1 Introduction

Librarians and library researchers have associated public libraries with a Habermasian public sphere (Öffentlichkeit). Public libraries, it is said, support a public sphere where citizens' values and interests are translated into state-secured rights. Recently, it has even been suggested that a global public sphere is emerging, one sustained by libraries (Morrison, 2010). To substantiate these claims, it is important that library researchers explain in what ways and to what degree public libraries relate to the public sphere. As of yet, however, connections between public sphere theory and public libraries remain vague. Braman (2009), for example, points out that more work is needed to theorize library-state relations, and Webster (1995) and Buschman (2003) express ambivalence about the vitality of a public sphere institutions in the face of state-sponsored marketization.

This study is an attempt to clarify how public libraries function as public sphere institutions. First, we identify the dimensions of the public sphere in public libraries. We do this through an analysis of public sphere theory, a review of previous literature, and qualitative content analysis of annual reports from the Carnegie Library of Pittsburgh. We then use the dimensions to develop a model of the public sphere in public libraries. Our study is significant because it clarifies an undertheorized area and because it introduces a novel research methodology into this field in inquiry.

1.1 Habermas and the Public Sphere

The public sphere is most commonly associated with the work of Jürgen Habermas. Habermas (1991) tracked the development and eventual collapse of critical public debate in France, Germany, and England from the 17th century to the early 20th century. In its heyday, the public sphere was an intellectual space composed of citizen-led discourse. In addition to raising topics related to art and culture, the debate and deliberation that formed the public sphere served as a counterdiscourse to absolutist governmental power. Conversations in the public sphere were sustained by face-to-face meeting places such as coffee shops, salons, and book clubs, as well as world-of-letters forums such as the free press, art journals, and magazines.

Conversations in the public sphere were secured by the realization of 3 necessary and sufficient conditions related to "publicness:"
1) discussion was based on the exchange of reasons and justifications, 2) interlocutors reflected on their own conditions and raised issues that were of mutual concern, and 3) discussion was in principle open to anyone (Habermas, 1991, pp. 36-37).

That discussion was based on reason and justification meant that the force of the better argument prevailed, not a member's relative social capital. The raising of mutual concerns meant that private citizens came to interpret for themselves what was in their best interests rather than allow these interests to be dictated to them by ecclesiastical or state authorities. Finally, openness of participants meant that anyone could in principle join the public discussions regardless of who they were, what they owned, or
what they believed. The degree of “publicness” of any public sphere can be evaluated with respect to these 3 discourse norms.

The public sphere in the abstract was grounded in physical and material media. A comprehensive public sphere was composed of collections of local conversations regarding social, cultural, and political topics (Habermas, 1987, pp. 359-360; See Figure 1). Today, public sphere organizations and groups must have intra-organizational public spheres “constituted by the public of the organization’s members,” and “external,” inter-organizational public spheres located between “societal organizations and state institutions” (Habermas, 1991, p. 248). A key point to understand in public sphere theory is that the public sphere is not a monolithic, undifferentiated whole; rather, it is composed of various layers, enclaves, and networks of communication that circulate in and between groups. The boundaries of smaller public spheres are “porous,” and “each public sphere is open to other public spheres” (Habermas, 1987, p. 360). The public spheres that comprise the whole are “articulated around specific themes and ordered contributions” (Habermas, 1987, p. 359).

Figure 1. The Comprehensive Public Sphere. The public sphere as a whole is composed of micro publics.

According to some political theory models, the public sphere as a whole, the collection of micro-public spheres therein, and the private sphere are located within civil society (Cohen & Arato, 1995, p. 431). Civil society is situated within the lifeworld (Lebenswelt)—citizens’ shared beliefs and culture—and is distinct from the system—the state bureaucracy and modes of economic exchange (Habermas, 1989; Cohen & Arato, 1995; See Figure 2). Public spheres within civil society are facilitated by technologies and institutions of communication, such as libraries, mass media, and the free press (Habermas, 1987, pp. 357-358). In this view, public sphere institutions like public libraries must generate popular support from citizens in order to remain the “public” resources on which citizens depend for rights securement. A perennial threat to public spheres is domination—“colonization”—by the system (Habermas, 1989, p. 355).
Regardless of its social and political importance for citizens, Habermas (1991) describes the public sphere as a fleeting social category that eventually succumbed to economic and state imperatives. The discussion-oriented, bottom-up composition of the public sphere became diluted in its critical character: what were once citizen-led, deliberative processes became sites for psychological manipulation. The public sphere became colonized. As deliberative governance dwindled, centralized power grew in strength. By the early 20th century, the public sphere had become a site for disseminating advertising and propaganda to passive clients and consumers (Habermas, 1989, 1991).

Though widely discussed in multiple fields, Habermas's (1991) narrative of the public sphere has not gone uncontested by critics. Critics argue that the strategic motives of individuals, combined with pervasive social inequalities, always influence access to discussions, their themes, and their outcomes (Fraser, 1992; Landes, 1995). It does not seem possible to bracket out privilege and bias as Habermas's idealistic account suggested, especially with respect to gender (Fraser, 1985). In addition, it might be said that rational discourse is a process of normalization and disciplining, itself open to question (Foucault, 1984, p. 48). Some question whether the public sphere ever served as an effective foil to state and economic imperatives (Schudson, 1992). All of these criticisms have their merits, but they may only suggest that Habermas's public sphere theory requires further development (Crossley & Roberts, 2004). A Habermasian public sphere, despite potential shortcomings, is explicitly mentioned throughout library literature and is associated with public libraries.

1.2 The Public Sphere in Library Literature

Several authors in library literature have associated the public sphere with public libraries, both with respect to the services public libraries offer and the norms they reproduce (see Table 1). These works were retrieved through a systematic review of library databases and by searching the indexes and references of books about public libraries. Articles with an asterisk (*) appeared in peer-reviewed journals.

Webster (1995) recognized that public libraries function as instruments of the public sphere in the UK insofar as they provide resources and materials that inform public discussion (pp. 111-112). Public libraries, Webster (1995) stated, fulfill Habermas's conditions for a critical public sphere because the inclusion of multiple viewpoints in library collections fosters critical debate rather than manipulation; the viewpoints of the authors of the materials in the collection are not necessarily those of state authorities or motivated by purely economic interests; and public library services are open to anyone (pp. 111-112). Webster (1995) identifies the shared values of debate, common concern, and openness between public libraries and the public sphere. According to Webster (1995), public libraries support the public sphere through citizens' interactions with staff and collections. Williamson (2000) concurred with Webster's (1995) analysis.

Buschman (2003) argued that public libraries function as intermediaries that connect private citizens to debate about social and political issues: libraries function as "disseminators of rational, reasoned, and organized discourse, as a source of verifying or disputing claims, and as a space for the inclusion of alternative views of society and reality" (Buschman, 2003, pp. 120-121). Buschman (2003, 2004, 2005a, 2005b, 2013) therefore identified common concern, debate, and openness as common values shared by public libraries and the public sphere. Libraries support the public sphere by making their collections accessible to their publics.

McCook (2003) found that public libraries support the public sphere through their collections and in their role as meeting places. These roles are ensured by the values of common concern, debate, and openness exhibited by public libraries. McCook (2004) furthered maintained that the public libraries support the public sphere through citizen-staff interactions and civic training (pp. 188-193).

Kranich (2004, 2013) found that public libraries support the public sphere by enabling access to collections and by serving as meeting places. Aabø, Audunson, and Vårheim (2010) confirmed that public libraries, in their role as meeting places, support the public sphere and do not just function as third places and social gatherings (Leckie & Hopkins, 2002, p. 327). Aabø, Audunson, and Vårheim (2010) concluded that public libraries, as complex meeting places, "appear to be a part of the public sphere in the Habermasian sense" (p. 26).

Andersen and Skouvig (2006) argued that the act of information organization performed by public libraries is an act of disciplining, enclosing, and separating information, ultimately influencing "what can
and cannot be communicated” in the public sphere (pp. 307, 310). The authors therefore identify knowledge organization as a public sphere role performed by public libraries.

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Year</th>
<th>Type of Work</th>
<th>Country/Region</th>
<th>Research Method</th>
<th>Services Identified</th>
<th>Values Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Webster</td>
<td>1995</td>
<td>Book</td>
<td>UK</td>
<td>Criticism</td>
<td>Interactions with Collections, Staff</td>
<td>Openness, Debate, Common Concern</td>
</tr>
<tr>
<td>2</td>
<td>Williamson</td>
<td>2000</td>
<td>Article</td>
<td>UK</td>
<td>Criticism</td>
<td>Interactions with Collections, Staff</td>
<td>Openness</td>
</tr>
<tr>
<td>3</td>
<td>Buschman</td>
<td>2003</td>
<td>Book</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collections</td>
<td>Openness, Debate, Common Concern</td>
</tr>
<tr>
<td>4</td>
<td>McCook</td>
<td>2003</td>
<td>Article</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collection, Meeting Place</td>
<td>Openness, Debate</td>
</tr>
<tr>
<td>5</td>
<td>McCook</td>
<td>2004</td>
<td>Book</td>
<td>US</td>
<td>Review</td>
<td>Interactions with Collections, Meeting Place, Interactions with Staff, Citizen Training</td>
<td>Openness, Common Concern</td>
</tr>
<tr>
<td>6</td>
<td>Buschman</td>
<td>2004</td>
<td>Article</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collections, Knowledge Organization</td>
<td>Openness, Debate, Common Concern</td>
</tr>
<tr>
<td>7</td>
<td>Kranich</td>
<td>2004</td>
<td>Article</td>
<td>US</td>
<td>Review</td>
<td>Meeting Place, Promote Issues, Interactions with Collections, Citizen Training</td>
<td>Openness, Debate</td>
</tr>
<tr>
<td>8</td>
<td>Buschman</td>
<td>2005a</td>
<td>Article*</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collection, Knowledge Organization</td>
<td>Openness, Debate, Common Concern</td>
</tr>
<tr>
<td>9</td>
<td>Buschman</td>
<td>2005b</td>
<td>Article</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collection</td>
<td>Openness, Debate</td>
</tr>
<tr>
<td>10</td>
<td>Andersen and Skouvig</td>
<td>2006</td>
<td>Article*</td>
<td>Denmark</td>
<td>Criticism</td>
<td>Knowledge Organization</td>
<td>Debate, Common Concern</td>
</tr>
<tr>
<td>11</td>
<td>Aabø, Audunson, and Vårheim</td>
<td>2010</td>
<td>Article*</td>
<td>Norway</td>
<td>Survey</td>
<td>Meeting Place</td>
<td>Openness, Common Concern, Debate</td>
</tr>
<tr>
<td>12</td>
<td>Buschman</td>
<td>2013</td>
<td>Article</td>
<td>US</td>
<td>Criticism</td>
<td>Interactions with Collections, Meeting Places</td>
<td>Openness, Debate</td>
</tr>
</tbody>
</table>

Table 1. Works in Library Literature that Associate the Public Sphere with Public Libraries (Articles with an asterisk [*] are peer-reviewed works).

In summary, previous studies found that public libraries support the public sphere in several ways: by enabling citizens to interact with collections and staff; by providing civic training opportunities; by acting as meeting places for citizen discourse; and by selecting, organizing, and promoting discourses. The values shared between public libraries and the public sphere are common concern, debate, and
openness. Aabø, Audunson, and Vårheim (2010) is the only study that bases its conclusions on empirical research findings, and only 3 articles out of 9 are peer-reviewed. There is not yet a comprehensive model of the public sphere in public libraries that speaks to all of its dimensions and explains how they interrelate.

1.3 Synthesis of Public Sphere Theory and Library Literature

Drawing from public sphere theory and from previous library literature, we were able to identify 3 dimensions of the public sphere represented in public libraries: 1) Core Criteria, 2) Internal Public Sphere, and 3) External Public Sphere. Core Criteria are the 3 norms of “publicness” that distinguish public discourse from other kinds of communication, such as instrumental, means-ends communication or strategic, manipulative communication. Core criteria were outlined by Habermas (1991, pp. 36-37) and in previous library literature.

Definition of Dimension 1: Core Criteria

• Core Criteria can be used to evaluate the degree of “publicness” of a discourse.
• The 3 criteria are 1) openness to participants, 2) consensus is obtained through debate, not social power or manipulation, and 3) concerns are raised by citizens, not authorities.

The Internal Public Sphere dimension and its 2 sub-dimensions accentuate the multiplicity and scalability of public spheres which together form layers and interconnected networks of conversations. The discourses in the individual spheres are distinguishable by their central themes and the actions coordinated through them. The Internal Public Sphere represents a new application of public sphere theory to public libraries by us, but the dimension was first identified by Habermas as a necessary characteristic of public sphere organizations today (Habermas, 1987, pp. 359-360; 1991, p. 248).

Definition of Dimension 2: Internal Public Sphere

• The Internal Public Sphere contains discourse that occurs between the library, state, and citizens.
• Internal Public Sphere discourse concerns the functions or interests of the library.
• The Internal Public Sphere is split into 2 sub-discourses, Intra-Library Communication and Inter-Library Communication.
• Intra-Library Communication is discourse oriented toward internal library functioning.
• Inter-Library Communication is discourse oriented toward relationships between the library and outside groups.

The External Public Sphere suggests a larger, more expansive public sphere beyond the library. External Public Sphere discourse is the discourse level identified by previous library literature on public libraries and the public sphere (e.g., McCook, 2003, Kranich 2004).

Definition of Dimension 3: External Public Sphere

• Discourse in the External Public Sphere is carried out primarily by citizens.
• The discourse is oriented toward securing state-supported rights.

The definitions above, when taken together, led us to the following preliminary conclusions:

• The public sphere in public libraries, while existing as a whole, is also composed of layers, or what we chose to call “discourse levels” (Habermas, 1987, p. 360);
• Three discourse levels intersect with the public library: intra-library, inter-library, and external;
• Each discourse level centers around a central theme or question (Habermas, 1987, p. 359);
• The library coordinates distinctive actions in each discourse level;
• Each sphere of discourse can be evaluated using the 3 Core Criteria to determine its degree of “publicness” (Habermas, 1991, pp. 36-37); and
• The degree of “publicness” of the public sphere in public libraries can be determined by evaluating the “publicness” of all 3 discourse levels.

We identified and defined 3 dimensions from the outset based on existing theory, but we still did not understand the dimensions in detail, and we did not have a clear picture of how they related to public libraries. This is because there is not yet a comprehensive theory of the public sphere in public libraries. We decided that there needs to be a model of the public sphere specific to public libraries that can be used and understood within the public libraries world.

We suspected that the public sphere in public libraries was more complex than previously assumed. With these considerations in mind, we established 5 main objectives for this study:

1) More fully understand the Core Criteria, Internal Public Sphere, and External Public Sphere by referencing them to discourse in an actual library;
2) Explore/Identify the library actions (library dimensions) that are coordinated by the library at each of the 3 discourse levels, and each dimension’s sub-dimensions and elements;
3) Identify the central theme that characterizes each discourse level;
4) Build a model of the public sphere in public libraries using the emerging concepts we find; and
5) Explain the model using examples in public libraries.

2 Methodology

In order accomplish these objectives, we used qualitative content analysis to investigate the contents of 12 annual reports—1,173 paragraphs—from the Carnegie Library of Pittsburgh (CLP), a public library in a mid-sized U.S. city. Our research process appears in Figure 3.

We chose CLP because it is one of the oldest public libraries in the US and because its size is neither extremely large nor extremely small. We examined the annual reports in 10-year increments from 1900 to 2010 (see Table 2). We chose annual reports as data sources because they had been published consistently since the library’s inception. We believed that the documents would lead to an understanding that was representative of the library over time. The documents were freely available in the library.

We scanned the documents and analyzed them using NVivo research software. The unit of analysis we used for coding was the paragraph level. We decided that the paragraph was the appropriate level to code in order to adequately capture concepts. Sentence-level is too small because it is redundant, and page-level is too large because pages often cut off in the middle of concepts. We assigned multiple codes to single paragraphs, as seen in Figure 4.

The library’s first annual report, 1897, was coded by both researchers as a pilot in order to practice coding and in order to develop a coding manual. Due to the large number of paragraphs, and in order to make the coding process efficient, the remaining documents were divided into two sets. One researcher coded the first set individually following the coding manual, the other researcher coded the second set individually following the coding manual, and then the researchers exchanged sets for review.
The researchers reviewed each other’s coding and, in the spirit of communicative action, resolved discrepancies through extensive discussion. Researchers assigned a total of 5,929 coding references to the 12 annual reports. The coding manual was continuously revised through regular discussions.

<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th># Pages</th>
<th># Paragraph</th>
<th># Pictures</th>
<th># Tables</th>
<th># Charts</th>
<th># Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1900</td>
<td>72</td>
<td>82</td>
<td>1</td>
<td>24</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>1910</td>
<td>80</td>
<td>131</td>
<td>5</td>
<td>46</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>1920</td>
<td>98</td>
<td>239</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>1930</td>
<td>37</td>
<td>86</td>
<td>5</td>
<td>18</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1940</td>
<td>17</td>
<td>43</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>1950</td>
<td>24</td>
<td>80</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1960</td>
<td>28</td>
<td>87</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>1970</td>
<td>40</td>
<td>133</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>1980</td>
<td>18</td>
<td>107</td>
<td>18</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>1990</td>
<td>27</td>
<td>108</td>
<td>25</td>
<td>10</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>2000</td>
<td>16</td>
<td>18</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>2010</td>
<td>31</td>
<td>59</td>
<td>31</td>
<td>4</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>488</td>
<td>1,173</td>
<td>95</td>
<td>156</td>
<td>6</td>
<td>82</td>
</tr>
</tbody>
</table>

Table 2. Scope of the Analysis (The 12 annual reports were analyzed for their content).

Paragraph-Level Multi-Coding

The results have been most gratifying both in the interest in good literature created by the discussions and in the improved choice of reading matter. The West End Study Club has a membership of thirty-one. This year the study has been on civic topics, such as Medical Inspection of Schools; Playgrounds; Child Labor; Women in Industry; Aldermanic Corruption, etc. The club members have taken a keen interest in the meetings and the topics seriously prepared and vigorously discussed. “1910 Annual Report”

Figure 4. Example of Assigning Multiple Codes to a Single Paragraph.

Our research methodology emphasized theory development and open-ended discussion. Interrater reliability scores were not used for several reasons. First, both researchers did not individually code both sets of documents—both sets were reviewed by researchers for discrepancies and changes were made based on discussion. Second, the use of inter-rater reliability scores aligns with standards for quantitative methods, not qualitative methods. Third, inter-rater reliability scores are not the characteristic of research methodology that ensures validity—discussion is.

In addition to these reasons, there are several problems with the use of inter-rater reliability scores that must be considered. First, inter-rater reliability scores only measure the reliability of codings within sets of coders, not between different sets of coders. For example, supposing that 2 pairs of coders each scored 100% reliable, the 2 sets of codings could still be completely different from one another. Inter-rater reliability scores only offer a limited measure of reliability, and there is no limit to how many coders would be necessary to ensure “universal” reliability. A second problem with using inter-coder reliability scores is that, even if the reliability score between 2 coders is perfect, the 2 coders could have coded with different understandings. Discussion is still the best measure of reliability because it accounts
for meaning. Finally, a study that emphasizes high inter-coder reliability scores shifts the focus of discussion away from holistic understanding of the content and toward only coding discrepancies. Three dimensions were established from the beginning based on previous work, and references from the text were coded to these nodes when appropriate. We constructed the remaining dimensions using a bottom-up process by grouping individual nodes into elements, elements into sub-dimensions, and sub-dimensions into dimensions.

3 Results

3.1 Dimensions and Sub-Dimensions of the Public Sphere in Public Libraries

We found 3 library dimensions in addition to the 3 previously-identified dimensions. The 6 total dimensions and their sub-dimensions appear in Table 3.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Sub-Dimensions</th>
<th>Examples of Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Core Criteria</td>
<td>Common Concern</td>
<td>Literacy Programs, Concerts</td>
</tr>
<tr>
<td></td>
<td>Debate</td>
<td>New Collections, Programming</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>Expansion, Materials in Different Languages</td>
</tr>
<tr>
<td>(2) Internal Public Sphere</td>
<td>Intra-Library Communication</td>
<td>Problems Inside the Library,</td>
</tr>
<tr>
<td></td>
<td>Inter-Library Communication</td>
<td>Distribution of Funds,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advisory Board, District Library</td>
</tr>
<tr>
<td>(3) External Public Sphere</td>
<td>Support</td>
<td>Donations, Investments, Taxes</td>
</tr>
<tr>
<td></td>
<td>People and Groups Support</td>
<td>City council, Schools,</td>
</tr>
<tr>
<td></td>
<td>Public Concerns Support</td>
<td>Population, Business and Industry</td>
</tr>
<tr>
<td>(4) Collect and Organize Discourse</td>
<td>Collection Development</td>
<td>Collection Categories,</td>
</tr>
<tr>
<td></td>
<td>Facilities</td>
<td>Collection Size</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>Continuity, Virtual Expansion</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
<td>Cataloging and Classification</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>Library Management and Governance, Staff</td>
</tr>
<tr>
<td>(5) Perform Legitimation</td>
<td>Evaluation</td>
<td>Surveys, Community Meetings, Focus Groups</td>
</tr>
<tr>
<td>Processes</td>
<td>Promotion</td>
<td>Friends of the Library, Interactive Workshops</td>
</tr>
<tr>
<td></td>
<td>Outreach</td>
<td>Bookmobiles, Home Libraries</td>
</tr>
<tr>
<td>(6) Facilitate Discourse</td>
<td>Citizen Discourse</td>
<td>Reading Clubs, Meeting Room</td>
</tr>
<tr>
<td></td>
<td>Integrate Citizens</td>
<td>Programs, Lectures and Classes</td>
</tr>
<tr>
<td></td>
<td>Interact with Collections</td>
<td>Circulation increase, books for the Blind</td>
</tr>
<tr>
<td></td>
<td>Interact with Staff</td>
<td>Reader’s Advisory, Virtual Reference</td>
</tr>
</tbody>
</table>

Table 3. Dimensions and Sub-Dimensions of the Public Sphere in Public Libraries.

3.1.1 Dimension 1: Core Criteria

The Core Criteria dimension contains 3 sub-dimensions: openness, debate, and common concern. Core Criteria refers to the norms that ensure “public” discourse. These criteria can be used to evaluate the degree of publicness of all 3 discourse levels in our model.
“Common Concern” pertains to any kind of discourse about cultural, social, economic, or political issues that are thematized by citizens, either about the public library itself or about aspects of society external to it. Common concerns raised in the annual reports that were directly related to the library were, for example, in 1900, how to meet the technical and scientific interests of the growing industrial economy, or how to develop services in response to children who no longer labored in Pittsburgh’s factories. In our study, common concerns were raised by citizens and incorporated into the annual reports and the internal discussion in the library. A common concern raised in 1970 that was indirectly related to library service was drugs in the community. As a result of citizens raising this concern, two branch library locations held town meetings to discuss the issue.

“Debate” means the exchange of reasons for and against validity claims. We coded for Debate anytime an understanding of a topic obtained through exchanging reasons. Non-coercive discussion that occurs in the public sphere brackets out personal characteristics such as gender, social capital, age, and so forth, instead focusing on the arguments. Examples of debate at CLP that were raised in 1990 were what services to provide and for whom, and which aspects of services and collections would be better supported through private rather than public funding.

“Openness” refers to the ongoing effort of CLP to widen the scope of participants in discussions. Openness was expressed in many ways by CLP throughout its history, including its ongoing expansion of branch libraries, the development of materials for blind and handicapped patrons, and mobile services such as the bookmobile and home visits.

3.1.2 Dimension 2: Internal Public Sphere
The second dimension, Internal Public Sphere, contains two sub-dimensions: intra-library communication and inter-library communication. Within the Internal Public Sphere of an organization such as CLP, inter-organizational communication occurs between groups and organizations such as the library. We coded for inter-organizational communication anytime the CLP annual reports referenced interactions with non-library organizations. Intra-Library Communication was coded in any instance where library departments, staff, or management communicated with one another or with outside groups regarding library services or problems.

3.1.3 Dimension 3: External Public Sphere
The third dimension, External Public Sphere, includes 3 sub-dimensions: support, people and groups, and public concerns. External Public Sphere positions the public library in a network with a number of private citizens, organizations, and state agencies. The library communicates with these groups regarding public concerns and in order to receive support. “Support” includes “Funding” such as pay-per charges, tax support, donations, and investments. “People and Groups” includes many elements such as city council, schools, scientists, and businesses. “Public Concerns” include such issues as commercial and industrial interests, war, women’s suffrage, and child labor.

3.1.4 Dimension 4: Collect and Organize Discourse
The fourth dimension of the public sphere in public libraries is Collect and Organize Discourse. This dimension contains 4 sub-dimensions. Collect and Organize Discourse refers to basic library functions such as storage, access, preservation, and materials acquisitions. While the dimension is library-centric and occurs at the intra-library level, the library functions here are affected by the input from outside organizations. “Collection Development” includes basic library duties related to acquisition. A perennial issue in CLP was whether the collection categories satisfied the diverse community demands. “Facilities” relates to the storage and maintenance of the collection as well as the physical access to it. “Knowledge Organization” includes intellectual access to materials. “Human Resources” refers to the staff, volunteers, staff training, and management within the library.

3.1.5 Dimension 5: Perform Legitimation Processes
The fifth dimension, Perform Legitimation Processes, contains 3 sub-dimensions: evaluation, promotion, and outreach. Legitimation Processes refers to the discourse carried out by the library, citizens, and state regarding the state of the library itself.

“Evaluation” refers to efforts by the library to assess the needs of its community in order to adapt to emerging needs. Evaluation strategies at CLP included community surveys and focus groups. “Support” means the development of new ways of promoting services and resources to the public, not necessarily using manipulative means. “Outreach” means utilizing new platforms of communication with community members and organizations, including home visits, regular newsletters, and virtual communication such as Twitter. It might be suggested that public spheres are moving or expanding into online media.
3.1.6 Dimension 6: Facilitate Discourse

The sixth dimension, Facilitate Discourse, includes 4 sub-dimensions: citizen discourse, integrate citizens, interact with collection, and interact with staff. Facilitate Discourse means that citizens utilize library-provided resources in order to communicate with one another and the state regarding public concerns outside of the library.

“Citizen Discourse” refers to contexts where citizens come together with one another to debate political issues of mutual concern and coordinate actions. Examples in CLP reports included meeting room use, study clubs, reading clubs, and women’s clubs. “Integrate Citizens” means that the library prepares, guides, and educates citizens for participation in the public sphere. Examples include exhibits, lectures, classes, programming, and publishing. “Interact with Collection” means that citizens converse with library collections. This sub-dimension is represented in the annual reports by discussions about circulation, ILL, and reading in non-traditional places like station libraries. “Interact with Staff” refers to instances where citizens consult with or depend on library staff when initiating political discourse. Examples include virtual reference, phone reference, readers’ advisory, and indexing services.

3.2 Model of the Public Sphere in Public Libraries

In our model, each of the 3 discourse levels (intra-, inter-, external) corresponds with a set of library actions. The communication that circulates among the library, citizens, community groups, and the state at each discourse level affects how the library coordinates that set of actions. At the intra-library level, communication centers on how the library should collect and organize discourse for its use in the external public sphere level; at the inter-library level, communication concerns how the library should perform legitimation processes, how it should communicate its mission to various audiences; and at the external library level, the library facilitates discourse among citizens who use library collections and services to interact with civil society groups, the state, and the economy (see Figure 5).

![Figure 5. Model of the Public Sphere in Public Libraries.](image-url)

3.2.1 Collecting and Organizing Discourse at the Intra-Library Level

At the intra-library level, the library, citizens, community groups, the state, and private sector actors engage in discourse to determine what types of issues to promote in library collections and services, how these discourses should be organized, and how they should be made accessible. The norm of openness is expressed at this level by taking into consideration the interests of all patrons. For example, CLP related in 1980 how it incorporated the needs for the blind and physically handicapped by expanding its services accordingly:
The Library for the Blind and Physically Handicapped (LBPH) expanded its personalized services by 5.5% in 1980. An increasing number of users are college students needing assistance in locating textbooks in formats usable to them.

In this example, the annual reports show that the library took into consideration the interests of an underserved population and expanded its services to better meet their needs. What collections and services to provide to that population became a matter of debate. In another example, in 1990, CLP planned to survey citizens to determine how to collect and organize discourse:

We will ask citizens throughout our service area to help us answer some very crucial questions. What services should the library be offering? Who benefits from these services?

The above excerpt shows that the library engaged in a give-and-take of reasons to justify the implementation of certain services. The discourses collected by the library, surveyors hoped, would reflect the common concerns raised by citizens. In an example 1920, CLP reacted to perceived needs of local business and industry by advocating and expansion of business collections and a new business branch. As a result, the library responded to needs expressed by local markets:

A downtown branch equipped with a good reference collection of limited scope and serving also as a station for circulating books brought upon call from the Central Library would enormously increase our value to a considerable portion of the population. The establishment of a downtown branch is unquestionably the most imperative need of the Library.

By responding to local business interests, the annual reports show how CLP had to direct services to the economic subsystem as well as civil society and the state.

The public library may adopt a politically-active role in deciding which discourses to promote to patrons. In 1910, for example, CLP’s reference department tried to raise awareness of community events and civic issues through its collection displays:

Throughout the year a regularly changing exhibition of art books in the Library has been kept on a table in the Reference Room. The purpose has been to call the attention of readers to the many beautiful books owned by the Library which cannot be kept on the open shelves in the room, and which therefore remain unknown even to the constant users of the Library. On another table have been exhibited collections of books on special subjects, such as, Clean City Day; City Planning; Street-Car Service, and Pageants.

In order to remain a legitimate institution, however, activities decided at the intra-library level must incorporate the norms and values expressed by citizens within civil society. The public library begins to emerge as a public sphere only when the communication that coordinates intra-library functions of collecting and organizing discourse exhibits openness, common concern, and debate.

3.2.2 Performing Legitimation Processes at the Inter-Library Level

At the inter-library level, the library communicates its value to its publics in order to sustain itself as an institution, both materially and culturally. As a quasi-state institution, the public library must legitimate itself to citizen bodies, on the one hand, and state bodies on the other. The library must also secure funding, whether from private investors or from corporate sponsors. The success of legitimation processes depends in part on the degree to which the library incorporates community feedback into intra-library discourse. Citizen support and governance ensures that the library remains a civil society institution and is not dominated by system interests.

CLP engaged in inter-library discourse to strengthen support for the library from both citizens and local government:

The release of The Report of the President’s Advisory Committee on the Library began the process of informing the citizens of Pittsburgh and Allegheny County about the library’s financial difficulties that have developed over the past 15 years. Neighborhood meetings held about the Report continued that educational process. There is an enormous reservoir of goodwill toward the library in the community from elected officials and citizens who want to help. The growth of
the Friends of the Library, from 100 to 750 members, certainly has been one of the highlights of the year.

The library continued inter-library discourse through a release of a comprehensive review of the library system in 2000 and a series of interactive community workshops in 2010. Based on our model, it seems likely that active community outreach at the inter-library level positively influences both the intra-library public sphere and the external library public sphere.

3.2.3 Facilitating Discourse in the External Public Sphere
In the external public sphere, citizens use library resources to communicate their interests and values to reproduce lifeworld values, bolster civil society institutions, and secure fundamental rights through state interventions. A distinction can be made here between political public spheres, on the one hand, and literary public spheres, on the other. On the political public sphere side, library action coordinated at the external public sphere level responded to citizens’ needs in an effort to facilitate discourse between citizens, state bodies, and local associations. Examples of political public sphere discourse in the external public sphere at CLP were civic clubs and women’s groups; examples of literary public spheres were study clubs, lectures, and children’s programs.

There is evidence that, through the achievement of political public spheres, CLP helped citizen groups to translate their interests into state-secured rights. For example, in 1910, women’s suffrage meetings were regularly held in the music hall in Oakland which was then managed by the library. Women’s suffrage rights were eventually guaranteed by the state as a result of the suffrage movement. Then, in 1920, following the passage of the 19th amendment, the Allegheny County League of Women Voters held regular meetings at the Hazelwood Branch to discuss learning how to vote. CLP played a role in facilitating discourse in the external public sphere that enhanced citizens’ political power and resulted in new legislation.

4 Conclusion
We successfully created a model that explains the relationships between the public sphere and public libraries. The 6 dimensions of our model are Core Criteria, Internal Public Sphere, External Public Sphere, Collect and Organize Discourse, Perform Legitimation Processes, and Facilitate Discourse. The “publicness” of the communication that occurs at the intra-, inter-, and external discourse levels affects how the public library functions as a public sphere at that level. Our study contributes to the theoretical and philosophical understanding of public libraries.

The method we used to identify the 6 dimensions and construct a model was also successful. This method was effective because it allowed us to ground public sphere theory in concrete examples from a public library. Our model of the public sphere in public libraries is more detailed and better justified than those of previous studies.

Our project raises a number of questions and suggests several possible avenues for future study. First, we found elements of the public sphere in public libraries that had not been previously mentioned, such as virtual communication. How the virtual public sphere in public libraries is changing, expanding, or transitioning remains an open question. Another significant issue not addressed in this study but suggested by it is the relationship, overlap, and potential conflict between the public sphere and the private sphere. Further, our analysis has not yet explained the threats and vulnerabilities associated with the public sphere in public libraries. Future research in this area could provide more detailed diagnoses of the public/private tensions articulated by Webster (1995) and Buschman (2003). More work is needed to understand how the 3 discourse levels build upon or relate with one another.

We plan to build on this study in a variety of ways. A comparative analysis of the public spheres of different libraries is needed to better understand how and why public spheres vary. Ethnographic studies of public libraries of various sizes or locations, such as international public libraries, may yield insights in this regard. We also hope to use the data from this study to explore how the public sphere changes over time. The final destination for our research is a clear and logical theory of the public sphere as it relates to public libraries.

5 References
6 Table of Figures

Figure 1. The Comprehensive Public Sphere. The public sphere as a whole is composed of micro publics. ................................................................................................................................. 2
Figure 2. A Political Schematic of Society. The public sphere is located in the lifeworld and communicates between the political and economic subsystems. Image adapted from Cohen & Arato (1995, p. 431). .............................................................................................................. 3
Figure 3. Research Process and Theory Development Process .............................................................................. 6
Figure 4. Example of Assigning Multiple Codes to a Single Paragraph ..................................................................... 7
Figure 5. Model of the Public Sphere in Public Libraries. .......................................................................................... 10
7 Table of Tables

Table 1. Works in Library Literature that Associate the Public Sphere with Public Libraries (Articles with an asterisk [*] are peer-reviewed works).

Table 2. Scope of the Analysis (The 12 annual reports were analyzed for their content).

Table 3. Dimensions and Sub-Dimensions of the Public Sphere in Public Libraries.