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Book Review: *The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries*

Hervieux, S., & Wheatley, A. The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries. Chicago, IL: Association of College and Research Libraries, 2022, 221pp, $80.00.

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The Rise of AI: Implications and Applications of Artificial Intelligence in Academic Libraries is a curated collection of essays from LIS scholars and practitioners on the impact and applications of AI in academic libraries. This is a timely publication considering that in 2019, "experts anticipate[d] AI in education to grow by 43% in the period 2018–2022" (Zawacki-Richter et al. 2019, 1). If the emergence and widespread adoption of large language models (LLMs) like OpenAI's ChatGPT is any indication, academic libraries need to be both reactive and proactive with regard to the various opportunities and challenges that AI offers on areas such as information generation, discovery, and management of systems and processes within higher education in general and libraries specifically.

The book is organized into three parts, each focusing on a different aspect of artificial intelligence and machine learning within the academic library context. The first part, comprising of eight chapters, focuses on user services and front-line programming. While the examples of library programming in this section can certainly inspire librarians as academic libraries face the challenge of addressing the place and usefulness of artificial intelligence in the higher education context, most of the chapters in part 1 are largely descriptive (they outline the details of particular programming choices and the specific outcomes of the programming offerings). Chapter 4 (titled "Incubating AI: The collaboratory at Ryerson University Library") is a notable exception to this, as it outlines best practices that emerged as a result of the case studies presented. While the other chapters in this section do include reflections on their particular challenges, most do not distill their conclusions beyond the

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particulars of narrow, unique, and specific case studies; whereas there may be room for such presentations at specialized conferences or symposia, a volume like this would have benefitted from the sort of generalized advice presented in chapter 4.

Part 2 discusses issues around collections and discovery. All six chapters in this section touch on interesting problems facing academic libraries, such as the utility of artificial intelligence and machine learning in image cataloguing in both library and non-library contexts, AI enhancements geared toward searchability, the benefits of automation, the training of staff regarding machine learning functionality, computational approaches to handwritten text recognition, and the translation of academic articles into non-scientific vernacular for the purposes of knowledge dissemination. Most studies in part 2 include general discussions of the practices under investigation, which makes much of the content in part 2 adaptable across various institutional contexts. Moreover, some chapters, chapter 7 (titled "Subjectivity and discoverability: An exploration with images") being a great example of this, afford the reader a glimpse into the future automation of some library work that has heretofore been only imaginable as human labour. This content is particularly interesting because it challenges the supposed fixity of librarian identity (Klein and Lenart 2020).

Part 3 focuses on future applications, and while the content in this section is more theoretical, this section — consisting of only two very short conceptual papers — is unfortunately somewhat underdeveloped. Nevertheless, what the reader will find here contains both value and utility for academic librarians working on shaping their professional practice in ways that will allow them to tackle both current and future challenges and opportunities of AI and machine learning in libraries. For example, the excellent first chapter in this section, chapter 13 (titled "Ethical implications of implicit bias in AI: Impact for academic libraries"), explores "ethically problematic outcomes in academic libraries" (178), such as the problem with dataset bias and the potential for the magnification of prejudices and stereotypes. This is the kind of work that will benefit libraries and librarians in the coming years, even as the artificial intelligence and machine learning landscape continues to change. The inclusion of this chapter is both important and well placed. More chapters like this one should have made it into this volume as a means of framing and synthesizing contributions in the other two sections of the book. Contemplations of this sort could have been used throughout this edited volume as philosophically and theoretically grounded introductions to the content outlining the practical challenges of the purely descriptive chapters.

Overall, the chapters that offer most value and utility in this collection are the ones that contain more general and philosophical discussions around automation,

artificial intelligence, machine learning, and so on. The reason those selections are so outstanding is that the field evolves and changes at an exponential pace, meaning that a book which mostly focuses on examples without the benefit of some theoretical musings and considerations of best practices aimed at future trends is outdated almost as soon as it is published. The more an example relies on the peculiarities of an individual institution or organizational circumstances of a particular library, the less application and adaptability such examples contain, and the quicker they become obsolete as technology continues to change and emerge. However, what shines through in this collection are the pieces of advice and thoughtful considerations that transcend the programming choices and special circumstances faced by libraries with unique organizational structures, resources, and issues, as those more generally applicable contributions will be of lasting value.

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