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CHAPTER I

INTRODUCTION

The purpose of a manuscript is to contribute knowledge to your field of study through the pursuit of research and scholarship. The process includes defining a topic, assembling a committee, executing the research, writing and submitting a manuscript, and defending your findings. This is a complex process requiring sustained work. You will take justifiable pride in this project since it not only satisfies a degree requirement but also positions you within your discipline and advances your field of study, especially when your manuscript is circulated to other scholars and readers.

The Graduate School encourages and upholds the University's standards of accuracy and soundness of research, as well as the requirements of the individual graduate programs regarding manuscripts. In addition, the Graduate School provides assistance in the preservation and circulation of your manuscript through the University Library System and ScholarWorks.

The Graduate School requires the electronic submission of all master's theses and doctoral dissertations. Instructions on how to submit your manuscript electronically can be found at http://www.umass.edu/gradschool/current_students. Doctoral dissertations are available to the public as circulating copies shelved in the W.E.B. DuBois Library or appropriate branch. Master's theses are only available electronically through ScholarWorks.

How to Use This Manual

This manual is designed to aid you in the process of submitting your manuscript to the Graduate School. These guidelines provide you with a quick reference as you prepare your manuscript. This manual also contains further explanations of form and style as well as a wide range of suggestions and advice that should clarify the rules and explain possible options in areas where decisions about form and layout are at your discretion. It is important that you read the entire manual before you begin preparing your manuscript so that you understand the format and the purposes behind the rules.

Once you are familiar with the specific regulations, you must consult a current and appropriate style manual recommended by your department and used by your discipline for all other issues of form and content. There is also a recommended list of recent style guidebooks in Appendix G of this manual. Regulations from the Graduate School take precedence over rules found in style manuals (when they differ from one another) because issues of clarity and legibility are extremely important for purposes of digitization and archival permanence. For example, although you may prefer a particular font, your selection may not be acceptable because it does not reproduce clearly on microfilm.

The staff at the Office of Degree Requirements in the Graduate School is knowledgeable and familiar with many of the issues you will encounter. The Office of Information Technologies also offers excellent assistance with technological aspects of formatting and organizing your manuscript. It is our experience that students encounter fewer obstacles when they consult with these offices along the way rather than at the end of their project.
CHAPTER II

RULES AND ADVICE FOR PREPARING A MANUSCRIPT

Mechanics

This section explains some of the preliminary information you will need in order to produce your manuscript.

- Begin each new chapter on a new page. Continue the text to the bottom of the page unless you are at the end of a chapter.
- Do not split references in your bibliography; always complete an entry on a single page.
- Do not split captions in the lists of tables and figures. Complete each on the same page. Multiline captions must be single spaced and not run into the number page.

If you have questions about the acceptability of the quality of the print or the type style you intend to use, take a sample to the Office of Degree Requirements for approval before proceeding with reproduction.

Type: Size, Fonts, Style

- For consistency, the same 10- to 12-point font is to be used throughout the entire manuscript.
- Font must be embedded (True Type/Form).

The font must be easy to read when it has been microfiched: specifically, choose a font that has true descenders, such as Times Roman, Helvetica, or Courier. Most standard fonts are acceptable: always submit a sample to the Office of Degree Requirements before submitting your entire manuscript if you have a question about a particular font.

- The pitch may be either proportional or an established measurement of 10 to 12 characters per inch.
- Do not vary fonts in the main text of the manuscript.
- Do not use script, italic or other typefaces for numerals (except in equations).

Tables and figures proper, appendices and equations may be reproduced in different size and style fonts other than those of the main text of the manuscript. For further information, see Tables and Figures section.

Different fonts may be used for poetry, dialogue, and other special circumstances. Boldface may be used for headings, chapter titles, subheadings, title and signature pages, within footnotes and bibliographic entries, and in tables or figures and their legends. Italicics may be used sparingly only for special emphasis, foreign words, technical or key terms, mathematical expressions, or book and journal titles.
Margins

- The margins for each page (including preliminaries, text, appendices, reference materials, tables and charts) must not be narrower than the following, (measuring from the edge of the paper to type):

  left 1 1/2 inches  
  right 1 inch  
  top 1 inch  
  bottom 1 inch  

- The left edge margin must be larger to accommodate the binding process.
- All typing must fall within the remaining 6” x 9” typing area (except page numbers).
- Margins must be uniform throughout the manuscript.

* Margins are particularly important for manuscripts because they affect the ability of the Library to bind your manuscript properly in a permanent manner. It is a good idea to print one page of your manuscript and measure the margins for accuracy.

Page Numbers

- Page numbers must be centered 1/2” from the bottom edge of each page.
- Every sheet must be counted for purposes of numbering pages. Every page must have a page number printed on it, except the title page, copyright page, signature page, dedication page, and epigraph page.
- All pages must be paginated consecutively.

Spacing

- The text of the manuscript must be double-spaced. This includes the Acknowledgments Page.
- No large spaces or gaps are allowed in the text.
- Single spacing is required for footnotes, captions and identification text related to tables, figures, graphs, or other illustrative materials. Single spacing is also required for bibliographic entries, and for all block quotations.
- A double space must be used to separate footnote and reference citations.
- Single spacing is permitted within—but not between—items in lists, multi-line captions, and appendices, if done in a consistent manner throughout the manuscript.

The general rule for spacing is to choose a consistent format and stick with it throughout the entire manuscript. Irregular or single spacing also may be used for poetry and scripts at the option of the department and the student.

If there are large gaps in the text you will be required to reformat the manuscript.
CHAPTER III

USING TECHNOLOGY

Almost all manuscripts are produced using a variety of software packages. It is important to consider the content and length of the manuscript when choosing a software package.

A little forethought will greatly reduce the time and effort needed to format a manuscript. The first step is to learn how to use the power of your software. Most popular programs come with extensive documentation and toll free telephone help lines. The Office of Information Technologies (OIT) offers classes on computing designed to assist people with various levels of computer literacy. Every semester and during the summer OIT also offers formatting workshops that provide instruction and templates for certain software packages. For a list of courses, please contact the OIT Help Desk, either in person or by Web page, phone, or email. The following sections provide more information about computer-related resources at the University.

The OIT Help Desk

The Office of Information Technologies [www.oit.umass.edu](http://www.oit.umass.edu) operates a Help Desk in Room A109, Lederle Graduate Research Center, lowrise. Currently, their hours are Monday through Friday, 9 a.m. to 5 p.m., but it is best to call them at (413) 545-9400 for the most up-to-date information.

More information is available on the support page: [http://www.oit.umass.edu/support/workshops](http://www.oit.umass.edu/support/workshops)

Help Desk consultants field computer questions on a wide array of topics including: OIT host computers and their associated applications; personal computers and their applications; telecommunications devices and software; and Internet-related issues. They provide up-to-date documentation for OIT host computers and Internet information as well as issuing OIT and UM Access accounts.

The Graduate School Web Page

The Graduate School maintains a website with information about resources, requirements, and other issues related to graduate student needs.

[http://www.umass.edu/gradschool/current-students](http://www.umass.edu/gradschool/current-students)
CHAPTER IV

PARTS OF THE MANUSCRIPT

Parts of the manuscript

This section addresses the Graduate School requirements for the arrangement of the manuscript and some particular aspects of manuscript format. Your manuscript will consist of three parts:

Preliminary pages
Text (Body of manuscript)
Reference materials

Specifications for each of these pages are explained on the following pages.

<table>
<thead>
<tr>
<th>PAGE</th>
<th>INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page</td>
<td>required</td>
</tr>
<tr>
<td>Copyright Page</td>
<td>required for doctoral only</td>
</tr>
<tr>
<td>Signature Page</td>
<td>required</td>
</tr>
<tr>
<td>Dedication</td>
<td>optional</td>
</tr>
<tr>
<td>Epigraph (Frontispiece)</td>
<td>optional</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>optional</td>
</tr>
<tr>
<td>Abstract Page</td>
<td>required</td>
</tr>
<tr>
<td>Preface</td>
<td>optional</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>required</td>
</tr>
<tr>
<td>List of Tables</td>
<td>when appropriate</td>
</tr>
<tr>
<td>List of Figures</td>
<td>when appropriate</td>
</tr>
<tr>
<td>List of Symbols or Abbreviations</td>
<td>when appropriate</td>
</tr>
<tr>
<td>Appendices</td>
<td>when appropriate</td>
</tr>
<tr>
<td>Bibliography</td>
<td>required</td>
</tr>
</tbody>
</table>
CHAPTER V

PRELIMINARY PAGES

- For doctoral dissertations, you must have a Title Page, Copyright Page, Signature Page, Abstract Page, and Table of Contents. For master's theses, you must have a Title Page, Signature Page, Abstract Page and a Table of Contents.
- When appropriate, both master's theses and doctoral dissertations must include a List of Tables, List of Figures, and/or List of Symbols or Abbreviations.
- The pages must be numbered in lower-case Roman numerals beginning with the Acknowledgments Page (see Samples section). The Title Page is considered page i, but it must not be numbered (if you're using Word make sure you have two breaks, one appearing before your first numbered preliminary page and the other appearing before your first numbered non-preliminary page).

Title Page (required)

*Please refer to Appendix A for a sample Title Page before proceeding.

- The Title Page is considered page i, but it must not be numbered. Each line of the Title Page must be centered.
- The title must include key words to make it easier for people to locate it using library information retrieval systems. Check with the reference librarians if you need help determining what the key words in your area might be.
- Word substitutes must be used for items such as formulas and symbols. If you have any questions about the use or presentation of scientific terms, please check with your committee chair.
- Use your full legal name as it appears on your academic records in the Graduate School at the time of graduation. If you have changed your name in any way, apply to have your name officially changed at the Graduate Records Office before you submit your manuscript.
- Be sure to correctly designate the degree you will be receiving. Refer to Appendix G if you are unsure of the degree title.
- The date listed on the Title Page must be the actual month and year of degree conferral, not the date of the defense or the date you submitted your manuscript.

Degrees are formally conferred, by vote of the Board of Trustees, in February, May, and September. Never use a comma between the month and year.

- Your official graduate program name must be listed below the date.

If you have any questions about the correct title of your program, consult your Graduate Program Director, the Office of Degree Requirements, or the Graduate School Bulletin under the Programs section. Please note that your graduate program name may differ from your department name. For example, Psychology is the official department name, but your program name may be Clinical Psychology.

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Areas of specialization or concentrations within a program can also be listed on the Title Page. For example, your graduate program name might be listed as:

Education
Public Health
Polymer Science and Engineering

Additionally, under your graduate program name, you may also want to list:

Early Childhood Education
Biostatistics and Epidemiology

**Copyright Page (required for all dissertations)**

*Please refer to Appendix A for a sample Copyright Page before proceeding.*

- A dissertation must be copyrighted. This is achieved by including a copyright page. A copyright page is optional for theses. Registration is optional and requires a fee. The year listed must be the year in which copyright is secured, which is also the year of degree completion.
- The copyright page is the second page of the manuscript and is counted as page ii, but it is never numbered.
- The official copyright notice is horizontally centered on this page, single- or double-spaced.

**Signature Page (required)**

*Please refer to Appendix A for the Sample Electronic Signature Page before proceeding.*

One paper signature page with all of your committee members’ signatures as well as your department head or program director signature must be delivered to the Graduate Student Service Center. An unsigned blank signature page should be included in the electronic copy of the dissertation. Your committee members’ signatures on the paper signature page indicate their approval of the manuscript and that no further content changes are required.

The Signature Page is a mandatory part of your manuscript. Please note that the format of the page may vary if you have more than three committee members. Members.

- The Signature Page follows the Copyright Page and is counted as page iii, it is never numbered. See the Samples section for a specimen of a Signature Page.
- The Signature page must be signed in black ink (not felt tipped pen or other non-waterproof inks: they smudge and fade) on archival quality paper. Most paper is now acid free. Please check the paper packaging to confirm.
- **Make at least three high quality copies** and obtain your committee members’ black ink signatures on two of them. The Graduate School requires one original of the signature page on archival paper with signatures in ink and one blank page in the electronic dissertation. You will also want one additional signature page for your own files.
- The title and student name must be centered on the page.
• The title must match exactly the title on the Title Page. The name of the student must match exactly the name on the Title Page. Both names must match the name on your official records in the Graduate School.
• The Signature Page must read, “Approved as to style and content by:” and then provide enough signature lines for all members of your committee, indicating “Chair” or “Member” following each name. You must also provide a signature line for your Department Head and include the name of the department under the typed name. A sample of a traditional Signature Page is provided in the Samples section.
• Do not use professorial titles. Do not include administrative titles for anyone except the department or program head/chair. Do not use “Ph.D.” or “Dr.” on the Signature Page.
• Each committee member must sign above her or his typed name on the page submitted to the Graduate School.
• If corrections are required on these pages, new Signature Pages must be produced.

If you have any questions about accuracy, it is highly recommended that you have the Office of Degree Requirements check your blank Signature Page before making copies for signing.

Although there is no correct order for the names, the committee chair's signature is traditionally first or most prominent on the page. Students are advised to double-check the spelling of committee members' names before having them sign the Signature Page.

**Acknowledgment Page (optional)**

*Please refer to Appendix A for the Sample Acknowledgments Page before proceeding.*

On the Acknowledgment Page, the author expresses her or his professional and personal indebtedness, including any permission to use previously copyrighted material. The text is limited to thanks for or recognition of special assistance. The Acknowledgment Page follows the Signature Page and is numbered in lower case Roman numerals accordingly. **This is the first page on which a page number should appear.** For consistency, the page should begin with the title ACKNOWLEDGMENTS (in all upper case).

Acknowledgments are written in a dignified and professional manner. When writing the acknowledgments, be sure that your use of “person” is consistent. If you begin with “the author” use third person throughout. If you begin with the first person (I, me, my), use first person throughout.

**Abstract Page (required)**

*Please refer to Appendix A for the Sample Abstract Page before proceeding.*

• The abstract must not exceed 350 words. The words in the heading do not count in the 350-word limit.
• The heading of the abstract is double spaced, centered, and in capital letters (with the exception of the last line).

The abstract is a brief summary of the contents of the manuscript. The abstract will be published without editing or revision, so take care in preparing it. Symbols and foreign characters or phrases must be printed clearly and accurately to avoid misinterpretation.
Mathematical formulas, diagrams, and other illustrative materials are not recommended for the printed abstracts. You are encouraged to incorporate key words that would allow for library searches.

**Table of Contents (required)**

*Please refer to Appendices B, C, and D for the Sample Table of Contents Page (s) before proceeding.*

- It may be titled “TABLE OF CONTENTS” or “CONTENTS.” (either should be in all upper case)
- **Do not** list the Title Page, Copyright Page, Dedication, Signature Page, or Table of Contents pages in the Table of Contents.
- The page numbers for the following pages should all be in lower case Roman numerals: the Acknowledgments, Abstract, List of Tables, List of Figures, Glossary, and Preface.
- The basic rule is to strive for consistency.
- **Do not** mix organizational schemes: if you begin with decimal headings, use decimal headings throughout. If you list subordinate headings for one chapter, list them for all the chapters where they appear. Samples of the three most common organizational schemes are provided in the Samples section.
- Double space between new levels of subheading.
- When used, the Introduction is the first page of the body of the manuscript and is numbered as page 1. It is listed in the Table of Contents one double space below the word Chapter and aligned with the title of Chapter 1.
- Be sure that the headings in the manuscript match the headings listed in the Table of Contents.
- Each chapter must have a chapter header in the manuscript and the chapter title placed on your Table of Contents. The title of a chapter is always listed in all capital letters. Do not underline.
- Chapters must be numbered using either Roman (I, II, III) or Arabic (1, 2, 3) numerals. Do not spell out numbers (ONE, TWO is not acceptable). The numbering system and form must be consistent in both the Table of Contents and the text.
- **Do not** use underlining in the Table of Contents except for titles of books.
- Use three or more dot leaders (...) to connect headings to page numbers. Titles must not run into the page number column.
- All Appendices must have a title, they must appear in all capital letters.
- **Do not** designate an Appendix “A” unless there is an Appendix “B”. List Appendix titles, with page numbers. See sample in Samples section of this manual.
- When using a display (banner) page at the beginning of the Appendices, indicate its page number and use dot leaders in the Table of Contents.

Fundamentally, a Table of Contents is a topic outline of the manuscript. Remember that it is the only index to the content of the manuscript; therefore, it must accurately reflect the organization within the text. Since a manuscript is longer than a paper or article, carefully consider the organization of its parts. Major divisions are chapters. Often, it is necessary to subdivide chapters. Organizational schemes help you arrange numerous parts into a unified, cogent whole. Whether you use a traditional outline, a system of headings indicated by location and underscoring, or a decimal numbering of headings, your ideas should develop in a logical way from general to
specific. A reader will be able to tell at a glance which ideas are of parallel importance because the heading will appear in parallel form.

The Table of Contents will follow the organizational scheme used in the text. While you are not required to list headings subordinate to the chapter level, remember that the Table of Contents is the only index to the manuscript. Samples of the three most common organizational schemes are provided in Appendices B, C, and D. Only three levels of subdivisions are given in these examples, but each of these schemes may be expanded. Whenever possible, avoid splintering your manuscript into minute fragments. Often, a heading can be incorporated into the flow of the text. Always check with the Office of Degree Requirements if you have any questions about the subdivision of your manuscript as it appears in the text and the Table of Contents.

If you decide to use another format you should have your scheme checked by the Office of Degree Requirements staff before you invest too much time in it. Bring a copy of your Table of Contents and samples of the headings system as used in the text; the staff will gladly check it and offer comments.

**List of Tables/List of Figures (when appropriate)**

*Please refer to Appendix E for the Sample List of Tables/List of Figures Page (s) before proceeding.*

- If a table or figure is included in the manuscript then a List of Tables or List of Figures page must be included.
- The List of Tables is ALWAYS placed before your List of Figures.
- Title your List of Tables “LIST OF TABLES” and List of Figures “LIST OF FIGURES” (both should be in all upper case and appear centered at the top of the page).
- The word “Table” or “Figure” (when creating a List of Figures) is placed double (left aligned) spaced above the first Table/Figure caption.
- The word “Page” is placed double spaced and right aligned above the page reference column.
- Double space between captions.
- All Table/Figure captions listed on your List of Tables/List of Figures must match their counterpart Table/Figure captions within your manuscript word for word. You are only required to list the first sentence of each Table/Figure caption on your List of Tables/List of Figures.
- Always single space between the lines of a multi-line Table/Figure caption.

**Brief re-cap of preliminary pages**

- **Title Page** (counted in the page count but not numbered)
- **Copyright Page** (counted in the page count but not numbered. Mandatory for dissertations, optional for theses)
- **Signature Page** (counted in the page count but not numbered)
- **Dedication** (counted in the page count but not numbered)
- **Acknowledgments** (first page that is numbered with lower case roman numeral)
- **Abstract** (numbered with lower case roman numeral)
- **Table of Contents** (numbered with lower case roman numeral)
List of Tables (numbered with lower case roman numeral)
List of Figures (numbered with lower case roman numeral)
CHAPTER VI

TEXT/MANUSCRIPT

• The body of the manuscript must follow a consistent format throughout.
• The first non-preliminary page is numbered 1. Continue with Arabic numbering throughout the entire body of the manuscript. All page numbers should be centered at the bottom of the page.
• Chapters must follow a consistent format and match the numbering sequence and format presented in the Table of Contents. The style or format must not change at any point in the text.
• Subheadings must match the scheme presented in the Table of Contents and must not change or combine styles or formats at any point in the text.

Chapters (required)

*Please refer to Appendices B, C, and D for the Sample Chapter headings before proceeding.

• Each chapter must have a title. The title of a chapter is always listed in all capital letters. Do not underline.
• Chapters must be numbered using either Roman (I, II, III) or Arabic (1, 2, 3) numerals. The numbering system and form must be consistent in both the Table of Contents and the text.
• Do not spell out numbers (ONE, TWO).

Subheadings within the manuscript (optional)

*Please refer to Appendices B, C, and D for the Sample subheading page(s) before proceeding.

• Subheadings must match the scheme presented in the Table of Contents and must not change or combine styles or formats at any point in the text.

Tables and Figures WITHIN the manuscript (optional)

*Please refer to Appendix E for the Sample Tables/Figures Page(s) before proceeding.

A table is a columnar arrangement of information, often numbers, organized to save space and convey relationships at a glance. A figure is a graphic illustration such as a chart, graph, diagram, map, photograph, or plate.

• Follow the style for tables and figures that is standard for your discipline. The format and styles must remain consistent throughout your manuscript.
• Tables and figures may be placed in one of five places consistently throughout the manuscript: within the text, at the end of each chapter, at the end of the main text, in an appendix, or submitted as associated files. Large or complicated files that do not upload properly should be attached as associated files.
• Within a table or figure, you can use a different font from the rest of your manuscript as long as it is large enough to be clear when the image is reproduced.
• Margins for Tables and Figures must be the same as for the rest of the manuscript.
• The font size of the captions, numbers, and page numbers on pages with a table or figure must match the font size of the rest of the manuscript, the font within the table or figure may be reduced by no more 25 percent.
• Tables and figures must be numbered in a consistent manner, using Arabic numbers (1, 2,3) and must match what is listed on your List of Tables or List of Figures.
• They must either be numbered sequentially throughout the document (1,2,3), or within chapters and appendices (1.1, 1.2, A.1, A.2). If you use the within chapter numbering option, use this option throughout the entire manuscript. You must use a consistent numbering sequence for both tables and figures.
• All table captions must be placed in a consistent location relative to each other.
• All figure captions must be placed in a consistent location relative to each other.

**Appendices (optional)**

Appendices are useful, particularly as a place for explanations too long for the main text and for documents, charts, copied forms or data sheets related to the main text.

• All Appendices must have a title.
• All appendix titles (with the exception of when only one appendix is used) should have an alpha assigned to them (A, B, C).
• Appendices should have headers which are formatted exactly as chapter headers.
• Appendix subheadings should NOT be listed on the Table of Contents.
CHAPTER VII

REFERENCE MATERIALS

Notes (optional)

*Please refer to Appendix F for the Sample Notes page before proceeding.

Notes serve the purpose of acknowledging facts, ideas, or materials from the works of others: they serve as amplification or parenthetical remarks (content notes) within the text or as citations of literature referred to in the text (reference notes).

- They may be placed at the end of the manuscript, at the end of each major section or chapter (endnotes), or on the page where the reference occurs (footnotes).

Bibliography (Required)

*Please refer to Appendix F for the Sample Bibliography page before proceeding.

A Bibliography is a list of the sources quoted or used in the manuscript. This list of sources must be comprehensive: that is, including all sources of cited material and other works consulted even if not formally cited within the main text.

- A Bibliography is required, even if you have included references (footnotes) throughout your manuscript. This list of sources must be comprehensive—that is, including all sources of cited material and other works consulted even if not formally cited within the main text.
- The Graduate School recommends that you follow the standard citation format used by a major journal in your field and the style manual recommended by your department.
- The Graduate School requires single spacing of reference entries with double spacing between each reference.
- Do not split reference entries between pages.
CHAPTER VIII

SAMPLES

Visual Aids for formatting

- The following are appendices containing samples, including three Table of Contents, showing the order of subheading levels to be used in your or manuscript.
- You will also see three text pages showing how to use each of the three levels of subheadings within your manuscript.
- Do not combine schemes (Scientific with Traditional, etc).
- You can skip levels of usage within a scheme, but levels must be used in descending order.
- The use of underlining and location of the subheadings are essential to distinguish levels (using bold, italics or oversize type does not constitute a level).
- Follow the sample pages exactly (with the exception of the page numbers shown at the bottom of each page).
- Make certain your manuscript title is identical on the title page, signature page, abstract page and submission site.
APPENDIX A

SAMPLES OF TITLE PAGE, COPYRIGHT PAGE, SIGNATURE PAGE, DEDICATION PAGE, ACKNOWLEDGMENTS PAGE, AND ABSTRACT
Title of Dissertation

A Dissertation Presented

by

ZOE B. RUBINSTEIN

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

DEGREE NAME

Month and Year of degree

Official Graduate Program Name
DEDICATION

To my patient and loving husband.
ACKNOWLEDGMENTS

I would like to thank my advisor, Jane P. Wong, for her many years of thoughtful, patient guidance and support. Thanks are also due to Frances Keegan. Together their friendship and selfless contribution to my professional development have been invaluable and will forever be appreciated. I would also like to extend my gratitude to the members of my committee, Thomas H. Pickles and Charles M. Waldau, for their helpful comments and suggestions on all stages of this project.

I want to thank XYA Corporation for funding this research and providing travel expenses during the writing of this manuscript. Thanks to GHK Publishing, Inc. for allowing use of the copyrighted materials in this manuscript.

I wish to express my appreciation to all the individuals who volunteered their participation in this project. A Special thanks to John Smith for his efforts in recruiting the participants. Thank you to Jo Brown for her tireless efforts in typing the many versions of this manuscript.

A special thank you to all those whose support and friendship helped me to stay focused on this project and who have provided me with the encouragement to continue when the going got tough.
ABSTRACT

TITLE OF MANUSCRIPT

DEGREE DATE MONTH AND YEAR

NAME OF STUDENT, B.A., COLLEGE OR UNIVERSITY

M.A., COLLEGE OR UNIVERSITY

Ph.D., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Jane P. Wong

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CHAPTER I
SOCIAL INTERACTION AND PUBLIC PLACES

A. Introduction

Many scholars have explored the decline of the public sphere, citing the increasing privatization of contemporary social life and its subsequent sublimation into consumption. This chapter explores the ways that people's social lives have been constrained by capitalism and suggests that although this is a dominant trend throughout westernized countries, there are countervailing tendencies that should be explored. According to Habermas, if the conditions for the possibility of knowledge are constrained, then the task of the intellectual is to explore what conditions or actions would be necessary to reopen those areas of social life.

B. The Decline of the Public Sphere

In 1990, Habermas argued that the public sphere has been radically transformed by the rise of social institutions such as newspapers, coffeehouses, and reading societies that provided for the formation and articulation of public opinion. However, public opinion came to be assigned specific political responsibilities within liberal democracies. Although historically, they allowed for the rise of a politically active and informed public in Europe, the emergence of the modern social welfare state circumscribed their power such that socioeconomic, political and cultural conditions were radically altered. Public opinion and the public sphere are limited and linked to specific interests as certain people began to control public forums such as the mass media.

1. The Coffeehouse as Exemplar

Before the closing off of the public sphere, certain spaces existed where free discourse and debate took place, where people engaged in real opinion-making about public issues. One arena for critical rational discourse was the coffeehouse. In its earliest formation, the coffeehouse provided people with a respectable reason to get out of the house and spend the evening in the company of others, to be entertained, to see, and be seen. They were comfortable places that encouraged patrons to stay a while.
People from a variety of socioeconomic backgrounds went to coffeehouses, although evidence suggests that different venues were stratified by class and other social arrangements. In other words, particular coffeehouses catered to specific audiences.

a. Coffeehouses in Europe

The lapsing of the licensing acts of 1652 marked the beginning of coffeehouses in England. In 17th and 18th Century London, coffeehouses were the crossroads of intellectual life. Discussions were led by speakers concerning politics. Literary and scientific debate occurred as people sipped their beverages at small tables across from political and social rivals. In England, the Royal Society used the coffeehouse as a public place in which to spread their ideas about scientific method. The rise of experimentalism and the debates between Hobbes and Boyle owe a great deal to the public forums provided by coffeehouses. The coffeehouse was one of a number of public gathering places in Europe at the time, however it had a particular character that made it the site of intellectual debate. Unlike the salon or dance hall, the coffeehouse was both accessible and reputable.

i. English Coffeehouses as Public Sphere

Known as Penny Universities, the English coffeehouse was a space where dialogue, conversation, questioning, solidarity, and community were enacted on a daily basis. People met without express intent to do business or to create public policy, and yet, in that atmosphere, interactions occurred beyond the realm of technical rationality. Although the coffeehouse was a money-making venture for its owners, its role as public space was more significant than its function as a business.
APPENDIX C

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CHAPTER 1
SOCIAL INTERACTION AND PUBLIC PLACES

1.1 Introduction

Many scholars have explored the decline of the public sphere, citing the increasing privatization of contemporary social life and its subsequent sublimation into consumption. This chapter explores the ways that people's social lives have been constrained by capitalism and suggests that although this is a dominant trend throughout westernized countries, there are countervailing tendencies that should be explored. According to Habermas, if the conditions for the possibility of knowledge are constrained, then the task of the intellectual is to explore what conditions or actions would be necessary to reopen those areas of social life.

1.2 The Decline of the Public Sphere

In 1990, Habermas argued that the public sphere has been radically transformed by the rise of social institutions such as newspapers, coffeehouses, and reading societies that provided for the formation and articulation of public opinion. However, public opinion came to be assigned specific political responsibilities within liberal democracies. Although historically, they allowed for the rise of a politically active and informed public in Europe, the emergence of the modern social welfare state circumscribed their power such that socioeconomic, political and cultural conditions were radically altered. Public opinion and the public sphere are limited and linked to specific interests as certain people began to control public forums such as the mass media.

1.2.1 The Coffeehouse as Exemplar

Before the closing off of the public sphere, certain spaces existed where free discourse and debate took place, where people engaged in real opinion-making about public issues. One arena for critical rational discourse was the coffeehouse. In its earliest formation, the coffeehouse provided people with a respectable reason to get out of the house and spend the evening in the company of others, to be
entertained, to see, and be seen. They were comfortable places that encouraged patrons to stay a while. People from a variety of socioeconomic backgrounds went to coffeehouses, although evidence suggests that different venues were stratified by class and other social arrangements. In other words, particular coffeehouses catered to specific audiences.

1.2.1.1 Coffeehouses in Europe

The lapsing of the licensing acts of 1652 marked the beginning of coffeehouses in England. In 17th and 18th Century London, coffeehouses were the crossroads of intellectual life. Discussions were led by speakers concerning politics. Literary and scientific debate occurred as people sipped their beverages at small tables across from political and social rivals. In England, the Royal Society used the coffeehouse as a public place in which to spread their ideas about scientific method. The rise of experimentalism and the debates between Hobbes and Boyle owe a great deal to the public forums provided by coffeehouses. The coffeehouse was one of a number of public gathering places in Europe at the time, however it had a particular character that made it the site of intellectual debate. Unlike the salon or dance hall, the coffeehouse was both accessible and reputable.

1.2.1.1.1 English Coffeehouses as Public Sphere

Known as Penny Universities, the English coffeehouse was a space where dialogue, conversation, questioning, solidarity, and community were enacted on a daily basis. People met without express intent to do business or to create public policy, and yet, in that atmosphere, interactions occurred beyond the realm of technical rationality. Although the coffeehouse was a money-making venture for its owners, its role as public space was more significant than its function as a business.

1.2.1.1.1 The Class Character of Coffeehouses

Although the coffeehouses were relatively open in a hierarchical society, different coffeehouses existed for every profession, trade, class, and party. Paralleling contemporary differences between Starbucks and Dunkin Donuts.
APPENDIX D

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SOCIAL INTERACTION AND PUBLIC PLACES

Introduction

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**English Coffeehouses as Public Sphere**

Known as Penny Universities, the English coffeehouse was a space where dialogue, conversation, questioning, solidarity, and community were enacted on a daily basis. People met without express intent to do business or to create public policy, and yet, in that atmosphere, interactions occurred beyond the realm of technical rationality. Although the coffeehouse was a money-making venture for its owners, its role as public space was more significant than its function as a business.

**The Class Character of Coffeehouses.** Although the coffeehouses were relatively open in a hierarchical society, different coffeehouses existed for every profession, trade, class, and party. Paralleling contemporary differences between Starbucks and Dunkin Donuts, English coffeehouses catered to different strata of society, offering both space and entertainment that matched the perception of separate interests of laborers, gentry, artisans, and intellectuals. Although patrons in different coffeehouses may have been discussing the same issues, they were often doing so within the confines of their occupational and class groupings.
APPENDIX E

SAMPLE LIST OF TABLES AND LIST OF FIGURES WITH EXAMPLES OF HOW THESE SHOULD APPEAR WITHIN THE MANUSCRIPT
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<table>
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<td>3</td>
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</tbody>
</table>

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Table 1 shows the results for datasets for which RC4.5 achieved a 5% or greater reduction in tree size over C4.5. On the hepatitis dataset, random data reduction actually results in a larger tree than the one that C4.5 builds on the full dataset. Reduction of training set size accounts for only about 10% of RC4.5’s effect on two of the datasets (breast-cancer-wisc and segment), and it accounts for 100% of RC4.5’s effect on two other datasets (lymphography and tic-tac-toe). On average, 41.67% of the decrease in tree size that RC4.5 obtains is attributable to the fact that it is simply reducing the size of the training set.

What do these results mean? First, it is clear that tree sizes obtained through random data reduction should serve as a baseline against which other data reduction techniques measure their success, much as default accuracy or Holte’s one-rules serve as a baseline for classification accuracy (Holte 93). If a data reduction

<table>
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<th>Dataset</th>
<th>C4.5 Size</th>
<th>RC4.5 Size</th>
<th>%</th>
<th>RDR Size</th>
<th>% of RC4.5 Effect Due to RDR</th>
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<tr>
<td>australian</td>
<td>61.58</td>
<td>48.48</td>
<td>92.19</td>
<td>58.89</td>
<td>20.53</td>
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<tr>
<td>breast-cancer wise</td>
<td>20.25</td>
<td>18.25</td>
<td>97.48</td>
<td>20.08</td>
<td>8.5</td>
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<td>cleveland</td>
<td>44.61</td>
<td>35.13</td>
<td>88.58</td>
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<td>diabetes</td>
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<td>65.99</td>
<td>83.11</td>
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<td>1. Example of a figure caption</td>
<td>4</td>
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</tbody>
</table>

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There are four types of contention curves:

1) resource, 2) normalized resource, 3) global, and 4) normalized global.

A resource curve is the ratio for a particular resource type over the time extent of the scheduling problem. The resource type is in bottleneck status anytime the value of the ratio exceeds one. Figure 1 is an overview that includes an example of a resource contention curve.

A normalized resource curve is simply a resource contention curve normalized to have a fixed size for each scheduling domain. The point of normalizing is to permit comparisons between cases with problems of different time extents. The reason the normalized fixed size is dependent on the scheduling domain is because different scheduling domains can have radically different time measurements.
APPENDIX F

SAMPLES OF REFERENCE MATERIAL PAGES (NOTES, BIBLIOGRAPHY)
Notes


2 The Medieval origins of coffeehouses are discussed in detail in R. Hattox, Coffee and Coffeehouses: The Origins of a Social Beverage in the Medieval Near East (Seattle: Univ. of Washington Press, 1985). Hattox covers the relationship between coffee drinking and religious activity both for Islamic and Sufi practices. Although there are similarities between this use and tribal use in the early Americas, no specific anthropological or historical study has been made connecting the two. For further evidence of this connection, see Schivelbusch, W., Tastes of Paradise: A Social History of Spices, Stimulants, and Intoxicants. (New York: Pantheon, 1992).

3 Although there are popular images of publicly owned community gathering spots, such as the village common or parks in urban environments, in contemporary society most of the expanding and enduring public places are being created by private corporations rather than the government. For the popularized version of this argument, one can look to any of the materials put out by Starbucks and its corporate founders. It originates in R. Oldenberg’s The Great Good Place (New York: Paragon House, 1989). He presents a more accessible and certainly depoliticized version of Habermas’ arguments, ending up with a conciliatory and upbeat appraisal of the commercialization of public space and public debate.

4 According to an employee at Java Net, “There is a considerable growth spurt considering that cyber cafes are founded on the odd proposition that people will leave their home computer and trek to a bar—just so they can stare at a computer screen again. People think it's anti-social to sit at a computer terminal at a cafe.” (personal interview 5/5/95) Most magazine articles and advertisements for these spots stress unique social activity of interacting both with individuals far away and right next to you. For a typical example, see A. Fryer, “Gathering round a virtual campfire: shunning isolation, computer users bask in the florescent glow of monitors in cyber cafes.” The Christian Science Monitor, May 14, 1996.
BIBLIOGRAPHY


APPENDIX G

SUGGESTED STYLE MANUALS


