

When is an Author Not an Author? Non-human and Fictional Creators under LRM, RDA, and Other Cataloging Standards

Sarah Hovde, presentation at SHARP 2023, June 27, 2023.

In an article for the journal *Library Computing*, a librarian recounts the process of consulting with her colleagues about how a book written by a computer program should be cataloged, receiving a number of responses ranging from the serious to the unhelpful. The head cataloger proposes corporate entry since the book is the result of the program that ran and the programmers that created it; the serials librarian has a hunch that the computer program is male and should therefore get a personal name entry, deploying the rather questionable reasoning that "if you can argue for gender, you can probably argue for personhood." An English professor cites Maimonides to argue that since the program is not yet thirteen years old and has not had a Bar Mitzvah, it cannot be held morally accountable for its actions (including, presumably, authorship - although as the article's author points out, catalogers do ascribe authorship to children). Yet another professor worries that it is imprudent to offend the program by implying that it is not an author. The article's author skirts the thorny question of whether the book is valid literature, and closes her piece not with an answer, but with a warning: "It behooves the cataloging community not to ignore the computer's potential status as author."¹

While this article may sound like it was published very recently, it is in fact from November 1985. The computer program in question is Racter and its book *The policeman's beard is half constructed*. Almost forty years later, you might think that the question of whether Racter should be considered the author of the book would have been settled by now. However, the adoption of new cataloging standards, based on new bibliographic conceptual models,

¹ Meredith Merritt. "Racter the author?" *Library Computing*, November 1985, 60.

combined with new developments in computer-generated texts, has seemingly reopened the debate - which was never truly closed to start with.

In today's presentation, I'll start by giving a whirlwind history of authors and names and their uses in library cataloging. I'll then focus more closely on several types of non-human authors, and how their works are or might be treated under several generations of library cataloging standards. I'll close by considering how these standards apply to algorithmic and/or generative texts. (I've chosen to stick with "generative" and "algorithmic" terminology to best describe the processes in question, rather than the broader but unhelpfully general "artificial intelligence" or even "machine learning".) This presentation will largely be focused on English-language text and cataloging practices in the American library world, and on descriptive standards - rules that tell you what information to record about a resource, such as AACR or RDA - and their underlying conceptual models, rather than on format standards - rules that tell you where to record the information and how to format it, such as MARC and BIBFRAME.

Authorship in cataloging standards

A very condensed timeline of modern Anglo-American cataloging codes might highlight the following:

- Anthony Panizzi (British Library), *91 Rules for Compilation of the Catalogue*, 1841
- Charles Ammi Cutter (Boston Athenaeum), *Rules for a dictionary catalogue*, 1876
- American Library Association, *Catalog Rules, Author and Title Entries*, 1908
- ALA, *A.L.A. Catalog rules: author and title entries* (revision/preliminary 2nd edition of 1908 edition), 1941
- ALA, *A.L.A. cataloging rules for author and title entries*, 2nd edition, 1949
- American Library Association, Library of Congress, Library Association, and Canadian Library Association, *Anglo-American Cataloging Rules (AACR)*, 1967
- *Anglo-American Cataloging Rules, 2nd edition (AACR2)*, 1978
- RDA Steering Committee. *Resource Description and Access (RDA, Original RDA Toolkit)*, 2013
- Official RDA Toolkit, 2020/currently being implemented

When cataloging a resource, bibliographic information about an author or creator can be recorded in two places, a bibliographic record and an authority record. The information in the catalog record itself shows the relationship(s) between the resource and the author. Creator information may be represented as either free text or, if the creator's name is established in a controlled vocabulary such as the LC Name Authority File, as structured data. Early cataloging codes largely provided instructions for describing resources, not their creators or contributors; it is only in the last fifty years or so that cataloging codes have provided separate instructions on describing authors and creators in authority records.

Notions of authorship and personhood have been shifting targets in cataloging standards as librarians attempt to balance an accurate representation of the world with user needs. Allyson Carlyle argued that filling the gap between representation and reality is an essential part of a cataloger's role.² Catalogs have existed in one form or another almost as long as libraries have - for centuries - but for much of this history they took the form of book lists sorted by title. Paul Shaner Dunkin commented that the practice of sorting lists by author was likely driven by collectors' need to manage large collections of texts, which coincided with, as did so many things, the advent of the printing press.³ Much American library literature assumed that the author and the title were the most salient features of a book - generally visible from the spine or cover - and that users were likely to prefer that books be grouped by author rather than title.

Charles Cutter defined the author as the writer of a book, or in a wider sense the person who is the cause of the book's existence. The first official cataloging code, *Catalog Rules, Author and Title Entries*, produced in 1908 by American Library Association, as well as its 1941 expansion and revision, provided similar definitions, continuing along the path that Cutter had

² Allyson Carlyle. "The policeman's beard was what? Representation and reality in knowledge organization and description" (presentation, iConference, Irvine, California, March 24-27, 2015).

³ Paul Dunkin. *Cataloging U.S.A.* (Chicago: American Library Association, 1969), 23-24.

set, although emphasizing that the writer of a book should be distinguished from the translator, editor, etc. The 1908 *Rules* stressed transcription as the main source of an item's description, and instructed catalogers to heed the sequence of information on the title page.⁴

Into the 20th century, the concept of the author began to stretch and broaden - cataloger Julia Pettee described this as an attempt to bring in "lambs outside the fold" such as corporate bodies and editors.⁵ In 1941, ALA revised their guidance as a preliminary measure ahead of a formal second edition. They made few changes to the instructions relating to authors, but they did introduce the first formal guidance on "mediumistic writings" into an American cataloging standard as rule 9. Rule 9's advice assigned authorship credit first to the medium, rather than to the spirit: "Enter a work received through a medium (automatic writing, table rapping, ouija board, etc.) under the medium with added entry for the purported author..."⁶ James Tait pointed out that this guidance was "in spite of the fact that the spirit is nearly always given greater prominence on the title page."⁷

The official second edition of ALA's rules, published in 1949, provided a definition of an author that allowed for that role to "by extension, [be] an artist, composer, photographer, cartographer, etc."⁸ This likely reflects the expanding nature of materials that circulated in library collections, and, as Svenonius points out, the "increasingly diffuse and mixed" nature of authorship, for example conference proceedings, edited volumes, and works authored by

⁴ Dunkin, *Cataloging U.S.A.*, page 24.

⁵ Elaine Svenonius. *The intellectual foundation of information organization* (Cambridge: MIT Press, 2000), 44.

⁶ Helen Sword. *Ghostwriting modernism* (Ithaca: Cornell University Press, 2002), 27.

⁷ James Tait. *Authors and titles: an analytical study of the author concept in codes of cataloging rules in the English language, from that of the British Museum in 1841 to the Anglo-American Cataloguing rules 1967* (Hamden, Connecticut: Archon Books, 1969), 82.

⁸ Dunkin, *Cataloging U.S.A.*, 24-25.

corporate bodies.⁹ The 1949 rules moved "mediumistic writings" to rule 11, but otherwise retained the rule text almost exactly.

The first edition of the Anglo-American Cataloging Rules in 1967 went even further than its predecessor: an author was a "person or corporate body chiefly responsible for the creation of the intellectual or artistic content of the work. Thus composers, artists, photographers, etc. are the 'authors' of the work they create; chess players are the 'authors' of their recorded games; etc." (In response, Dunkin wondered whether baseball players could also be considered the 'authors' of their games, and if not, what about sportswriters?¹⁰) AACR also maintained guidance for "mediumistic writings," but changed the terminology to "spirit communications," and tucked it under the aegis of rule 13, "Reporter or person reported." It continued to advise catalogers to enter these works under the authorship of the medium, and implicitly allowed but did not explicitly recommend recording the spirit as an added entry.

The second edition of the AACR, published in 1978 and popularly known as AACR2, struck a balance between its predecessors: "A personal author is the person chiefly responsible for the creation of the intellectual or artistic content of a work."¹¹ AACR2 covered a broader range of materials, including for the first time audiovisual materials and machine-readable data files (known as computer files in later revisions). It also introduced a dramatic change to the practice of cataloging "spirit communications." They were given their own rule set once more (section 21.26), but catalogers were instructed to treat the spirit as the author, with the medium or "other person recording the communication" (recognizing the numerous forms that spirit communications could take) recorded as an added entry.¹²

⁹ Svenonius, *The intellectual foundation of information organization*, 44.

¹⁰ Dunkin, *Cataloging U.S.A.*, page 25.

¹¹ Michael Gorman and Paul W. Winkler, eds. *Anglo-American Cataloguing Rules, second edition*. (London: Library Association, 1978). Rule 21.1A1.

¹² Gorman and Winkler, *Anglo-American Cataloguing Rules, second edition*, rule 21.26.

AACR2 also introduced what Charity Stokes categorizes as the first official standardization of authority control, providing guidance for how names should be formatted for addition into the LC Name Authority File.¹³ This expansion included instructions for creating authorized name headings for spirits. To make clear the nature of the entity, catalogers would add "Spirit" in parentheses following a name, which had the added benefit of resolving conflict and confusion over historical figures and their pre- and post-humous writings.¹⁴ These changes relieved the cataloger of some of their duties as arbiter of authorship by re-focusing their role on bibliographic description.

As had previous cataloging codes, AACR2's definition of authorship centered a person or a group of persons. Despite the inclusion of authority records for spirits, AACR2 made no provisions for authority records for other types of non-human authors. For the first several decades of its existence, the LC Name Authority File's official policy stated that animals, fictional characters, and deities could not be established in the file, meaning that catalog records could not record an animal or fictitious character as a creator (or contributor) to a resource.¹⁵

Resource Description and Access (RDA), the follow-up standard to AACR2 implemented in 2013, changed that as part of a shift in bibliographic conceptual models. Original RDA defines author as "An agent [i.e., a person, family, or corporate body] responsible for creating a work that is primarily textual in content, regardless of media type or genre."¹⁶ An author has returned to being a text-centric term, but RDA also defines additional and more specific types of creatorship, such as artist, architect, cartographer, compiler, programmer, remix artist, etc. RDA drops the specific instructions for cataloging spirit communications, but

¹³ Charity Stokes. "A Brief History of Authority Control" (presentation for Authority Control Interest Group at Core Interest Group Week, virtual, March 7, 2023).

¹⁴ Gorman and Winkler, *Anglo-American Cataloguing Rules, second edition*, rule 22.14.

¹⁵ Patricia Van Ryn and William L. Starcko, eds. *NACO Participant's Manual, 3rd edition* (Washington, D.C.: Program for Cooperative Cataloging, July 31, 2005), 13.

¹⁶ RDA Steering Committee, *Original RDA Toolkit*, chapter 9.6, viewed 23 June 2023.

maintains guidance on establishing name headings for spirits, under chapter 9.6, "Other Designation Associated with a Person," which is located within section 3, "Recording Attributes of Agents." "Other designation" is required (or *core*, in RDA terminology) for "Christian saints, spirits, persons named in a sacred scripture or apocryphal book, fictitious or legendary person, or a real non-human entity," implying that these categories of beings are considered persons in the bibliographic sense, albeit nonstandard ones. Following the implementation of RDA, the Library of Congress updated its policy to allow the inclusion of "entities that were formerly only used as subjects such as family names, fictional characters and non-human entities (e.g., animals)" in the Name Authority File when they "purport to be responsible for the creation of, contribution to, etc. a work or expression."¹⁷

RDA - or, more recently, Original RDA - was intended first as a continuation of and then a break with AACR2: the rules in use for half a century were no longer a good fit for library resources or library users. Original RDA is based on a model known as Functional Requirements for Bibliographic Records, or FRBR, published in 2008, which divided the world into three groups of entities: intellectual and artistic resources, those responsible for creating and producing them (to which the entity "person" belongs), and the types of relationship between them. Under FRBR, a person is simply: "an individual."¹⁸ Unlike other standards, FRBR specifies directly that "person" includes individuals who are deceased as well as ones who are living: its chief interest in persons as entities is "only to the extent that they are involved in the creation or realization of a work... or are the subject of a work." Their personhood in the real world is not speculated on, only their relationship to a resource.

¹⁷ Library of Congress. *Descriptive Cataloging Manual*, 2015 update number 2 (April 2015), 2. https://www.loc.gov/aba/publications/FreeDCM/DCM_2015-02.pdf

¹⁸ IFLA Study Group on the Functional Requirements for Bibliographic Records. *Functional Requirements for Bibliographic Records: Final Report* (International Federation of Library Associations and Institutions, September 1997, as amended and corrected through August 2009), 23. https://cdn.ifla.org/wp-content/uploads/2019/05/assets/cataloguing/frbr/frbr_2008.pdf

RDA is a continually updated resource, and not long after its 2013 release, its editors identified a need to bring the standard into better alignment with international cataloging practices and with related industry standards, such as publishing's ONIX and the museum world's CIDOC-CRM, in order to make it effective and interoperable in a linked data/Semantic Web context. The RDA Steering Committee undertook a several-years-long project to bring the standard in line with IFLA's newer conceptual model, the Library Reference Model, or LRM. In 2017, the existing RDA text was frozen and designated as "Original RDA"; the live, LRM-based version of RDA is known as "Official RDA," and the cataloging world is currently preparing for its imminent implementation.

LRM makes some important but controversial changes to its predecessor model FRBR, as Mirna Willer and Gordon Dunsire acknowledged in a 2016 presentation. LRM seeks to present library resources as they present themselves, through transcription of descriptive data values, but also attempts to be a source of authority on the authenticity and provenance of that information. Under the LRM, and by extension Official RDA, a cataloger can transcribe a resource's description of itself, but then must adjudge whether the information they have transcribed is an accurate representation of the "real world" when adding access points, i.e. linking the description to related work, agent, and concept entities.¹⁹

With the 2020 release of the Official RDA Toolkit, after half a decade of debate, it became policy that "responsibility for works could only be attributed to real human beings or collective agents" (a collective agent being a group of human persons), abruptly reversing Original RDA's relatively open approach to authorship. Under Official RDA and LRM, a person is "an agent who is an individual human being who lives or is assumed to have lived." As the

¹⁹ Mirna Willer and Gordon Dunsire. "Authority versus authenticity: the shift from labels to identifiers" (presentation at APAE Conference and School, Zagreb, Croatia, October 25, 2016), viewed June 11 2023. <http://slideplayer.com/slide/13107124/>

definition implies, "Person" is a subtype of "agent," which is "an entity who is capable of deliberate actions, of being granted rights, and of being held accountable for its actions."²⁰

Under these constraints, fictitious entities, legendary and mythological figures, and animals are stricken from consideration for authorship, although there are several limited workarounds for this rule. Fictitious characters can be treated as a pseudonym of a (human) agent, and the agent can be recorded as the creator of the resource. Alternatively, the name of the fictitious character and its relationship to the work can be recorded as unstructured descriptions (i.e., as free text information rather than structured data). Non-human entities have even fewer options: they can be recorded only ambiguously as a "related entity" of a resource, which, while it does allow for some structure, strips away much of the semantic context.²¹

With the rapid changes in cataloging standards within the last two decades, how should catalogers approach resources created by non-human authors? I'll discuss several types of situations - spirit communications, animal authorship, and generative text algorithms.

Spirits

Spirits are somewhat unique among non-human authors in that cataloging rules have actually included explicit guidance on describing mediumistic works and other spirit communications for much of the 20th century. Nancy Babb connects the expanding popularity of spiritualism with the professionalization of librarianship, both of which gained momentum during the mid-nineteenth century. A variety of works, including poems, plays, stories, essays, and even multi-volume novels were produced by spirits during this time, whether via a medium

²⁰ Pat Riva, Patrick Le Bœuf, and Maja Žumer. *IFLA Library Reference Model: A Conceptual Model for Bibliographic Information*. (International Federation of Library Associations and Institutions, August 2017), 28-29. https://repository.ifla.org/bitstream/123456789/40/1/ifla-lrm-august-2017_rev201712.pdf

²¹ RDA Steering Committee, *Official RDA Toolkit*, accessed 23 June 2023.

or another method of spirit communications such as spirit rapping, automatic writing, or Ouija boards.²²

Nineteenth century cataloging codes did not explicitly provide instructions on how to describe works authored from the beyond. However, as these rules generally emphasized title page transcription and user convenience, a book that claimed to be written by the spirit of a deceased person would probably have been entered into the catalog under that person's name, particularly if their name was more prominent on the title page than that of the medium. On the other hand, the spirit would not be considered the author, only added entry, under the 1941 and 1949 ALA rules, or AACR.

AACR2 reversed this and instructed catalogers to treat the spirit as the author, with the medium or other recorder as an added entry. Notably, the spirit could also be added to the LC Name Authority File to definitively disambiguate it from the living human, or from other spirits.

Original RDA's focus on the resource as the source of the description (as well as an emphasis on the formatting of the title page to determine responsibility) means that a cataloger can take a resource at its word if it represents itself as written by a spirit, and record the spirit as the author. Any intermediaries can also be included - and under RDA, there is a specific relationship designator to use for mediums.

Under Official RDA, spirit authorship is somewhat unclear. LRM and Official RDA restrict authors to persons, and define persons as humans, whether living or deceased. They do not explicitly comment on whether deceased persons can be considered creators of works; however, Official RDA carries over Original RDA's provisions for adding "Spirit" as a parenthetical designation to an authorized name heading for a person, and also includes elements

²² Nancy M. Babb "Cataloging spirits and the spirit of cataloging," *Cataloging & Classification Quarterly* v.40 no.2 (2005), 91.

for "medium" and "medium of." These instructions suggest that spirits can continue to be authors under Official RDA, despite its rejection of other types of quasi- or non-human authorship.

Animal authors

Babb points out some of the difficulties with even the concept of animal authorship: while there are certainly instances of animals painting, talking, singing, and more, most of the animals would need human assistance for their creations to be published and circulated. Since ascribing intellectual responsibility has been a key feature of representing authorship in catalog records, catalogers would be called upon to make judgements about the nature of animal consciousness and intent, which surely falls outside of their professional remit.²³

Probably the most popular example of an animal autobiography is *Black Beauty*, the "autobiography of a horse, translated from the original Equine by Anna Sewell," first published in 1877. This example is complicated as *Black Beauty* is not only a horse, but a fictional one. The title page information of other examples varies: *Millie's book* (1990), the autobiography of Barbara Bush's springer spaniel, presents itself as "as dictated to Barbara Bush," and *Zero Dark Thirty: the autobiography of a very special cat* (2019) prominently features the names of two humans on the cover but the text "translated and interpreted by Misty Bridges Vaverka and Elaine Heckingbottom" on the title page, while *Dickey Downy: the autobiography of a bird* (1902) is written in the voice of a woodpecker but contains "by Virginia Sharpe Patterson" on the title page, and the new edition of *Autobiography of a salmon (Salmo Salar)* (1886) is "by George Rooper" (although the first edition had presented the book as the autobiography of *Salmo Salar*,

²³ Nancy Babb. "Who'll Let the Dogs In? Animals, Authorship, and the Library Catalog," in *Speaking for Animals : Animal Autobiographical Writing*, ed. Marge DeMello (New York: Routledge, 2015), 79-81.

Esq., "edited by a fisherman"). *Autobiography of a canary bird* (1866) carries no author or contributor information at all on the title page beyond "a canary bird."²⁴

Under most of the early cataloging codes we have discussed so far, animal creators were not explicitly addressed. It is likely that they were assumed not to be authors at all, to the point where it needed no clarification. Original RDA considers an animal a "real non-human entity," which falls within its definition of person, and therefore allows an animal to be an author (or other contributor). Under Original RDA, *Black Beauty* the horse could be added to the Name Authority File as either an animal or a fictitious character (and in fact, he has been), and can be added as an access point to bibliographic records in the role of author or any other contributor to a text (although a quick search of Worldcat shows that his human translator Anna Sewell still receives main author credit in almost all records for the book *Black Beauty*.)

Under Official RDA, the first consideration would be whether a purported animal author is fictitious or a real animal. For the horse *Black Beauty*, his fictitious status trumps his animal nature. The name "Black Beauty" could either be treated as a pseudonym for Anna Sewell, who can be recorded as the creator, or it can be recorded as a piece of free text description about the resource. He could also be recorded as the subject of the resource, but either way, he is demoted from its authorship. A real animal to whom authorship is attributed has few better options under Official RDA. They can be recorded as the ambiguous "related entity" of a resource, but not its creator.

²⁴ Anna Sewell. *Black Beauty: his grooms and companions: the autobiography of a horse* (London: Jarrold and Sons, 1877); Barbara Bush. *Millie's book* (New York: William Morrow, 1990); Elaine Heckingbottom and Misty Bridges Vaverka. *Zero Dark Thirty: The Autobiography of a Very Special Cat* (self-published, 2019); Virginia Sharpe Patterson. *Dickey Downy: the autobiography of a bird* (Philadelphia: A.J. Rowland, 1902); [George Rooper]. *The autobiography of the late Salmo Salar, Esq., comprising a narrative of the life, personal adventures, and death of a tweed salmon* (London: Day & Son, 1867); George Rooper. *The autobiography of a salmon (Salmo Salar)* (London: S. Virtue & Co., 1886); *Autobiography of a canary bird* (New York: Anson D. Randolph, 1866).

Generative text algorithms

When speaking of "generative text," I am trying to encompass a range of techniques and methods: programmatic substitution or alteration of characters, words, or phrases (such as the Oulipo $n+7$ technique, or substitution ciphers used for literary rather than cryptological purposes); randomization of text through physical or computational means (such as physically cutting apart and reassembling texts, or scripting computer programs to do the remixing); predictive generation of text by analyzing the relationships between words in a large corpus of existing texts (such as neural networks and their descendants, the newly popular generative pre-trained transformers). I describe a wide range of techniques here to emphasize that generative processes long pre-date today's internet-based chatbots, or even the use of electronic computers. While Racter is popularly characterized as the first computer program to write a book, Leah Henrickson points out that other story-telling programs existed in the 1960s and 1970s - they just had not published and marketed their output for mass readership.²⁵ Similarly, C.T. Funkhouser traces the history of digitally-generated poetry to the late 1950s and 1960s, pointing to a wide variety of text generation programs written in BASIC, TRAC, APL, and FORTRAN. Funkhouser's study stops in the mid-90s, but the creation of text generation programs and scripts has continued through the present day, in more recent languages such as Python and Perl.²⁶

Non-computerized algorithmically-generated or randomized texts date back even further: Florian Cramer traces what he refers to "combinatory poetry" to the fourth century A.D. with the works of Publilius Optatianus Porfyrius, a poet and possible prefect who specialized in what the

²⁵ Leah Henrickson. "The policeman's beard is algorithmically constructed," *3:am Magazine*, July 16, 2018, viewed June 25, 2023.

<https://www.3ammagazine.com/3am/the-policemans-beard-is-algorithmically-constructed/>

²⁶ C.T. Funkhouser. "Chapter 1: Origination: Text Generation" in *Prehistoric digital poetry: an archaeology of forms, 1959-1995* (Tuscaloosa: University of Alabama Press, 2007), 31-84.

1911 Encyclopedia Britannica described as "curiosities and specimens of perverted ingenuity," poems that could be read backwards, poems that formed pictures or maxims, or poems with interchangeable words.²⁷ Modernist movements of the 20th century are well-known for their algorithmic literary practices, summoning both constraint and chance: particularly the Dada movement for its instructions to cut apart and reorder existing texts (and the repeated resurgence of those practices in literature and music since), and Oulipo and similar groups that followed rigid instruction sets to create or creatively modify texts. Many of these practices were prefigured by earlier groups and methods such as the 17th-century religious community at Little Gidding known for their cut-up "Harmonies," the long-running use of commonplace books, and the later trend of "Grangerizing" books in the 18th and 19th century.²⁸

Notably, most algorithmic literary endeavors involve creative alterations to an existing text, whether one written by someone else or one written by the programmer or user. As Funkhouser points out, "selecting appropriate text" is the most important element of either generation or alteration.²⁹ On some occasions, an author composes a text specifically for the purpose of performing algorithmic actions on it. The present era of modern transformer models (also called large language models, or LLMs) such as OpenAI's GPT family, Google's Bard, and Meta's LLAMA probably marks the first time that texts have not been specifically chosen to be altered or to inform a model's output, but rather based on their availability and their quantity.

While the scale of large language models makes their capacity as authors feel complicated, the issue is clarified by examining texts created from hard-coded algorithms or

²⁷ Hugh Chisholm, ed. "Porfirius, Publilius Optatianus" in *Encyclopædia Britannica*, 1911. Viewed June 25, 2023, via Wikisource.

https://en.wikisource.org/wiki/1911_Encyclop%C3%A6dia_Britannica/Porfirius_Publilius_Optatianus

²⁸ Florian Cramer. "Combinatory poetry and literature on the internet," *Ars semeiotica*, v.24:3-4 (2001), 243-244; Adam Smyth. "Cutting and authorship in early modern England," *Authorship*, 2.2 (Summer 2013).

²⁹ Funkhouser, *Prehistoric digital poetry: an archaeology of forms, 1959-1995*, 79.

smaller language models: when published, these texts often present the human who selected the input text or ran the algorithmic script as the author, such as Eran Hadas' *Code* (2015) or Lillian-Yvonne Bartram's *Travesty Generator* (2019). Charles Hartman has similarly described his work in composing poems algorithmically as authorship, citing the extensive selection, arrangement, and other editorial work he performed on an algorithm's output, in addition to the work of composing much of the text that the algorithm processed.³⁰ In contrast, the more prominent programmer behind the program Racter, William Chamberlain, insisted that Racter should be regarded as the author of *The policeman's beard...* as did the book's (human) illustrator, Joan Hall. However, as Henrickson points out, Chamberlain and his fellow programmer Thomas Etter wrote all of the textual input and templates for Racter, and appear to have played an editorial role.³¹

At the time of Merritt's article questioning whether Racter could be an author, the catalog record for *The policeman's beard...* sidestepped the question of authorship - it used the book title as the main entry, with the names of the programmers as added access points, presumably reasoning that library patrons would remember the name of book but not the programmers. Racter itself did not have an access point within the record. Based on the publication date, it is reasonable to assume that the catalog record was created using AACR2, under which authorship was constrained by personhood. Interestingly, Racter was later established in the LC Name Authority File following AACR2 rules... but as a title heading, rather than a name heading - essentially, the program was described as a work itself, rather than an entity capable of creating other works. This heading could not be used in a record as a creator or contributor, only as a related work.

³⁰ Charles Hartman. *Virtual muse* (Hanover, NH: Wesleyan University Press, published by University Press of New England, 1996), 65.

³¹ Henrickson, "Algorithmically constructed."

Under Original RDA, the determination seems to hinge on what falls under the umbrella of person once more: can a computer program be considered a "real non-human entity," and thus able to be credited with the creation of the work? A computer program is certainly an entity, certainly not human, and presumably real (without getting too far into phenomenology) - so under a generous interpretation, a generative text program or algorithm could indeed be considered an author or creator of a work. However, since Original RDA does not provide explicit guidance in this area, a cataloger could exercise their personal judgment (or local guidance) to determine whether the program or the human who set it in motion is the most relevant creator.

Under Official RDA, the prospects would seem to be dim for computer authorship, given LRM's definition of "agent" as "an entity capable of deliberate actions, of being granted rights, and of being held accountable for its actions." While copyright law has grappled with the legal status of computer-generated texts since the 1960s, no generative text algorithm has yet been granted legal standing or status as copyright holder of its output.³² Even setting aside for now the question of whether a program or algorithm can be said to act deliberately, generative text processes do not meet the criteria of being granted rights or being held accountable for their actions.³³ Therefore, under a strict interpretation of Official RDA, a generative text algorithm cannot author a book.

Computer-generated resources have received short shrift under cataloging codes up to this point. C.D. Gull raised concerns over "the impact of electronics on cataloging rules" in a paper presented at the 1961 *Conference on Cataloguing Principles*. Gull discussed some possible

³² Leah Henrickson. "Authorship in Computer-Generated Texts" in *Oxford Research Encyclopedia of Literature*. May 29, 2020, 6-7. Accessed 26 Jun. 2023.
<https://oxfordre.com/literature/view/10.1093/acrefore/9780190201098.001.0001/acrefore-9780190201098-e-1226>.

³³ Riva, *FLA Library Reference Model*, 28.

implications of what he called "automatic authorship," whose output he argued that catalogers needed further rules to guide them in describing. However, Gull's paper gradually makes clear that he is discussing large datasets of information generated by, for example, "satellites, solar probes, and space vehicles."³⁴ (It was the 1960s, after all.) A March 2021 email thread on the cataloging listserv PCCLIST discussed how to deal with a book "authored" by GPT-3; the discussion continued for 45 messages over the course of a week, and did not reach a final consensus.³⁵ Highlighting this ongoing lack of agreement, the Program for Cooperative Cataloging has announced its intention to diverge from Official RDA instructions on fictitious and real non-human entities.³⁶

I opened this presentation with a discussion of "Racter the author," published in 1985, where Meredith Merritt cautioned catalogers "not to ignore the computer's potential status as author." It is clear that while we may have done so for the intervening four decades, we will not be able to continue doing so for much longer.

³⁴ C.D. Gull. "No. 17: The impact of electronics upon cataloguing rules," in *International Conference on Cataloguing Principles, Paris, 9th-18th October, 1961: report* (London: IFLA International Office for UBC, 1981), 289.

³⁵ "Als as authors" email thread, *PCCLIST*, March 10-16th, 2021. Accessed June 25, 2023.
<https://listserv.loc.gov/cgi-bin/wa?A1=ind2103&L=PCCLIST#3>

³⁶ Library of Congress Program for Cooperative Cataloging. "Fictitious and real non-human entities" *LC-PCC Metadata Guidance Document for Official RDA Toolkit*, 31 January 2022.
<https://www.loc.gov/aba/rda/mgd/mg-fictitiousRealNonHumanEntities.pdf>