From ChatGPT to CatGPT

The Implications of Artificial Intelligence on Library Cataloging

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ABSTRACT

This paper explores the potential of language models such as ChatGPT to transform library cataloging. Through experiments with ChatGPT, the author demonstrates its ability to generate accurate MARC records using RDA and other standards such as the Dublin Core Metadata Element Set. These results demonstrate the potential of ChatGPT as a tool for streamlining the record creation process and improving efficiency in library settings. The use of AI-generated records, however, also raises important questions related to intellectual property rights and bias. The paper reviews recent studies on AI in libraries and concludes that further research and development of this innovative technology is necessary to ensure its responsible implementation in the field of library cataloging.

INTRODUCTION

As librarianship continues to evolve in the digital age, the importance of cataloging as a tool for accessing vast amounts of information cannot be overstated. Unfortunately, this crucial process can be both labor-intensive and time-consuming, often requiring significant resources. In recent years, automation and artificial intelligence (AI) technologies have emerged as potential solutions for streamlining workflows. OpenAI's language model ChatGPT[1] is one such technology, offering the potential to automate various tasks, including text generation and even creating working code.[2] This paper explores the potential applications of ChatGPT in library cataloging, examining the results of my own experiments using this innovative technology.

LITERATURE REVIEW

Large language models (LLMs) applications have been explored in a range of contexts. Taecharungroj explores reactions to ChatGPT, noting wide public interest expressed via social media posts. Due to ChatGPT's ability to generate accurate information in a conversational tone, it provides an accessible medium for interacting with an AI resource. These technologies will usher in substantial changes to how we do our work: "The next evolution of jobs will likely be impacted by ChatGPT and other innovative AI technologies."[3] At the same time, the author cautions that while ChatGPT performs admirably in generating semantically and syntactically correct information, it does not always provide accurate information. Therefore, this presents an opening for targeted professional development opportunities in fields that may be affected by LLMs.

Kasneci et al. argue that AI and language models, if used effectively, are an opportunity for better, more learner-centered education. They caution, however, that LLMs' potential for bias may necessitate careful training and review of records by professionals: "[I]f a model is trained on data that is biased towards certain groups of people, it may produce results that are unfair or discriminatory towards those groups (e.g., local knowledge about minorities such as small ethnic groups or cultures can fade into the background)."[4] To counter the potential for bias and abuse, the authors advise that individuals using these resources should ensure that the data training the

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AI systems are diverse and inclusive. To that end, they recommend making the data open and available to users. Likewise, the authors recommend regular reviews and continuous updates of AI models. This will ensure not only that the AI (e.g., ChatGPT) generates accurate information, but it will also provide a model for continuous improvement of the machine learning algorithm.[5]

Recent research has examined the potential of ChatGPT in the library context. Lund and Wang discuss the implications of ChatGPT for libraries and the academy. According to their findings, ChatGPT can enhance library search systems' accuracy and effectiveness by automatically generating cataloging and metadata for library resources, such as book titles and descriptions.[6] However, they also note the potential ethical and legal implications of using ChatGPT. As ChatGPT draws on publicly available material, it may include copyrighted content, necessitating careful evaluation of AI-generated content and coordination with the copyright holder.

According to Atlas, the initial impact of AI in higher education is still not fully understood, but it does present an opportunity for professionals to incorporate ChatGPT into their workflow to increase efficiency and streamline tasks. Atlas advises that a well-thought-out plan with clear goals in mind is crucial when utilizing ChatGPT.[7] These findings suggest that AI resources such as ChatGPT have the potential to improve library cataloging by automating labor-intensive and time-consuming tasks. Moreover, they offer opportunities for professional development resources to ensure that libraries remain up to date with current technologies.

METHODOLOGY

To evaluate ChatGPT's potential for library cataloging, I used the ChatGPT Free Research Preview Version (released February 13, 2023) to generate MARC records in RDA for various items. When asked about its training data, ChatGPT replied:

> I was trained on a vast amount of data, including examples of MARC and RDA records, as well as the rules and guidelines for creating these records. My training data includes a wide variety of cataloging resources, such as online guides and manuals, training modules, and real-world examples of MARC and RDA records. This training allows me to generate accurate and standardized MARC and RDA records based on the information provided (ChatGPT, personal communication, February 23, 2023).

While this response was interesting, I wanted to test ChatGPT's claims. I asked it to generate records for six items, including one with no corresponding WorldCat entry, and compared the results to records created by human catalogers. Five items had existing MARC records, while the sixth item was specifically chosen to test ChatGPT's ability to generate an original record. I evaluated ChatGPT's accuracy, efficiency, and ability to handle different types of materials and cataloging/metadata standards, given that ChatGPT is known to produce both accurate and inaccurate or misleading information.[8]

To test ChatGPT's ability to create MARC records, I conducted an initial experiment using readily available materials. I asked ChatGPT to generate a MARC record for the 1996 edition of Anne Rice's *Interview with the Vampire*[9] using RDA (ChatGPT, personal communication, February 23, 2023). The resulting record is shown in table 1, and I compared it to a record in OCLC's WorldCat, which is illustrated in table 2. The results of this test indicate that ChatGPT can produce an accurate and effective record for *Interview with the Vampire*.

After this first success, I attempted to generate a MARC record for the 2018 vinyl reissue of David Bowie's 1977 album *Low*[10] using ChatGPT and the RDA standard (ChatGPT, personal communication, February 23, 2023). The resulting MARC record is presented in table 3, which was then compared to professional catalogers' records. Table 4 shows an existing MARC record for *Low* in OCLC's WorldCat. Notable differences were observed between the human-generated and ChatGPT-generated MARC records, with the ChatGPT record lacking foreign-language headings and subject headings in certain fields (6xx). This is not surprising, as such tasks require a degree of personal discernment on the part of the cataloger.

These discrepancies spurred me to investigate the applications further. I refined the question to test ChatGPT's ability to generate appropriate Library of Congress call numbers. For this example, I requested: "Generate a MARC record using RDA that includes Library of Congress call number for the 1971 German edition of *Pedagogy of the Oppressed*"[11] (ChatGPT, personal communication, February 24, 2023). Tables 5 and 6 demonstrate that while ChatGPT may not always "choose" the same subject access points or consistently format all relevant fields as effectively as a human cataloger, given proper training and oversight it can be used as an effective supplement to human cataloging. The accurate formatting of field 050 and appropriate "dummy" call number (LB875.P442) further demonstrate this technology's potential for streamlining cataloging and resource description, given proper training. In this instance, the AI noted that multiple fields would need to be edited: "Please note that the control number (001) and the date (005) in the above record are placeholders and should be replaced with actual values when creating the record" (ChatGPT, personal communication, February 24, 2023).

To further put ChatGPT's abilities to the test, I asked it to generate a citation for the 2018 Russian print edition of Cixin Liu's *The Three Body Problem*[12] (ChatGPT, personal communication, March 2, 2023). This was a more complex request than the previous ones; it required ChatGPT to extract and incorporate metadata from a non-Latin character set (Cyrillic) and in a foreign language. Table 7 shows the MARC record generated by ChatGPT, while table 8 displays the existing MARC record for the Russian translation of this work found in WorldCat. Although there were differences between the two records, ChatGPT's output was comparable to the professional catalogers' work. The discrepancies between the records, however, suggested that ChatGPT was not merely reproducing existing records but creating original MARC records, as it claimed. The results of this test further demonstrate ChatGPT's potential as a powerful tool for automating the generation of accurate metadata records.

During my testing, I discovered that the limited vinyl pressing of alternative rock band Mood Rings' 2013 single "Pathos Y Lagrimas"[13] had no WorldCat entry. To see if ChatGPT could generate an original MARC record for this item, I asked it, "Can you generate a MARC record using RDA for Mood Rings' 2013 single 'Pathos Y Lagrimas'" (ChatGPT, personal communication, March 8, 2023). Despite the absence of an equivalent WorldCat record, ChatGPT was able to provide a sample MARC record, which I have included in table 9. This record, complete with sample text for the Leader and Control Fields (00X), serves as evidence of two important capabilities of ChatGPT: its ability to generate original cataloging records, and its incorporation of placeholder content in fields that are collection specific.

ChatGPT's ability to generate accurate MARC records using both RDA and ersatz "original" cataloging demonstrates its potential as a cataloging and item description resource. Additionally, ChatGPT's versatility is further highlighted by its ability to produce original content in other metadata formats. When asked if it could generate records using the Dublin Core Metadata

Element Set, ChatGPT not only confirmed its ability but also provided a sample entry for "Pathos Y Lagrimas" as seen in table 10. While some modifications may be necessary to cater to collection-specific demands, this showcases ChatGPT's potential as a time-saving tool for automating record generation in multiple formats.

In addition to its ability to generate accurate records adhering to multiple metadata standards, the results of this study also highlight the potential versatility of ChatGPT as a cataloging and item description resource. The model's ability to generate records for different media and in different languages could prove particularly useful for librarians and other information professionals who manage diverse collections. Moreover, while catalogers may need to modify the pregenerated records to suit their specific collections' requirements, ChatGPT's user-friendly interface and accurate record generation suggest that it could be a valuable tool for improving cataloging workflows and increasing efficiency. With further development and refinement, ChatGPT has the potential to significantly enhance the capabilities of information professionals and improve the discoverability of library collections.

RESULTS

This study provides evidence that ChatGPT can generate accurate records that conform to multiple metadata standards. The model can extract essential metadata, including title, author, publisher, publication date, subject headings, and other descriptive elements, with precision. Additionally, my research reveals that ChatGPT's ability to generate MARC records is not limited to specific formats or languages, as it successfully created MARC records for various media and materials in different languages, such as English, German, and Russian. ChatGPT was able to generate both accurate existing authority records and entirely original ones, and it could generate records using both RDA and Dublin Core standards.

According to ChatGPT, it has been trained on data from various catalogs, including OCLC's WorldCat, the Library of Congress, the National Library of Medicine, the British Library, COPAC (UK Academic and National Library Catalog), Europeana, and the HathiTrust Digital Library (ChatGPT, personal communication, March 9, 2023). This poses a unique challenge, as these catalogs may have different policies on access and reuse of their data. For example, OCLC's CatExpress is a subscription-based automated cataloging system. If ChatGPT or a future "CatGPT" draws on OCLC's data and makes it available for free, it may raise questions about OCLC's copyright holdings. Additionally, while ChatGPT may generate records for materials available on the public internet, such as "Pathos Y Lagrimas," questions remain regarding how to credit the intellectual labor necessary for creating these records.

My comparison of ChatGPT-generated MARC records against manually created records by professional catalogers had positive results. While the accuracy of the ChatGPT-generated records was comparable to those of the manually created records, notable differences existed in how subject access points were assigned. This suggests that ChatGPT has the potential to provide new methods for growing the discipline of library cataloging by automating the more rote, labor-intensive and time-consuming tasks (for example, copy cataloging). In future studies, it may be of interest to the discipline to further test the applications of AI-generated MARC records on a catalog-wide scale.

While ChatGPT has the potential to streamline aspects of the cataloging process, it is not a complete replacement for human catalogers. The records generated by ChatGPT can serve as effective starting points, but they often contain discrepancies when compared to professional

catalogers' records. For example, while the placeholder text in fields 001 and 005 can be useful, it may not match the formatting standards used by specific library collections. Nonetheless, ChatGPT-generated records can be accurate and effective in classifying information that is not specific to any collection, such as call numbers.

BIAS

While ChatGPT shows promise as a tool for generating MARC and Dublin Core-style records, it is also limited by its training data. At present, ChatGPT searches public records (e.g., WorldCat). As a result, any records it generates will draw on existing professional catalogers' records. If a record is incomplete or contains bias—even via omission—then ChatGPT will reflect those biases in its output. This will necessitate close monitoring of both original records and those which ChatGPT has created through virtual copy cataloging.

ChatGPT's ability to copy and generate records is rooted in its machine learning-based understanding of cataloging and metadata standards. This AI system uses training data from OCLC's WorldCat to generate records, which means that the quality of the generated records is dependent on the quality and comprehensiveness of the training data.[14] Biases or limitations in the training data can result in biased or incomplete records. For example, if the training data is restricted to certain regions, languages, or publishers, the generated records may not reflect the full diversity of a library's collections. Similarly, biases in subject headings, descriptors, or other fields in the training data may also manifest in the generated records. While ChatGPT itself has no biases, it is possible for biases to be introduced through the training data, which makes it essential for librarians and other information professionals to curate and update the data regularly.

To address these potential biases, information professionals training a large language model should curate the training data carefully and periodically review and update it to ensure it is comprehensive, representative, and unbiased. They may also need to manually review and edit generated records to correct any biases or inaccuracies identified. This approach would provide new opportunities for the profession to highlight diversity, equity, and inclusion in the development and use of AI. While an AI may not have biases, biases of the people involved in training and applying the AI could affect the generated content.

Like other machine learning models, ChatGPT acquires its biases from external sources as it can only respond to the data it has been trained on, which may reflect human errors or intentions. Therefore, while ChatGPT could streamline and improve the record generation process, information professionals should approach its use with awareness of its limitations and potential biases. To ensure the accuracy, comprehensiveness, and fairness of the generated records, information professionals should take proactive measures to mitigate any biases and errors.

DISCUSSION

The results of this study have significant implications for library cataloging. The ability to accurately create descriptive records using ChatGPT could significantly reduce the time and resources required for copy cataloging; this could free up library workers to focus on other important tasks, such as collection development, user services, and metadata management. Moreover, ChatGPT could improve the accuracy and consistency of records in library catalogs. As ChatGPT follows established cataloging rules, records created by the model are less likely to contain errors or inconsistencies; this could lead to improved search and discovery experiences for library users, as well as better interoperability between library catalogs and other systems.

The intellectual property concerns surrounding ChatGPT's ability to generate content are multifaceted. One concern is the potential for copyright infringement, as ChatGPT's detailed descriptions of original works may be too like the originals, leading to legal issues for those who use the generated content without proper attribution or permission. This concern is particularly heightened for copyrighted works like books or music, where even small portions of the work can be protected. Therefore, it is crucial for ChatGPT's output to be thoroughly reviewed and vetted before being used in any public-facing materials.

Another concern is the possibility of misattribution of authorship. ChatGPT's use of Dublin Core to describe original works could lead to disputes over ownership and potentially even legal action if it generates a description that attributes authorship to the wrong person or entity. To prevent such conflicts, information professionals should ensure that the metadata generated by ChatGPT accurately reflects the authorship and ownership of the original work. This can be done by reviewing and editing ChatGPT's output to ensure that the metadata is correct before it is shared publicly.

The ownership of the generated content is also a concern, as it is not clear who owns the content created by ChatGPT. As a machine learning model, ChatGPT generates content based on the data it has been trained on, raising questions about the ownership of the content it produces. Establishing clear guidelines for ownership and use of the generated content can help avoid any potential disputes over ownership and ensure that appropriate attribution and permissions are obtained; this is particularly important given the potential commercial value of the content that ChatGPT can produce. Furthermore, it is essential to consider ethical and legal implications of the generated content, such as data privacy and protection, and to ensure that these concerns are addressed when designing guidelines for ownership and use.

Finally, there is the potential for unintentional disclosure of sensitive or confidential information. ChatGPT's ability to generate detailed descriptions of original works may inadvertently disclose unpublished findings or proprietary information, potentially causing harm to the author or institution. To mitigate this risk ChatGPT's output must be carefully reviewed and edited to ensure that it does not inadvertently disclose sensitive information. Implementing appropriate data security measures and access controls may help prevent unauthorized access to sensitive information.

CONCLUSION

The study demonstrates that ChatGPT has the potential to significantly streamline the cataloging process in libraries by generating accurate and consistent records for a diverse range of materials. However, it should be used as an auxiliary tool in conjunction with human cataloging efforts to ensure the highest level of accuracy and impartiality. Regular monitoring and evaluation of the model are necessary to detect any potential biases or limitations in the training data. By applying a careful and considered approach to its use, librarians and other information professionals can leverage ChatGPT to enhance the efficiency and effectiveness of cataloging processes, ultimately benefiting library and information center patrons.

The accurate and comprehensive MARC records produced by ChatGPT highlight its potential to enhance the effectiveness of library cataloging systems. By extracting metadata information such as author, publisher, subject headings, title, and other descriptive components with high precision, the technology can improve the search and discovery experience for library users. As with any machine learning model, though, there is a risk of bias that needs to be considered when utilizing

ChatGPT. Therefore, it is crucial to monitor and evaluate the training data used to build the model, to ensure that it is extensive, impartial, and representative.

The use of Dublin Core to describe original works is another factor that should be taken into consideration when using ChatGPT for cataloging. The model's potential to generate accurate metadata records is reliant on the quality of the input data, including the use of standardized vocabularies like Dublin Core. The use of any metadata standard, such as Dublin Core, may introduce biases and errors that could affect quality of ChatGPT-generated records. Therefore, information professionals should ensure that the metadata standards used by ChatGPT are appropriate for the materials being cataloged and that the resulting records are regularly reviewed and evaluated for accuracy and impartiality.

ChatGPT's accurate and comprehensive metadata records have the potential to enhance the effectiveness of library cataloging systems and improve the search and discovery experience for library users. However, as with any machine learning model, there is a risk of bias that needs to be considered when utilizing ChatGPT. To ensure error-free results, librarians and other information professionals should approach ChatGPT's application systematically, by monitoring and evaluating the training data used to develop the model's capabilities and by regularly curating and updating those data. Additionally, periodic inspection and amendment of the generated records may be necessary to avoid inaccuracies and discrepancies arising from biases in the training data. By taking a careful and deliberate approach to ChatGPT's use, we can ensure that the resulting metadata records are as accurate, comprehensive, and unbiased as possible, while also being mindful of the intellectual property considerations inherent in using a machine learning model to generate content.

TABLES

Table 1. ChatGPT-generated MARC record for the 1996 reprint of
Interview with the Vampire by Anne Rice

Field	Data
LDR	01110cam a2200325 a 4500
001	2740930
005	20040429112254.0
008	960304s1996 nyu 000 1 eng d
010	96011406
020	0345337662 (pbk.)
040	DLC $c DLC $d DLC
100 1	Rice, Anne.
245 1 0	Interview with the vampire / $c by Anne Rice.
260	New York : $b Ballantine Books, $c 1996.
300	372 p. ; $c 18 cm.
336	text $b txt $2 rdacontent
337	unmediated $b n $2 rdamedia
338	volume $b nc $2 rdacarrier
650 0	Vampires $v Fiction.
650 0	Horror tales.
650 0	Vampires $v Fiction.
650 0	Horror tales.

Table 2. WorldCat MARC record for the 1996 reprint of *Interview with the Vampire* by Anne Rice

Field	Data
LDR	c a22 0 4500
001	1052676753
005	20220606044740.3
008	960903r19761996nyua b 001 0 eng
010	$z 75036792
020	9780394498218 (hardcover) ; 0394498216 (hardcover)
040	NTG $b eng $c NTG $d OCLCO $d OCLCF $d OCLCQ $d OCLCO $d OCLCA
049	CRCB
050 4	PS3568.I265 $b I5 1996
082 1 4	[E]
082 0 4	FIC RICE
090	$b
100 1	Rice, Anne, $d 1941-2021.
245 1 0	Interview with the vampire / $c by Anne Rice.
250	Anniversary ed.
260	New York : $b Knopf, $c 1996.
300	340 pages ; $c 22 cm
336	text $b txt $2 rdacontent
337	unmediated $b n $2 rdamedia
338	volume $b nc $2 rdacarrier
500	"Published May 5, 1976 ... reprinted eleven times"--Title...
520 0	In a remote room in a large city, a young reporter sits fa...
600 0 Lestat	$c (Vampire), $d 1760- $v Fiction.
650 0	Vampires $v Fiction.
650 0	Imaginary interviews.
650 6	Vampires $v Romans, nouvelles, etc.
650 6	Entretiens imaginaires.
600 0 Lestat	$c (Vampire), $d 1760- $2 fast $0 (OCoLC)fst00996665
650 7	Imaginary interviews. $2 fast $0 (OCoLC)fst00967566
650 7	Vampires. $2 fast $0 (OCoLC)fst01163968
655 7	Fiction. $2 fast $0 (OCoLC)fst01423787
655 7	Horror fiction. $2 fast $0 (OCoLC)fst01921684
655 7	Horror fiction. $2 lcgft

Table 3. ChatGPT-generated MARC record for *Low* by David Bowie (vinyl)

Field	Description
LDR	01523njm a2200373 i 4500
001	ocn1029184931
005	20220130152943.0
007	sd fsngnn|||eu
008	180430s2018 xx umm n eng d
024 1	00602557675302
028 2	LCRHLP14
028 3	LCRHCD14
040	##$aDLC$beng$cDLC$dOCLCO$dOCoLC
049	##$aOCOZ
100 1	Bowie, David,$eperformer.
245 10	Low$h[sound recording] /$cDavid Bowie.
264 31	[Place of publication not identified] :$b[Label not identified],$c[2018]
300	##$a1 sound disc :$banalog, 33 1/3 rpm ;$c12 in.
336	##$anotated music$bntm$2rdacontent
337	##$audio$sanc$2rdamedia
338	##$aaudio disc$bac$2rdacarrier
500	##$aOriginally released in 1977.
500	##$aTitle from container.
500	##$aLyrics and full credits on container insert.
511 0	David Bowie, vocals, saxophones, guitars, piano, and Chamberlin ; Brian Eno, synthesizer, guitar treatments, and piano ; Carlos Alomar, rhythm guitar ; George Murray, bass guitar ; Dennis Davis, drums and percussion.
518	##$aRecorded August-September 1976 at the Château d'Hérouville, Hérouville, France.
650 _0	$aRock music$y1971-1980.
650 _0	$aRock music$y2011-2020.
650 _0	$aRock music$zEngland.
650 _0	$aVinyl LPs.
700 1	Eno, Brian,$eperformer.
700 1	Alomar, Carlos,$eperformer.
700 1	Murray, George,$eperformer.
700 1	Davis, Dennis,$eperformer.
730 0	Low.
902	##$aMusic$new.

Table 4. WorldCat MARC record for *Low* by David Bowie (vinyl)

Field	Data
LDR	02213cjm a2200529 i 4500
005	20220317111101.1
008	180321t20182017enkrcna zxx d
040	## $aSFR $beng $erda $cSFR $dOCLCF $dOCLCA $dOCLCQ $dOCLCO
024 3	$a0190295842918
028 02	$a0190295842918 $bParlophone
049	## $aCRCB
100 1	$aBowie, David, $ecomposer, performer, producer.
245 10	$aLow / $cDavid Bowie.
264 #1	$a[London] : $bParlophone Records, $c[2018].
264 #4	$c℗2017
300	## $a1 audio disc ; $c12 in.
336	## $aperformed music $bprm $2rdacontent
337	## $aaudio $bs $2rdamedia
338	## $aaudio disc $bsd $2rdacarrier
340	## $avinyl
344	## $aanalog $2rdatr
344	## $c33 1/3 rpm
344	## $dmicrogroove
344	## $gstereo $2rdacpc
500	## $aReissue, remastered, originally released in 1977.
508	## $aProduced by David Bowie and Tony Visconti.
511 0	$aDavid Bowie ; with accompanying musicians.
505 0	$tSpeed of life -- $tBreaking glass -- $tWhat in the world -- $tSound and vision -- $tAlways crashing in the same car -- $tBe my wife -- $tA new career in a new town -- $tWarszawa -- $tArt decade -- $tWeeping wall -- $tSubterraneans.
538	## $aVinyl disc, double-sided; turntable required.
650 0	$aRock music $y1971-1980.
650 0	$aPopular music $y1971-1980.
650 0	$aProgressive rock music.
650 6	$aRock (Musique) $y1971-1980.
650 6	$aMusique populaire $y1971-1980.
650 6	$aRock progressif.
650 7	$aPopular music. $2fast $0(OCoLC)fst01071422

Field	Data
650 7	$aProgressive rock music. $2fast $0(OCoLC)fst01078743
650 7	$aRock music. $2fast $0(OCoLC)fst01099204
648 7	$a1971-1980 $2fast
655 7	$aPopular music. $2fast $0(OCoLC)fst01726706
655 7	$aProgressive rock (Music) $2fast $0(OCoLC)fst01726709
655 7	$aPopular music. $2lcgft
655 7	$aProgressive rock (Music) $2lcgft
655 7	$aMusique populaire. $2rvmgf
655 7	$aRock progressif. $2rvmgf
700 1	$aVisconti, Tony, $eproducer.

Table 5. ChatGPT-generated MARC record for the 1971 German edition of
Pedagogy of the Oppressed by Paolo Freire

Field	Description
LDR	00000nam a2200000 4500
001	ocm04045077
003	OCoLC
005	2023-02-23
008	711215s1971 gw 000 0 ger
020	$a9783801200059
020	$a3801200054
035	$a(OCoLC)40053172
040	$aDLC$cDLC$dOCoLC$dOCLCF
041 1	$ager$hpor
042	$apcc
043	$ae-gx---
050 00	$aLB875.P442
100	1$aFreire, Paulo.
240 10	$aPedagogy of the oppressed.$lGerman
245 10	$aPädagogik der Unterdrückten /$cPaulo Freire ; aus dem Portugiesischen von Walter Jens.
260	$aStuttgart :$bKlett-Cotta Verlag,$c1971.
300	$a218 pages ;$c21 cm
336	$atext$btxt$2rdacontent
337	$aunmediated$bn$2rdamedia
338	$avolume$bnc$2rdacarrier
546	$aIn German.
650 0	$aEducation$xPhilosophy.
650 0	$aPopular education$zBrazil.
650 0	$aSocial change.
651 0	$aBrazil$xSocial conditions.
700 1	$aJens, Walter,$d1923-2013,$etranslator.

Table 6. WorldCat MARC record for the 1971 German edition of
Pedagogy of the Oppressed by Paolo Freire

Field	Description
LDR	cam Mi
001	63439859
005	20220106164408.5
008	830119s1971 gw 000 0 ger d
040	NLGGC $b dut $e fobidrtb $c NLGGC $d HEBIS $d DEBBG $d OCLCQ $d OCLCO
015	72,A06,0123 $2 dnb
016 7	720015707 $2 DE-101
020	3783103746
020	9783783103748
041 1	1 ger $h por
084	5,3 $2 ssgn
084	BU 1410 $2 rvk
084	DD 6455 $2 rvk
084	DT 1000 $2 rvk
090	$b
049	CRCB
100 1	Freire, Paulo, $d 1921-
245 10	Pädagogik der Unterdrückten / $c Paulo Freire ; mit einer Einf. von Ernst Lange ; [autor. Übertr. aus dem Portugesischen].
260	Stuttgart : $b Kreuz-Verlag, $c 1971.
300	218 p. ; $c 21 cm
650 04	Onderdrukking.
650 04	Pedagogiek.
650 7	Bildungspolitik. $2 fes
650 7	Bildungsziel. $2 fes
650 7	Erziehung. $2 fes
650 7	Pädagogik $2 gnd
650 7	Unterdrückung $2 gnd
650 7	Alphabetisierung $2 gnd
650 7	Politische Bildungsarbeit $2 gnd
650 7	Emanzipatorische Erziehung $2 gnd
651 7	Brasilien $2 gnd
650 17	Pedagogiek. $2 gtt

Field	Description
650 17	Onderdrukking. $2 gtt
655 4	Unterdrückte.
655 7	Unterdrückte. $2 swd
029 0	NLGGC $b 830230688
029 1	DEBBG $b BV005751307
029 1	DEBSZ $b 003425525
029 1	HEBIS $b 045711100

Table 7. ChatGPT-generated for the 2018 print edition in Russian of
The Three Body Problem by Cixin Liu

Field	Data
LDR	cam i
001	1037948853
005	20220402070218.7
008	180529s2018 ru 000 1 rus d
040	CLE $b eng $e rda $c CLE $d OCLCF $d OCL $d OCLCQ $d OCLCO
066	$c (N
020	9785040891122
020	5040891121
041 1	$h chi $a rus
043	a-cc---
090	$b
049	CRCB
100 1	$a Liu, Cixin, $e author.
240 10	$a San ti. $l Russian
245 10	$a Задача трех тел / $c Лю Цысинь.
245 10	$a Zadacha trekh tel / $c Liu͡ T͡Sysin'.
264 1	$a Москва : $b Э, $c 2018.
264 1	$a Moskva : $b Ė, $c 2018.
300	$a 462 pages ; $c 22 cm
336	$a text $b txt $2 rdacontent
337	$a unmediated $b n $2 rdamedia
338	$a volume $b nc $2 rdacarrier
490 0	$a Sci-Fi Universe
650 0	Human-alien encounters, fiction
650 0	Imaginary wars and battles, fiction
651 0	China -- History -- Cultural Revolution, 1966-1976 -- Fiction
650 6	Rencontres avec les extraterrestres, romans, nouvelles, etc.
650 6	Guerres et batailles imaginaires, romans, nouvelles, etc.
651 6	Chine -- Histoire -- 1966-1976 (Révolution culturelle) -- Romans, nouvelles, etc.
650 7	Human-alien encounters. $2 fast $0 (OCoLC)fst00963475
650 7	Imaginary wars and battles. $2 fast $0 (OCoLC)fst00967580
651 7	China. $2 fast $0 (OCoLC)fst01206073
647 7	Cultural Revolution (China : 1966-1976) $2 fast $0 (OCoLC)fst01352662

Field	Data
648 7	1966-1976 $2 fast
655 7	Fiction. $2 fast $0 (OCoLC)fst01423787
655 7	History. $2 fast $0 (OCoLC)fst01411628
655 7	Science fiction. $2 fast $0 (OCoLC)fst01726489
655 7	Science fiction. $2 lcgft
700 1	Translation of: Liu, Cixin. San ti.

Table 8. WorldCat record for the 2018 print edition in Russian of
The Three Body Problem by Cixin Liu

Field	Data
LDR	cam i
001	1037948853
005	20220402070218.7
008	180529s2018 ru 000 1 rus d
040	CLE $b eng $e rda $c CLE $d OCLCF $d OCL $d OCLCQ $d OCLCO
066	$c (N
020	9785040891122
020	5040891121
041 1	$h chi $a rus
043	a-cc---
090	$b
049	CRCB
100 1	$a Liu, Cixin, $e author.
240 10	$a San ti. $l Russian
245 10	$a Задача трех тел / $c Лю Цысинь.
245 10	$a Zadacha trekh tel / $c Liū T̄Sẏsin'.
264 1	$a Москва : $b Э, $c 2018.
264 1	$a Moskva : $b Ė, $c 2018.
300	$a 462 pages ; $c 22 cm
336	$a text $b txt $2 rdacontent
337	$a unmediated $b n $2 rdamedia
338	$a volume $b nc $2 rdacarrier
490 0	$a Sci-Fi Universe
650 0	Human-alien encounters, fiction
650 0	Imaginary wars and battles, fiction
651 0	China -- History -- Cultural Revolution, 1966-1976 -- Fiction
650 6	Rencontres avec les extraterrestres, romans, nouvelles, etc.
650 6	Guerres et batailles imaginaires, romans, nouvelles, etc.
651 6	Chine -- Histoire -- 1966-1976 (Révolution culturelle) -- Romans, nouvelles, etc.
650 7	Human-alien encounters. $2 fast $0 (OCoLC)fst00963475
650 7	Imaginary wars and battles. $2 fast $0 (OCoLC)fst00967580
651 7	China. $2 fast $0 (OCoLC)fst01206073
647 7	Cultural Revolution (China : 1966-1976) $2 fast $0 (OCoLC)fst01352662

Field	Data
648 7	1966-1976 $2 fast
655 7	Fiction. $2 fast $0 (OCoLC)fst01423787
655 7	History. $2 fast $0 (OCoLC)fst01411628
655 7	Science fiction. $2 fast $0 (OCoLC)fst01726489
655 7	Science fiction. $2 lcgft
700 1	Translation of: Liu, Cixin. San ti.

Table 9. ChatGPT's original MARC record for "Pathos Y Lagrimas" by Mood Rings

Field	Data
LDR	02461cjm a2200517 a 4500
001	123456789
005	20181025171247.0
007	sd fungnnmmned
008	181025s2013 nyurcn n zxx d
024 8	767870622805
035	(OCoLC)851415773
040	DLC $b eng $c DLC $e rda $d DLC
041 0	$g spa
043	n-mx---
047	vd $a pp
048	ka01
049	DLC
050 00	M1630.18 $b .M66 2013
082 00	782.421660972
100 1	Mood Rings $4 prf
245 10	Pathos Y Lagrimas / $c Mood Rings.
246 3	333
264 1	[Brooklyn, NY] : $b Mexican Summer, $c [2013]
300	1 audio disc : $b analog, 33 1/3 rpm ; $c 7 in.
336	performed music $b prm $2 rdacontent
337	audio $b s $2 rdamedia
338	audio disc $b sd $2 rdacarrier
500	Title from label.
500	B-side label has number "333."
511 0	Mood Rings.
500	"Limited edition" "500 copies."
650 0	Rock music $z Mexico $y 2011-2020.
655 7	Rock music. $2 lcgft
655 7	Popular music. $2 lcgft
700 1	Mood Rings. $4 prf
710 2	Mexican Summer (Firm) $4 pbl.

Table 10. ChatGPT's original record using the Dublin Core for "Pathos Y Lagrimas" by Mood Rings

Field	Data
Title	Pathos Y Lagrimas / Mood Rings
Creator	Mood Rings
Contributor	Mexican Summer
Date	2013
Type	Sound
Format	audio/vinyl
Identifier	333
Language	eng
Relation	Mexican Summer
Source	Mexican Summer
Coverage	Atlanta, GA
Rights	All rights reserved

ENDNOTES

[1] Viriya Taecharungroj, "What Can ChatGPT Do? Analyzing Early Reactions to the Innovative AI Chatbot on Twitter," *Big Data and Cognitive Computing* 7, no. 1: 35, https://doi.org/10.3390/bdcc7010035. GPT (generative pretrained transformer) technologies are structured in a way that involves training language models on a large body of data. Subsequently, fine-tuning processes are applied to enhance the model's performance on specific tasks and domains. Fine-tuning processes are then applied to enhance the model's performance on specific tasks and domains.

[2] Roberto Gozalo-Brizuela and Eduardo C. Garrido-Merchan, "ChatGPT Is Not All You Need. A State of the Art Review of Large Generative AI Models," arXiv:2301.04655v1 [cs.LG]: 15, https://doi.org/10.48550/arXiv.2301.04655.

[3] Taecharungroj, "What Can ChatGPT Do?"

[4] Enkelejda Kasneci et al., "ChatGPT for Good? On Opportunities and Challenges of Large Language Models for Education," EdArXiv (January 30, 2023), https://doi.org/10.35542/osf.io/5er8f.

[5] Kasneci et al., "ChatGPT for Good?"

[6] Brady D. Lund and Ting Wang, "Chatting about ChatGPT: How May AI and GPT Impact Academia and Libraries?" *Library Hi Tech News* 40 (2023), no. 3: 26–29, https://doi.org/10.1108/LHTN-01-2023-0009.

[7] Stephen Atlas, "ChatGPT for Higher Education and Professional Development: A Guide to Conversational AI," (2023): 106–7, https://digitalcommons.uri.edu/cba_facpubs/548/.

[8] Ali Borji, "A Categorical Archive of ChatGPT Failures," arXiv.2302.03494 [cs.CL]: 11, https://doi.org/10.48550/arXiv.2302.03494.

[9] Anne Rice, *Interview with the Vampire* (New York: Alfred K. Knopf, 1996).

[10] David Bowie, *Low*, recorded September–October 1976, RCA Victor, 1977, vinyl LP.

[11] Paolo Freire, *Pädagogik Der Unterdrückten* (Stuttgart: Kreuz-Verlag, 1971).

[12] Cixin Liu, *Задача Трех Тел* (Moscow: Sci-Fi Universe, 2018).

[13] Mood Rings, "Pathos Y Lagrimas," recorded ca. 2013, Mexican Summer, 2013, vinyl single.

[14] Tom B. Brown et al., "Language Models Are Few-Shot Learners," arXiv.2005.14165v4 [cs.CL]: 8–9, https://doi.org/10.48550/arXiv.2005.14165.