MDPI

Editorial

Further Reading

Nick Montfort

Comparative Media Studies/Writing, Massachusetts Institute of Technology, Cambridge, MA 02139, USA; nickm@nickm.com

It is clear that the contributions in this volume are not only insightful, but also wide-ranging, reaching into popular culture and across different media forms and practices. Rather than directly comment on this writing further, though, I offered to supplement the topics of these essays by pointing to a few additional categories of computational, poetic production that seem rich but relatively overlooked.

Interactive Fiction

Over the past 40 years, interactive fiction has occupied several different places in computing and in culture. When the first widely-released version of *Adventure* by Will Crowther and Don Woods became available to users of time-sharing systems in 1976, it hit them like a wrecking ball. Legends tell that productivity ceased for days, or weeks, while those who were supposed to be programming explored the simulated cave system. Then people in the US and UK went on to program their own *Adventure*-like games, or, simply, adventure games. *Zork* was a successful and memorable one, originally created at MIT by Tim Anderson, Marc Blank, Dave Lebling and Bruce Daniels and then made into a trilogy of home-computer games by Blank and Lebling. Interactive fiction was a pillar of the emerging entertainment software industry—videogames, or to be more specific, computer games. In the 1980s "interactive fiction" (or "IF") was more widely used a term for this type of production, or "text adventure" if one wanted to distinguish the graphical adventure.

By the 1990s, IF was significantly less lucrative in the marketplace; it eventually ceased have a commercial life. Meanwhile, however, free development systems were being created and released and an amateur scene was growing. New sorts of games never imagined by companies were made —yes, "games," they were and are called within the community, although many don't have a score and can't be won. I wrote my book *Twisty Little Passages* (Montfort 2003) in this context. Since then, the development of interactive fiction and the community has continued, with several new twists. One is the advent of Twine, a hypertext editing system by Chris Klimas that has been used to develop numerous experimental hypertexts dealing with identity and trauma.

The Interactive Fiction Competition (http://ifcomp.org/), a community-organized event that is the main annual activity in English-language interactive fiction, took place once again during October and November 2017. This was the 23rd instance of the event, which had the largest number of entries ever: 79 of them. For the second time, the competition was operated by a non-profit organization, the recently established Interactive Fiction Technology Foundation. Anyone can enter this online competition, at no cost, and anyone who plays a few games can judge. A great way to see what is happening in the IF community is to try some of the entries in the latest "Comp," as it is called by IF authors and players.

Of the many striking Twine games, I'll mention one that makes unusual use of computation, blending elements of a simulation game with a hypertext fiction. This is the uncanny *Horse Master: The Game of Horse Mastery*, released in 2013 by Tom McHenry (http://tommchenry.itch.io/horse-

master). There are many other compelling ones to be found on hosting site (http://philome.la/), and there is a good book introducing these games, *Videogames for Humans* (Kopas 2015).

In what is now called "parser-based" interactive fiction (the *Adventure* kind, where the system accepts and understands typed input) there have been computational developments in the simulation of the world and in the way play and interaction transpire. Andrew Plotkin's *Hadean Lands* (http://hadeanlands.com/), a commercial game in the *Infocom* tradition, continues to refine and improve on the classic text adventure by offering an elaborate simulation of a magical world and by modeling how a character learns to undertake complex procedures. Another long-time IF author, Emily Short, has been developing interactive fiction in which the social situation is explicitly modeled and influences characters. A recent mid-size work of hers is one that uses procedural generation and allows the player to train an AI character: *The Mary Jane of Tomorrow* (http://emshort.wordpress.com/tag/the-mary-jane-of-tomorrow/).

Bots

There is now an explosion of interest in automating various sorts of instrumental tasks, such as retail and customer support interactions. The raft of *creative* bots, floating largely upon the sea of Twitter, has, surprisingly, almost nothing to do with the corporate formulation of the bot. These systems are reconfiguring word and image in surprising ways, often at regular intervals, reworking and interjecting themselves into human discourse. Botmaker Allison Parrish describes them as a "performative critique of procedural writing," skateboarding on the corporate landscape of social media in artful ways that were never intended.

It can be hard to understand the appeal of certain bots outside of the context of Twitter. A bot might produce 20 lackluster tweets for every one that's particularly funny or disturbing; if its faithful user/creator retweets its greatest hits, it can end up receiving acclaim. Also, bots might produce outputs which are particularly great to see in the context of a Twitter feed, even if they wouldn't read as well when standing alone. Finally, bots can be part of social media interactions, for instance by replying to others but also because others can retweet their tweets and reply to them.

Although removing a bot from its environment can be problematic, it's also useful to preserve things about them. To accomplish this, the *Electronic Literature Collection, Volume 3* includes a selection of bots (http://collection.eliterature.org/3/collection-bots.html). These include @everyword, by Parrish, which simply enumerated every English word (in a particular list, of course) and managed to inspire dozens of enumerative verbal bots. Additionally: @rom-txt by Zach Whalen harvests texts from videogame ROMs; @TwoHeadlines by Darius Kazemi conflates journalistic titles, as it says on the tin; @wikisext by thricedotted presents sexual text messages inspired by online instructions; @tiny_star_field by Katie Rose Pipkin builds skyscapes from Unicode characters; and @pentametron by Ranjit Bahtnagar, which builds an endless epic poem, in heroic couplets, out of unsuspecting tweets.

Bots often generate texts and images in a fictional or poetic mode, and often produce humorous outputs, but being funny isn't mandatory, and they can also be documentary. @CensusAmericans by Jia Zhang produces tiny biographical sketches directly based on US Census data from 2009–2013—for instance, "I work in travel arrangements and reservation services. I am divorced. I have an associate's degree. I have multiple ancestries."

Note, too, that bots are not exclusively focused on the present and the current social world. One of many bots by Hugo, @houseofdust, reimplements an influential 1967 computational poem by Alison Knowles and James Tenney.

In any case, to truly appreciate a Twitter bot, it's best to follow it (or someone who retweets it) for a while and see how it contributes to the chorus of your social media reading.

Generated Novels

There have been various attempts to generate long poems and novels by computer over the years, but the floodgates were opened by Darius Kazemi in 2013. On November 1 of that year he tweeted,

seemingly as a joke, in response to National Novel Writing Month or NaNoWriMo, which had just begun, a suggestion: "NaNoGenMo: spend the month writing code that generates a 50 k word novel, share the novel & the code at the end." As it happened, many people were willing to join him in this quixotic endeavor, and more have been in years since that announcement.

For instance, in 2013 Leonard Richardson generated a book that conflated *Alice's Adventures in Wonderland* and *Moby Dick*. (The white whale became the de facto mascot of NaNoGenMo, with many people generating novels that transformed Melville's in some way.) Richardson's novel, *Alice's Adventures in the Whale*, remarkably replaced all of the quoted dialog in Lewis Carroll's novel with dialog from *Moby Dick*, and thus has a first paragraph that concludes "'Can't sell his head?—What sort of a bamboozingly story is this you are telling me?' thought Alice 'Do you pretend to say, landlord, that this harpooneer is actually engaged this blessed Saturday night, or rather Sunday morning, in peddling his head around this town?'"

During the second NaNoGenMo, in 2014, Allison Parrish contributed *I Waded in Clear Water*, which was based on the classic American text *Ten Thousand Dreams Interpreted*. The actions imagined in dreams were ordered according to their sentiment, from most negative to most positive, and elaborating footnotes were added. The result was a stark, declarative text with unusual typography (for a novel), loaded with extreme situations.

One of the most amazing generated novels from that year, and one that makes an impact after only a glance, is Liza Daly's *Seraphs*. This was a text, with images, similar in appearance to the c. 15th Century *Voynich Manuscript* (Clemens 2016) and recalling also the much more recent *Codex Seraphinianus* (Serafini 1981). It is filled with inscrutable but systematic glyphs that are arranged alongside encyclopedic pictures. Daly made her book available for download as a PDF and also offered it for sale as a print-on-demand book (Daly 2015).

One thread of novel-generating practice that stands out in these examples, and distinguishes them from many other practices, is a strong relationship to one or two well-known source texts, although authors have explored numerous relationships. The NaNoGenMo sites, with links to work and code, are hosted as GitHub repositories, beginning in 2013 at (http://github.com/dariusk/NaNoGenMo). Other recommendations for outstanding generated novels can be found by searching the Web or Twitter for "NaNoGenMo."

Generating book-length literary art with the computer is an intense area of work for me currently. I am editing the book series *Using Electricity*, a series of computer-generated books from Counterpath; the director of this press selected my book-length poem. *The Truelist*, as the first volume (Montfort 2018). Two other books, *Mexica* (Pérez y Pérez 2017) and *Articulations* (Parrish 2018) are already in print, and at least two more will be published before the end of 2018. I also recently put together the exhibit, *Author Function*, displaying printed books of this sort, for one of the MIT Libraries.

Digital Writing in Performance

Electronic literature has been presented in person by authors for a while, sometimes in the familiar format of a literary reading, sometimes in more of a demo mode, and sometimes in performances that are significantly distinct from these. For instance, numerous readings of *The Unknown*, a hypertext novel, were staged by William Gillespie, Scott Rettberg, and Dirk Stratton. During these, a hotel bell was rung every time a link was encountered, inviting the audience to leave the current text if they were interested in that link (or bored with what was being read at that point). The authors dressed up for these occasions and took turns reading from their collaborative novel.

While *The Unknown* (http://unknownhypertext.com, also included in *The Electronic Literature Collection*, *Volume 2*, http://collection.eliterature.org/2/) was presented as a sort of literary reading, with interesting deviations and invitations to the audience, other digital writers have developed performances that start from other points. J. R. Carpenter and Jerome Fletcher have presented digital performance writing pieces in which the performance is intended as a particularly significant or primary channel for the work. Their projects include "Along the Briny Beach" and "Whisper Wire,"

the online versions of which can be found at Carpenter's site (http://luckysoap.com). Judd Morrissey, individually and in collaboration, has done work that ranges from interactive electronic text on screen (*The Jew's Daughter,* included in *The Electronic Literature Collection*, *Volume 1*, http://collection.eliterature.org/1/) to theatrical productions incorporating projection and digital texts. One of the latter is *The Operature*, a 90-min performance of the collective Anatomical Theatres of Mixed Reality (ATOM-r), of which he was a founder.

Those involved with digital writing keep showing, into the 2010s, that the possibilities for performance have not been exhausted. The format of Todd Anderson's website (http://hotwriting.net) gives some particular hints about his performance style. Using the Windows program AutoHotkey, he remaps his keyboard so that it cues audiovisual elements. Wearing a wireless keyboard on a strap around his neck, he speaks, croons, and sometimes just watches the multimedia show he is cuing. His presentation is based more on scrappy musical performances than theater or literary readings.

While Anderson has innovated with interface and in terms of the framework for performance, computation has been involved in composing performances as well. Annie Dorsen's *A Piece of Work*, performed in several cities in 2013, is a play in which a new version of Hamlet is algorithmically generated each night.

Onward & Outward

I hope these brief comments are of use to people who wish to cast their eyes around the fringe of computational, poetic territory, looking for developments in the past decade. Although I'm sure I am missing out on several other new types of practice, I offer these ideas for further reading, some covering practices that have yet to be critically discussed in depth, many of them very exciting.

Conflicts of Interest: The author declares no conflict of interest.

References

Clemens, Raymond, ed. 2016. *The Voynich Manuscript*. New Haven: Beinecke Rare Book & Manuscript Library.

Daly, Liza. 2015. *Seraphs: A Procedurally Generated Mysterious Codex*. San Francisco: Blurb.

Kopas, Merritt, ed. 2015. *Videogames for Humans: Twine Authors in Conversation*. New York: Instar Books.

Montfort, Nick. 2003. *Twisty Little Passages: An Approach to Interactive Fiction*. Cambridge: MIT Press.

Montfort, Nick. 2018. *The Truelist*. Denver: Counterpath.

Parrish, Allison. 2018. *Articulations*. Denver: Counterpath.

Pérez y Pérez, Rafael. 2017. *Mexica: 20 Years-20 Stories [20 años-20 historias]*. Denver: Counterpath.

Serafini, Luigi. 1981. *Codex Seraphinianus*. Imperia: Franco Maria Ricci.