Glimmers of Digital Publishing Innovation

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As an exercise, take a moment to consider: What is the most *innovative* eBook or electronic publication that you have read in the past couple of years? Alternatively, what is the most innovative electronic publication, broadly speaking, that you have *ever* read? You might be asking, what does *innovative* have to do with it? Isn't an eBook essentially the same as print book, just one that you can read on a mobile device? How do you define innovative in terms of electronic publications? The mere fact that you are reading this, however, may predispose you to have some idea, or recollection, of something pioneering and inventive in the realm of digital texts.

This exercise has a second part: If the *innovative* eBook you considered—if, in fact, you recalled any in particular—is one you read more than five years ago, is it still available? Can you access it, read it again? What about an *innovative* eBook you may have read more than a decade ago?

Innovative, in terms of an eBook, can mean a lot of things. For someone with vision or reading disabilities, for example, it might mean an expertly formed, accessible text, one with images that are well described, with charts and tables that are not gibberish with a screen reader. Innovative can mean the seamless and effective use of text, audio, and video. It might mean interactivity, immersing the reader in the text, as a participant.

Most of us, on average, however, don't ask a lot from the eBooks we may read on a regular basis. We expect them to function. That's what most publishers, vendors and platforms focus on. If we check out an eBook from a public library,

using an app such as Libby from Overdrive, or from an academic library using ProQuest or another vendor, we cross our fingers and hope that we have access, can avoid a long waiting list, and can read the text without technological glitches. A couple of dozen eBooks I purchased for my Sony Reader became inaccessible several years ago after the device's demise and Sony's eBook platform itself became nonfunctional. Particularly in the realm of books, there seems to be little true innovation with electronic publications from the reading perspective. This is not to say that publishers haven't pursued some innovations in terms of digital-first workflows and processes, albeit haltingly. "Digital transformation" was cited as the number one business priority by publishers surveyed by Deanta for "Trends in Academic Publishing 2022," while 30 percent of publishers claimed that "developing a clear strategy in a complex world" was holding them back. At least until now the focus of innovation in publishing technology has centered on XML workflows, of late on data analytics, and though less than optimally, on metadata.[1]

Glimmers of innovation in digital publishing emerge in the intersection of gaming and text. *80 Days*, developed by Inkle Studios, a UK-based company founded by Jon Ingold that has been innovative in text-based gaming, provides an excellent example. Inkle productions such as *80 Days* have been widely embraced by the gaming community but have received far less attention from the publishing community.[2] These text-based games can be large or small. An excellent example of the latter is *Scents and Symbiosis*, developed by Sam Kabo Ashwell, which he calls "a piece of interactive fiction about perfume, memory, and the process of assigning or re-evaluating personal symbolic associations with things: *semiosis*, the creation of meaning."[3] Notably, this game is dedicated to Emily Short, the modest but undisputed doyenne of all things text-game related. For an epic, text-based game, look no further than *AI Dungeon*, developed by a college student named Nick Walton, who subsequently founded game startup Latitude Games. AI Dungeon, as the name implies, is a *Dungeons & Dragons*–style text-based, choose-your-own adventure game that Walton built using the AI text generation system GPT-2. Developed by the nonprofit, venture capital–backed OpenAI—and yes, that is a contradiction in terms—GPT (generative pre-training) became even more powerful with GPT-3, which Walton used to upgrade *AI Dungeon*.[4] You can play *AI Dungeon* for free, although you'll need a paid account to unlock all story capabilities and more powerful GPT models. Give it a try: you'll pick a setting (Fantasy, Mystery, Zombies, Apocalyptic, etc.), select a character (depending, naturally, on your first choice), name your character, and you're off to the races. Whether *AI Dungeon* will be available to play and read five or ten years from now, let alone fifty, is anyone's guess. At least for now, the original launch version is still available, even as the

company ventures further with new iterations and improvements enabled by GPT-3.[5]

I don't have a crystal ball, but I have a compass. Of the innovations that will transform publishing, artificial intelligence (AI) is the monster in the room, apt to transform all of society. (Let's check in, in a few years, to see if that transformation is more *Terminator* or *Utopia*; if we're lucky we'll be around to note it's been a combination of both.) AI is already transforming how publishers and other organizations collect and analyze data; it's having an impact on generating audiobooks. Google used neural networks, a subset of machine learning, to transform Google Translate overnight from an unreliable tool to a trusted resource.[6] The predictive text of Google Smart Compose creates cogent sentences to "save" billions of keystrokes.[7] AI can assist with what one might want to research and even to write a research paper or a novel.[8]

NFTs (non-fungible tokens) remain a wild card, one worth keeping an eye on in the world of digital publishing, with their potential for collectible and transferable ownership, microcredentialing, and microcurrencies. NFTs—ownership records of assets stored on blockchains—can be bought, sold, resold, and traded on online platforms. NFTs can have at least potential value as speculative collectors' items; through the addition of "smart contracts" that govern resale rights, they can track value over time. Ingram Content Group, one of the world's largest book distributors, long a leader in print-on-demand (POD) technology, entered the NFT game by investing in start-up Book.io, with plans to "create NFT ebooks and audiobooks from the world's top authors and publishers" and "bundle NFT eBooks with bespoke printed physical books."[9] Pearson hopes to diminish the irritating—for them—secondary market for textbooks through NFTs, which would allow the publisher "to *participate* [emphasis mine] in every sale of that particular item as it goes through its life."[10] In theory, at least, NFTs can have an impact on preservation as well as transfer of ownership, ameliorating the issue I described above, with the eBooks from my long-obsolete Sony Reader.

On the more creative side, Amplified Publishing, a Bristol+Bath Creative R+D incubator, has provided support to four prototype teams including Storm Jar, which is pursuing a model of interactive horror fiction utilizing a sustainable version of NFTs, microcredentialing, intelligent design, new forms of storytelling, and Web3 technologies.[11] This may give you nightmares or may be a harbinger of things to come.

The Deanta survey mentioned the Jekyll and Hyde nature of the industry: traditional yet agile, siloed yet progressive, cautious yet innovative.[12] Deanta's survey results may refer to different people, or perhaps not. Many publishers, both organizations and individual professionals, contain multitudes, a mix of traditional

business model and agile, digital start-up mode. My compass also points to the northern and southern poles that are the creators and authors themselves. I await the *Don Quixote* or *Moby-Dick*, the *Earthsea Trilogy* or *Americanah* of digital publishing, groundbreaking works that combine anew these elements and push the boundaries between form and content, of what we have experienced and imagined from narrative.

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Notes

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[4] Aaron A. Reed, "2019: A.I. Dungeon," blog post, December 23, 2021, https://if50.substack.com/p/2019-ai-dungeon.

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[7] John Seabrook, "The Next Word: Where Will Predictive Text Take Us?," *New Yorker*, October 14, 2019, https://www.newyorker.com/magazine/2019/10/14/can-a-machine-learn-to-write-for-the-new-yorker.

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[12] Deanta, "Trends in Academic Publishing 2022."