Special Forum: AI through the A Ω : Theological Librarians Interact with Artificial Intelligence

Artificial Intelligence through McLuhan's Tetrad of Media Effects

Libraries Maintaining the Human in the AI Regime

by Jordan Patterson

In today's media landscape, we face the paradigm-shifting advent of artificial intelligence (AI). We understand its power but still struggle to understand how it may become integrated into our lives and its ultimate effects. There is no challenge, threat, or opportunity as great as AI, nothing as powerfully new as AI. Theological libraries must ask the same question that perplexes everyone else: how can we respond? This question suggests another: how will our response in theological libraries differ from others?

In his 2015 article, "McLuhan in the Library," librarian Alan Turner points to philosopher Marshall McLuhan's tetrad of media effects as "a critical tool for libraries to discuss the impact of new media" (Turner 2015, 7). McLuhan proposed that we could understand a given medium or technology by asking what it (a) enhances, (b) obsolesces, (c) retrieves, and (d) "flips" or "reverses" into at its most extreme.

"When all four questions are considered in depth...we have a better understanding of the medium and can address its negative effects" (Turner 2015, 7). It may be a long time until we truly understand the impact of AI, even as its adoption spreads rapidly throughout society, but asking these questions about AI can help librarians prepare a response. There is no single answer to any of these questions, but here are some of my thoughts, and I hope other librarians will explore this tetrad of questions for themselves.

WHAT DOES AI ENHANCE?

The promise of AI, we are told, is the advancement of human endeavors on all fronts. McLuhan defines media as an extension of ourselves in that AI can potentially augment all human activities for the better. Through AI, we will increase productivity, and work faster and more efficiently. We will make better decisions and more appropriately allocate resources to our most pressing problems (as identified by AI). As a solo librarian, I am looking forward to this assistance!

In the library context, we already know AI has seen widespread adoption among students in their academic research and writing projects. We can expect this trend to continue, especially when AI is proving challenging to detect and norms around its acceptability are still forming. I have been unimpressed with ChatGPT's ability to prepare reading lists or bibliographies on specific topics, which, I have found, consistently return with fabrications or errors. Providing references is also a severe problem for ChatGPT, because it cannot precisely tell a user from where it derived an answer to a

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question in its training data. While these are significant issues, eventually they will be overcome, and a generative AI application will become an essential and reliable research tool for students.

WHAT DOES AI OBSOLESCE?

With gains in speed and efficiency, AI is poised to obsolesce the duration of labor. Academic work will take less time if concepts are made more accessible to understanding, studying is made more efficient, fewer dead ends are met in the research process, and the agonizing task of actually writing the lab report is reduced to prompt engineering. Work will take less time and effort, freeing personal resources for other activities (at least, this has been the promise of past technological advances, though it usually results in even more work!)

While such promised gains are attractive, and eliminating drudgery is a noble goal, concerns are justified as to what AI may render obsolete. There are important reasons academic and creative work should take time and effort. Thinking is not merely an activity that happens prior to putting pen to paper or before conducting a lab experiment. The thinking continues after a clever prompt that results in a satisfactory ChatGPT essay. The writing and the experimenting are thinking by doing. Language arts theorist James Moffet notes, "Writing discovers as much as it communicates" (1982, 234). When delegating essential parts of the thinking process to AI, we give up the meandering paths that lead to our eureka moments. We give up novelty and surprise, spontaneity and serendipity. We devalue the contributions of our personal perspectives and experiences, and ignore the worth of making a mistake. With its reading rooms and collections, libraries are "humanity-maintenance spaces" where patrons can use a powerful new tool, such as AI, without sacrificing their uniqueness.

WHAT DOES AI RETRIEVE?

In publicizing their revolutionary technologies, developers of AI have had, above all, to demonstrate its safety to the fearful masses. All want to be assured that, powerful as it is, AI will not be used for nefarious purposes. Still, as we muddle through these early days of AI's mass adoption, the media report story after story of AI put to questionable ends. Developers of large language models, such as OpenAI, have focused on training their AI in broad-minded political correctness to combat misinformation and other potential abuses of their platforms. OpenAI, for instance, has conditioned each iteration of ChatGPT not to outright affirm any controversial, radical, or inflammatory stances. Instead, developers have calibrated its responses to questions about topics like gun control, immigration, or politics to conform to a pattern of safe, balanced opinions recognizing arguments for and against.

In a polarized, fragmented world, AI retrieves a political and cultural homogeneity not seen since the days of only three television stations. These are important questions for librarians to consider: Will AI retrieve a more even-tempered politics? Will the retrieval of a monoculture result in a broad circumscription of thought? If publicly available, AI is bounded by the Overton window's guardrails, which may challenge research questions that push against the status quo. If widespread AI use does retrieve monoculture, this may present a challenge also to academic and intellectual freedom. Can librarians prepare for this by doubling down on the intellectual diversity of their libraries' collections? As with previous new media, librarians should urge AI literacy and communicate principles that serve as the basis for its more values-oriented content.

WHAT DOES AI FLIP INTO AT EXTREMES?

Blade Runner, Terminator, Her, and Avengers: Age of Ultron—for decades, Hollywood has been preparing us for a future when artificial intelligence is pushed past our comfort limits. In libraries, concerns about AI in its extreme forms may not make for great cinema, but they are no less important to consider. Bracketing the possibility that AI may render humanity superfluous (another obsolescence), librarians might be concerned about the condition of information in an AI-dominated world. One example of such a conundrum is this: if the pace of legitimate research and junk content creation increases, librarians and patrons will face an ever-expanding body of search results to sift through. We can probably use AI to solve this AI-generated problem. The production capacity of AI will exist in constant tension with the sorting-and-retrieval capacity of AI. Rather than allowing actual progress, will AI capture us in an inescapable pattern of drawing a map while a labyrinth of information builds itself around us?

McLuhan characterizes the media's tendency to flip to extremes as a "reversal." We will see this in AI as the machine becomes increasingly human. However, there is also a sense that humanity's drive into artifice will push us back into introspection. Amid the AI revolution, humanity's questions of values, ethics, consciousness, and meaning will have renewed importance. When AI has solved all of our problems, and we are left with only ourselves, theological libraries will be well-poised to respond. Yes, theological libraries hold books that probe the mysteries of our existence, and suggest ethical and metaphysical alternatives to modern society's Darwinian, material, market-oriented worldview. However, remember McLuhan's most famous statement: "the medium is the message."

The very form of the library is instructive, ordered as it is toward all that AI would obsolesce. With AI prepared to escalate human activities to an inhuman scale, the library encourages a return to a human pace of thought, to contemplation and reflection. The library is vast but not limitless—it is human. In the face of this technological revolution, let us counsel reflection:

Reflection...is about lingering, looking both forward and back with mindfulness and care. It is not about resisting change—social change and innovation are inevitably stimulated by the new ideas to which reflection gives rise—but about slowing its pace, giving us the time to understand what the given change means, to decide if it is really in our best interest, and if it is, how we might best go about it in an orderly, peaceful way that upholds those values and practices that are worth preserving (Rose 2013, 31).

If this is our project, is there a better place to start than the library?

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