

Kuzushiji and Premodern Japanese Studies: Learning Resources and Artificial Intelligence Initiatives

Based on Dr. Tarin Clanuwat's presentation on July 23, 2020

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Physical Resources

児玉幸多 『くずし字用例辞典普及版』 (dictionary [in red])

<https://www.amazon.co.jp/%E3%81%8F%E3%81%9A%E3%81%97%E5%AD%97%E7%94%A8%E4%BE%8B%E8%BE%9E%E5%85%B8-%E6%99%AE%E5%8F%8A%E7%89%88-%E5%85%90%E7%8E%89-%E5%B9%B8%E5%A4%9A/dp/4490103336>

児玉幸多 『漢字くずし方辞典新装版』 (kanji dictionary [in gold])

https://www.amazon.co.jp/dp/4490109075/ref=cm_sw_r_tw_dp_x_G9ufFb1QK1WRM

村山臥龍 『草書のくずし方』 (kanji)

https://www.amazon.co.jp/dp/4544014190/ref=cm_sw_r_tw_dp_x_yevfFb1V5PHTK

集兼築信行 『一週間で読めるくずし字古今集・新古今』 (hiragana)

https://www.amazon.co.jp/dp/4473032663/ref=cm_sw_r_tw_dp_x_HOwfFbQKKA34T

Digital Resources

Rank of character occurrences in 1 million characters

日本古典籍くずし字データセット 文字種（くずし字）一覧 (website) [in Japanese]

<http://codh.rois.ac.jp/char-shape/unicode/>

Mojizo: Nara National Research Institute for Cultural Properties

文簡・くずし字解読システム (website) [in Japanese]

<https://mojizo.nabunken.go.jp/>

*There are PDF guides in English, Korean, Traditional Chinese and Simplified Chinese on the website.

English: https://mojizo.nabunken.go.jp/doc/legend_en.pdf

Online Kuzushiji Dictionary: Historiographical Institute, University of Tokyo

電子くずし字字典: 東京大学史料編纂所 (website) [in Japanese]

<http://wwwap.hi.u-tokyo.ac.jp/ships/shipscontroller>

Select [電子くずし字字典データベース](#) under 辞典・字典 (bottom right column)

KuLa: Kuzushiji Learning App (mobile application) [in Japanese]

App Store (iOS):

<https://apps.apple.com/jp/app/%E3%81%8F%E3%81%9A%E3%81%97%E5%AD%97%E5%AD%A6%E7%BF%92%E6%94%AF%E6%8F%B4%E3%82%A2%E3%83%97%E3%83%AAkuLa/id1076911000>

Google Play (Android):

<https://play.google.com/store/apps/details?id=yuta.hashimoto.kula&hl=ja>

100 Classical Kana Words in Motion (website) [in Japanese]

<http://people.ucalgary.ca/~xyang/kana/kana.html>

An animated guide to writing kuzushiji using primary documents, with links to the full original digital facsimiles at various archives, as well as a transcription and translation of each word.

Kuzushiji Kaidoku Kōza Text Ichiran (Komonjo Kaidoku)

くずし字解読講座テキスト一覧(古文書解読) (website) [in Japanese]

<https://www.tosyokan.pref.shizuoka.jp/contents/history/kuzushi.html>

Full text of a series of essays on kuzushiji and archival documents, provided in PDF format, from Shizuoka Prefectural Central Library.

Waseda University: Reading Kuzushiji (lecture videos) [in Japanese]

<http://course-channel.waseda.jp/subject/contents>

Waseda University offers video course instruction on kuzushiji by Professor Nobuyuki Kanechiku in thirteen videos.

*Course Details:

Teacher : MUNAKATA, Kazushige others/KANECHIKU, Nobuyuki

Class name : Reading Kuzushiji

Year : 2020

01. 「第一講 変体仮名を読もう (1) 第一章 変体仮名とは何か?」
02. 「第一講 変体仮名を読もう (1) 第二章 古筆切を読む (1)」
03. 「第二講 変体仮名を読もう (2) 第二章 古筆切を読む (2)」
04. 「第二講 変体仮名を読もう (2) 第三章 明治の教科書を読む」
05. 「第三講 変体仮名を読みながら (1) 第二章 極札 (伝一条兼良筆源氏物語切1)」
06. 「第三講 変体仮名を読みながら (1) 第三章 ミセケチ (伝一条兼良筆源氏物語切2)」
07. 「第四講 変体仮名を読みながら (2) 第二章 声点 (伝一条兼良筆源氏物語切3)」

- 08. 「第四講 変体仮名を読みながら（2）第三章 ツレ（伝一条兼良筆源氏物語切4）」
- 09. 「第四講 変体仮名を読みながら（2）第四章 伝冷泉為相筆源氏物語切」
- 10. 「第五講 書写形式のさまざま（1）第二章 物語の書写形式」
- 11. 「第五講 書写形式のさまざま（1）第三章 歌集の書写形式」
- 12. 「第六講 書写形式のさまざま（2）第二章 伊勢物語－集付と勘物」
- 13. 「第六講 書写形式のさまざま（2）第三章 新古今集－選者名注記ほか」

*Note: If you cannot play the video in Google Chrome, you can play it by changing your settings with the following steps.

1. Open the video playback page in Google Chrome, and click the symbol circled with an eye (i) at the left end of the address bar.
2. There is a Flash item in the pull-down menu, so select "Always allow this site".
3. After refreshing the screen or switching screens with the F5 key, the movie will play correctly.

Komonjo Navi 古文書なび: 古文書解読支援サイト (website) [in Japanese]

<http://komonjo.rokumeibunko.com/>

古文書なび provides a basic introduction to kuzushiji and komonjo reading, including books and guides useful for beginners, explanations about the structure of premodern documents and their writing styles, materials for beginners, and some basic practice materials such as calligraphic cards of the Hyakunin isshū.

古筆 仮名 bot @detchobon (Twitter account) [in Japanese]

<https://twitter.com/detchobon>

Photos of easy hentaigana examples for some quick reading practice with translation.

仮名の古筆の画像と釈文と原字とをつぶやく。字体の解説も。
粘葉本和漢朗詠集・伏見院宸翰筑後切（ColBase より切抜）・小倉色紙
（『集古十種』より）・和歌体十種（ColBase より切抜）

Machine Learning and Kuzushiji Recognition Models

Kuzushiji Dataset (Created by NIJL and CODH)

日本古典籍くずし字データセット (website) [in Japanese]

<http://codh.rois.ac.jp/char-shape/>

*Created from 44 books from Edo period. (Mostly woodblock printed). With over 1 million characters and over 4300 character types

Kuzushiji Single Character Recognition (KogumaNet)

AI くずし字認識（一文字）(website) [in Japanese]

<http://codh.rois.ac.jp/char-shape/app/single-mobilenet/>

Kuzushiji Recognition Viewer: IIF Curation Viewer

くずし字認識ビューア (website) [in both Japanese and English]

English: <http://codh.rois.ac.jp/char-shape/app/icv-kuzushiji/?lang=en>

Japanese: <http://codh.rois.ac.jp/char-shape/app/icv-kuzushiji/?lang=ja>

*Provide KuroNet Service from other website

1. Check if the images are in IIF format.
2. Drag the IIF Manifest URI into KuroNet Viewer

Kuzushiji Multiple Character Recognition (KuroNet)

KuroNet くずし字認識サービス (website) [in Japanese]

<http://codh.rois.ac.jp/kuronet/>

KuroNet Service: CODH Booklist (3126 books) 日本古典籍データセット(website) [in Japanese]

<http://codh.rois.ac.jp/pmjt/>

Digital Orientalist: Tutorial on How to Use KuroNet by James H. Morris (website) [in English]

<https://digitalorientalist.com/2020/02/18/cursive-japanese-and-ocr-using-kuronet/>

KuroNet Papers

KuroNet: Pre-Modern Japanese Kuzushiji Character Recognition with Deep Learning (ICDAR, Sep 2019) (open access) [in English]

Tarin Clanuwat, Alex Lamb, Asanobu Kitamoto

<https://arxiv.org/abs/1910.09433>

KuroNet: Regularized Residual U-Nets for End-to-End Kuzushiji Character Recognition (Springer Nature Computer Science Special Issue on Document Analysis and Recognition, May 2020) (open access) [in English]

Alex Lamb, Tarin Clanuwat & Asanobu Kitamoto

<https://link.springer.com/article/10.1007/s42979-020-00186-z>

List of digital libraries in IIIF format

Database of Premodern Japanese Works, NIJL

新日本古典籍総合データベース, 国文学研究資料館 (website)

[in both Japanese and English]

English: <https://kotenseki.nijl.ac.jp/?ln=en>

Japanese: <https://kotenseki.nijl.ac.jp/?ln=ja>

Digital Collections of Keio University Library

慶應義塾大学メディアセンターデジタルコレクション (website)

[in both Japanese and English]

English: <http://dcollections.lib.keio.ac.jp/en>

Japanese: <http://dcollections.lib.keio.ac.jp/ja>

National Diet Library Digital Collections 国立国会図書館デジタルコレクション (website) [in both Japanese and English]

English: https://dl.ndl.go.jp/?_lang=en

Japanese: https://dl.ndl.go.jp/?_lang=ja

CODH Premodern Japanese Text Dataset 日本古典籍データセット (website) [in Japanese]

<http://codh.rois.ac.jp/pmjt/>

Other Recommended IIIF Sites by CODH おすすめ IIIF サイト (website) [in Japanese]

<http://codh.rois.ac.jp/software/iiif-curation-viewer/resource/>

***Note: Waseda Kotenseki Database is **not** in IIIF format.

Resources Guide

UBC Library: Japanese Kuzushiji & Hentaigana Resources by Tomoko Kitayama Yen (website) [in English]

<https://guides.library.ubc.ca/kuzushiji>

What can I do with a B.A. in Japanese Studies?: Kuzushiji Reading Resources by Paula Curtis (website) [in English]

<https://shinpaideshou.com/2016/02/17/kuzushiji-reading-resources/>

Digital Orientalist: Apps for Learning Cursive Japanese by James H. Morris (website) [in English]

<https://digitalorientalist.com/2018/07/12/apps-for-learning-cursive-japanese/>

Kuzushiji/Hentaigana Initiatives

Crowdsourced Online Transcription Project: Minna de Honkoku みんなで翻刻 (website) [in both Japanese and English]

<https://honkoku.org/>

*Features transcription editor, transcription timeline and help from AI models

**Click [A/文] button on the top menu bar (between the search box and Twitter icon) to switch between English or Japanese interface

University of Cambridge Summer School in Japanese Early Modern Palaeography

<https://wakan.cambridge.com/>

University of Pennsylvania Kuzushiji Reading Group Summer Workshop

<https://pennkuzushiji.wordpress.com/>

University of Chicago Kuzushiji Summer Workshop

<https://lucian.uchicago.edu/blogs/kuzushiji/>

Collections Related to Japanese Studies at UBC

*UBC Collection is IIF-compatible. To select IIF url to use in external IIF-viewer, click on “Embed” tab below the image you would like to use.

One Hundred Poets | 百人一首 (website) [in English]

<https://open.library.ubc.ca/collections/hundred>

Originating from the personal collection of Professor Joshua Mostow of the UBC Department of Asian Studies, this digital collection consists at present of 74 books and 20 different card sets relating to the poetry anthology Hyakunin Isshu 百人一首 (One Hundred Poets, One Poem Each, hereafter HNIS), edited by the famous poet and scholar, Fujiwara no Teika (1162–1241) in the 1230s. It is unquestionably the most famous poetry anthology in the Japanese tradition.

Japanese Maps of the Tokugawa Era (website) [in English]

<https://open.library.ubc.ca/collections/tokugawa>

UBC Library's Rare Books and Special Collections holds one of the world's largest collections of maps and guidebooks of the Japanese Tokugawa period, ca. 1600–1868. The collection varies in both format and size: items range from small single-sheet maps to more than thirty square feet, and also include a ceramic plate, a woodblock, and maps in scroll format.

Meiji at 150 Collection (website) [in English]

<https://open.library.ubc.ca/collections/meiji150>

The *Meiji at 150* collection consists of visual images that were produced primarily in Japan during the Meiji period (1868-1912). They include 21 Meiji-era woodblock prints, 1 hand-painted kimono book, a 7-volume book on the Ainu, 1 tourist album, 2 Japanese-Canadian booklets, and 41 photographs from the John Cooper Robinson collection.

Meiji at 150 Project (website) [in English]

<https://meijiat150.arts.ubc.ca/>

The Meiji at 150 Project is comprised of several series of events and projects.

- The Meiji at 150 Lecture Series
- The Meiji at 150 Workshop Series
- The Meiji at 150 Digital Teaching Resource
- The Meiji at 150 Podcast Series hosted by Tristan Grunow