPLOYEES:

HAVE A LIBRARY OR INFORMATION DEGREE? {\_\_\_\_\_} HAVE A UNIVERSITY DEGREE? {\_\_\_\_} {\_\_\_\_}

HAVE A HIGH SCHOOL DEGREE ?

PLEASE WRITE BELLOW IF YOU WISH YOUR PERSONAL DATA. This information is needed only for future contacts with you.

NAME OF RE	SPONDENT	 	<u>_</u>
POSITION	· · · – – – , –	 	
DATE		 	

## APPENDIX II

## TABLES

# Table A1: Categories of libraries

University	Lab. libraries	Sectorial Libraries	School Libraries	Depart. Libraries	Seminar Libraries	Central (Main) libraries	Small Collections (Not considered as libraries)	Total of llibraries	Total Collections
AUT	60	23	2	13	18	1	16	117	133
AAU						1	19	1	20
HSFA						1		1	1
MUES			-			1		1	1
NCUA	17	8	2	4	21	1 (Students' Reading Room)	34	53	87
NTUA	4	2				2	15	8	23
PUPSS	,					1		1	1
тис						1		1	1
UC			3					3	3
UESA						1	7	1	8
UI		2		6	10	1 (Students Reading Rooms)	16	19	35
UP		1		3		1	14	5	19
UPES						1		1	1
UAE				4				4	4
UION				2				2	2
UTHES				2			6	2	8
UTHR			2	4		· · ·	5	6	11
Totals	81	36	9	38	49	13	132	226	358

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UNIVERSITY	1986		198	1987 1988		88	1989		1990	
· · · · · · · ·	Books	Periodicals								
AUT			37254792	117000000	62521173	136890731	66716630	309927619	108368015	184037000
AAU	5000000	1980000		2290000	T12000000		T16500000		T18200000	_
HSFA	785150	296705	1432252	423864	2467210	605520	1277921	493344	3316822	631712
MUES	2980000	3710000	2695000	4202000	3218000	6980000	3360000	8640000	3370000	9990000
NCUA	184000000	83331480	100000000	108468686	191686000	83064419	108568000	107127760	151143000	116193976
NTUA	5000000	38000000	1000000	50000000	2000000	65000000	3000000	75000000	34500000	10000000
PUPSS	2600000	5000000	3500000	6000000	15000000	6000000	6200000	9000000	10500000	13000000 *
TUC	7292271	13990592	7604297	16102248	13297941	17238142	8836368	20665480	10455929	18479323
UC										
UESA	5500000	3000000	5000000	6000000	6000000	9000000	700000	12000000	8000000	15000000
UI	14872099	54893400	19975969	64083043	24108117	68788020	1303404	98219284		117199223
UP										
UPES	2000000	300000	2500000	500000	2700000	800000	300000	1500000	4000000	2000000
UAE	2000000									
UTHR	T37760000 (1)		T21881215 (2)		T29318023 (2)		T39410698 (2)		T49251634 (2)	

\* Approximated Data

(1) In two libraries (technical & Law)

(2) In three libraries (Technical,Law & Athletic Sciences)

Table A3 : Allocation of libary funds between books and periodicals during1986-1991 (in million drachmas)

Year	Books	Periodicals
1986	230.2	204.6
1987	189.7	375
1988	341.1	394.2
1989	236.4	642.2
1990	258	716
1991	238	756

Data for the universities : AAU, AUT (excluded from 1986), HFSA, MUES, NCUA, NTUA, PUPSS, TUC, UESA, UI, UPES. (Figure for 1991 is an estimation).

Table A4: Cost of	Acquisitions/Active Library	y User (in drachmas)
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UNIVERSITY	1986	1987	1988	1989	1990
ARISTOTELIAN UNIVERSITY OF THESSALONIKI		4407	5630	10404	7972
ATHENS AGRICULTURAL UNIVERSITY	4207	1308	6557	9065	9800
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	2525	2573	3777	4412	4912
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	5082	7058	9970	12240	15696
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1820	2245	4916	3492	5364
TECHNICAL UNIVERSITY OF CRETE	27850	42943	48037	59241	57525
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	2380	3060	4147	5227	6327
UNIVERSITY OF IOANNINA	11983	14160	15092	18195	20751
UNIVERSITY OF PIRAEUS	609	791	921	1178	1571
UNIVERSITY OF THRACE	7108	4060	5414	7228	8259
MEAN	7602	8260	10446	13068	13818

University	1986	1987	1988	1989	1990
		5650000	4000000	12182103	14205000
		(4.8%)	(2.9%)	(3.9%)	(7.7%)
A A I I	200000	320000	280000		420000
~~~	(10%)	(14%)	(2.3%)		(2.3%)
HSFA	-	-	174070	178293	203129
MUER	676000	453000	426000	362000	976000
MUES	(18%)	(10.8%)	(6%)	(4.2%)	(9.7%)
	1300000	1000000	2000000	5000000	5000000
	(3.4%)	(2%)	(3%)	(6.6%)	(5%)
	400000	500000	600000	700000	1000000
PUP35	(8%)	(8.3%)	(10%)	(7.7%)	(7.6%)
	1088719	2207066	2277572	1416746	1528797
100	(7.8%)	(13.7%)	(13.2%)	(6.8%)	(8.2%)
	500000	700000	1000000	1000000	1300000
UESA	(16.6%)	(11.6%)	(11%)	(8.3%)	(8.7%)
	2918140	2855136	1962048	9340185	7059190
	(4.2%)	(3.4%)	(2.11%)	(8.34%)	(5.5%)
	-	200000	-	250000	-
UFE3	(0%)	(25%)	(0%)	(10.8%)	(0%)
UTHR	1000000	2150000	4194958	4299936	1299144

# Table A5: Cost of binding\* (in drachmas)

\* In brackets the cost of binding as percentage of periodical subscriptions

### Table A6 : University of Ioannina cost of acquisitions

Year	Increase in Book expenditure (%)	Increase in Expediture for Periodicals (%)	Increase of expenditure for all acquisitions(%)	Inflation (%)	Devaluatio ECU	on of Drachma to
1986	18.7	29.6	23.3	23.1	137	30.5%
1987	20.5	6.7	13.8	16.4	156	14%
1988	10.5	7.4	9	13.5	167	7%
1989	20	42.8	30	13.7	179	7%
1990	14	19.3	16.7	20.4	202	13%
1991	37.6	22	30	19.5	225	11.4%
1992	23	15	19	16.2	251	11.5
Total 86- 92	144.3	142.8	141.8	122.8		94.4%

Index	1985	1986	1987	1988	1989	1990	1991	Mean
Expenditure/ Student in drachmas	64	144	17	168	176	317	346	176
Expenditure/ Student in £	0.3	0.6	0.06	0.6	0.6	1	1	0.6
Expenditure on textbooks (*) / Student	.03	.06	.005	.05	.06	.2	.07	.06

### Table A7: University of Ioannina: Expenditure on undergraduate collections.

(\*) Prices of Greek Books

## Table A8: University of Ioannina: Expenditure on Reference material. (in drachmas)

Index	1985	1986	1987	1988	1989	1990	<b>199</b> 1	Mean
Total	70998	289442	88861	176647	93721	300888	975766	285189
Cost								
Total Cost For Ref. Material/ User	13	52	16	30	16	53	170	50

# Table A9: University of loannina acquisitions (number of volumes)

School	1987	1988	1989	1990	1991
Philosophy	4039	4427	4201	4459	5283
Medical	1949	798	117	274	238
Natural Sciences	439	1093	379	524	421
Totals	6427	6318	4697	5257	5942

UNIVERSITY	BOOK COLLECTIONS						
	Volumes	Estimated volumes					
AUT	664640	700000					
AAU	5200	6000					
HSFA	16000	17000					
MUES	30000	35000					
NCUA	421570	450000					
NTUA	125000	130000					
PUPSS	51224	51224					
тис	5000	5800					
	170000	170000					
UESA	50000	56000					
<u>u</u>	124933	145000					
UP	22033	85000					
UPES	22000	25000					
UAE	5000	8000					
UION	27500	28000					
UTHES	19520	22000					
UTHR	41300	60000					
TOTAL	1800920	1994024					
MEAN	105936	117296					

# Table A10: Book collections (1991)

(\*) Included the small collections.

UNIVERSITY	- 1000	1001-	5001 - 10000	10001	300001	100001	Number of volumes	Estimated number of volumes in	Books/ Users (1989)
				30000	100000			1991	()
AUT	48	53	10	7	1	1	664640	700000	13.5
AAU	<u> </u>		1				5200	6000	2.6
HSFA				1			16000	17000	34
MUES				1			30000	35000	4.1
NCUA	11	20	11	9			421570	450000	7.3
NTUA		3			1		125000	_130000	13.4
PUPSS		1			1		51224	51224	7.6
TUC		1					5000	5800	8
UC				1	1		170000	170000	38
UESA					1		50000	56000	6.6
UI	1	7	6	2	1	0	124933	145000	18.6
UP	1	2	1				22033	85000	7.7
UPES				1			22000	25000	6.5
UAE		2	2				5000	8000	6.7
UION							27500	28000	59
UTHES					-		19520	22000	82
UTHR		1			2		41300	60000	8
TOTAL	61(29%)	89(42%)	31(14.6)	22(10%)	89(3.7%)	1(0.5%)	1800920 (in	1994024	Mean=10.3
							212 libraries)		
							Mean libr.   Collection=8485		
							volumes		

# Table A11: Book Collections in library size

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# Table A12: Distribution of book collections in languages

UNIVERSITY	GRE	EEK	ENG	LISH	FRENCH		GERMAN	
	<50%	≥50%	<50%	≥50%	<50%	≥50%	<50%	≥50%
AUT	49	5	37	75	77	1	82	15
AAU	1		1		1		1	
HSFA	1		1		1		1	
MUES	1			1	1		1	
NCUA	34	6	24	23	27	2	19	5
NTUA	4		1	3	4		4	
PUPSS	1		1		1		1	
TUC	1			1	1		1	
UC	2	1	1	2	3		3	
UEȘA	1			1	1		1	
UI	12	5	10	7	16		11	
UP	4			4	2		1	
UPES	1			1	1		1	
UAE	3	1	1	3				
UION	1	1	1	1	2		2	
UTHES	2			2				
UTHR	3		1	2	1			
TOTALS	121 (59%)	19( <del>9</del> %)	79(38.5%)	126(61.5%)	139(68%)	3(1.5%)	129 (63%)	20 (10%)

		···
UNIVERSITY	TITLES OF PERIODICALS	VOLUMES OF PERIODICALS*
AUT	4000	105000
AAU	64	4500
HSFA	60	2000
MUES	500	7000
NCUA	2933	104025
NTUA	1300	50.000
PUPSS	500	8500
TUC	310	5000
UC	1472	61500
UESA	480	10000
UI	1143	23000
UP	1034	8000
UPES	70	5000
UAE '	323	5000
UION	258	6000
UTHES	250	3000
UTHR	712	7312
Total	15409	364887

### **Table A13: Periodical collections**

\* In libraries which provided data.

.

## Table A14: Text-book collections

UNIVERSITY	REPLIES	STUDENT COLLECTION FROM EDUCATIONAL UNI UNIVERSITY	STUDENT COLLECTION FROM OTHER UNIVERSITIES				
		YES	NO	>100	≤100	YES	NO
AUT	115	89(77%)	26(23%)	8 (7%)	55 (48%)	63 (55%)	53 (46%)
AAU	1	1					1
HSFA	1	1				_	1
MUES	1	1			1	1	
NCUA	47	26 (55%)	21(45%)	3(6%)	18 (38%)	21	28 (60%)
NTUA	2	2		1		1	1
PUPSS	1	1				_	1
TUC	1	1			1	1	
UC <sup>1</sup>	2	1	1		2	2	
UESA	1	1			1	1	
UI	17	10(59%)	7(41%)		7(41%)	7(41%)	9(53%)
UP	4				1	1	3
UPES	1	t					1
UAE	1	1			1	1	
UION	2	2			2	2	
UTHES	2	1		1		1	
UTHR	2		2				2
TOTAL	201	139 (69%)	57 (28%)	13 (6.5%)	8 <del>9</del> (44%)	102 (50%)	100 (50%)

-

		Abstracts, Indexes
UNIVERSITY	LIBRARIES	& Reviews
AUT	26	50
AAU	11	6
HSFA	11	1
MUES	1	5
NCUA	14	37
NTUA	4	17
PUPSS	1	4
TUC	1	6
UC	2	21
UESA	1	5
UI	8	20
UP	4	12
UPES	1	3
UAE	4	10
	2	3
UTHES	2	3
UTHR	2	4
TOTAL	75	207

#### Table A15: Abstracts and Reviews

### **Table A16: Dissertations Collections**

	REPLIES	Libraries with a collection of dissertations
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	116	83
ATHENS AGRICULTURAL UNIVERSITY	1	1
HIGHER SCHOOL OF FINE ARTS	1	-
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1	-
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	50	37
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	2	2
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1	1
TECHNICAL UNIVERSITY OF CRETE	1	-
UNIVERSITY OF CRETE	2	2
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1	1
UNIVERSITY OF IOANNINA	17	12
UNIVERSITY OF PATRAS	4	1
UNIVERSITY OF PIRAEUS	1	1
UNIVERSITY OF THE AEGIAN	4	•
UNIVERSITY OF THE IONIAN	2	_
UNIVERSITY OF THESSALIE	2	
UNIVERSITY OF THRACE	4	2
TOTAL	210	143

UNIVERSITY	LIBRARIES WITH NEWSPAPER COLLECTION	NUMBER OF NEWSPAPER TITLES
AUT	7	45
AAU		
HSFA		
MUES		
NCUA	2	8
NTUA	1	
PUPSS	1	10
TUC	1	2
UC		_
UESA	1	4
UI	5	19
UP	2	4
UPES	1	1
UAE	1	8
UION		
UTHES		
UTHR	2	8
TOTAL	24	109

## Table A17: News-paper collections

# Table A18: Library Staff

UNIVERSITY	LIBRARIES			NUI	MBER	OF LIB	RARY	STAFF		TOTALS	Users/ Staff
		0	1	2	3	4	5	6	7.	•	
AUT	118	51	55	9	2		1		_	84	4365
AAU	1					1			-	4	465
HSFA	1				1					3	152
MUES	1				1					3	906
NCUA	53	15	29	5	4					51	698
NTUA	4		1	1	1	1				10	536
PUPSS	1					1			_	4	1095
TUC	1					ĺ		1		5	120
UC	2	•							2 a	14	290
UESA	1					1				4	908
UI	18		12	3	1					21	268
UP	4	1	2	1					_	5	1570
UPES	1			1						. 2	1273
UAE	4			4						8	148
UION	2			2					_	4	136
UTHES	2			2						4	75
UTHR	4			2		2			2 <sup>c</sup>	12	471
TOTALS	214	69	102	22	9	4	1	1	4	227	
		32%	49%	10%	4%	2%	0.5%	0.5%	_2%		ļ į
Mean=792 Standard Deviation=1023 Range=75-4365											

a: (7,11) b: (3+2+1) c: (8,8)

\_\_\_\_

UNIVERSITY	REPLIES	OPEN	CLOSED
AUT	115	60	_ 55
AAU	1	1	
HSFA	1	1	
MUES	1	1	
NCUA	47	36	11
NTUA	4	4	
PUPSS	1	1	
TUC	1	1	
UC	3	3	
UESA	1	1	
UI	17	15	2
UP	4	3	1
UPES	1		1
UAE	4	4	
UION	2	2	
UTHES	2	2	
UTHR	3	3	
TOTALS	208	138 (66%)	70 (34%)

### Table A19: Stacks

## Table A20 : Library area in Greek universities.

University	Area in m <sup>2</sup> (*)
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	18644
ATHENS AGRICULTURAL UNIVERSITY	1000
HIGHER SCHOOL OF FINE ARTS	250
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	450
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	13398
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	2500
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	800
TECHNICAL UNIVERSITY OF CRETE	500
UNIVERSITY OF CRETE	2500
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1000
UNIVERSITY OF IOANNINA	5000
UNIVERSITY OF PATRAS	2500
UNIVERSITY OF PIRAEUS	1000
UNIVERSITY OF THE AEGEAN	1500
	800
UNIVERSITY OF THESSALI	700
UNIVERSITY OF THRACE	2300

(\*) Estimated figures.

Country	Univ. libraries (Universities)	Service points	Total area	Area/ univ. libr.	Area/ service point
Denmark	5	14	46660	9332	3333
UK	53	•••		6104	
Greece	17	211	54842	3226	152

## Table A21: Library area in Greek, UK and Danish Universities

### Table A22: Catalogue form

UNIVERSITY	REPLIES	WITHOUT A CATALOGUE	CĂRD	BOOK	COMPUTERIZED	MICROFICHE
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	115	10	76	25	19	1
ATHENS AGRICULTURAL UNIVERSITY	1		1	· · · ·		
HIGHER SCHOOL OF FINE ARTS	1		1			
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1		1			
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	50	6	33	10	0	0
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	4		4			
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1.		1		1	
TECHNICAL UNIVERSITY OF CRETE	1		1			
UNIVERSITY OF CRETE	3		3	1	3	
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1		1			
UNIVERSITY OF	17.	1	15		2	
UNIVERSITY OF PATRAS	4		4	1	1	
UNIVERSITY OF PIRAEUS	1		1			
UNIVERSITY OF THE AEGIAN	4		4	1		
UNIVERSITY OF THE	2		2			
UNIVERSITY OF THESSALI	2		2			
UNIVERSITY OF THRACE	3		2	1	1	1

# Table A23: Cataloguing Practices

UNIVERSITY	BY EXPERIENC E	AGLOAMERICA N CATALOGUING RULES	FOLLOWING PARTLY INTERNATIONA L STANDARDS	OTHER
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	49	28	14	12
ATHENS AGRICULTURAL UNIVERSITY		1		
HIGHER SCHOOL OF FINE ARTS			1	
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES		1		
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	19	15	6	2
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	1		1	
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES		1		
TECHNICAL UNIVERSITY OF CRETE		1		
UNIVERSITY OF CRETE	2			
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS		1		
UNIVERSITY OF IOANNINA	6	2	6	1
UNIVERSITY OF PATRAS	11	1	2	
UNIVERSITY OF PIRAEUS	<u></u>	1		
UNIVERSITY OF THE AEGIAN		1		
UNIVERSITY OF THE IONIAN		2		
UNIVERSITY OF THESSALI	1	1		
	2			_

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# Table A24: Catalogue Entries

UNIVERSITY	AUTHOR NAME	TITLE	SUBJECT HEADINGS	CALL NUMBER Ναδώ το Β35
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	85	33	39	15
ATHENS AGRICULTURAL UNIVERSITY	_ 1	1	1	1
HIGHER SCHOOL OF FINE ARTS	1	1		
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1	1	1	1
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	39	15	13	5
NATIONAL TECHNICAL	2	1	1	1
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1	1		1
TECHNICAL UNIVERSITY OF CRETE	1	1	1	1
UNIVERSITY OF CRETE	2	2	2	2
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1	1	1	1
UNIVERSITY OF IOANNINA	15	5	7	4
UNIVERSITY OF PATRAS	4	3	2	4
UNIVERSITY OF PIRAEUS	1	1	1	1
UNIVERSITY OF THE AEGIAN	11	1	1	_1
UNIVERSITY OF THE IONIAN		·		
UNIVERSITY OF THESSALI				· · · ·
UNIVERSITY OF THRACE	2 ·	2	1	1

### Table A25: Circulation

UNIVERSITY	BOOKS		PERIODICALS	
	FACULTY MEMBERS	STUDENTS	FACULTY MEMBERS	STUDENTS
ARISTOTELIAN UNIVERSITY OF THESSALONIKI	112	65	52	
ATHENS AGRICULTURAL UNIVERSITY	1	1	0	0
HIGHER SCHOOL OF FINE ARTS	1	0	1	0
MACEDONIAN UNIVERSITY OF ECONOMIC AND SOCIAL STUDIES	1	0	1	0
NATIONAL CAPODISTRIAN UNIVERSITY OF ATHENS	45	13	16	0
NATIONAL TECHNICAL UNIVERSITY OF ATHENS	4	2	0	0
PANTEIOS UNIVERSITY OF POLITICAL AND SOCIAL STUDIES	1	1	0	0
TECHNICAL UNIVERSITY OF CRETE	1	1	0	0
UNIVERSITY OF CRETE	3	3	0	0
UNIVERSITY OF ECONOMIC STUDIES OF ATHENS	1	1	0	0
UNIVERSITY OF IOANNINA	15	10	8	0
UNIVERSITY OF PATRAS	4	4	2	0
UNIVERSITY OF PIRAEUS	1	1	1	0
UNIVERSITY OF THE AEGIAN	4	4	4	0
UNIVERSITY OF THE IONIAN	2	2	2	0
UNIVERSITY OF THESSALI	2	0	2	0
UNIVERSITY OF THRACE	4	2	1	0

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## **APPENDIX III**

## List of libraries which provided data.

UNIVERSITY	LIBRARY
MUES	Βιβλιοθήκη Πανεπιστημίου Μακεδονίας
HSFA	Βιβλιοθήκη Ανώτατης Σχολής Καλών Τεχνών
AUT	Βιβλιοθήκη Α' Υποτομέα του Κτασκευαστικού Τομέα
AUT	Βιβλιοθήκη Εργ. Ακίνητης Οδοντικής Προσθετικής του Τομέα Προσθετικής
AUT	Βιβλιοθήκη Εργ. Αμπελουργίας του Τομέα Φυτικής Παραγωγής
AUT	Βιβλιοθήκη Εργ. Αναλυτικής και Περιβαλλοντικής Χημείας
AUT	Βιβλιοθήκη Εργ. Ανατομίας του Τομέα Ανατομικής και Παθολογικής Ανατομικής
AUT	Βιβλιοθήκη Εργ. Αστρονομίας
AUT	Βιβλιοθήκη Εργ. Βιολογίας- Εργ.Γεν. Βιολογίας
AUT	Βιβλιοθήκη Εργ. Βιολογικής Χημείας
AUT	Βιβλιοθήκη Εργ. Βιοχημείας
AUT	Βιβλιοθήκη Εργ. Βοτανικής
AUT	Βιβλιοθήκη Εργ. Εδαφολογίας του Τομέα εγγείων Βελτιώσεων,Εδαφολογίας και Γεωργ.Μηχαν.
AUT	Βιβλιοθήκη Εργ. Εδαφομηχανικής και Θεμελειώσεως του Τομέα Γεωτεχνικής Μηχανικής
AUT	Βιβλιοθήκη Εργ. Εφαρμοσμένης Ζωολογίας και Παρασιτολογίας του Τομέα Φυτοπροστασίας
AUT	Βιβλιοθήκη Εργ. Εφαρμοσμένης Θερμοδυναμικής του Τομέα Ενεργειακού
AUT	Βιβλιοθήκη Εργ. Εφηρμοσμένης Φυσικής
AUT	Βιβλιοθήκη Έργ. Ιατρικής Φυσικής του Τομέα Ακτινολογίας-Ιατρικής Φυσικής-Πληροφορικής.
AUT	Βιβλιοθήκη Έργ. Ιατροδικαστικής και Τοξικολογίας του Τομέα Ανατομίας και Παθολογικής Ανατομικής
AUT	Βιβλιοθήκη Εργ. Ιστολογίας-Εμβρυολογίας και Ανθρωπολογίας
AUT	Βιβλιοθήκη Εργ. Κατασκευής Συσκευών Διεργασιών του Τομέα Ενεργειακού
AUT	Βιβλιοθήκη Εργ. Μηχανικής των Ρευστών του Τομέα Ενεργειακού.
AUT	Βιβλιοθήκη Εργ. Μικροβιολογίας
AUT	Βιβλιοθήκη Εργ. Οδοντικής Χειρουργικής
AUT	Βιβλιοθήκη Εργ. Οδοντικής Παθολογίας και Θεραπευτικής του Τομέα Οδοντοθεραπευτικού
AUT	Βιβλιοθήκη Εργ. Οδοντικής και Ανωτέρας Προσθετικής του Τομέα Προσθετικής
AUT	Βιβλιοθήκη Εργ. Οδοντογναθ. Χειρουργικής του Τομέα Παθολογίας και Χειρουργικής Στόματος

ΑUT Βιβλιοθήκη Εργ. Οδοποιίας του Τομέα Συγκοινωνιών και Οργάνωσης

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UNIVERSITY	LIBRARY
AUT	Βιβλιοθήκη Εργ. Οικοδομικής του Τομέα Επιστήμης και Τεχνολογίας των Κατασκευών
AUT	Βιβλιοθήκη Εργ. Οργανικής Χημείας
AUT	Βιβλιοθήκη Εργ. Οργανικής Χημικής Τεχνολογίας
AUT	Βιβλιοθήκη Εργ. Ορθοδοντικής του Τομέα Ορθοδοντικής και Παροδοντολογίας.
AUT	Βιβλιοθήκη Εργ. Τεχν. Γεωλογίας του Τομέα Γεωτεχνικής Μηχανικής
AUT	Βιβλιοθήκη Εργ. Τεχνολογίας Γάλακτος του Τομέα Γεωργ.Βιομηχανιών,Επιστήμης και Τεχνολογίας Τροφίμων
AUT	Βιβλιοθήκη Εργ. Υδραυλικής του Τομέα Εγγείων Βελτιώσεων,Εδαφολογίας . και Γεωργ.Μηχανικής
AUT	Βιβλιοθήκη Εργ. Υγιεινής του Τομέα Βιολογικών Επιστημών και Προληπτικής Ιατρικής
AUT	Βιβλιοθήκη Εργ. Ζωολογίας
AUT	Βιβλιοθήκη Εργ. Γενετικής και Βελτιώσεως των Φυτών
AUT	Βιβλιοθήκη Εργ. Γενικής και Ανόργανης Χημικής Τεχνολογίας
AUT	Βιβλιοθήκη Εργ. Γεωργίας του Τομέα Φυτικής Παραγωγής
AUT	Βιβλιοθήκη Εργ. Γεωργικής Χημείας του Τομέα Φυτικής Παραγωγής
AUT	Βιβλιοθήκη Εργ. Δασικής Βοτανικής
AUT	Βιβλιοθήκη Εργ. Δασικής Οικονομικής του Τομέα Σχεδιασμού και Ανάπτυξης Φυσικών Πόρων.
AUT	Βιβλιοθήκη Εργ. Δασικής Γενετικής
AUT	Βιβλιοθήκη Εργ. Δασικών Βοσκοτόπων του Τομέα Λιβαδοπονίας και Θηραμάτων
AUT	Βιβλιοθήκη Εργ. Δασοκομίας και Ορεινής Υδρονομικής του Τομέα Δασικής Παραγωγής-Προστασίας Δασών-Φυσικού Περιβάλλοντος.
AUT	Βιβλιοθήκη Εργ. Δεντροκομίας του Τομέα Φυτικής Παραγωγής
AUT	Βιβλιοθήκη Εργ. Δομικών Μηχανών του Τομέα Συγκοινωνιών και Οργάνωσης
AUT	Βιβλιοθήκη Εργ. Παθολογίας και Παθολογικής Ανατομικής του Τομέα Ανατομικής και Παθολογικής Ανατομίας
AUT	Βιβλιοθήκη Εργ. Προληπτικής Οδοντιατρικής και Παροδοντολογίας του Τομέα Οδοντικής και Παροδοντολογίας
AUT	Βιβλιοθήκη Έργ. Σιδηροπαγούς Σκυροδέματος του Τομέα Επιστήμης και Τεχνολογίας των Κατασκευών
AUT	Βιβλιοθήκη Εργ. Στατικής και Δυναμικής των Κατασκευών του Τομέα Επιστήμης και Τεχνολογίας των Κατασκευών
AUT	Βιβλιοθήκη Εργ. Στοιχείων Μηχανών του Τομέα Κατασκευαστικού
AUT	Βιβλιοθήκη Εργ. Στοματολογίας του Τομέα Παθολογίας και Χειρουργικής Στόματος
AUT	Βιβλιοθήκη Εργ. Συγκοινωνιακής Τεχνικής του Τομέα Συγκοινωνιών και Οργάνωσης.

UNIVERSITY	

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UNIVERSIT	LIBRARY
AUT	Βιβλιοθήκη Εργ. Συστηματικής Βοτανικής
AUT	Βιβλιοθήκη Εργ. Φυσικοχημείας
AUT	Βιβλιοθήκη Εργ. Φυσιολογίας του Τομέα Φυσιολογίας-Φαρμακολογίας
AUT	Βιβλιοθήκη Εργ. Φυσιολογίας,Θρέψεως και Εφαρμοσμένης Διατροφής Αγροτικών Ζώων του Τομέα Ζωικής Παραγωγής
AUT	Βιβλιοθήκη Εργ. Φυτοπαθολογίας του Τομέα Φυτοπροστασίας
AUT	Βιβλιοθήκη Εργαλειομηχανών και Δυναμικής των Μηχανών του Τομέα Κατασκευαστικός
AUT	Βιβλιοθήκη Εργαστ. Ατομικής και Πυρηνικής Φυσικής
AUT	Βιβλιοθήκη Εργατικού Δικαίου
AUT	Βιβλιοθήκη Κλινικής ΩΡΛ του Τομέα Αισθητήριων Οργάνων και Α' Νευρολογικής Κλινικής του Τομέα Νευροεπιστημόνων της Ιατρικής Σχολής
AUT	Βιβλιοθήκη Κτηνιατρικής Σχολής
AUT	Βιβλιοθήκη ΤΕΦΑΑ
AUT	Βιβλιοθήκη Τμήματος Αγρονόμων και Τοπογράφων
AUT	Βιβλιοθήκη Τμήματος Αρχιτεκτόνων
AUT	Βιβλιοθήκη Τμήματος Βιολογίας
AUT	Βιβλιοθήκη Τμήματος Ηλεκτρολόγων Μηχανικών
AUT	Βιβλιοθήκη Τμήματος Μαθηματικών
AUT	Βιβλιοθήκη Τμήματος Χημικών Μηχανικών
AUT	Βιβλιοθήκη Τμήματος Γεωλογίας
AUT	Βιβλιοθήκη Τμήματος Φυσικής
AUT	Βιβλιοθήκη Τμήματος Φυσικών και Μαθηματικών Επιστημών
AUT	Βιβλιοθήκη Τομέα Αρχαιολογίας και Ιστορίας της Τέχνης
AUT	Βιβλιοθήκη Τομέα Βιομηχανικής Διοίκησης
AUT	Βιβλιοθήκη Τομέα Εμπορικού και Οικονομικού Δικαίου
AUT	Βιβλιοθήκη Τομέα Ηλεκτρονικής και Η/Υ
AUT	Βιβλιοθήκη Τομέα Ηλεκτρονικής και Υπολογιστών
AUT	Βιβλιοθήκη Τομέα Μετεωρολογίας-Κλιματολογίας
AUT	Βιβλιοθήκη Τομέα Οικολογίας
AUT	Βιβλιοθήκη Τομέα Τηλεπικοινωνιών
AUT	Βιβλιοθήκη Τομέα Υδραυλικής και Τεχνικης Περιβάλλοντος
AUT	Βιβλιοθήκη Τομέα Γαλλικης Λογοτεχνίας
AUT	Βιβλιοθήκη Τομέα Γενετικής Ανάπτυξης και Μοριακής Βιολογίας.
AUT	Βιβλιοθήκη Τομέα Γενικής και Ανόργανης Χημείας
AUT	Βιβλιοθήκη Τομέα Γεωφυσικής
AUT	Βιβλιοθήκη Τομέα Παιδαγωγικής
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Βιβλιοθήκη Τομέα Συγκομιδής και τεχνολογίας Δασικών Προϊόντων. AUT

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UNIVERSITY	LIBRARY
AUT	Βιβλιοθήκη Τομέα Φαρμακευτικής Χημείας
AUT	Βιβλιοθήκη Τομέα Φιλοσοφίας
AUT	Βιβλιοθήκη Τομέα Ψυχολογίας
AUT	Βιβλιοθήκη Γ' Εργ. Τομέα Εφαρμογών Φυσικής
AUT	Βιβλιοθήκη Γερμανικού Τμήματος
AUT	Βιβλιοθήκη Θεολογικής Σχολής
AUT	Βιβλιοθήκη Λαογραφίας
AUT	΄Βιβλιοθήκη Παιδαγωγικού Τμήματος Νηπιαγωγών
AUT	Βιβλιοθήκη Πειραματικής Φαρμακολογίας
AUT	Βιβλιοθήκη εργ. Διευθέτησης Ορεινών Υδάτων του Τομέα Δασοτεχνικών και Υδρονομικών Έργων
AUT	Βιβλιοθήκη του Εργ. Γεωργικής Μηχανολογίας του Τομέα Εγγείων Βελτιώσεων,Εδαφολογίας και Γεωργικής Μηχανικής
AUT	Κεντρική Βιβλιοθήκη Α.Π.Θ.
AUT	Σπουδαστήριο Αγγλικής Γλώσσας και Λογοτεχνίας
AUT	Σπουδαστήριο Αστικού Δικαίου
AUT	Σπουδαστήριο Βυζαντινής και Μεσαιωνικής Ιστορίας
AUT	Σπουδαστήριο Ιστορίας (Νεώτερης και Σύγχρονης.
AUT	Σπουδαστήριο Ιταλικής Γλώσσας και Λογοτεχνίας
AUT	Σπουδαστήριο Κλασσικής Φιλολογίας και Αρχαίας Ιστορίας.
AUT	Σπουδαστήριο Μηχανικής
AUT	Σπουδαστήριο Οικονομικών Επιστημών
AUT	Σπουδαστήριο Τομέα Ιστορίας,Φιλοσοφίας και Κοινωνιολογίας του Δικαίου.
AUT	Σπουδαστήριο Τομέα Μεσαιωνικών και Νεοελληνικών Σπουδών
AUT	Σπουδαστήριο Τομέα Ποινικών και Εγκληματολογικών Επιστημών
AUT	Σπουδαστήριο Γαλλικής Γλωσσολογίας
AUT	Σπουδαστήριο Γλωσσολογίας
AUT	Σπουδαστήριο Δημοσίου Δικαίου
AUT	Σπουδαστήριο Διεθνών Σπουδών
AUT	Σπουδαστήριο Θεωριτικής Φυσικής
AUT	Σπουδαστήριο ΠΟλιτικής Δικονομίας του Τομέα Αστικού,Αστικού Δικονομικού και Εργατικού Δικαίου
AUT	Σπουδαστήριο Παιδαγωγικού Δημοτικής Εκπαίδευσης
NCUA	Βιβλιοθήκη Εργ. Ανόργανης Χημείας του Τμήματος Χημείας
NCUA	Βιβλιοθήκη Εργ. Αναλυτικής Χημείας
NCUA	Βιβλιοθήκη Εργ. Αστροφυσικής και Αστρονομίας του Τμήματος Φυσικής
NCUA	Βιβλιοθήκη Εργ. Βιολογικής Χημείας της Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Εργ. Βιομηχανικής Χημείας του Τμήματος Χημείας

UNIVERSITY	LIBRARY
NCUA	Βιβλιοθήκη Εργ. Βοτανικής του Τμήματος Βιολογικού
NCUA	Βιβλιοθήκη Εργ. Ηλεκτρονικής του Τμήματος Φυσικής
NCUA	Βιβλιοθήκη Εργ. Ιατροδικαστικής και Τοξικολογίας της Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Εργ. Κλιματολογίας
NCUA	Βιβλιοθήκη Εργ. Μετεωρολογίας του Τμήματος Φυσικής-Τομέας Φυσικής Εφαρμογών
NCUA	Βιβλιοθήκη Εργ. ΜηχΦυσικής Στερεάς Κατάστασης του Τμήματος Φυσικής
NCUA	Βιβλιοθήκη Εργ. Οργανικής Χημείας
NCUA	Βιβλιοθήκη Εργ. Ζωολογίας του Βιολογικού Τμήματος
NCUA	Βιβλιοθήκη Εργ. Παθολογικής Φυσιολογίας της Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Εργ. Πειραματικής Ανατομίας της Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Εργ. Πειραματικής Φαρμακολογίας της Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Εργ.Πειραματικής Ψυχολογίας
NCUA	Βιβλιοθήκη Ιατρικής Σχολής
NCUA	Βιβλιοθήκη Τμήματος Φαρμακευτικής-ΦαρμακευτικήςΤεχνολογίας
NCUA	Βιβλιοθήκη Τομέα Βιοχημείας Κυτταρικής και Μοριακής Βιολογίας και Γενετικής του Βιολογικού Τμήματος
NCUA	Βιβλιοθήκη Τομέα Οικολογικής Ταξινόμησης του Βιολογικού Τμήματος
NCUA	Βιβλιοθήκη Τομέα Ορυκτολογίας και Πετρολογίας του Τμήματος Γεωλογίας
NCUA	Βιβλιοθήκη Τομέα Χημείας Τροφίμων
NCUA	Βιβλιοθήκη Τομέα Γεωγραφίας-Κλιματολογίας του Τμήματος Γεωλογίας
NCUA	Βιβλιοθήκη Τομέα Δημοσίου Δικαίου,Νομικής Σχολής
NCUA	Βιβλιοθήκη Τομέα Διεθνών Σπουδών Νομικής Σχολής
NCUA	Βιβλιοθήκη Τομέα Πυρηνικής Φυσικής και Στοιχειωδών Σωματιδίων του Τμήματος Φυσικής
NCUA ·	Βιβλιοθήκη Γεωλογικού Τμήματος
NCUA	Βιβλιοθήκη Θεολογικής Σχολής Αθηνών
NCUA	Βιβλιοθήκη Παιδαγωγικού Τμήματος Δημοτικής Εκπαίδευσης
NCUA	Ιστορικό Σπουδαστήριο
NCUA	Ιταλικό Σπουδαστήριο
NCUA	Μαθηματικό Σπουδαστήριο
NCUA	Νομικό Σπουδαστήριο
NCUA	Γαλλικό Σπουδαστήριο
NCUA	Παν/κή Αθλητική Βιβλιοθήκη ΤΕΦΑΑ
NCUA	Σπουδαστήριο Αγγλικής Γλώσσας και Φιλολογίας
NCUA	Σπουδαστήριο Αρχαιολογίας
NCUA	Σπουδαστήριο Βυζαντινής και Νεοελληνικής Φιλολογίας
NCUA	Σπουδαστήριο Εμπορικού και Ναυτικού Δικαίου, Νομικής Σχολής

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UNIVERSITY	LIBRARY
NCUA	Σπουδαστήριο Εργατικού Δικαίου Νομικής Σχολής
NCUA	Σπουδαστήριο Ιστορίας Δικαίου,Νομικής Σχολής
NCUA	Σπουδαστήριο Κλασικής Φιλολογίας
NCUA	Σπουδαστήριο Οδοντιατρικής Σχολής
NCUA	Σπουδαστήριο Οικονομικού Τμήματος Νομικής Σχολής
NCUA	Σπουδαστήριο Τομέα Παιδαγωγικής
NCUA	Σπουδαστήριο Γερμανικής Γλώσσας και Φιλολογίας
NCUA	Σπουδαστήριο Γλωσσολογίας
NCUA	Σπουδαστήριο Λαογραφίας
NCUA	Σπουδαστήριο Ποινικών Επιστημών Νομικής Σχολής
NCUA	Σπουδαστήριο Συστηματικής Θεολογίας
NCUA	Σπουδαστήριο Φιλοσοφίας
NCUA	Φοιτητικό Αναγνωστήριο Παν/κής Λέσχης
NTUA	Βιβλιοθήκη Ε.Μ.Π. Παράρτημα Ζωγράφου
NTUA	Βιβλιοθήκη Τομέα Διοικήσεως και Επιχειρησιακής Ερευνας Τμήματος Μηχανολόγων Μηχανικών
NTUA	Βιβλιοθήκη Γεωδετικής Τμήμα Τοπογράφων.
NTUA	Κ.Βιβλιοθήκη Ε.Μ.Π.
UESA	Βιβλιοθήκη Οικονομικού Παν/μίου
AAU	Βιβλιοθήκη Γεωργικού Παν/μίου
UTHR	Βιβλιοθήκη Νομικής
UTHR	Βιβλιοθήκη Ιατρικής Σχολής
UTHR	Βιβλιοθήκη Πολυτεχνικής Σχολής
UTHR	Πανεπιστημιακή Βιβλιοθήκη ΤΕΦΑΑ
UAE	Βιβλιοθήκη Παν/μίου Αιγαίου
UI	Βιβλιοθήκη Ιατρικού Τμήματος
Uł	Βιβλιοθήκη Τμήματος Μαθηματικών
UI	Βιβλιοθήκη Τμήματος Φυσικής
UI	Βιβλιοθήκη Τομέα Ψυχολογίας
UI	Βιβλιοθήκη Χημικού
Uł	Βιβλιοθήκη Παιδαγωγικού Τμήματος Νηπιαγωγών
UI	Βιβλιοθήκη Παιδαγωγικού Τμήματος Δημοτικής Εκπαίδευσης
UL.	Κεντρική Βιβλιοθήκη
UI	Νεοελληνικό Σπουδαστήριο
UI	Σπουδαστήριο Φιλοσοφίας
UI	Σπουδαστήριο Αρχαιολογίας
UI	Σπουδαστήριο Ιστορίας Νεωτέρων Χρόνων

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UI Σπουδαστήριο Κλασ. Φιλολογίας και Αρχ. Ιστορίας

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UNIVERSITY	
UI	Σπουδαστήριο Μεσαιωνικής Ελληνικής Φιλολογίας και Βυζαντινής Ιστορίας
UI	Σπουδαστήριο Γλωσσολογλιας
UI	Σπουδαστήριο Λαογραφίας
UI	Σπουδαστήριο Παιδαγωγικής
UI	Βιβλιοθήκη Ιατρικής- Ηράκλειο
UC	Βιβλιοθήκη Ηρακλείου
UC	Βιβλιοθήκη Παν/μίου Κρήτης- Ρέθυμνο
UP	Βιβλιοθήκη Η/Υ & Πληροφορικής & Ι.Τ.Υ. του Τμήματος Μηχανικών Ηλεκτρονικών Υπολογιστών και Πληροφορικής
UP	Βιβλιοθήκη Τμήματος Φυσικής
UP	Κεντρική Βιβλιοθήκη
UP	Βιβλιοθήκη ΠΠΓΝΠ
UPES	Βιβλιοθήκη Βιομηχανικής Σχολής Πειραιά
PUPSS	Κεντρική Βιβλιοθήκη Παντείου Παν/μίου
TUC	Βιβλιοθήκη

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