

# “The Mother of all LibGuides”: Applying Principles of Communication and Network Theory in LibGuide Design

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Since their development in 2007, LibGuides have captured the attention and the imagination of the academic library world, at least in the United States. The 2009 ACRL national conference saw crowded panel, roundtable, Cyber Zed Shed, poster, and contributed-paper presentations on the reception and use of LibGuides by libraries, librarians, and their constituents. Reactions to LibGuides were so positive that an ACRL blogger compared participation in the sessions to “being inducted into a cult.”<sup>1</sup> By the 2011 ACRL conference, LibGuides had so thoroughly taken root in the library landscape that only one presentation, which described an attempt to replace LibGuides with free, open-source alternatives, dealt with the product.<sup>2</sup> LibGuides seem to be here to stay. As of this writing the LibGuide parent company, Springshare, has “3,856 sites live, and 53,800 librarian accounts. There are 319,000 published guides and currently [Springshare is] averaging about 100 million page views per month by 5.25M monthly visitors.”<sup>3</sup>

LibGuides are the Web 2.0 development of subject guides that began as paper Pathfinders in the 1970s. Like Pathfinders, LibGuides offer learners state-of-the-art introductions to research resources. Like Pathfinders and their progeny, web subject guides,

LibGuides present workload problems for librarians who seek to increase the use of guides in order to justify the time and effort required to create and maintain them.<sup>4</sup>

Current research on library tools and information systems views them as texts that communicate with users.<sup>5</sup> LibGuides are created to communicate with learners, who in turn derive content from LibGuides; therefore, communicative principles are involved in both their creation and use. This article describes the application of communication-by-design principles to the creation and upkeep of LibGuides in order to address problems inherent in subject guides. First, the authors trace the history of LibGuides and focus on issues of workload and use inherent in such guides. Second, they examine the affordances and constraints in networking LibGuides for efficient creation and maintenance. Third, they provide a vocabulary that both renders the implicit communicative aspects of LibGuide creation visible while encouraging overt deliberative activity as part of the processes of the creation and organization of LibGuides.

## **From Pathfinders to LibGuides**

Pathfinders arose during the early 1970s as part of

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Project Intrex' Model Library Project at the Massachusetts Institute of Technology. The name *Pathfinder* derives from the pioneering work of Patricia Knapp and the Monteith College Library Experiment. This program of library research instruction endeavored to teach students to "find a path" appropriate to their library's organization and the conventions of scholarly communication.<sup>6</sup> Pathfinders were intended to function as step-by-step, point-of-need reference and instructional tools that supported the first three-five hours of research. They were uniform in arrangement and content and limited to a single 8.5 x 11-inch sheet.<sup>7</sup> Pathfinders provided a "win-win" experience for both learners and librarians by addressing two related problems in reference work: "the orientation problems of library users" and "the repetitive instructional demands placed on library staff,"<sup>8</sup> "subtly... rais[ing] the level of sophistication of persons posing questions at the reference desk, thus improving the morale of staff who appreciate challenging questions."<sup>9</sup> According to Pathfinder pioneer Marie Canfield, such guides offered, "an efficient and productive library experience."<sup>10</sup>

While Pathfinders certainly benefitted both learners and reference librarians, they introduced two issues that have continued to plague guide developers: the labor- and time-intensive creation and maintenance of these guides and the need to maximize their use in order to justify this workload.<sup>11</sup> Since experienced librarians required between eight and twenty hours to produce a Pathfinder,<sup>12</sup> this workload needed to be justified by strong use of guides by learners.

In the 1990s Pathfinders went online, first as static guides, enhanced with hypertext links.<sup>13</sup> While Web 1.0 guides increased the accessibility of Pathfinders, making them available "24/7," workload and usage were still linked in the many articles written about online subject guides.<sup>14</sup> New workload issues included the increased "volatility" of Pathfinders incorporating web links;<sup>15</sup> since the average lifespan of a URL is 44-75 days,<sup>16</sup> the amount and frequency of maintenance required by an online guide is dependent on the number of included links.<sup>17</sup> Jackson and Pellack pointed out that, although online guides are considered important library documents, they do not figure prominently in the evaluation of academic librarians, which complicates issues of workload.<sup>18</sup> One solution proposed to the problem of the "tedious, repetitive, and labor-intensive process" of subject guides' cre-

ation and maintenance involved the production of dynamic, database-driven guides.<sup>19</sup> However, since both static and dynamic guides required knowledge of HTML coding, creation and maintenance was often in the hands of web librarians or programmers. The introduction of content-management systems (CMS) solved this problem by allowing librarians with little or no knowledge of HTML coding to create and maintain online guides efficiently.<sup>20</sup> With the advent of Web 2.0, librarians saw the potential for using its capabilities to create online guides that were more interactive and appealing to millennial learners, while simplifying creation and maintenance.<sup>21</sup> Some libraries created collaborative wiki subject guides, while social networking tools like Del.icio.us were also used to organize and provide access to online resources.<sup>22</sup>

In her review of the literature on Pathfinders and web subject guides, Vilenó identified three themes in the literature: workload, intended audience, and usability.<sup>23</sup> Librarians seemed to work diligently at subject-guide creation and maintenance, but did not appear to devote attention to their intended users and their content and accessibility needs. Since guides were not heavily used by learners,<sup>24</sup> librarians appeared to be engaged in the production of library tools that were important only to themselves and not to their target audience. Smith's historical overview of the development of subject guides also points to librarians' heavy investment of time and their lack of web skills as impediments to the cultivation of effective, focused, up-to-date guides.<sup>25</sup> Vilenó asked whether technology might not be sufficiently developed to allow guides to be quickly and efficiently produced.<sup>26</sup> One year later, Smith pointed to LibGuides as the answer to calls like Vilenó's; LibGuides also enabled the sharing of guides that was originally part of the MIT Pathfinder model.<sup>27</sup> The development of LibGuides has done much to streamline the creation of online guides, allowing librarians to produce guides quickly for specific audiences, courses, and assignments, thus potentially better targeting the needs of users.

LibGuides combine CMS structure and ease of use with Web 2.0 social-networking capabilities, "leveling... the technology playing field" for librarians<sup>28</sup> LibGuides enable "anytime-anywhere" engagement with discipline-, course-, or assignment-specific resources and, like the Pathfinder, allow librarians to dedicate more reference and consultation time to answering higher-order, more rigorous research questions.<sup>29</sup> Lib-

Guides also allow librarians to provide uniform, high-quality reference assistance and instruction to all of their constituents.<sup>30</sup> Creation of these guides is quick and easy, allowing liaisons to be responsive to faculty and learners' preferences for course- and assignment-specific guides.<sup>31</sup> In addition to customization, standardization, and branding of form and content at the institutional level, LibGuides allow customization at the level of individual LibGuides, including repackaging of content for different audiences, borrowing of content from other libraries' LibGuides, communicating via Web 2.0 tools like chat widgets and RSS feeds, and embedding within a CMS. They are mobile-device-friendly; the software also provides automatic link checking and easily captures usage statistics for entire LibGuides or individual pages thereof.<sup>32</sup>

The literature on LibGuides is consistently positive, emphasizing the ease of creation and many uses of LibGuides beyond solely subject, course, and assignment guides. LibGuides also function as guides to special collections,<sup>33</sup> electronic tenure and promotion portfolios,<sup>34</sup> in-house training and knowledge repositories,<sup>35</sup> repositories to display student research projects,<sup>36</sup> to share research and teaching materials of a faculty learning community,<sup>37</sup> to organize the tools required for evaluation of electronic resources;<sup>38</sup> as computer-assisted instructional tools to replace face-to-face instruction, and even virtual handouts of conference presentations.<sup>39</sup> These uses demonstrate LibGuides' versatility.<sup>40</sup>

While LibGuides are easy to create, maintenance remains a problem. Leibiger has pointed out a "down side" to the ease with which LibGuides can be created: This ease of creation encourages librarians to produce many LibGuides, which in turn must be frequently maintained, especially if they rely on lists of web links to connect learners with resources.<sup>41</sup> The workload issue of guide maintenance has actually been complicated by LibGuides, especially if links are simply copied and pasted from older online guides without checking them for accuracy and currency.<sup>42</sup> The online, public nature of LibGuides and the fact that they are also used as library marketing tools makes imperative the need to keep them up to date.

The sheer number of library publications devoted to Pathfinders, subject guides, and LibGuides indicates their importance to librarians. The literature has emphasized the need to maximize guide use to justify the workload inherent in their creation and maintenance;

despite LibGuides' ease of creation, maintenance is still an issue. The need to create some LibGuides that will predictably experience little use (e.g., for small academic departments, programs, or courses) seems to fly in the face of librarians' connection of guide creation and maximization of use. Perhaps it is time to "unhook" these notions and address workload and use separately. Viewing LibGuides as communication tools allows us to consider creation and use as separate aspects of communication, just as the production and interpretation of communication are separate acts performed by communicators. Feinberg has demonstrated how rhetorical analysis can reveal the communicative effect, or "message given off," by an information system.<sup>43</sup> Communication as design encourages us to take advantage of the affordances and constraints of network structures like systems of LibGuides in order to streamline their production and thus reduce workload.

### **LibGuides and Communication as Design**

The LibGuides software facilitates information sharing from a creator to many users. In this way, LibGuides function as a form of communication; the software allows additional communicative functions such as the ability to contact the creator directly and the capability to share content across multiple LibGuides. The communication-as-design perspective provides a useful means for analyzing and exploiting the communication potential of LibGuides.<sup>44</sup>

Communication as design is "an intervention into some ongoing activity through the invention of techniques, devices, and procedures that aim to redesign interactivity and thus shape the possibilities for communication."<sup>45</sup> LibGuides redesign information-seeking activity differently for the guide creator and the end user. First, LibGuides can be linked with each other, allowing content to be shared among guides. A variety of network structures can be used to create functional LibGuide networks. Second, the organization and presentation of content in LibGuides can affect the quality of the interaction between the user and the guide. While a plethora of current research is focused on LibGuide design from the user perspective,<sup>46</sup> there is no research that examines the communicative potentials afforded in creating and linking LibGuides in a network. Our research is an initial attempt to remedy this gap in the literature.

Two goals remain in this study. First is the ap-

plication of the communication-as-design perspective to the building and organizing of LibGuides. The authors seek to identify *affordances* or “possibilities and preferences for action that are either created or amplified by the new technology” and *constraints* or “possibilities cut off by the technology.”<sup>47</sup> Reflective managing of affordances and constraints when creating LibGuides, whether at the individual or institutional level, will directly address issues already identified above such as managing workload. While the focus is on LibGuide creation and organization at the level of the creator rather than use on the level of the learner, much important work remains to be done on the interaction of end-users with LibGuides and their content.

Second, this article seeks to promote the deliberate use of design principles in the creation and organization of LibGuides. Because communication is ubiquitous, individuals engage in it with little or no awareness of how communicative structure and intent facilitate or constrain interactions. Simply stated, people tend to ignore what they do without apparent effort. Individuals organize or encounter networks with little awareness of their properties. As such, people often lack a common vocabulary to articulate the affordances or constraints influencing networks. It is possible to develop a useful vocabulary for LibGuide creators to use when planning the construction and connection of LibGuides into productive network structures through an examination of research on networks and their communicative properties.

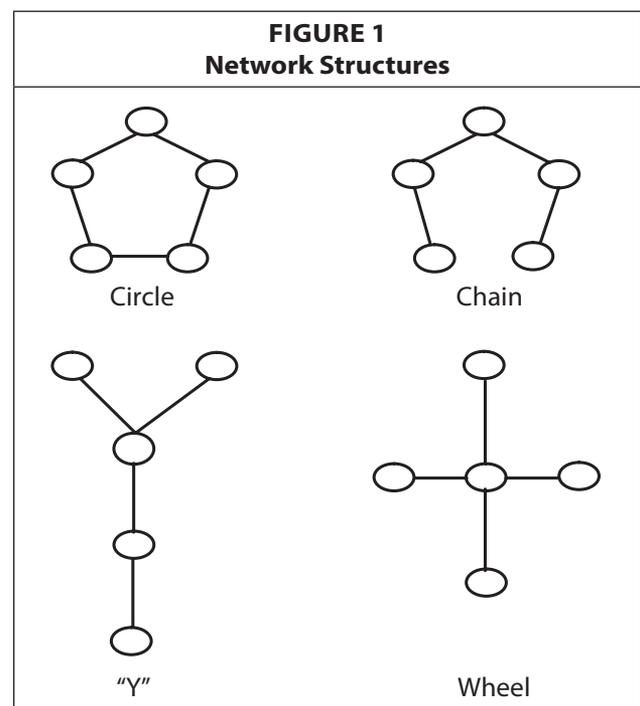
### A Brief History of Network Structures

The initial study of networks occurred in the discipline of psychology early in the twentieth century and in communication studies from the late 1940s through the 1960s. Behaviorism, which sought to establish the causal links between stimuli and behaviors, was a strong focus of psychology and remained so through the 1980s.<sup>48</sup> While behaviorism can readily explain individual action, Lewin sought to account for human behavior on a much larger scale by considering sets of related elements and their influences on each other in a field theory. Lewin modeled what he called the “life space,” which included the individual, the environment, and the state of the individual within the environment.<sup>49</sup> Mathematical concepts of geometry and hodology (the study of pathways) were used to model interactions between individuals and the environ-

ment.<sup>50</sup> Of particular interest in Lewin’s field theory was the nature of bounded regions or “cells” which comprise the life space and movement of people within and across regions. Contact in the life space, whether between people or between regions, was considered communication.<sup>51</sup> This research focused on identifying the shortest path by which change would spread throughout the cells within a structure. Lewin’s theorizing on life space gave rise to research on communication networks and their influence on participants’ interactions.

Bavelas explored Lewin’s assumptions regarding the shortest path for the spread of change in various structures. Bavelas explicitly recognized the usefulness of his work for “communication between individuals (or between groups), and that of communication between ideas and attitudes” as he examined the spread of change and the importance of location (e.g., most central vs. least central position) within a network structure.<sup>52</sup>

Bavelas and others expanded this work, focusing on small group structures and the ways in which the communicative potential inherent in these structures affects performance and productivity.<sup>53</sup> Structures studied included the circle, chain, Y, and wheel patterns; attention was devoted to two dimensions: efficiency and satisfaction.<sup>54</sup> The various possible network structures are illustrated in Figure 1 below.<sup>55</sup>



The degree of centrality within a network affects these dimensions directly.<sup>56</sup> The patterns in order of greatest to least efficiency are the wheel, Y, chain, and circle.<sup>57</sup> Both the wheel and Y patterns require a person to occupy a central position, receive all of the messages flowing through the network, and manage or coordinate the information kind and flow. People occupying the central positions in a network have greater autonomy, which leads to increased personal satisfaction.<sup>58</sup> However, the patterns in which a group as a whole experiences the greatest to least satisfaction are the circle, chain, Y, and wheel networks.<sup>59</sup> Both the circle and chain networks allow each member to communicate with at least one or two other people. This equality of communication appears to be related to the overall satisfaction of group members, whereas locating a person in a central position creates a superior-subordinate relationship, which tends to be more satisfying for the person in the superior position. Clearly the structure of a network influences both the members and the network's communicative potential.<sup>60</sup>

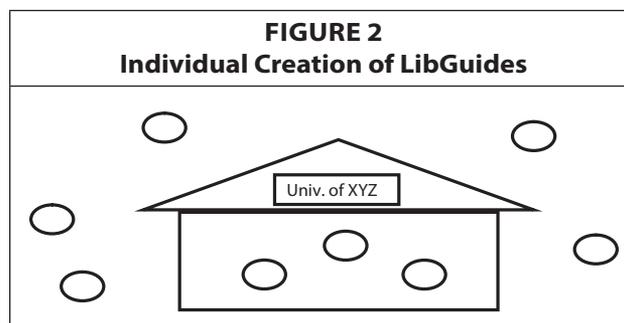
Terminology used to describe these network structures was initially taken from biology, with regions described as cells and the intersection of cells as connections.<sup>61</sup> The endpoints of connections were called nodes; those nodes that occupied a centralized position within the network were egos.<sup>62</sup> While this terminology is descriptively adequate, it is far from memorable, especially for those with little connection to network theory. The German linguist August Schleicher provided a different, metaphorical approach in his analysis of the relationships between languages by diagramming these relationships using a *Stammbaum* or genealogical tree.<sup>63</sup> The parent-child relationships captured by the *Stammbaum* representation is ideal for rendering the power differential that exists between nodes and egos. Applying Schleicher's terminology to networks, nodes become the children, and the ego is the mother. The circle and chain networks thus consist of a mother with direct linear links to one or two children and indirect links to the remaining children, illustrated in Figure 1 above. The Y and wheel networks consist of a mother occupying the central position. There may be one or more indirect links between the mother and some children in the Y network, whereas the mother links directly to all of her children in the wheel network.

## LibGuides and Networks

This section identifies various models for LibGuide creation, focusing on the affordances and constraints inherent in them. The first two models are the individual-creator and social-creator models which represent individuals creating LibGuides independently. The Mother LibGuide model makes use of networks to more efficiently organize and manage LibGuides.

### The Individual-Creator Model

The most basic and most common model for LibGuide design is the individual-creator model, where a LibGuide is individually constructed for a specific use, such as for a single course or subject area. Each LibGuide stands alone in the individual-creator model, independent of any other LibGuide, as illustrated in Figure 2 below. All content, linkages, etc. are produced by the LibGuide creator.

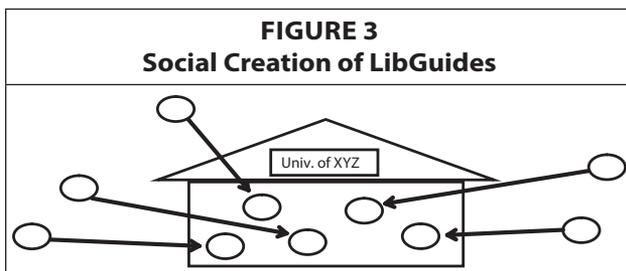


The individual-creator model provides several affordances, including customization of content for specific purposes and the creator's personal satisfaction from exercising individual creativity. The major constraints inherent in the individual-creator model concern issues of workload and consistency. Creating each LibGuide as a stand-alone guide is labor-intensive, and the creator must update or refresh content for each individual LibGuide. There is also the potential for as many different LibGuide designs within an organization as there are people creating them. Important tools like the library catalog may be located differently across the library's LibGuides, resulting in confusion for the end user.

### The Social-Creator Model

The social-creator model provides some relief from the workload and consistency issues inherent in the individual-creator model. Content may be borrowed

from other LibGuides at the content-box or page levels. LibGuides software allows an entire LibGuide to be copied and renamed for use as a structural template for a new LibGuide. Borrowing of content is facilitated by the ability to search across all published LibGuides for prototypes.<sup>64</sup> Making a copy of any content effectively places that content under the complete control of the LibGuide into which it is copied. Creators can also close their LibGuides to borrowing as part of the construction process.



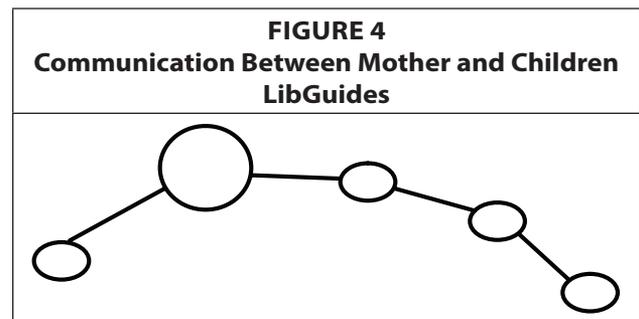
The social-creator model affords some workload reduction, as librarians do not have to reinvent or organize content. This model also promotes the sharing of excellent content. However, borrowing often occurs in one direction rather than as reciprocal sharing. Most of the constraints associated with the individual-creator model remain, such as the need to update content in each LibGuide individually. Neither the individual-creator nor the social-creator model encourages collaboration or purposeful organization that might arise from considering higher-order notions of communication as design. The following discussion will address these higher-order considerations through a design-based model we call the Mother LibGuide.

### The Mother-LibGuide Model

The Mother LibGuide represents a very different design approach from the previous two models. Where the individual-creator and social-creator models rely mainly upon individual, uncoordinated effort, the Mother-LibGuide concept takes advantage of the linking capability of LibGuides to generate productive network structures. Rather than simply copying content from one LibGuide to another, content can be shared through a linked relationship between LibGuides at the box or page level. Once a link is established between any LibGuides, changes made to the originating LibGuide content will be passed on to the linked LibGuides.

Applying Schleicher's *Stammbaum* vocabulary, the LibGuide that hosts or provides content is the Mother LibGuide, and the LibGuides that are linked to, and receive content from, the Mother are her Children. In principle, any LibGuide can function as either a Mother or Child LibGuide in a network; additionally, a LibGuide can simultaneously be a Mother to one or more LibGuides and a Child of a different LibGuide. In practice, the Mother-LibGuide concept locates any content intended to be shared by Children within a specific Mother LibGuide.

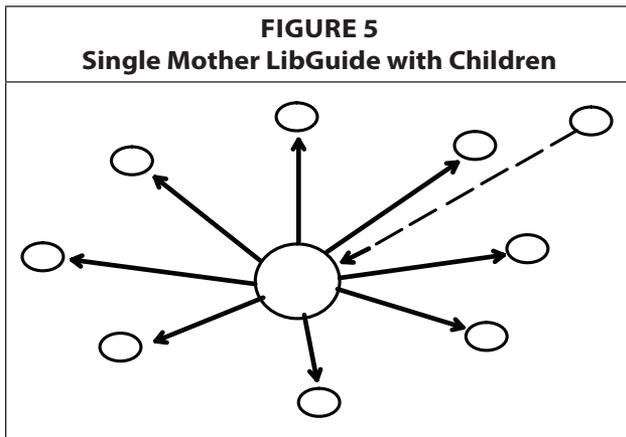
An indefinite number of LibGuides can be linked together in different network patterns including the circle, chain, Y, and wheel networks illustrated in Figure 1. The important issue from a design perspective is the position or relationship of the Mother LibGuide relative to her Children in the network. In the decentralized circle or chain network, the Mother LibGuide can link directly to her Children LibGuides on either side of the Mother. Children located farther away from the Mother have to link through another Child in order to obtain content from the Mother LibGuide. In Figure 4 below, the Mother LibGuide (large circle) has direct contact with two of her Children. The remaining two Children can connect to the Mother only through the other Children in a chain.



Keeping track of which LibGuide is the Mother is difficult in decentralized circle or chain networks. LibGuide software identifies which guides share linked content, but it does not identify the origin of that content. When links between LibGuides are made indiscriminately without attention to a formal network structure, the work necessary to keep track of the location of original content exceeds the benefits of this sort of linking LibGuide content. Expressed in terms of the family metaphor employed in this article, the extensive recordkeeping required to manage results of the indiscriminate creation of LibGuide Children is

reminiscent of a social worker's attempts to keep track of a dysfunctional mother and her wayward children.

The Mother LibGuide concept addresses this management issue by locating the Mother in a centralized position in relation to the Children. Both the Y and Wheel networks provide a central location for the Mother LibGuide. The Wheel network illustrated in Figure 5 is the preferred structure because all of the Children LibGuides receive their content directly from the Mother without having another Child as an intervening link, as is the case in the Y network. Because all linked content is shared directly from the Mother to the Children, the Mother LibGuide is the sole, direct source of all content in her Children, and updating content or links is straightforward and efficient.



The dotted line indicates that content can be copied or imported into the Mother LibGuide from another LibGuide. Copying the content rather than linking to it places the new content under the complete control of the Mother LibGuide. This makes the Mother LibGuide the source of the content for the Children linked to this content.

The Mother LibGuide organized using the Wheel network model affords several key advantages over other ways of organizing and sharing content among LibGuides. First, a single person can easily create and locate content in a Mother LibGuide for sharing with many other Children LibGuides as needed. This frees both time and energy for creating original content as necessary in individual LibGuides. Second, updating a Mother LibGuide transfers the updates to all of the Children in the network. Content unique to any Child

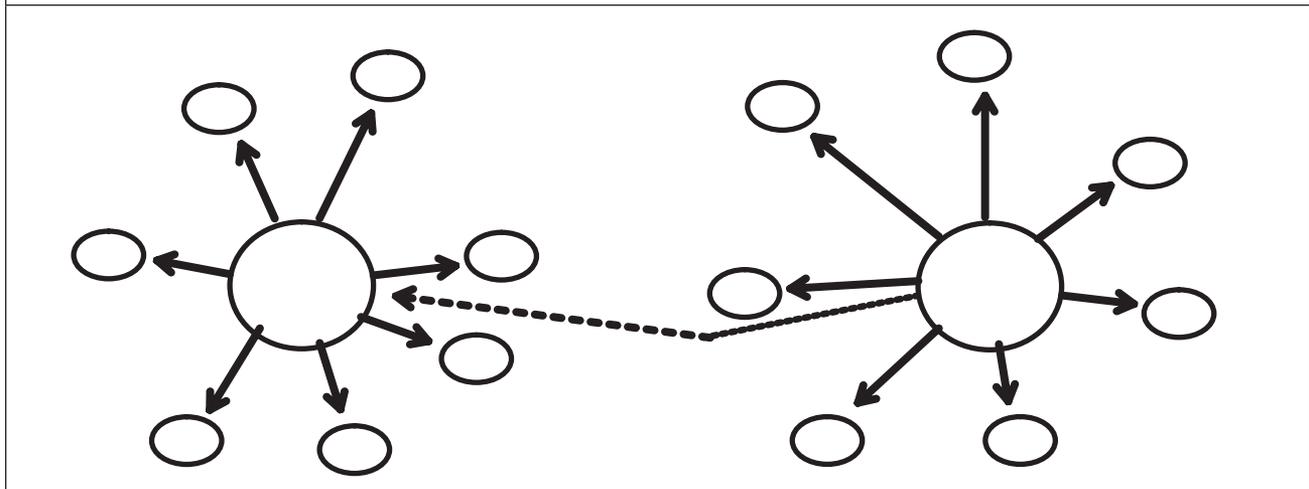
LibGuide must be updated within that guide. Third, creating and storing common content within the Mother LibGuide allows greater uniformity and continuity of design to be achieved across the Children. The content derived from the Mother LibGuide is not static, however, as page or box content can be revised within individual Children LibGuides by renaming pages or boxes, reorganizing the contents of pages or boxes, and editing descriptions of content.

Employing the wheel model with the Mother LibGuide occupying the central position produces clear gains in efficiency and organization, as suggested by the literature on networks. The same literature offers help in addressing several crucial and sometimes problematic questions associated with the Mother-LibGuide model. These questions include responsibility for creation and maintenance and scalability: Who creates the Mother LibGuide? Who maintains her? Is one Mother LibGuide sufficient to meet the needs of all LibGuide users?

Research on networks has consistently found that personal satisfaction among group members is highest in decentralized networks like the circle or chain where members have an equal opportunity to communicate and no single individual has control. Conversely, satisfaction within the centralized (Y and wheel) networks is greatest for the individual occupying the centralized, controlling position and significantly lower for those at the network's periphery. Applying these findings to the different LibGuide models, personal satisfaction will be higher in the decentralized individual- and social-creator models and lower in the centralized Mother-LibGuide model. In other words, those who have little or no say in the creation of the Mother LibGuide might not want to participate as a Child.

While LibGuide creation can be a solitary pursuit, a Mother LibGuide can be created collaboratively. Individuals might be responsible for developing and maintaining a specific portion of the Mother-LibGuide content used by their Children. This approach can work well with a small group of people. However, in a large university library with hundreds of databases and resources serving many different disciplines, the Mother-LibGuide model might be insufficient to create all the LibGuides needed. In this case, the Multiple-Mother model readily addresses issues of creation and scalability.

**FIGURE 6**  
**Multiple Mother LibGuides with Children**



### The Multiple-Mother Model

An infinite number of LibGuides can be linked in many different configurations, making the Mother-LibGuide concept scalable for organizations of different sizes and complexities. The Multiple-Mother model consists of different Mother LibGuides, with each Mother linked to its own group of Children LibGuides. In Figure 6 below one Mother LibGuide might be created to support the Humanities, and another Mother LibGuide might support the Social Sciences or Sciences.

While the diagram suggests each discipline uses separate content provided by its respective Mother LibGuide, some subjects, courses, or assignments are interdisciplinary in nature. One LibGuide might need to link to another Mother LibGuide to receive specialized content such as citation-style materials or to accommodate interdisciplinary materials. The dotted arrow illustrates a Mother LibGuide sharing its content through a link to either another Mother or Child LibGuide.<sup>65</sup>

The Multiple-Mother Model can also be scaled to the level of the individual. Since it is common for subject specialists or liaisons to create and maintain many individual LibGuides, they can create and maintain personal Mother LibGuides. This accommodates individual control and satisfaction while retaining the benefits of the Mother-LibGuide concept.

The Multiple-Mother model offers several affordances over a single Mother LibGuide. By spreading

content across multiple Mother LibGuides, a single Mother is not being tasked with providing all common content to the Children LibGuides. Organizing LibGuide content by discipline naturally distributes the workload among staff supporting the information needs of different disciplines, locating control of each Mother LibGuide with a subject or area specialist and addressing issues of satisfaction. This also allows the look, feel, and internal organization of the content to be fitted to the expectations of subject or disciplinary areas.<sup>66</sup>

### Conclusion

New ideas and ways of doing inevitably arise where technology and tradition intersect. LibGuides are a clear example of this, as the Pathfinder has evolved from a static, single-page document to a multifaceted “anytime-anywhere” resource. When any tool is fundamentally transformed, it is important and relevant to ask whether old problems have been addressed while also identifying new opportunities.

This examination of the development from Pathfinder to LibGuide has considered three issues: the workload associated with creation and maintenance, the need to address users, and the need to increase usage to justify workload. It is evident from the growing body of LibGuide literature that the need to identify and address users is receiving attention. However, issues of workload remain unaddressed in libraries and in the literature; in fact, these issues have actually increased due to LibGuides’ ease of creation.

LibGuides are communicative, and their success is due at least in part because they reflect the properties of language. Language is limited in its resources (structures and "rules" for combining them into meaningful communication), yet infinitely creative in its expressiveness. Language is also complex, as it allows a multitude of ways to express meaning. Using a communication-as-design perspective combined with insights from research on networks, the authors have demonstrated how limited structural forms and an infinite variety of combinations provide new ways to address workload issues associated with LibGuides' creation and maintenance. Insights from networks analysis suggest the need to manage the tension between efficiency and satisfaction associated with networks in the Mother-LibGuide model.

Deliberate discussions about design should be included in the introduction and use of any new technology. By making design and related issues explicit, this study has demonstrated how key issues associated with LibGuides can be managed while also identifying new ways of employing this technology. This article represents a starting point in examining design issues. Future areas for study include new communicative functions for LibGuides and other Web 2.0 technologies. LibGuides are a passive form of communication; users go to the guide for information. Can or should LibGuides provide more interactive engagement with information? Should information be pushed to the user independently of the user's seeking it? Should outside organizations such as the Modern Language Association or American Psychological Association create Mother-LibGuide pages to provide commonly used disciplinary content to users worldwide? Librarians are in the business of connecting people with information. Addressing the ways libraries accomplish this connection from a communication-as-design perspective clearly leads to improved and more effective processes and understandings.

## Notes

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Child of Aldrich's (unpublished) Mother LibGuide, linking to Aldrich's Mother for several resource pages.

66. Space limitations prevent the authors from delving into questions of content for Mother LibGuides. Regardless of the kind of linking structures used, the best content for a Mother LibGuide is any content that can be used by multiple Children LibGuides. Examples of common or sharable content include databases organized around subjects or disciplines, citation style resources, links to library resources such as catalogs or interlibrary loan services, information literacy materials, and tutorials or other online lessons.