# Digital labour shortage: A new divide in library and information studies education?

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ABSTRACT: This paper offers a preliminary reflection on the degree to which the concept of 'digital labour' appears in current library and information studies (LIS) education language, including in course titles, course descriptions, and course content. A basis for this paper was established from September 2010 to April 2011 through examination of a global range of online publicly accessible LIS program information. First-stage analysis indicates that LIS education language appears to treat digital labour reductively; it fails to account for the labour conditions that frame the work. A tightening of the search examined evidence of critical teaching and learning of digital labour that allow for determinations of how the digital work environment relates to library labour rights and movements. This resulted in a scan of English language and translated information for a total of 121 individual LIS programs. Several trends emerged, which suggest that digital labour is generally, and most often out of necessity, inherently connected to other issues studied in LIS programs. A potential, yet unborn, paradigm in LIS education negates the basic notion of digital labour movement. Recommendations include research into the potential value of teaching and learning about the theory and practice of digital labour, a more sufficient and sophisticated approach to digital labour within LIS education in foundations courses, and a proposed set of possible advanced topics for teaching and learning in LIS education. Limitations of this topical exploration include what might be explained by the unknown factor of what is actually unseen from publicly accessible documents. To test the meaning of our first-stage work, future inquiry might involve interviews with teachers and looking into classroom communication of learners to see how the idea of digital labour is being addressed by them even if it is only in the most subtle manner.

> *"History is a race between education and catastrophe."*
> H. G. Wells

While not everyone has access to technology or is engaged with it to the same extent, a present industrialized model of higher education characterized by excellence and corporatist efficiency both embraces digital culture and drives its developmentwith a capitalist spirit. Not surprisingly, the field of library and information studies/science (LIS),which reflects its broader educational market,participates in this process of disciplinary decadence[1] or fight to struggle and save itself.Digital libraries, digital reference services, digital curation, the replacement of libraries by learning or knowledge commons, bookless "library" spaces, and even library and information studies curriculum delivered by avatars in second life classrooms are now ubiquitous characteristics of digital culture, including campus culture. As many practicing librarians now have little choice but to perform digital labour, the shifting nature of this workforce prompts new questions: How is digital labour treated in LIS education? To what extent does the current teaching and learning of librarianship produce digital labourers – and what class of them? Can we see markers in the broader geopolitics of knowledge that might suggest our field is reframing throughparticipation in alternative models of higher education (e.g., Kantian-Humboldtian, decolonial and politico-religious, and politico-economic dewesternizing)?[2]

In this short paper, we offer preliminary or first stage reflection on the degree to which the concept of'digital labour'appears in current LIS education language, including in course titles, course descriptions, and course content. We also consider to what extent contemporary LIS education provokes critical thought on digital labourand whether or notrealities such as library worker unionization, library strikes, and library lockouts, coupled with de-professionalization, deskilling, and the defining, redefining (and even confining) of labour,are apparent in LIS study. The basis for our scholarship was established from September 2010 to April 2011 through examinationof online publicly accessible LIS program information.

The study of digital labour in LIS education requires an understanding and definition of the concept of said, digital labour. Digital labour appears to have two distinct but yet intertwineddefinitions. Firstis the idea of digital labour as work; i.e., simply the effect of technology (digitization) on the activity of work (labour) or the conversion and convergence of work activities reflected by a shift from the traditional and or hybrid environment to the strictly digital environment. It could be argued that these changes have been affected with the introduction of many technologies, such as the pen, printer, typewriter, desktop computer, iPad or tablet, and so on.It could also be further framed to take in how recent technological trends allow workers to transcend traditional workplace settings and labour in purely digital environments. It is proposed that the result is a "more collaborative" (Dye, 2006) workplace, one that is dependent upon, at the same time that it serves to increase, both the concepts of globalization and more importantly, the "commodification of information" (Barbrook, 2005).While this typing of digital labour has been highly embraced by many industries, including apparently LIS education,

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[1] See Disciplinary Decadence: Living Thought in Trying Times by Lewis Gordon.

[2] Informed by Walter Mignolo's public lecture "Re-claiming the Ethical University and Citizenship Engagement in the 21st Century" at the University of Alberta, Edmonton, Alberta, Canada on 28 October 2011.

a rise in techno-management and concomitant digitization of the workplace has opened up space for the formation of an alternative definition of digital labour.

This second definition describes digital labour as a labour rights movement and/or class struggle.  The assumption is that digital labour as a rights movement has evolved from, or is the by-product of, digital labour when understood as work. One cannot have a labour rights movement without the labour.  According to Glaros (n.d.), the key to digital labour, as with any rights movement, is the idea of exploitation.  This exploitation is seen in three specific areas: (1) outsourcing and temporary or contingent employment; (2) the separation of work from traditional workplace; and, (3) the de-linking of labour from labour contracts.

While outsourcing has resulted in labour rights movements within LIS, even in the traditional labour environment (as seen in cases such as the Hawaii Public Library and the Fort Worth Public Library), it may be argued that the separation of work from place and the de-linking of labour from labour contracts are unique to the digital labour environment. Schenk and Anderson (1999) believe that

> technology has been generally used as a weapon, not for our liberation from monotony, stress and want, but rather for the private appropriation of profit; for changing the workplace beyond recognition with the main aim of increased revenues instead of for the greater welfare of society and better conditions for working people.

In the increasingly collaborative digital environment of social networking, tagging, and sharing, the idea of 'free labour' versus paid is blurred.  While the arguments applied by Terranova (2000) regarding 'NetSlaves' and the potentially exploitive nature of the webcan still apply to digital labour, there is also to consider the phenomenon that "today's information seeker is expecting to participate, instead of only receive" (Steele, 2009).For example, LIS is arguably participating in, and perpetuating, on both sides of this phenomenon.  Insome cases,it is the exploiter of digital labour (as potentially seen in the case of the New York Public Library Menu Project[3]),at the same time that it is the exploited (asseen in the case of librarians labouring in Multi User Virtual Environments (MUVE)[4]).

Taking note of this complex terrain, we began to examine LIS language, as represented in programs accredited by the American Library Association,to see how the idea of digital labour as a rights movement might appear.  The initial search yielded inadequate results for meaningful analysis.  This led to a decision to expand the search to include programs accredited by the Australian Library and Information Association (ALIA), LIS programs in South African universities, Chartered Institute of Library and Information Professionals' (CILIP) accredited schools in the United Kingdom, LIS programs in Brazilian universities, and select other programs from the Czech Republic, Hong Kong, Finland, Singapore, and Denmark.

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[3]See http://menus.nypl.org

[4] See Samantha Thompson S. , 2009. Virtual Libraries, Real Patrons: Looking at Library Service in a Virtual World, *The Reference Librarian* [online] 50 Available at: doi:10.1080/02763870902755999 [Accessed February 24, 2011].

A limitationof our process is that we restricted our actual examination of information to a content analysis of English language and English language translations of publicly accessible LIS program information. Furthermore, full and complete access to all information within all programs was not always available. Rather, accessible documentation varied greatly between each program - and in many cases it also varied between courses within a single program.Initial key terms used to conduct the search include:digital labour; digital labour movement; digital labour rights; digital economy; NetSlaves; affective labour; digital deskilling; fan labour; digital exploitation; digital volunteerism, and digital divide. In cases where these terms were not explicit, the perceived broader ideas and understanding of digital labour and its facets were used to identify potential hits.

We found that both above-mentioned definitions of digital labour appear in the LIS education language, but most commonly that of performing and managing work in a digital environment (e.g., digital reference services). And we began to recognize that the concept of digital labour as work appears to have permeated most LIS education language. While we did not dismiss this trend, the particular target of our inquiry is digital labour as a rights and/or labour movement in the field of librarianship. Meanwhile, our analysis began to indicate that LIS education is much more preoccupied with the first concept of digital labour and not (as yet) particularly reflective of the second. Of note, LIS education language appears to treat digital labour reductively; it fails to account for the labour conditions that frame the work. Thus, a tightening of our search was needed in order to find mentions of critical teaching and learning of digital labour that allow for determinations of how the digital work environment relates to library labour rights and movements (e.g., unionization, strikes, deskilling, de-professionalization).

We proceeded to scanthe available English language and translated information for a total of 121 individual LIS programs.And most, if not all, programs include a course(s) that mentions library labour in the digital environment. We disregarded these, since they did not fit within the parameters of desirable outcomes. The remaining results were organized into three categories: Positive Hits, Negative Hits, and Unclear.

Our statistics showthat 13 courses from nine select programs give reference to the idea of digital labour as impacting labour and/or as a rights movement. We considered a further 20 courses in 17 programs "Unclear"; they contained information which could lead to the possibility of broader discussions of digital labour. However, this may be only in an implicit or undefined manner where digital labour is discussed in everything but *name*.

The classification of "Unclear" is simply that: unclear. It includes courses where there was a potential Positive Hit, but this is not apparent. It includes courses for which the terms/concepts of'digital' and 'labour' might have appeared in the language, for example, course content. However, this was not in obvious conjunction, nor was it identified in connection to the course delivery. Unclear may also indicate that there is not enough publicly accessible information to warrant a decision of a Positive or Negative Hit.

A specific examination of the Positive Hit results reveals that although 13 courses were identified, only one specifically deals with and uses rights movement language in its discourse. This is course *MIT 3771F – Net-Work: Labour and Profit on Facebook, Flickr, YouTube and Web 2.0*offered by the University of Western Ontario (Canada). Tags and keywords identified in the syllabus include, but are not limited to: "immaterial labour",

"user-generated content", and "Web 2.0", all of which relate to the digitization of labour; and, "the social factory", "bourgeoisie", "division of labour", "(post-) Fordism", and "autonomist Marxism", all of which relate to labour rights/movement. Similarly, in its description it asks question and seeks to

> investigate the concrete and theoretical changes that have occurred as a result of the contentious shift from industrialized labour to immaterial labour; [digital labour].The unwaged, immaterial work characteristic of the Web 2.0 era is a paradigmatic example of capitalist exploitation.... Does the exploitation of a globally distributed network of misnomic 'users' prompt the same kind of revolutionary fervour that Marxists identified in the industrial factories?(Brown, 2011).

Not only does it include in its language many of those terms identified in our initial parameters, but it also seems to follow ideas similar to the last two points identified by Glaros.  The course itself even acknowledges a shift in the types of labour performed as a result of technological advances; the separation of work from place and "the unwaged, immaterial work characteristic of the Web 2.0 era" (Brown, 2011); the de-linking of labour from labour contracts.

Other courses given a Positive Hit are not as clear or as explicit in their use of the digital labour language.  While they may or may not directly contain such specific rights movement language discourse, they do give enough reference to the idea of digital labour that warrant their inclusion.  For example, programs from both the University of Tennessee (USA) and the University of Illinois (USA) include courses titled*IS351 Race, Gender, and Information* and *LIS390RGI Race, Gender, and Information Technology* respectively. These course descriptions use similar language.  For example, the Illinois University states that "this course critically examines the ways in which information technologies are both the source of and consequence of race and gender relations.... Particular attention will be given to... Labour" (Anon, 2011).In the case of Tennessee, the effect of digital labour as work on race and gender is framed by the concepts of "identity (individual and group) in cyberspace and the "digital divide" (Winkelstein, 2011).In this case, "digital divide" has also been identified as a key term to the concept digital labour as rights movement.

Another example of a Positive Hit is from the University of Brighton.  Its course, *5.1.5 - Information Policy and Professionalism in a Digital Society,* 'introduces students to the theoretical, policy, and practical implications for professional work in societies reliant on digital communications infrastructure' (Marshall, 2010). What is noteworthyhere is that the language gives allusion to both definitions of digital labour, one, as work (practical) and more importantly for this scholarship, one, as a rights movement (theoretical).

A broadening of our search results includedthose Unclear Hits reflecting a strong potential to include the concepts and language of digital labour as rights movement. This effort yielded a further 20 courses from 17 programs. The language of these courses is more difficult to interpretbecause it often references "impact", i.e., the "impact" of technology on social, economic, cultural, political, professional aspects of LIS.  These "impacts" can lead to or result in rights movements or discussions of labour movements given certain circumstances.  However, as stated above, the language is as yet unclear and requires additional unpacking and interrogation.

Several trends emerged from our limited data set. When we looked solely at the statistics,55 percent of all courses examined were assigned a Negative Hit, 35 percent were given an Unclear Hit, and only seven percent were specified as a Positive Hit.[5] Of the Positive Hits, there is only one course from outside of the American Library Association accredited programs - the course previously identified from the University of Brighton.[6]Again, this only encompasses nine LIS programs.If one examines the Unclear Hits there is a more global distribution of results.[7] When one identifies those Unclear Hits with a strong potential for a Positive Hit, there is a possibility for an additional 20 courses in 17 programs. Still, there appears to be a heavy concentration of results and thus, trends in the discussion of digital labour within North American programs.

Further conceptual trends that emerge from the data collected suggest that: (1) current discussion of the digital labour topic tends to reflect the interests of certain LIS programs and teachers (and this is particularly true in the North American context); and, (2) mention of digital labour consistently appears in conjunction with other "issue" topics. Regarding the latter point, there is, as yet, only one program that specifically dedicates a course to digital labour issues.  It is not surprising that it appears both within the North American context and as a result of the particular interests of the instructor and reinforced by the underlying context of academic freedom.

These initial trends suggest that digital labour is generally, and most often out of necessity, inherentlyconnected to other issues studied in LIS programs. This has been demonstrated in the Positive Hit courses highlighted previously.  Even in courses offered at the University of Western Ontario which are dedicated solely to the ideas of digital labour, there is an infusion of other issues (i.e. globalism).  Based on our limited findings, we suggest a potential, yet unborn, paradigm in LIS education that negates the basic notion of digital labour movement.

Assuming a continued leaning in both LIS education and industry towards increasing digital librarianship skill sets, we suggest more extensive research into the potential value of teaching and learning about the theory and practice of digital labour. Underlying questions include: To what extent does current LIS education prepare its students to gain employment in the digital labour force? Are these future digital labourers prepared to simply work in a digital world because that is the market trend, or are they also prepared to effect change by advocating and negotiating their rights as workers, not to mention those of the people they might administer, manage and mind? Projecting ahead, what is the potential for LIS education to prepare its teachers and students to critique digital labour from multiple perspectives and ultimately to contribute to innovative socially responsible design and re-design of that labour framework?

Along these lines, we suggest that a more sufficient and sophisticated approach to digital labour within LIS education could occur in foundations courses. For example, the present ubiquitous survey teaching and learning about 'information and society' and 'digital divide' could arguably be enhanced by layering in treatment of concepts such as digital economy, digital labour movement, digital labour rights, digital deskilling, digital slavery, and technological unemployment. Moreover, a further exploration of the

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[5]See Appendix A

[6]See Appendix B

[7]See Appendix C

connection between digital labour issues and other concerns is warranted.  As this has only been a topical survey of the appearance of digital labour in LIS education, there is need for a more in depth exploration of those courses given Positive and Unclear Hits. This would allow for a broader confirmation of the discussion of this topic to determine if in factthe language and discourse appear in an implicit manner, and if the initial trends citedare correct, by looking at not only what is being taught but who is teaching it.  It is important to note that we took a 'first stab in the dark' at trying to find out what LIS schools are doing to teach digital labourconcepts. We did not see much to report. But, to be fair, this might be explained by the unknown factor of what is actually *unseen* from publicly accessible documents. To test the meaning of our first-stage work, future inquiry might involve interviews with teachers and looking intoclassroom communication of learners to see how the idea of digital labour is being addressed by them even if it is only in the most subtle manner. This would likely be further complicated by the challenges of trying to pin down the precise language that may be used to convey concepts such as 'digital exploitation'.

We can also look further afield. To what extent is there a possibility for links between LIS education trends and those in related academic disciplines (e.g. education) operating by alternative models of higher education as compared to the reinforcement of the corporate university evident in our search? For example, to what extent, and how, might digital labour be viewed in a curriculum designed for de-westernization of knowledge, indigenization of knowledge, or Islamization of knowledge?

Finally, we suggest several themes be considered as possible advanced topics for teaching and learning in LIS education. For example, educational treatment of the digitization of the information professions *and professionals* would counterpoint a techno-managerial perspective with that of the human condition. Examination ofeffects of technologies on corporate processes and culture could take in the study of information technologies interacting with race and gender. And looking at the shifting balance between management and labour in a computerized work environment should be studied through the lense of multiple stakeholder perspectives. Social media courses could critically consider the blurred boundaries of work and leisure in the context of cognitive capitalism. And so, we can easily see a place for the study of digital labour in existing LIS seminars, such as: "Digital Citizenship"at theUniversity of Pittsburgh; "Gender, Technology and Information" at the University of Texas at Austin; "Information Divides and Differences in a Multicultural Society"at the University of Wisconsin-Madison; "Ethics, Diversity and Change in Information Professions" at UCLA; "Feminism, Librarianship and Information" and "Globalization and the Information Society: Information, Communication and Development" at the University of Illinois at Urbana-Champaign; "Indigenous Systems of Knowledge" at the University of Washington; and, "Group Information Rights" at the University of Arizona.

Our underlying concern is that to first miss basic consideration of digital labour, and then its examination through specialized multiple lenses, even unconsciously, might be a silent driver for an LIS education that,borrowing Len Findlay's phrasing from another context and applying it here, "privileges mediation over mobilization of the grassroots; that supports an ignorance economy characterized by anti-intellectual, anti-tradeunion, and anti-dissent mentalities[8].What is this future of this kind of teaching and learning

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[8] Len Findlay on academic freedom at the August 2011 meeting of the Canadian Association of University Teachers Academic Freedom and Tenure Committee (on which Toni Samek serves).

given the global politicization of civil society and an emerging political society in a time when the future of the university is now opened up to these movements and their push for epistemic control?

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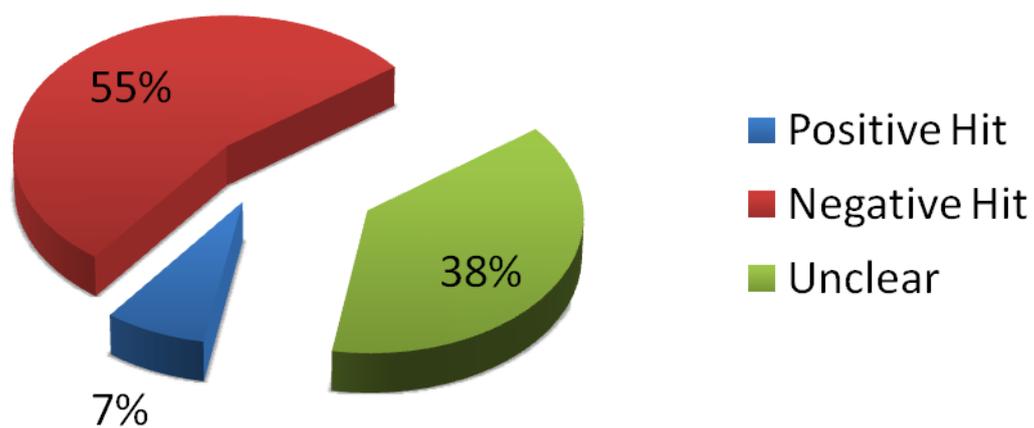
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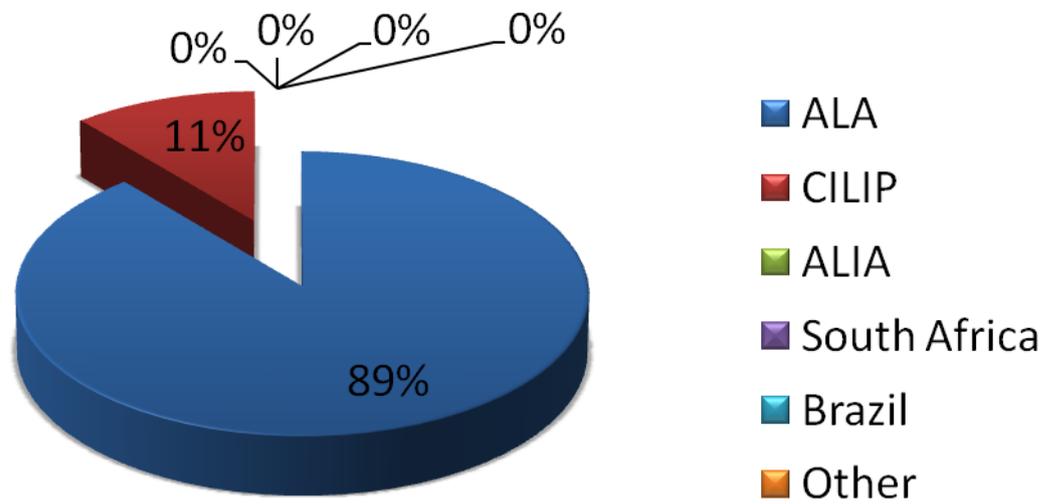
## Appendix A

# Digital Labour Search Results

**Appendix B**

## Global Distribution of Positive Hits



Legend:
- ALA
- CILIP
- ALIA
- South Africa
- Brazil
- Other

**Appendix C**

## Global Distibution of Unclear Hits



6%

28%

37%

20%

0%

9%

- ALA
- CILIP
- ALIA
- South Africa
- Brazil
- Other