The Heart of the University: Revisiting an Enduring Metaphor

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abstract: One of the most enduring and controversial metaphors to describe the academic library is this: "The academic library is the heart of the university." For 150 years, librarians have both embraced and rejected this metaphor in equal measure. For some, the metaphor is old, dusty, and ignorant of contemporary library practices; for others, it endures precisely because of the place it affords the library at the center of the university. While it is understandable that these polarized views persist, is contestation the only possible outcome of this discussion? Subjecting the metaphor to a more critical analysis has the potential to rekindle an appreciation for it and to reveal other possible understandings hidden within its words. This paper draws on traditions of metaphor analysis to invite questions about how this metaphor might be construed and read differently. In doing so, the aim is to indicate why and how the metaphor remains vital, and to examine how it can refresh academic library scholarship and practice. Its future relevance lies not with the library as the heart of the university, but with the library engaged in the scholarly debate about what the heart of the university is.

Looking Again: Revisiting the Academic Library Heart Metaphor

Faced with the ever-present challenge of describing and communicating the value of the academic library, librarians have long leveraged the creative possibilities afforded by metaphor. The metaphor "the academic library is the heart of the university" is a well-known figure of speech that has been in circulation for nearly 150 years. While it is one among dozens, it has endured. Researchers have identified and categorized the many academic library metaphors,[1] and librarians continue to coin new ones to describe and develop a mythology about the academic library.[2] Despite vibrant imaginings ushered in by these new library metaphors, the heart metaphor continues steadfastly in the mix.

The power and ubiquity of metaphor in everyday language is used by librarians to promote a common understanding about academic libraries and to illustrate all that the library is, and might be, for the university community. The heart metaphor was used in the late nineteenth century by the president of Harvard University to secure funds for enlarging library buildings to better accommodate students, readers, and books,[3] and it has endured in library literature ever since. Notwithstanding the library's evolving digital and physical forms, the heart metaphor persists in the linguistic landscape and is commonly interpreted as describing the literal and figurative central positioning of the academic library. Over time, however, librarians' attitudes to the metaphor have shifted, oscillating between enthusiastic engagement, indifference, and disapproving dismissal. As illustrated by the selected examples in Table 1, this metaphor has been endorsed, referenced, and rejected in equal measure.

> **The heart metaphor persists in the linguistic landscape and is commonly interpreted as describing the literal and figurative central positioning of the academic library.**

For some academic librarians, the metaphor "has not lost its relevance. It is as appropriate as ever, if not more so."[4] For those who intentionally embrace the heart metaphor, their endorsement validates and strengthens its relevance. Authors who make neutral reference to it without value statements about the idea, its history, and its past usefulness, help keep the heart metaphor in circulation. For others, rejection will likely diminish its value, and the academic library is more like a "heart with clogged arteries and in need of bypass surgery" than an indispensable contributor to the university mission.[5]

The references to the academic library heart metaphor listed in Table 1 are not intended to be exhaustive; rather, they are representative of its usage of over time and the shifting reaction to the metaphor. It would be unwieldly to present comprehensively the frequency of use of this metaphor. For example, the list excludes the dozens of librarians and academic authors who frequently rely on the heart metaphor to offer both real and symbolic descriptions of library purpose and value. What the selected references in Table 1 do illustrate, however, is that the metaphor emerges again and again to illuminate the idea of the academic library—what it might be or should no longer be. The metaphor's persistent inclusion in authors' interpretative repertoire suggests that it continues to resonate. See Table 1.

Given the metaphor's history, what does its recurring use call to attention? Subjecting the heart metaphor to more substantive analysis has the potential to offer new insights about its usefulness and raises the question of whether there is more to understand about it. Why is the heart metaphor so unremitting and so contested in the wide-ranging assortment of implied comparisons that represent academic libraries? How does a distinction between the literal and nonliteral language in the metaphor aid comprehension? What meanings are carried by the heart as a metaphor? Why does library centrality readily come to mind in response to the metaphor? And what new understandings might emerge by using metaphor theory to look more closely at the linguistic structure and conceptual characteristics of the heart metaphor? In this paper, the authors take up each of these questions in turn to make the case for revisiting the metaphor as relevant to the academic library in its present and future forms.

Table 1.

The academic library heart metaphor: endorsements, neutral statements, and rejections in the literature

Year	Endorsements*	Neutral statements†	Rejections‡
1875	Charles Eliot		
1889	Hiram Stanley		
1924	Harold Leupp		
1944			Fremont Rider
1958			H. Vail Deale
1966	Allan Cartter		
1979	Joseph Nitecki		
1981		Arthur Hamlin	
1984	Patricia Battin		
1991			Lloyd Chapin and Larry Hardesty
1993	Danuta Nitecki		
1998			Deborah Grimes
2000			Felix Chu
2001			Patience Simmonds and Syed Andaleeb
2005	Sharon Weiner		
2006	Patricia Frade and Allyson Washburn		
2007			Beverly Lynch, *Catherine Murray-Rust, Susan Parker, Deborah Turner, Diane Parr Walker, Frances Wilkinson, and Julia Zimmerman*
2008	Dale Gyure		
2010	Pieter Kleymeer, Molly Kleinman, and Ted Hanss		Joan Giesecke
2011	Beatrice Tice		
2013		Richard Stoddart	
2014	Victoria Okafor		
2015	Richard Danner		
2015		Matthew Sullivan	
2015		Carl Johannsen	
2015			Mark Robertson
2015			MaryBeth Meszaros and Alison Lewis
2016	George Fowler		
2018			Adam Murray and Ashley Ireland

Table 1., cont.

Year	Endorsements*	Neutral statements†	Rejections‡
2018		Fiona Salisbury and Tai Peseta	
2019		Clem Guthro	
2019	William Leonard		

Due to space limitations, only short citations are given here. The full references appear in the "Notes" section of this article.

*Eliot, *Forty-Ninth Annual Report of the President of Harvard College 1873–74*; Leupp, "The Library. The Heart of the University"; Cartter, *An Assessment of Quality in Graduate Education*; Joseph Nitecki, "Metaphors of Librarianship"; Battin, "The Library: Center of the Restructured University"; Danuta Nitecki, "Conceptual Models of Libraries Held by Faculty, Administrators, and Librarians"; Weiner, "The History of Academic Libraries in the United States"; Frade and Washburn, "The University Library: The Center of a University Education?"; Gyure, "The Heart of the University"; Kleymeer, Kleinman, and Hanss, "Reaching the Heart of the University"; Tice, "The Academic Law Library in the 21st Century"; Okafor, "Information Services in Nigerian University Libraries"; Danner, "Law Libraries and Laboratories"; Fowler, "The Essence of the Library at a Public Research University"; Leonard, "In the Digital Age, the Heart of the University Expands."

†Hamlin, *The University Library in the United States: Its Origins and Development*; Stoddart, "'Straight to the Heart of Things'"; Sullivan, "From Warehouses to Workshops, from Libraries to Labs"; Johannsen, *Library User Metaphors and Services: How Librarians Look at Their Users*; **Salisbury** and Peseta, "The 'Idea of the University'"; Guthro, "The 21st Century Academic Library."

‡Rider, *The Scholar and the Future of the Research Library: A Problem and Its Solution*; Deale, "Public Relations of Academic Libraries"; Chapin and Hardesty, "Benign Neglect of the 'Heart of the College,'" in *Academic Libraries: Their Rationale and Role in American Higher Education*, McCabe and Person, eds.; Grimes, *Academic Library Centrality: User Success through Service, Access, and Tradition*; Chu, "Changing Our Tools"; Simmonds and Andaleeb, "Usage of Academic Libraries"; Lynch, *Murray-Rust, Parker, Turner, Walker, Wilkinson, and Zimmerman*, "Attitudes of Presidents and Provosts on the University Library"; Giesecke, "Finding the Right Metaphor"; Robertson, "Perceptions of Canadian Provosts on the Institutional Role of Academic Libraries"; Meszaros and Lewis, "Librarianspeak: Metaphors That Reflect (and Shape) the Ethos and Practice of Academic Librarianship," in *Not Just Where to Click: Teaching Students How to Think about Information*, Swanson and Jagman, eds.; Murray and Ireland, "Provosts' Perceptions of Academic Library Value & Preferences for Communication."

The Academic Library Heart Metaphor

Structurally, the academic library heart metaphor is typical of simple linguistic metaphors: a phrase or sentence where some words are used literally and others are used nonliterally or metaphorically.[6] Simple metaphors make an implicit comparison, substitution, or attribution between two things that signify "something regarded as representative or suggestive of something else."[7] As a linguistic device, simple metaphors "do something highly creative and succeed in saying something that we could not say without recourse to metaphor." They combine words in an unusual way depending on whether the intended sense of each word is literal or nonliteral.[8] This combination of words transfers the characteristics of one thing to an unrelated thing. It enables readers to see a subject in new ways and extends the meaning of words,[9] imbuing them with significance beyond their literal definition and so giving "language users a flexibility that is not available with literal expressions."[10]

In the academic library heart metaphor, *academic library* and *university* are used literally and draw on common knowledge about the meaning of these terms. Readily available definitions about the purpose and function of the academic library make clear that it is a library associated with a university or college of higher education,[11] whose intent is to support the institution's mission by providing collections, services, and programs that align with the educational and research needs of the university community.[12] In support of teaching, learning, and research, the academic library is both a physical and digital space.[13] The literal meaning of *library* is generally understood to involve the information, research, and educational requirements of students, teaching staff, and researchers.[14] Any use or interpretation of the term might also specifically refer to, among other things:

1. the digital collections,
2. the on-site collections,
3. information access services, such as discovery platforms and interlibrary loan,
4. direct reference and research services either online or on-site,
5. capability and skill development for information and digital literacies,
6. the physical building, space, or environment as a center for individual or group study, and
7. the physical and digital environment as a center for academic or social activities.

Researchers have made clear that the phrase *academic library* can, and does, have multiple meanings. Because of that, when used literally, *academic library* inhabits a complexity of layered meanings even before the phrase is associated with the word *heart*. Understandably, questions then emerge about which salient characteristics of the heart are transferred to the academic library, and what the heart—as a metaphor—suggests about the library and its relationship with the university.

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Exploring the Heart as a Metaphor

The two intertwined narratives that underpin the heart as a metaphor stem firstly, from the anatomical heart known to science, and secondly, from the notion of a feeling heart of emotion and thinking. The anatomical heart serves a function vital for survival; the organ receives and sends blood from veins to arteries.[15] The anatomical heart is a precision pump, a working machine that is maintained, monitored, repaired, or replaced, and finally expires when its rhythmic beating stops. Heart metaphors speak to the universal human experience of the heart's regular beat.[16] A healthy heart relaxes and contracts in a steady rhythm to pump blood through the body, and although it is productive and industrial—a "powerhouse supplying fuel to the body's periphery"—in symbolic terms, the heart represents much more than a mechanical pump.[17] The physiology of the beating heart is also linked to psychological well-being and relationships with others.

The parallel narrative of the feeling heart is concerned with mind, emotion, and thinking: the heart is the "physiological canvas onto which our emotions are most easily written."[18] The feeling heart has its origins in historical cultural practice, ideology, and ancient beliefs about the connection between body and brain.[19] Today, it continues to mean an emotional repository for love, moods, passions, and moral values. Our understanding of the heart as a metaphor is anchored in these two parallel narratives—that the heart is both a driving force that pumps blood around the body and a figurative vessel waiting to convey and be filled with emotional meaning.[20] In the metaphoric heart, these concrete and abstract narratives interact, and the boundaries between the anatomical heart and feeling heart are blurred, just as a linguistic conceptualization of emotion is triggered through bodily sensations and symptoms.[21]

The metaphoric heart has numerous features, including size, shape, materiality, temperature, architecture, and geography. Over 40 heart metaphors common in everyday English draw on the characteristics of the physical heart and the feeling heart.[22] Meanings of the heart as a metaphor can be grouped according to the categories in Table 2. These interpretations come from a long history of the heart being used to refer to the body, mind, and emotions,[23] which gives the word *heart* its linguistic significance and power.

The "heart as the center or core of something" is the generally accepted interpretation of the academic library heart metaphor. Metaphors in this category draw on narratives of the "clockwork of the heart"[24] and on the role of the anatomical heart as the body's central mechanical driver.[25] While physically left of center in the upper chest, the heart's role at the center of the body's circulatory system reveals why the geographic hub of a place or thing might also be called its *heart*. For example, the "heart of the city" is traditionally understood to be its geographic center point. This expression of positional centrality is widespread and has an equivalent metaphorical projection in several languages.[26] But in a contemporary sprawling metropolis, pinpointing a city's geographic center does not necessarily locate its heart. This metaphor directs us not just to a central location but also to something that goes beyond concrete location to a more abstract sense of central purpose and value. Finding the heart of the city means a deeper and more complex discovery of the inner workings and essence of a municipality,[27] important to its ongoing existence. The anatomical heart's work is vital for the body's everyday functioning, for human survival, and indeed for life itself;[28] the heart as a metaphor for

Table 2.
Categories of heart metaphors and selected examples

Category	English-language examples
A container of emotions and feelings[*]	From the bottom of one's heart
	To pour one's heart out
	To open one's heart
	To find it in one's heart
	To know something in one's heart of hearts
	To take heart
A material substance[†]	A heart of gold
	A heart of stone
An object of value[‡]	To offer one's heart
	Brokenhearted
A container for intelligence[§]	To learn by heart
A metonymy for the person[#]	To win someone's heart
	To have a heart-to-heart
A living organism[**]	To one's heart's desire
	To set one's heart on something/somebody
	My heart tells me
The center and core of something[††]	The heart of the city
	The heart of the matter/argument
	The heartland
	To get to the heart of something

Due to space limitations, only short citations are given here. The full references appear in the "Notes" section of this article.

[*]Afreh, "The Metonymic and Metaphoric Conceptualisations of the Heart in Akan and English"; Berendt and Tanita, "The 'Heart' of Things: A Conceptual Metaphoric Analysis of *Heart* and Related Body Parts"; Alberti, *Matters of the Heart: History, Medicine, and Emotion*; Gutiérrez Pérez, "A Cross-Cultural Analysis of Heart Metaphors"; Mashak, Pazhakh, and Hayati, "A Comparative Study on Basic Emotion Conceptual Metaphors in English and Persian Literary Texts"; Niemeier, "'To Have One's Heart in the Right Place,'" in *Human Contact through Language and Linguistics*, Smieja and Tasch, eds.; Niemeier, "Straight from the Heart," in *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective*, ed. Barcelona; Ogarkova and Soriano, "Emotion and the Body"; Swan, "Metaphors of Body and Mind in the History of English"; Yu, *The Chinese HEART in a Cognitive Perspective: Culture, Body, and Language*.

[†]Jauhar, *Heart: A History*; Gutiérrez Pérez, "A Cross-Cultural Analysis of Heart Metaphors."

[‡]Afreh, "The Metonymic and Metaphoric Conceptualisations of the Heart in Akan and English"; Niemeier, "Straight from the Heart."

[§]Gutiérrez Pérez, "A Cross-Cultural Analysis of Heart Metaphors"; Swan, "Metaphors of Body and Mind in the History of English"; Yu, *The Chinese HEART in a Cognitive Perspective*.

[#]Afreh, "The Metonymic and Metaphoric Conceptualisations of the Heart in Akan and English"; Niemeier, "Straight from the Heart."

[**] Erickson, *The Language of the Heart, 1600–1750*; Gutiérrez Pérez, "A Cross-Cultural Analysis of Heart Metaphors"; Alberti, *Matters of the Heart*; Perloff, "The Metaphoric and Morphologic Heart," Jauhar, *Heart: A History*; Niemeier, "Straight from the Heart"; Afreh, "The Metonymic and Metaphoric Conceptualisations of the Heart in Akan and English."

[††]Erickson, *The Language of the Heart, 1600–1750*; Gutiérrez Pérez, "A Cross-Cultural Analysis of Heart Metaphors"; Jauhar, *Heart: A History*; Perloff, "The Metaphoric and Morphologic Heart"; Sheridan, "The Heart, a Constant and Universal Metaphor"; P. R. Wilkinson, *Thesaurus of Traditional English Metaphors* (London: Routledge, 2002); Yu, *The Chinese HEART in a Cognitive Perspective: Culture, Body, and Language*.

the center or core of something positions that thing at the center of life.[29] To be at the heart of something may conjure up the concrete or the abstract, but nevertheless, what lies at the core is experienced as important.[30] Even if the heart is invisible, it can always be heard or felt.[31] It is the heart "as a centre *qua* centre that makes those shining and illuminating centres emerge."[32]

Academic Library Centrality: A Lively Debate

The freight of metaphor means different interpretations of the heart might potentially be carried from the source domain (the conceptual realm from which the metaphor is drawn) to the target domain (the quality or experience the metaphor describes) in the academic library heart metaphor. In the library literature, both superficial and more substantial references to the heart metaphor reflect an observable and primary assumption that this metaphor means that the library is central. But is the inferred centrality about position, purpose, or value? When the heart is interpreted as the center or core of something, the notion of centrality has complexity and layered meaning. *Central* is itself a metaphor, but does it signal something crucial, convenient, or controlling? Clearly, *central* has multiple connotations. In addition to vitality, it can also imply prominence, prestige, and visibility.

A central position is the point from which something proceeds, emanates, or develops: a place around which things are situated or gather.[33] It signifies the most essential or important aspect of something. Library buildings at the geographic center of the campus reinforce the centrality of the library within the institution. The visibility of the library's architecture and position infers and underlines that the library is essential because it dominates the campus landscape.[34] But the geography of the campus is not singular in nature. Its texture is plural. It is physical, digital, and conceptual; it is concrete and abstract; and the library is present in the landscape in all these forms. As Jeffrey Pomerantz and Gary Marchionini contend, the digital and physical library share purpose and function: to provide their community with "cognitive spaces that can be intellectually moved through and modified to suit cognitive needs."[35] Therefore, centrality (perhaps unwittingly) sets up an opposition between physical and digital geography, and competing ideas of function, purpose, and value make the interpretation of the heart metaphor more complex. What centrality is, and whether the physical and digital forms of the library deliver on all that centrality might entail, are the key concerns in the debate over the relevance of the heart metaphor.

In questioning the ongoing applicability of the heart metaphor, the claim to centrality is what researchers most dispute. Fundamental to this debate is firstly, whether the library achieves all that centrality evokes, and secondly, whether the heart metaphor remains relevant and provides ongoing inspiration and symbolism in the twenty-first century. In 1991, Lloyd Chapin and Larry Hardesty not only criticized the careless and clichéd use of the heart metaphor, they also suggested that the underlying central positioning it implied was true neither philosophically nor financially. The changing nature of the academic library

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demands new ways of operating, new partnerships, and strategically (re)positioning the library; in this environment the heart metaphor could be perceived as resembling traditional rather than contemporary library practice.[36] Interestingly, the four North American studies that follow have each rejected the heart metaphor.[37] Taken together, their reasons and insights provide background for revisiting what the metaphor invokes.

Deborah Grimes was perhaps the first researcher to test the cogency of the heart metaphor as a description of the relationship between the library and the university. Grimes believed the analogy to be imprecise and uneconomical because of the range of interpretations evoked by the word *heart*. For Grimes, the metaphor remained unconvincing. She claimed that the ambiguous nature of the metaphoric comparison "provides neither librarians nor academics with a lens through which to clearly view the function of the library within the university."[38] Inability to limit the comparisons suggested by the heart metaphor meant that it had little explanatory weight to offer "conceptualizations of the real relationships between the academic library and the university" and therefore "no power to inform the practice of librarianship."[39]

To explore whether the heart metaphor offered any benefit for libraries in linking the concept of centrality with academic library practice, Grimes surveyed campus leaders in 1994 to elicit their views on what the heart metaphor implied compared to the reality of academic library practice. Although most participants in the study perceived the library "as having a strong symbolic role, in both intellectual and physical senses," they disagreed with the metaphor and judged it an exaggeration that did not reflect the practical and operational reasons for the library's existence.[40]

Based on her results, Grimes concluded "that academic library centrality is operationally defined through user success." She identified service, access, and tradition as the empirical indicators of academic library centrality because they bridge definition and practice.[41] Furthermore, Grimes surmised that the heart metaphor offers no evidence to operationalize the definition of *centrality*, nor does it provide new perspectives on the organizational relationships that influence the allocation of financial resources to the library. Grimes's conclusions challenged abstract views of academic library centrality conjured up by the heart metaphor, which by and large, do not aim to signify library value. As an antidote to potential multiple interpretations of the metaphor, she called on librarians to cultivate a realist understanding of what university leaders and administrators (who are directly involved in resource allocation) want and need from the library.

In 2004, Beverly Lynch, C*atherine Murray-Rust, Susan Parker, Deborah Turner, Diane Parr Walker, Frances Wilkinson, and Julia Zimmerman* replicated Grimes's research to measure changes in the understanding of library centrality in the decade since the original study.[42] Lynch and her coauthors investigated whether positioning the library on a continuum of centrality impacts resources allocated to the library by its parent institution. Like Grimes, Lynch's team interviewed presidents, chancellors, provosts, and chief academic officers about their understanding of the heart metaphor and the extent to which it reflected reality at their campus. The findings from Lynch's study emphasized the need for the library to demonstrate its alignment to the university mission and "to employ strategies that connect what it does to the values and mission of the university."[43] Lynch's team concluded that the heart metaphor is not useful in securing resources for the library. Yet not all participants in the study found the metaphor irrelevant and outdated. For some,

it served to raise awareness that "being the heart of the university today really means . . . that library should be accessible."[44] Like Grimes, Lynch and her coauthors concluded that the reality of academic library practice and competing for funding was no longer well-served by the heart metaphor. They recognized that when the metaphor resonated with participants, it more likely referred to the physical position of buildings or to the library in a symbolic sense. Lynch and her team acknowledged that in "an emblematic sense, academic administrators still view the library as the heart of the university, a symbol of the intellectual purpose of the institution."[45]

This debate continues in the work of Mark Robertson, who uses the research of Lynch and her team as a starting point for studying library centrality.[46] While Robertson does not explicitly investigate the heart metaphor, for many of the study's participants, the metaphor is the comparison used to describe the library's essence and how it evokes a sense of place. One of Robertson's participants puts it succinctly: "The library is in the heart of the campus. It is a critical, critical, critical gathering place . . . in terms of the gathering place, being the heart of the campus, one of the nerve centers where people go to meet, study, talk, and think very carefully about their education."[47] The leaders in Robertson's study see the library as the "focal point of the campus. It's smack in the middle of the campus. It's being used for campus events."[48] Another describes colocating the learning commons in the library as ideal because it "really speaks to position in the library at the heart of the university and the support that it provides for all the activities that go on at the university."[49] In these comments, participants turn toward the heart metaphor to conjure up and imply the physical and symbolic centrality of the library. Perhaps nostalgia plays a part, or perhaps they lack an alternative figure of speech to communicate the library's value. For one of Robertson's participants, however, the heart metaphor has transferability and therefore ongoing relevance in communicating value: "A library, whether it's a digital heart place or a physical heart place, would still be one of those key connectors for any university."[50] The digital form of the academic library and the proliferation of platforms for providing collections, services, and spaces reflect the changing nature of the library and likely account for periods of rejection of the metaphor. Equally, the shared core values that drive digital and physical forms of the library perhaps explain why the metaphor continues to resurface. It could be argued that the heart metaphor celebrates plurality, just as both digital and physical forms of the library give rise to opportunities for reinvention.

More than 20 years on from Grimes's study, and just over a decade after Lynch and her coauthors published their 2004 study, Adam Murray and Ashley Ireland again tested assumptions of academic library centrality with a large-scale survey of university leaders.[51] Their findings resemble those of the Lynch team in that they conclude that securing funding must be linked to university goals and evidence of the value of the library. Based on their findings, Murray and Ireland also posit that "academic libraries are no longer the symbolic 'heart of the university.'"[52] Yet unlike Lynch and her coauthors, they do not concede room for emblematic views of the library as the heart of the university.

These four North American studies make clear why the heart metaphor is contested; it is ambiguous and subjective. Nevertheless, these studies also demonstrate that the metaphor remains firmly in the repertoire of symbolic language used by librarians and institutional leaders in universities. While library researchers debate the metaphor's ac-

curacy, ambiguity is seldom considered to reduce a metaphor's effectiveness.[53] In fact, for scholars, what works best is an ambiguous metaphor that proposes "vaguely and ambiguously, lines of research along which one may later discover new ideas."[54] Importantly, the heart metaphor, for all its opacity, continues to provoke thought, discussion, and insights about the function and value of the academic library.

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For more than a decade, the question of how academic libraries address value has gathered momentum,[55] even as the challenges in communicating its value remain. Tove Frandsen and Kristian Sørensen's review of library value studies reveal that practice inputs (for example, resources, space, and staff) are not the only indicators of the library's worth.[56] Several studies included in Frandsen and Sørensen's review refer to "the aspiration of the library" and its "higher purpose" as equally important in determining and understanding the perception of library value. Frandsen and Sørensen suggest that metaphors are often used to communicate these abstract beliefs.[57] While this argument offers some insight into the continued use of the heart metaphor, the possible multiple interpretations of metaphors present difficulties in arriving at an intersubjective view of the library that captures both realist considerations and more intangible ideas of essence and value.

In 2019, Clem Guthro suggested six metaphors that are relevant for the twenty-first-century academic library. He posits that one of these metaphors—the library as the brain of the university—is a fitting replacement for the heart metaphor: it goes beyond the limits of the physical centrality of library buildings on campus to encompass the distributed digital world. While the heart metaphor sets up an expectation of the library as life support,[58] it overlaps with the brain metaphor, which "builds on the idea of intellectual engagement of ideas with local and global participants and of action that moves from intellectual engagement of ideas to civic engagement on a local and global scale."[59] Compared to the academic library as heart, the brain metaphor is infrequent in the literature, but already influences academic and public library building design.[60]

Empirically informed metaphors fail to solve the problem of finding apt comparisons that reflect all that is real and aspirational in the academic library. An example of a new metaphor that was empirically informed was coined by Grimes—the academic library as a crossroads community. Grimes saw the crossroads metaphor as anchored in the reality of practice and considered it a more economical and precise alternative to the heart metaphor.[61] The crossroads metaphor has not, however, gained the traction of the heart metaphor. Chief among the reasons for this is that the heart metaphor is considered strong compared to other metaphors; not only is it anchored in the longevity of historical debate but also analysis of the strength of the conceptual relationships between its source and target domains affirms its potency.[62] At a time when a global pandemic has prompted academic librarians to question rational economic notions of measuring value,[63] value needs to extend beyond measurable indicators of practice. Perhaps in this environment, a metaphor that prompts debate about the library's aspirational role and positioning is more important than a precise comparison that fails to take into consideration the more prosaic ideals of academic libraries.

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Supporting this view is George Fowler's argument that the "aspirational library" and the library experience, which provide the opportunity to grow, learn, and integrate "new knowledge into an individual's worldview," are valid interpretations of the heart metaphor.[64] Comparing the academic library with the heart suggests a resemblance—the library takes on the qualities of the heart and "the *heart* is the courage, the spirit, the desire to be better . . . to strive for the ideal. It is the *anchor* of the public research university."[65] As a counterpoint to the conclusions of Grimes, Lynch's team, Murray and Ireland, and Robertson, Fowler does not conflate centrality with operational practice; rather, he proposes a more expansive interpretation of the centrality implied by the heart. This potential for finding a higher purpose buried in the heart metaphor is a shift away from a search for precise and functional interpretations of academic library purpose and value toward more evocative and expansive meanings.

The opposing forces of the abstract heart of emotion and the material heart of science work to buttress Grimes's claim that the heart metaphor should be rejected. The position of the authors of this paper, however, is to suggest expansion rather than rejection. We argue that what Jan Zwicky describes as the "flex" of metaphor provides a generative space to revisit the heart metaphor.[66] In this space, questions do not always suggest clear answers, and dialogue about metaphor takes the form of a lively debate that embraces a polyphony of interpretations intended to enliven library practice. The flex of metaphor enables alternative narratives and understandings of the academic library heart metaphor and works at multiple levels of comprehension, appreciation, and potential relevance to practice. Appreciating the flex of metaphor and glimpsing the range of interpretations it generates involves drawing on traditions of metaphor analysis. Viewing the heart metaphor through a theoretical lens is to understand how it is construed and to question how it might be read multiply, and differently—this is what it means to work with metaphor.

Using Metaphor Theory to Examine the Heart Metaphor

A good metaphor facilitates creative discoveries.[67] The possibility for metaphor analysis to reveal hidden insights is motivation for a close inspection of the heart metaphor. According to Murray Knowles and Rosamund Moon, metaphors in speech and writing explain, clarify, describe, express, evaluate, and entertain.[68] If metaphor is, as Donald Davidson describes, the "dreamwork of language," what meanings wait to be discovered in the heart metaphor? And what techniques will uncover them? For Davidson, "There are no instructions for devising metaphors; there is no manual for determining what a metaphor 'means' or 'says.'"[69] The difficulty of providing a full explanation through any single approach allows flexibility to use multiple approaches, thus revealing a more rounded and fuller view of the metaphor. By drawing on the history and development of metaphor analysis, we present three interpretations of the heart metaphor. Each

of the three is underpinned by a theoretical view of metaphor analysis that is either comparison-based, conceptual, or a hybrid of the two.

All three interpretations offer a different view of the heart metaphor, and each helps refresh understanding and appreciation of the analogy. The sequence in which the interpretations are presented is intentional and begins with the simple comparison, then moves to a more complex and universal conceptual view, and concludes with a new reading. If the creative interaction ignited by metaphor not only helps us to see reality but also plays a role in constituting it,[70] then together these three interpretations provide a more expansive understanding of the heart metaphor. Taken collectively, they offer a way of looking anew at an enduring figure of speech and at the basis for making different claims about its ongoing relevance and utility for academic libraries in terms of idea and practice.

Interpretation One: Comparison Theory View—*A* Is *B*

From its Greek origins, the word *metaphor* in its classical Latin form *metaphora* means "to transfer." This linguistic move is "a figure of speech in which a name or descriptive word or phrase is transferred to an object or action different from, but analogous to, that to which it is literally applicable."[71] In this way, metaphor is "the trope of resemblance *par excellence*."[72] It sets up and draws the reader or listener into a comparison. A comparison theory view of metaphor emphasizes that meaning is a consequence of the association that occurs in relating the unrelated. In metaphoric expressions, words undergo a linguistic "interchange of qualities, a transference of energies, and informing of each other."[73] Understanding comes from recognizing the comparison and the similarities that can be transplanted. What is unfamiliar becomes recognizable because meaning results from "bringing in the unusual, new or unknown to what is familiar or already experienced."[74]

In taking a comparison theory view, it is necessary to first understand a metaphor linguistically: the way it has been set up and construed. The simple linguistic form of metaphor consists of three components:

1. the target domain, or A, which is subject of the metaphor;
2. the source domain, or B, which is the term used metaphorically; and
3. the ground, which is the relationship between the target and source domains.

As a linguistic phenomenon, comparison theory provides a view that makes visible the similarities between two domains and brings into sharp relief the features they share. This approach involves identifying the target and source domains, as well as comparing and finding the similarities between concepts drawn from different domains to establish the ground. The ground gives the metaphor meaning. In other words, metaphors are meaningful when the relationship between the target domain and the source domain is determined and comprehended.[75] In simple metaphors, there is a transference from the source domain to the target domain, and the formula used to express this shift is *A is B*. This formula applied to the library heart metaphor means *library* is the target domain and *heart* is the source domain: The academic library is the heart of the university—*A* (target) is *B* (source).

Application of this formula to the academic library heart metaphor makes transparent how the source and target are to be compared, and meaning is derived by transferring qualities of the source domain *heart* to the target domain *academic library*. In this construal, the word *university* is taken literally. Sam Glucksberg and Boaz Keysar's view of metaphor comprehension involves putting A and B into a common category where both entities share the attributes of B.[76] It is a process of comparison and transferral of one or some of the salient features of the source domain to the target domain.

As already discussed, the heart as a metaphorical construct is rich in symbolism, and the library as target domain might assume meaning from any of the various categories of meaning for the heart as a metaphor. Perhaps the library will take on the qualities of the heart as a container for intelligence, which can be traced back to ancient traditions that saw the heart as "the locus of cognitive agency" and the point where mind, body, and spirit interacted and converged.[77] Perhaps the rhythms of the anatomical heart conjure up tempos for receiving and processing information.[78] Perhaps the library as a living organism performs functions that invoke fluency in knowledge discovery, filtering, and creation. All categories of meaning attributed to the metaphoric heart may contribute to how the library is understood, but as discussed earlier, the heart as the center and core is the most readily adopted comparison. To be at the "heart" of something is to stand at its innermost part or its core and to serve as its life force or its essence. This transferral sets up the library as a central life-giving center—of knowledge and for knowledge—the virtual and physical intellectual core of the university community. The implication for the library should not be underestimated: at its central vantage point, the life-giving library has a fundamental role to energize, stimulate, and animate university life.

If the authors of this paper were to exchange their roles as librarian and academic researching the heart metaphor for that of directors of *The Academic Library Heart Metaphor: The Movie*, they would have at their disposal all the categories of meaning of the heart as metaphor listed earlier. But like users of the heart metaphor before them, the meaning they would reach for is the heart as the core or center of something. This classification provides the visual inspiration for the film's opening scene: a bird's-eye view of a traditional academic library, which shows clearly how the library as heart and center can be taken literally, with students entering and leaving the building in a steady flow between it and other areas of the university. As the plot thickens, the action might move from this traditional interpretation of the academic library heart metaphor, which positions the library "at the center of the academic building complex" that allows "a healthy person to walk from any academic area of the campus to the entrance of the library within five minutes,"[79] to a visual representation of the central position of the digital library. In fact, this feature film treats all aspects of the library as central and important, with centrality as the salient characteristic of the metaphorical heart that dominates this interpretation. When asked why the heart as core and center is the focus for bringing the metaphor to life on screen, the directors' answer is simple: linguistic metaphor derives from conceptual structures.[80] In other words, understanding of simple *A is B* metaphors also draws on embodied experience of the world, which is why this cinematic interpretation resonates with audiences.

Interpretation Two: Conceptual Theory View—Central Is Important

Interpretation one uses comparison theory to analyze the academic library heart metaphor. Yet comparison theory fails to adequately explain why the heart as core and center of something is the prevalent interpretation for the heart metaphor. Conceptual metaphor theory, however, provides further insights. According to this theory, metaphor expresses deep emotion and embodied meaning,[81] so that "the metaphorical words and phrases encountered in language are but surface expressions of these underlying conceptual relationships."[82] Conceptual metaphor theorists emphasize that metaphors reflect bodily experiences and that "metaphor in both thought and language partly arises from these recurring patterns of embodiment."[83]

Conceptual metaphor theory consists of conceptual mappings that show how ideas relate to each other and linguistic expressions. Theorists use *metaphor* to refer to the conceptual mapping and *metaphorical expression* to indicate a word or phrase that expresses the conceptual mapping and is validated by it.[84] Researchers have identified hundreds of conceptual mappings, and these metaphors have been extensively documented, reviewed, and empirically tested. For example, the metaphor "Love is a journey" draws on experience of travel and journeys to understand the abstract concept of love, and the words validate such metaphorical expressions as "This relationship is a dead-end street" or "We'll just have to go our separate ways."[85]

Of the many conceptual mappings that have been identified, one might explain why the academic library heart metaphor is most often interpreted as being about centrality: "Important is central." Two bodily experiences contribute to our understanding of the metaphor "Important is central." Firstly, the beating of the heart at the center of the body's circulatory system "is why we refer to a central place as its heart, especially if that place is very important or has a lot of activity."[86] Secondly, the focus of an individual's field of vision puts what is important and demands attention at the center of the space in which objects are visible or within reach.[87] A wide range of metaphorical expressions involving the heart cluster within this conceptual metaphor. For example, "getting to the heart of the matter" is to talk about what is central and therefore important. With conceptual metaphor theory, there is a justifiable logic in the academic library heart metaphor or metaphorical expression being mapped to the metaphor "Important is central."[88] The embodied experiences that explain the metaphor "Important is central" also provide a rationale for why most users of the heart metaphor or metaphorical expression intuitively reach for centrality as the primary interpretation of the metaphor and why this reading remains prevalent.

Mapping the academic library heart metaphor or metaphorical expression to this conceptual metaphor involves understanding an abstract domain of experience (importance) in terms of a different and more concrete domain of experience (centrality). The heart metaphor or metaphorical expression is only one example. Many other metaphorical expressions about academic libraries can be mapped to this conceptual metaphor. For example, the academic library as a center of learning,[89] an information or knowledge commons,[90] a town square,[91] or a hub[92] are all comparisons that can be mapped to "Important is central." The "Important is central" metaphor is not just a matter of thought and language, it is also realized in social-physical practice and influ-

ences spatial arrangements. Zoltan Kövecses illustrates this point with the example that more important people and objects tend to hold more central physical locations.[93] Likewise, when the physical library building occupies prime real estate on campus or if the digital library is featured on the university website, it is an example of this metaphor in social-physical practice.

Interpretation two proposes that the academic library heart metaphorical expression is a realization of the conceptual metaphor "Important is central." The metaphor "Important is central" is a common and conventional figure of speech. George Lakoff and Mark Turner argue that it belongs to ordinary thought patterns and that metaphorical expressions mapped to it are powerful connectors of thought and experience.[94] This conceptual view reinforces why centrality is the meaning commonly ascribed to the heart metaphor and why it might be universally understood and continually repeated. It applies equally to the digital library, where the metaphoric meaning of central location is superseded by a sense of central function and value. Interpretation two suggests that continued use of the heart metaphor is not hackneyed and clichéd but underpinned by embodied and ubiquitous experiences of centrality that signify the importance of the library in a way that is meaningful and universally understood.

Interpretation Three: A New Reading—*A* Is *B*, which Is *F*

Interpretation one took a comparison theory view (*A* is *B*) and involved direct application of the source domain *heart* to the target domain *library*. Direct comparison is only one way to derive meaning and identify the interchangeable properties for the target and source domains in the heart metaphor. In interpretation three, we use the flex of metaphor to look at how the words in the figure of speech might be combined and read in multiple ways. Drawing on interaction theory,[95] interpretation three identifies a different relation between the concepts in the academic library heart metaphor that describes an interplay between systems of things rather than a comparison of things. It involves the reciprocal influence of one system (the university) upon another (the library).

The new reading of the academic library heart metaphor offered in interpretation three is prompted by expanding the number of words in the source domain. In interpretation one, metaphorical significance was ascribed to a single word—*heart*. The word *heart* was identified as the source domain and the words *academic library* assigned as the target domain, with the word *university* considered part of the literal vocabulary. In contrast, in interpretation three, the source domain consists of a combination of literal and nonliteral vocabulary in the phrase the "heart of the university": The academic library is the heart of the university—*A* (target) is *B* (source).

There is a linguistic variability here that was absent in interpretation one and a subtle difference in the content and context of the source domain in interpretation three: a shift from a one-word source domain to a combination of words that has an indefinite range of meanings. In other words, B is, in fact, F. This accretion creates ambiguity but also new interactions: The academic library is the heart of the university—*A* is *B,* which is *F*.[96]

Expanding the source domain to include the phrase the "heart of the university" brings a different level of interaction between the words. Borrowing from interactionist metaphor theory, the source domain becomes "a system rather than an individual

thing."[97] This enlargement suggests "the heart of the university" is an arrangement of relationships and ideas about what a university is. A larger range of characteristics of the metaphorical heart—for example, its role as a connector and supplier of elements needed for various functions—comes more strongly into play. The context of the academic library heart metaphor has now changed because the source and target have the potential to interact differently, and the metaphor becomes an invitation to explore and construct new similarities between domains.[98]

Metaphors become linguistically more complex when more than one word is used metaphorically because multiple readings will more likely compete in the reader's understanding. When several words are regarded as a single metaphorical element, interesting questions are raised about interpretation. Complexity and ambiguity are characteristic of metaphors in the form of *A* is *B,* which is *F.*[99] Yet this model also raises questions about what the metaphor might communicate. The coupling of the words *heart* and *university* make discovery of another meaning possible. In this way, interpretation three tends to emphasize emergent properties that the source domain phrase brings to creating the ground and engages a different interplay between target and source domains. This reading enables us to see the target domain in a new way.[100] The message carried is that engagement with scholarly ideas of the university uncovers new possibilities for understanding what the academic library is and might be. This interpretation foregrounds questions about what concepts of the university are signified and represented at the "heart of the university" and how this system of ideas might influence what is meant by the academic library as a system of digital and physical spaces, collections, and services.

Discussion: The Case for the Heart Metaphor

Elsewhere, it has been argued that "the conceptual thinking about academic libraries appears to be isolated from theoretical ideas of the university."[101] Interpretation three goes beyond transferring the qualities of the metaphorical heart to the library and offers a new account: that the idea of the university is key to unlocking novel meaning in this metaphor. This analysis is a metaphorical plot twist. While the ground is easy to locate in interpretation one, the ground in interpretation three has moved. In interpretation three, we can grasp the difficulty of metaphor's nature and quiddity: it is a word being used simultaneously in different ways "to focus into one meaning many different meanings."[102] It presents a more complex linguistic challenge that shifts our engagement to an encounter with the contemporary idea of the university—what it is, how it is changing, what lies at the core and essence of the scholarly idea of the university, and what it means for the academic library. The higher education literature is awash with contested views of the university and its function and purpose. For example, Ronald Barnett identified over 110 different ideas of the university.[103] While it is beyond the scope of this paper to explore those ideas, our goal is to highlight that the academic library heart metaphor opens up the future of the academic library by engaging with the long tradition of debate about the university. In this reading, the heart metaphor triggers curiosity and is a call for librarians to engage in a journey of discovery about the ideas at the heart of the university. In fact, it invites librarians to engage with the scholarly idea of the university and so widen what the library might become in practice.

Bringing ideas of university to bear on thinking about the academic library heart metaphor also potentially contributes to a broader conversation about what is at the heart of the university (if indeed it is not the library) in terms of place, people, and philosophies. Where and what is the heart? One way for librarians to revisit and look anew at the heart of the university is by trying to separate the concepts of place and space—whether physical or virtual. If the heart is a location within a larger spatial or nonspatial assemblage, then it potentially has a narrower range of meanings than if the heart is about the notion of place, which has shades of meaning that are much more evocative. According to Jeff Malpas, place must supervene on space.[104] Malpas argues that place is a more open concept because a place always exists in relation to other places—the idea of place is also grounded in experience and brings the possibility of dwelling. These considerations prompt such questions as: What are the ideas that dwell at the heart of the university? And more broadly: Who dwells at the heart of the university? From this perspective, the heart of the university becomes increasingly crowded as people, ideas, and virtual and physical environments compete for positional centrality. Many groups, systems, and networks see themselves at the center, suggesting that the heart of the university is no longer the singular concept signified by the heart metaphor. The competition for positional centrality is well known to academics and professional staff alike. In this congested environment, can the library exclusively claim to be the university's heart? Using the heart metaphor as a prompt to ask different questions about centrality—who, what, and where is the center—helps to bring fresh thinking to librarians' deliberations about positioning the academic library in the institution.

Interpretation three brings new awareness of a recondite interpretation of the heart metaphor. The analysis also challenges the meanings based on comparison theory. It does not "establish new internal relations; it shows us ones that were already there,"[105] As a result, it expands our awareness, and importantly, fashions a distinctive connection and a new conversation. Interpretation three reminds us that no single theory suffices in comprehension of metaphor.[106] It is not uncommon for metaphor researchers to traverse metaphor theories to make the required "interpretative manoeuvres" that enable a full understanding of metaphor.[107] Indeed, some metaphor scholars claim there is no limit to the insights metaphor can bring to our attention or the number of theoretical accounts that can be used to study metaphor.[108] One may take the view that the academic library heart metaphor "poses a question, [that] it surprises us, it triggers off a heuristic process, it forces an interpretative task onto us."[109] In response to this complex interpretative task, we have not been constrained by a single theoretical approach and instead have added to interpretations of how the academic library sits at the heart of the university.

The quest of some researchers for a definitive and economical metaphor for academic libraries assumes precision rather than evocative interpretation. This is not to suggest that the search for an ideal metaphor is a waste of time. On the contrary, the art and beauty of metaphors are that they provoke thinking, discussion, and debate. The academic library heart metaphor will likely continue to be reinforced, referenced, and rejected. The three interpretations presented in this paper support the argument that while the heart metaphor is not perfect, it has a role in the metaphorical lexicon and future imaginings of the academic library.

Conclusion

The academic library heart metaphor has been interpreted variously: as a meaningless, dusty cliché;[110] as an outdated truism no longer relevant to contemporary professional practice;[111] as an enduring symbol of central positioning;[112] and as an expansion of the library's value beyond the operational to the aspirational.[113] Librarians often search for apt metaphors to describe the academic library, without yet happening upon the "perfect metaphor that adequately describes the complexity of the research library."[114]

This paper presents three interpretations of the academic library heart metaphor. The first interpretation is a traditional linguistic analysis of the metaphor based on comparison theory. It identifies the metaphor's elements and examines the figure of speech as a simple comparative statement.[115] Analysis in the second interpretation is based on conceptual metaphor theory. It validates the first interpretation and identifies an underlying conceptual mapping of the metaphor.[116] As metaphor theory has developed over time, theoretical approaches have often overlapped and interplayed with one another, and they all strive to make sense of literal language used in a nonliteral way. The third interpretation draws on a mix of approaches to analyze what the academic library heart metaphor might potentially communicate. This analysis takes a hybrid view that provides a new reading of the metaphor. By presenting multiple readings of the academic library in this paper, we have been partly engaged in an exercise to understand why some metaphors endure. More importantly, however, it is an effort to fully appreciate, refresh, and discover how the academic library heart metaphor maintains contemporary relevance.

A surprising set of subtleties and differences is found across the three interpretations of the academic library heart metaphor offered in this paper. Taken together, they demonstrate how one metaphorical sentence can produce different readings. All three illuminate different aspects and dimensions of the relationship between the library and the university, and all three views are needed to appreciate the metaphor more deeply. Communication in metaphor is achieved through the interplay between such different readings, and as Max Black contends, "Ambiguity is a necessary by-product of metaphor's suggestiveness."[117] Understanding the academic library heart metaphor "is not mere deciding which of these readings is the *correct* one, but accepting them all" and embracing the possibilities triggered by such multiplicity.[118]

Davidson proposes that there "is no limit to what a metaphor calls to our attention."[119] Metaphor theory enables multiple meanings of the academic library heart metaphor to be explored and uncovered for changing times and environments. By revisiting it, this paper adds to and challenges the existing dialogue about the meaning and utility of the heart metaphor.

A poem titled "The Metaphor" in the Australian journal *Quadrant* employs several variations on the heart of science and the heart of emotion:

> Anatomists insist that the heart is an organ;
> Four hollow chambers and fibrous walls . . .
> It is true that the heart is an engine room, not a bower . . .
> Expanding, contracting, keeping the pace.
> And yet there is a grace in the work of the heart, I say,
> That mimics a love that stays the distance.[120]

"The Metaphor" is a reminder of the transposability and enduring nature of the metaphoric heart. The academic library heart metaphor has not just stayed the distance; indeed, it calls academic libraries to attention—inviting them to engage deliberatively with the scholarly debates about the idea of the university.

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