Watch Repairer, Taxi Driver, Librarian: How threatened are our jobs in the digital age?



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For 702 different jobs, the Oxford researchers Frey and Osborne examined the degree of susceptibility to computerisation. With a probability of 65%, the occupation "librarian" was calculated as quite good computerisable (1). How does this translates into the reality of our daily work? Do we now all have to be anxious for our jobs? Fearing that our jobs will get lost? That libraries get extinct?

Yes and No. Let's take a closer look at the evidence: 1. The Oxford study was published in September 2013. Since then, 11 libraries were closed in Germany. That's less than 0,1% of the 14.300 German libraries. And the number of employed librarians isn't shrinking either. 2. The usage of libraries is steady or even increasing as well as 3. the budgets. These three observations are a good indication of the lasting attractiveness of libraries. But what about the attractiveness of librarians? For sophisticated library tasks we are desperately looking for candidates, but simple library jobs may definitely be threatened.

To understand this more clearly, let's take a look at some other occupations examined by the Oxford researchers: The Watch Repairers and the Taxi Drivers will both be replaced with a probability of 99% and 98% resp., but the Recreational Therapists and the Computer Systems Analysts are totally safe jobs (0-1%). And this is the key message of the report: Watch Repairers and Taxi Drivers do routinely, simple work, which could be easily replaced by automation (watch building/repairing robots) or smart algorithms/services (Google cars, UBER service). On the other hand, the Recreational Therapist and the Computer Systems Analyst are so highly individual and innovative tasks, that nobody can think of a computer algorithm or robot to replace them.

We as librarians are somewhere in between these two work groups. Some of us already perform highly ambitious tasks, some of us do routinely simple, and some of us do both. The hypothesis of a two-class system in librarianship is supported by the higher susceptibility to computerisation of "Library Assistants" (95%) and "Library Technicians" (99%) in contrary to the normal "Librarian" (65%). (1)

Is our fate predestined then? One way to success, the other to extinction? Yes and No. There is no such thing as Kharma in librarianship. You can switch to other, more future-ready tasks by your capabilities, training or both. Each and any boss would be happy for such a staff member, especially in the present days of rapid change. But: If you work in the acquisition or circulation department it could be somewhat harder. Then you are definitely on the wrong track. Acquisition and cataloguing will be the first tasks to become centralised on a regional or national level; circulation and stacking will be automated by robots resp. replaced by digital content. So my advice would be: If you are in one of these dead ends, ask for transfer to the reference or teaching department or apply for project management for centralisation and automation (remember: be the hammer not the nail).

If you change to the more specialised things such as rare books, that would be really smart. Be sure to collaborate with G.L.A.M. (galleries, libraries, archives, and museums). And if you do old books, mix this up with the latest technology, such as the Bavarian State Library did, which gives away the Gutenberg Bible for free on an iPad (2). And if you are in reference, become specialised. Don't do the routine questions, which could easily be automated (Google) or centralised (nation-wide reference), but the ones which are local, customized, cunning, and of high priority. You will find a list of specialisations in the reference (3).

Be open-minded in everything (especially the needs of your users) and get trained, trained, trained. Not only by the usual library instructors, but by the very experts in the field, world-wide, which are often no librarians (any more). And do not forget research. For academic libraries, it's the core of success. For instance, researchers do not have a clue of data management and if they had, they would love a librarian to do it for them, as the computer scientist Daniel Lemire mentioned: "So I think that librarians should move on to more difficult tasks. For example, we badly need help with what I would call 'meta-science'. For example, we have collections of papers that refer back to data sets. These data sets are typically poorly hosted, partially replicated, and so on. We badly need to clean up this mess. We need data object identifiers. We need help tracking data sets, their transformation and so on. In effect, I would push librarians into data science. That's the next frontier" (4).

To sum-up, let's quote Marc Andreessen, the famous internet entrepreneur: "The spread of computers and the Internet will put jobs in two categories: People who tell computers what to do, and people who are told by computers what to do" (5).

REFERENCES

- 1. Frey CB, Osborne MA. The Future Of Employment: How Susceptible Are Jobs To Computerisation? [Internet]. 2013 Sep 17 [cited 2015 Aug 30] Available from: http://www.oxfordmartin.ox.ac.uk/downloads/academic/The Future of Employment.pdf
- 2. Bayerische Staatsbibliothek. Famous Books Treasures of the Bavarian State Library [Internet]. 2012 Jun 25 [cited 2015 Aug 30] Available from: https://itunes.apple.com/gb/app/famous-books-treasures-bavarian/id380668385
- 3. Obst O. The Librarian of the Future. Journal of the European Association for Health Information and Libraries 10(4):24-25 (2014)
- 4. Lemire D. Commentary to John Duouis: An Open Access thought experiment. [Internet] Confessions of a Science Librarian 2012 Aug 29 [cited 2015 Aug 30] Available from http://scienceblogs.com/confessions/2012/08/28/an-open-access-thought-experiment/#comment-1920
- 5. Mims C. How the internet is making us poor. Quartz 2013 Mar 3 [Cited 2015 Aug 30] Available from: http://qz.com/67323/how-the-internet-made-us-poor/