The University of Pennsylvania Collection of Sumerian Lexicography

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Published here is the Sumerian lexicography collection housed in The Babylonian Section of the University of Pennsylvania Museum of Archaeology and Anthropology. The collection was digitized in May 2023 by Dr Anna Glenn on behalf of the Institut für Assyriologie und Hethitologie of the Ludwig-Maximilians-Universität München, with the kind permission of Prof. Steve Tinney and Dr Philip Jones.

This collection represents the ultimate expression of the great lexicographical compilations that were once a sine qua non for basic work in Assyriology. Other Sumerologists created similar collections: for instance, D. O. Edzard, whose Zettelkasten has now been digitised at LMU Munich;¹ and M. Yoshikawa, whose collection of $\pm 40,000$ lexical cards has been digitised by the National Museum of Ethnology.² No other collection, however, can compare in scale or quality with that of the University of Pennsylvania: indeed, this card file represents the foundation on which Å. W. Sjöberg intended to build what was the culmination of a lifetime of painstaking work, the *Pennsylvania Sumerian Dictionary* (PSD).

Given the extremely laconic nature of the introductions to the PSD volumes ("brief and modest almost to a fault," in W. W. Hallo's words),³ little is publicly known about the genesis of this treasure of philological industry. In several scattered publications, Sjöberg is quoted as stating that he wrote his first card for the collection in 1948 or 1949,⁴ i.e., even before he began his studies in Heidelberg with A. Falkenstein. The bulk of the Philadelphia collection, however, consists of a very homogeneous group of cards, around 200,000,⁵ which were compiled in the late 1970s and early 1980s. P. Michalowski, who arrived in Philadelphia in 1979 and worked on the project for two years, recalls the genesis of this collection as follows:⁶ the dictionary staff was tasked with creating editions of all texts to be indexed. Once completed, these editions were brought to Sjöberg, who carefully corrected and collated them, often with the help of the tablets in the collection. Once Sjöberg was satisfied with the edition, he proceeded to index them word for word, using his typewriter. The clattering of the keys on Sjöberg's typewriter was a fixture in the Babylonian Section of those years.

These cards were the pride and joy of the PSD staff, and the care with which they were compiled will be evident to any user: not a single correction can be found on them, and errors are extremely rare. After one summer in Sweden, Å. W. Sjöberg brought back a sizable stack of European-sized cards to Philadelphia: instead of trimming them to fit the trays, he employed A. Guinan, then a student, to retype them.⁷ Sjöberg stated: "After we got our grant in 1976 from the National Endowment for the Humanities, I sat here, planted, stuck to my seat, for five years. I did these."⁸

Sjöberg jokingly said once: "there are some who make cards and some who think."⁹ In reality, for Sjöberg the mechanical process of typing the cards was inextricably linked to the intellectual process of writing the dictionary. In a brief history of Near Eastern lexicography, R. Borger describes this link as follows:

Für das Pennsylvania Sumerian Dictionary hat der Herausgeber Sjöberg es allerdings vorgezogen, das ganze Material dieser Textgruppe [scil. of the Sumerian literary corpus], soweit er Aufnahme in das Wörterbuch für sinnvoll hält, persönlich mit der Schreibmaschine wörterbuchreif auf Karten zu verzetteln und diese Zettel selber in die Kartei einzufügen. Diese Zettel hat er sofort so angeordnet, wie er später den Lexikonartikel aufzubauen gedenkt. Das ist, wie mir scheint, ein sehr vernünftiges Verfahren und es wird seinen Nachfolgern die Fortführung seiner Arbeit erheblich erleichtern.¹⁰

When the PSD was transformed into a regularly updated digital project (ePSD, currently in its 2.7 version), the editorial principles were radically transformed, and the manually compiled catalogue was replaced by a vastly larger digital corpus. The PSD lexical catalogue, however, is still useful, in particular because many of the texts edited by the dictionary staff at that time have not yet received modern editions, and because the user can find in these cards the

¹ https://www.zettelkasten.assyriologie.uni-muenchen.de/

² https://htq.minpaku.ac.jp/databases/sumer/index-eng.html

³ Hallo 1985, 14.

⁴ 1948 according to Andersson (2019, 15); 1949 according to Cambpell (1984).

⁵ Several sources speak of "400,000 cards": thus Campbell 1984; McPherson 1984, 61; and Andersson 2019, 15.

⁶ Interview with P. Michalowski, 12.05.2023.

⁷ A. Guinan, email 18.05.2023.

⁸ Campbell 1984.

⁹ A. Guinan, email 18.05.2023.

¹⁰ Borger 1999, 127.

interpretations of Sjöberg and his team as well as elements that normally escape the indexing of lexicographers, such as particles or suffixes. Thus, at the beginning of each letter, the user will find examples of variations between phonemes $(d/g, d/l, k/\tilde{g}, etc.)$ in manuscripts of texts. These "dictionary-ready" cards offer a window into the PSD volumes that were never published.

It is planned to convert these scans into text, and to link the results with other lexical collections, in particular with the Münchner Sumerischer Zettelkasten. It seems appropriate, however, to offer to the interested student these raw scans as soon as they were ready.

Andersson, J. (2019): In Memoriam Åke W. Sjöberg, Orientalia Suecana 62-68, 13-17

Campbell, C. (1984): After 5,000 Years, a Dictionary of Sumerian, The New York Times 18 April 1984

McPherson, W. (1984): The New Sumerian Dictionary, Biblical Archaeology Review 10/5, 61

Borger, R. (1999): Träume eines interessierten Außenstehenden. Von der Zukunft des Wörterbuchs der ägyptischen Sprache, in: S. Grunert/I. Hafemann (ed.), Textcorpus und Wörterbuch. Aspekte zur ägyptischen Lexikographie. Probleme der Ägyptologie 14. Leiden/Boston/Köln, 117–129

Hallo, W. W. (1985): The Pennsylvania Sumerian Dictionary (PSD): A Review Article, JCS 37, 114-126

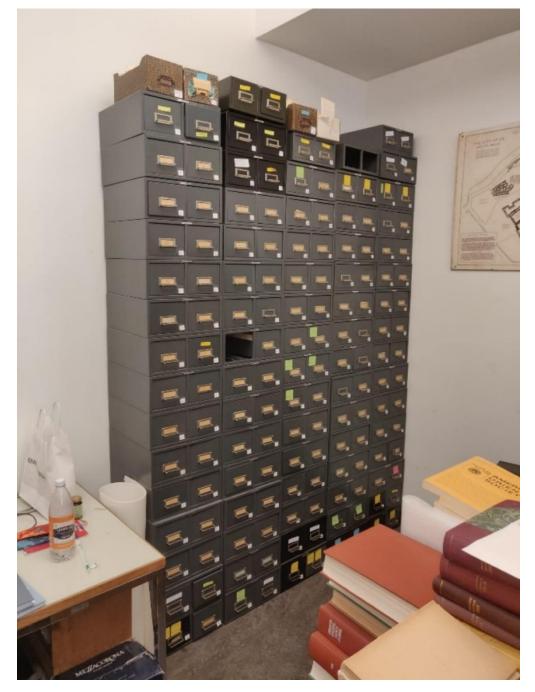
Documentation

Anna Glenn

Drawer names and contents

Main Catalogue

I assigned each drawer a grid-based number: the bottom row is Row 01 and the left-most column is Column A. The main catalogue, located in the back corner of the tablet room, comprises columns A–J:



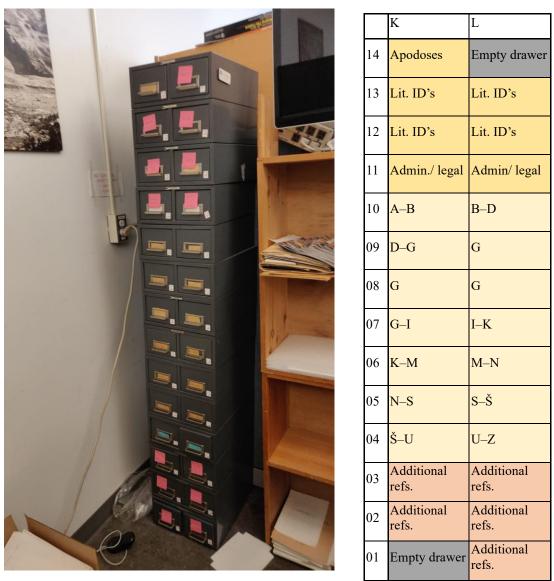
	А	В	С	D	Е	F	G	Н	Ι	J
16	5		Empty drawer	Empty drawer					Empty drawer	Empty drawer
15		Empty drawer	Empty drawer	Empty drawer	Empty drawer	Empty drawer	No drawer	No drawer	Empty drawer	Empty drawer
14	A1	A ₂	Additional refs.	Misc.	Misc.	Biblio- graphy, numerals	Misc.	Misc.	Additional refs.	PSD B cross-refs.
13	A ₃	A4	E ₆	G 1	\mathbf{K}_1	K2	N5	N_6	T ₂	T3
12	A5	A_6	G2	G3	K3	K4	N7	N_8	T4	U1
11	A ₇	B_1	G4	G5	K5	K6	N9	P/Q	U ₂	U ₃
10	B ₂	B3	G ₆	G7	K7	K ₈	Q/R	S_1	U4	U5
09	D_1	D2	No drawer	G9	K9	L1	S ₂	S ₃	U ₆	U7/W
08	D3	D4	G10	G11	L ₂	L ₃	S4	S5	Z_1	Z2
07	D5	D ₆	G12	G13	M_1	M2	S ₆	S ₇	Z3	Z4
06	D7	D8	G14	H_1	M3	M4	S ₈ /Ṣ	Š1	Divine names A–D	Divine names E
05	D9	E1	H ₂	I/J ₁	M5	M ₆	Š ₂	Š3	Divine names G– N	Divine names N–Z
04	E2	E3	I/J ₂	I/J ₃	M7/N1	N2	Š4	Š₅	Personal names	Temple names
03	E4	E5	I/J4	I/J ₅	N ₃	N4	Š ₆	T ₁	Geographic names A–L	Geographic names M– Z
02	Refs. from MSL	Empty drawer	Misc. from corner desk	Misc. from corner desk	Sumerian lit. ID's	Texts in JCS	G _{8a} (GIM)	G8b (GIM)	Akkadian	Empty drawer
01		Hittite logograms	L4; misc.	Misc.	Additional refs.	Misc.	Additional refs.	Additional refs.	Akkadian	Akkadian

Sumerian words A–Z				
Proper nouns				
Akkadian				
Other				
Additional references				
Miscellaneous				
Empty drawer/no drawer				

There were five boxes located on top of the filing cabinets, which I labeled Box 01–Box 05. Boxes 01–04 contain miscellaneous lexicographical cards. Box 05 contains museum administrative information on tablets in the Princeton Theological Seminary collection.

Older Catalogue

The older, largely hand-written catalogue, located in one of the carrels, comprises columns K-L:



A box of cards containing museum administrative data was found in front of this set of drawers (Box 06). I did not scan this box.

Additional Boxes/Drawers

Two boxes of miscellaneous lexicographical cards were found on a bookshelf between the BiOr volumes (Boxes 07–08). Three small boxes of tablet IDs were found on the green cabinet by the entrance to the tablet-room library (Boxes 09–11). A single drawer of tablet IDs was found on the desk opposite the main catalogue (Drawer X01).



Boxes 07–08

Boxes 09-11

Drawer X01

Scanned files

Each folder corresponds to a physical drawer or box. A folder name comprises a 3-digit number, indicating the order in which I scanned the drawers/boxes, followed by an underscore and the drawer/box name.

The first 107 folders contain the main catalogue (Sumerian words A–Z). Folders 108–115 contain proper nouns. Folder 116 contains bibliographical abbreviations and Sumerian numerals. The remaining folders contain other types of data or miscellaneous cards.

File names

I used several different naming conventions, depending on the type of data recorded. Note that if a drawer contained multiple data types (e.g., references to be added and miscellaneous cards), if the files are sorted alphabetically, this may not reflect their actual order within the drawer. To view the files in the order in which they appear in the drawer, sort by date created.

- Main catalogue: Files are named [Sumerian letter] + [6-digit number]. The numbers span drawers and start over again with each new letter.
- Proper nouns: Files are named [class of proper noun (DN = Divine name, PN = personal name, GN = geographical name, TN = temple name)] + [6-digit number]. The numbers start over again with each new class.
- Bibliographical abbreviations: Files are named Bib + [6-digit number].
- Sumerian numerals: Files are named Num + [6-digit number].
- **References to add:** A number of drawers contain cards that seem to have been prepared as references to add to the catalogue but that have not yet been sorted into it. Some of these cards occur in alphabetical series with a bibliographical card at the beginning making it clear where the references were drawn from; more often, a series of cards is unlabeled and includes references from multiple works. I labeled these cards according to the drawer or box in which they were found. Files are named Add_ + [drawer/box name]_ + 6-digit number. The numbers start over again with each new drawer/box, with a few exceptions where a series clearly continues into a second drawer/box (e.g. 117_DrawerG01 and 118_DrawerH01). Note that if a drawer/box also contains miscellaneous cards, the alphabetical order of the scanned files will be different from the order of the cards in the drawer/box.

- Miscellaneous: A number of drawers contain miscellaneous cards, some of which seem to have been pulled from the main catalogue or the older catalogue, others of which are one-off, often hand-written notes. Many of these sets are related to A-words and B-words and were presumably used in preparation for the published PSD volumes. Like references to add, I named these files according to the drawer or box in which they were found. Files are named Misc_ + [drawer/box name]_ + 6-digit number. The numbers start over again with each new drawer/box. Note that if a drawer/box also contains references to add, the alphabetical order of the scanned files will be different from the order of the cards in the drawer/box.
- Hittite logograms: 127_Drawer B01 contains Sumerian logograms in Hittite. Files are named Hittite + [6-digit number].
- MSL IV references: 128_DrawerA02 contains references from MSL IV. Files are named MSL-IV + [6-digit number].
- **PSD B cross-references**: 129_DrawerJ14 contains cross-references for PSD B. Files are named **B-CrossRefs + [6-digit number]**.
- Akkadian: 132_DrawerI02, 133_DrawerI01, and 134_DrawerJ01 contain Akkadian references. Files are named Akk + [6-digit number]. The numbers span drawers.
- **IDs of Sumerian literary texts**: Several drawers/boxes contain identifications of Sumerian literary texts. Files are named **LitIDs_ + [drawer/box name(s)]_ + [6-digit number]**. The numbers start over again with each new drawer/box (or series of drawers, in the case of 165_DrawerK13–168_DrawerL12).
- **Texts in JCS:** 138_DrawerF02 contains texts treated in early JCS volumes. Files are named **JCS_ + [6-digit number]**.
- Older catalogue: Lexicographical files in the older catalogue are named OldCat_ + [Sumerian letter] + [6-digit number]. The numbers span drawers and start over again with each new letter.
- Additional references for the older catalogue: Files are named OldCat_ + Add_ + [drawer/box name]_ + [6-digit number]. The numbers start over again with each new drawer/box.
- **Omen apodoses**: 162_DrawerK14 contains Akkadian omen apodoses. Files are named **Apodoses + [6-digit number]**.
- Legal/administrative documents: 163_DrawerL11 and 164_DrawerK11 contain cards dealing with Ur III legal/administrative documents. Files are named LegAdm + [6-digit number]. The numbers span both drawers.
- **Text IDs:** 171_Box10 and 174_DrawerX01 contain IDs for texts other than Sumerian literary texts. Files are named **TextID_ + [drawer/box number]_ + [6-digit number]**. The numbers start over again with each drawer.
- Miscellaneous cards from the "corner desk": 172_DrawerD02 and 173_DrawerC02 contain cards with miscellaneous notes and are each labeled "Misc. Cards from Corner Desk." Files are named **CornerDesk + [6-digit number]**. The numbers span both drawers.

	-	1
Scan Order	Drawer/Box Name	Contents
001	Drawer A14	Α
002	Drawer B14	A (cont.)
003	Drawer A13	A (cont.)
004	Drawer B13	A (cont.)
005	Drawer A12	A (cont.)
006	Drawer B12	A (cont.)

File contents

007	Drawer A11	A (cont.)
008	Drawer B11	В
009	Drawer A10	B (cont.)
010	Drawer B10	B (cont.)
011	Drawer A09	D
012	Drawer B09	D (cont.)
013	Drawer A08	D (cont.)
014	Drawer B08	D (cont.)
015	Drawer A07	D (cont.)
016	Drawer B07	D (cont.)
017	Drawer A06	D (cont.)
018	Drawer B06	D (cont.)
019	Drawer A05	D (cont.)
020	Drawer B05	E
021	Drawer A04	E (cont.)
022	Drawer B04	E (cont.)
023	Drawer A03	E (cont.)
024	Drawer B03	E (cont.)
025	Drawer C13	E (cont.)
026	Drawer D13	G/Ĝ
027	Drawer C12	G/\hat{G} (cont.)
028	Drawer D12	G/\hat{G} (cont.)
029	Drawer C11	G/\hat{G} (cont.)
030	Drawer D11	G/\hat{G} (cont.)
031	Drawer C10	G/\hat{G} (cont.)
032	Drawer D10	G/\hat{G} (cont.)
033	Drawer D09	G/\hat{G} (cont.)
		note: GIM is located in two separate drawers, G02 and H02. I forgot to scan them within the G/\hat{G} sequence—I scanned them instead as nos. 075 and 076
034	Drawer C08	G/\hat{G} (cont.)
035	Drawer D08	G/\hat{G} (cont.)
036	Drawer C07	G/\hat{G} (cont.)
037	Drawer D07	G/\hat{G} (cont.)
038	Drawer C06	G/\hat{G} (cont.)
039	Drawer D06	Ĥ
040	Drawer C05	Ĥ (cont.)
041	Drawer D05	Ι
042	Drawer C04	I (cont.)

043	Drawer D04	I (cont.)
044	Drawer C03	I (cont.)
045	Drawer D03	I (cont.)
046	Drawer E13	K
047	Drawer F13	K (cont.)
048	Drawer E12	K (cont.)
049	Drawer F12	K (cont.)
050	Drawer E11	K (cont.)
051	Drawer F11	K (cont.)
052	Drawer E10	K (cont.)
053	Drawer F10	K (cont.)
054	Drawer E09	K (cont.)
055	Drawer F09	L
056	Drawer E08	L (cont.)
057	Drawer F08	L (cont.)
058	Drawer C01	LUGAL
059	Drawer C01 part 2	Miscellaneous cards located at the back of the drawer
060	Drawer E07	L (cont.); M
061	Drawer F07	M (cont.)
062	Drawer E06	M (cont.)
063	Drawer F06	M (cont.)
064	Drawer E05	M (cont.)
065	Drawer F05	M (cont.)
066	Drawer E04	M (cont.); N
067	Drawer F04	N (cont.)
068	Drawer E03	N (cont.)
069	Drawer F03	N (cont.)
070	Drawer G13	N (cont.)
071	Drawer H13	N (cont.)
072	Drawer G12	N (cont.)
073	Drawer H12	N (cont.)
074	Drawer G11	N (cont.)
075	Drawer G02	GIM
076	Drawer H02	GIM (cont.)
077	Drawer H11	P
078	Drawer G10	P (cont.)
079	Drawer H10	S
080	Drawer G09	S (cont.)

081	Drawer H09	S (cont.)
082	Drawer G08	S (cont.)
083	Drawer H08	S (cont.)
084	Drawer G07	S (cont.)
085	Drawer H07	S (cont.)
086	Drawer G06	S (cont.); Ş
087	Drawer H06	Š
088	Drawer G05	Š (cont.)
089	Drawer H05	Š (cont.)
090	Drawer G04	Š (cont.)
091	Drawer H04	Š (cont.)
092	Drawer G03	Š (cont.)
093	Drawer H03	Š (cont.); T
094	Drawer I13	T (cont.)
095	Drawer J13	T (cont.)
096	Drawer I12	T (cont.)
097	Drawer J12	U
098	Drawer I11	U (cont.)
099	Drawer J11	U (cont.)
100	Drawer I10	U (cont.)
101	Drawer J10	U (cont.)
102	Drawer I09	U (cont.)
103	Drawer J09	U (cont.); W
104	Drawer I08	Z
105	Drawer J08	Z (cont.)
106	Drawer I07	Z (cont.)
107	Drawer J07	Z (cont.)
108	Drawer I06	Divine names
109	Drawer J06	Divine names (cont.)
110	Drawer I05	Divine names (cont.)
111	Drawer J05	Divine names (cont.)
112	Drawer I04	Divine names (cont.); personal names
113	Drawer J04	Temple names
114	Drawer I03	Geographical names
115	Drawer J03	Geographical names (cont.)
116	Drawer F14	Bibliographical abbreviations; Sumerian numerals
117	Drawer G01	Additional references
118	Drawer H01	Additional references

119	Drawer E01	Additional references
120	Drawer C14	Additional references
121	Drawer I14	Additional references; miscellaneous notes on LA ₂
122	Drawer F01	Additional references; miscellaneous notes on AMA
123	Drawer A01	Additional references; miscellaneous notes on A-words
124	Drawer G14	Additional references; miscellaneous notes LIB, lexicographical references for gal + gu-la
125	Drawer D01	Miscellaneous notes on A-words
126	Drawer H14	Miscellaneous notes on B-words
127	Drawer B01	Hittite logograms (this drawer is labeled "Sumerian Logograms Hittite CDH")
128	Drawer A02	References from MSL IV
129	Drawer J14	Cross-references for PSD B
130	Box 01	Additional references; miscellaneous notes; metal tablet (used as divider?); 3 photos of tablets
131	Drawer D14	Miscellaneous notes, esp. A-words
132	Drawer I02	Akkadian A–G
133	Drawer I01	additional Akkadian refs; Akkadian Š–Z, I–N
134	Drawer J01	Akkadian P–Š; personal names; divine names; miscellaneous notes
135	Drawer E02	IDs of Sumerian literary texts
136	Drawer E14	Additional references; miscellaneous notes, esp. on L-words, A-words, B-words
137	Box 02	Miscellaneous notes
138	Drawer F02	Texts treated in early JCS volumes; at the back of this drawer is a small box, scanned separately
139	Box inside Drawer F02	Miscellaneous notes
140	Box 03	Miscellaneous notes, esp. on AK and other A-words
141	Box 04	Miscellaneous notes; additional references
141 (number accidentally repeated)	Drawer K10	Older catalogue: A
142	Drawer L10	Older catalogue: B, D
143	Drawer K09	Older catalogue: D (cont.), G/Ĝ
144	Drawer L09	Older catalogue: G/Ĝ (cont.)
145	Drawer K08	Older catalogue: G/Ĝ (cont.)
146	Drawer L08	Older catalogue: G/Ĝ (cont.)
147	Drawer K07	Older catalogue: G/Ĝ (cont.), Ḫ, I
148	Drawer L07	Older catalogue: I (cont.), K
149	Drawer K06	Older catalogue: K (cont.), L, M
150	Drawer L06	Older catalogue: M (cont.), N
151	Drawer K05	Older catalogue: N (cont.), P, Q, R, S

152	Drawer L05	Older catalogue: S (cont.), Š
153	Drawer K04	Older catalogue: Š (cont.), T, U
154	Drawer L04	Older catalogue: U (cont.), W, Z
155	Drawer K03	Additional references for the older catalogue
156	Drawer L03	Additional references for the older catalogue
157	Drawer K02	Additional references for the older catalogue
158	Drawer L02	Additional references for the older catalogue
159	Drawer L01	Additional references for the older catalogue
160	Box 07	Additional references for the older catalogue
161	Box 08	Additional references for the older catalogue
162	Drawer K14	Akkadian omen apodoses (this drawer is labeled "Apodoses")
163	Drawer L11	Legal/administrative documents: text info, transliterations
164	Drawer K11	Legal/administrative documents: vocabulary
165	Drawer K13	IDs of Sumerian literary texts
166	Drawer L13	IDs of Sumerian literary texts (cont.)
167	Drawer K12	IDs of Sumerian literary texts (cont.)
168	Drawer L12	IDs of Sumerian literary texts (cont.)
169	Box 09	IDs of Sumerian literary texts, with many handwritten notes
170	Box 11	IDs of Sumerian literary texts
171	Box 10	Text IDs, with many handwritten notes
172	Drawer D02	Miscellaneous notes (this drawer is labeled "Misc. Cards from Corner Desk")
173	Drawer C02	Miscellaneous notes (this drawer is labeled "Misc. Cards from Corner Desk")
174	Drawer X01	Text IDs, with many handwritten notes
175	Box 05	Museum administrative data on tablets in the Princeton Theological Seminary collection

Scan Settings and Notes

The cards were scanned on a Fujitsu Fi-6800 scanner at 400 dpi.

Blank-page detection

Almost all of the drawers were scanned in duplex with blank-page detection enabled;¹¹ this means that the reverse side of a card was not scanned if it was blank (true for the vast majority of cards). Blank-page detection was disabled for tabbed dividers, so that these appear in the scans regardless of whether they had any content; this means that the reverse sides of tabbed dividers are also present.

The cards in the main catalogue are unruled, and blank-page detection worked well for eliminating blank reverses. Many of the miscellaneous and older cards, however, are ruled; for these cards, blank-page detection didn't always recognize the reverse of a card as blank. This is especially true of the

¹¹ 001_DrawerA14 and the first half of 002_DrawerB14 were scanned in simplex, before I realized some cards were 2-sided. The same is true of 132_DrawerI02 and the beginning of 133_DrawerI01.

Akkadian cards (132_DrawerI02, 133_DrawerI01, 134_DrawerJ01), which I scanned before I learned how to adjust blank-page detection sensitivity.¹²

Organizational notes

Any notes or comments that I added within the scanning process include the signature "-A.G.", with only a few exceptions.

Organizational labels: For some of the drawers, especially those containing miscellaneous cards and/or additional references, I had added post-it-note labels to organize the contents. I included these post-it notes as individual files in the scan sequence.

Paperclips: When a sequence of cards was attached with a paperclip (or, occasionally, a rubber band or a staple), I inserted a pink "Start Paperclip" card at the beginning of the sequence and a turquoise "End Paperclip" card at the end of the sequence.

Cards backwards: A series of cards can sometimes be placed in the drawer backwards, with the reverses facing the front of the drawer. Since it is impossible to tell obverses from reverses in the scans, and reverses are usually omitted from the scans entirely, this is difficult to recognize in the scanned files. Rather than turning the sequence of cards the right direction, I scanned them in the order in which they were found in the drawer. This results in the logically "last" card of the backwards-facing sequence appearing *first* in the scans, and the logically "first" card appearing last. When I noticed such sequences, I inserted a "Cards backwards START" card at the beginning of the scans and a "Cards backwards END" card at the end of the scans. Unfortunately, I did not always notice sequences of backwards-facing cards during the scanning process.

Object used as divider: When an object—e.g., a folded-up piece of paper, a metal drawer-part—was used as a divider, I inserted a card with the text "Object used as divider" to be scanned in its place. When an index-card was rotated vertically to serve as a divider, I simply scanned it with its vertical rotation, unless it was blank; if it was blank, I inserted a card with the text "Rotated blank card as divider."

¹² Note that 132_DrawerI02 and the beginning of 133_DrawerI01 were scanned in simplex.