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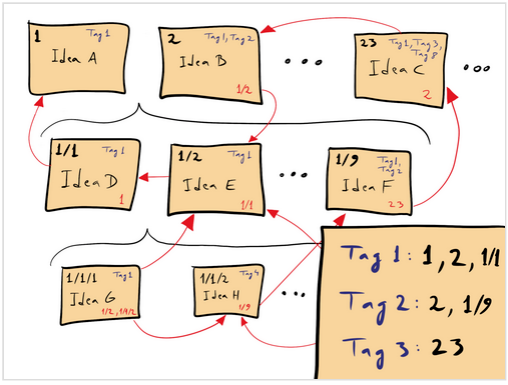
Zettelkasten

A ***Zettelkasten*** (German: 'slipbox', plural ***Zettelkästen***) or **card file** consists of small items of information stored on *Zetteln* (German: 'slips'; singular: *Zettel*), paper slips or cards, that may be linked to each other through subject headings or other metadata such as numbers and tags.[1][2] It has often been used as a system of note-taking and personal knowledge management for research, study, and writing.[3]

In the 1980s, the card file began to be used as metaphor in the interface of some hypertextual personal knowledge base software applications such as NoteCards.[4] In the 1990s, such software inspired the invention of wikis.[5]



A German scholar's physical *Zettelkasten* or card file



A card file for personal knowledge management can be made up of notes containing numbers, tags (blue) and cross-references to other notes (red). A tag index (bottom right) allows topical cross-referencing.

Use in personal knowledge management

As used in research, study, and writing, a card file consists of many individual notes with ideas and other short pieces of information that are taken down as they occur or are acquired.[6] The notes may be numbered hierarchically so that new notes may be inserted at the appropriate place, and contain metadata to allow the note-taker to associate notes with each other.[6] For example, notes may contain subject headings or tags that describe key aspects of the note, and they may reference other notes. The numbering, metadata, format, and structure of the notes are subject to variation depending on the specific method employed.[7]

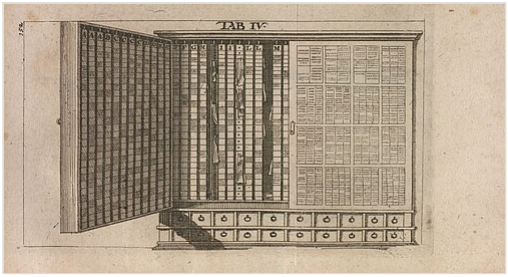
The system not only allows a researcher to store and retrieve information related to their research, but has also long been used to enhance creativity.[7][8][9]

History

The paper slip or card has long been used by individual researchers and by organizations to manage information, including the specialized form of the card catalog.[10]

Coming from a commonplace book tradition,[11] Conrad Gessner (1516–1565) invented his own method of organization in which the individual notes could be rearranged at any time. In retrospect, his recommendation of gluing slips onto bound sheets[12] was an innovation in moving from commonplace books to index cards as a form for scholarly information management.[13]:212–225

The first early modern card cabinet was designed by 17th-century English inventor Thomas Harrison (c. 1640s). Harrison's manuscript on the "ark of studies"[15] (*Arca studiorum*) describes a small cabinet that allows users to excerpt books and file their notes in a specific order by attaching pieces of paper to metal hooks labeled by subject headings.[16] Harrison's system was edited and improved by Vincent Placcius in his well-known handbook on excerpting methods (*De arte excerpendi*, 1689).[14][17] The German polymath Gottfried Wilhelm Leibniz (1646–1716) was known to have relied on Harrison's invention in at least one of his research projects.[17]



Filing cabinet for paper slips in Vincent Placcius's *De arte excerpendi* (1689)[14]

In 1767, Carl Linnaeus used "little paper slips of a standard size" to record information for his research.[18] Over 1,000 of Linnaeus's precursors to the modern index card containing information collected from books and other publications and measuring five by three inches are housed at the Linnean Society of London.[16]

Later in his own commonplace, under the heading "My way of collecting materials for future writings" (translated), Johann Jacob Moser (1701–1785) described the algorithms with which he filled his card boxes.[7]

The 1796 idyll *Leben des Quintus Fixlein* by German Romantic writer Jean Paul is structured according to the *Zettelkasten* in which the protagonist keeps his autobiography.[7][19] Paul ultimately assembled 12,000 paper scraps into his commonplace books over the course of his lifetime.[20]

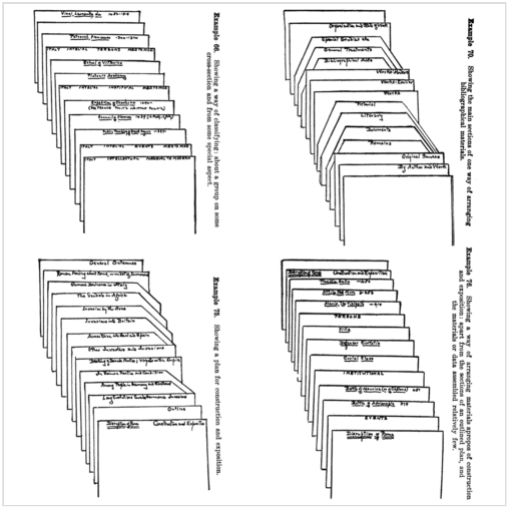
French scholars Charles-Victor Langlois and Charles Seignobos, in their *Introduction to the Study of History* (1897), recommended that historians take notes on paper slips or cards, and they commented: "Every one admits nowadays that it is advisable to collect materials on separate cards or slips of paper."[21] However, some decades later other scholars said that in America in the 1890s the card-file note-taking system was "still something of a novelty".[22]

20th century

Antonin Sertillanges' book *The Intellectual Life* (1921) outlines in Chapter 7 a version of the card-file method.[23] The book was published in French, and translated into English, in many editions over the span of 60 years.[23] In it, Sertillanges recommends taking notes on slips of "strong paper of a uniform size" either self made with a paper cutter or by "special firms that will spare you the trouble, providing slips of every size and color as well as the necessary boxes and accessories". He also recommends a "certain number of tagged slips, guide-cards, so as to number each category visibly after having numbered each slip, in the corner or in the middle". He goes on to suggest creating a catalog or index of subjects with divisions and subdivisions and recommends the "very ingenious system", the decimal system, for organizing one's research. For the details of this he refers the reader to *Organization of Intellectual Work: Practical Recipes for Use by Students of All Faculties and Workers* (1918) by Paul Chavigny.[24] Sertillanges recommends against the previous patterns seen with commonplace books where one does note taking in books or on slips of paper which might be pasted into books as they don't "easily allow classification" or "readily lend themselves to use at the moment of writing".[23]

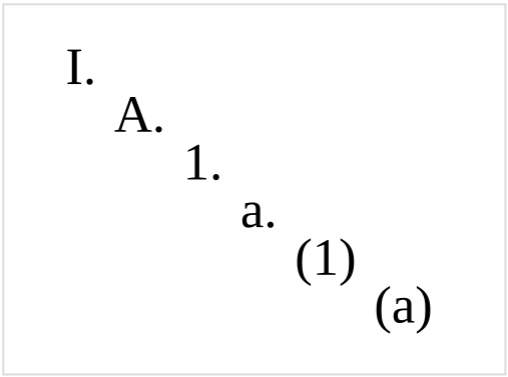
Some examples of English-language research manuals with instructions for a card-file note-taking system are: Earle W. Dow's *Principles of a Note-system for Historical Studies* (1924),[25] Homer C. Hockett's *Introduction to Research in American History* (1931),[26] Sidney and Beatrice Webb's *Methods of Social*

Study (1932),[27] Carter Alexander's *How to Locate Educational Information and Data* (four editions from 1935 to 1958),[6] Cecil B. Williams's *A Research Manual* (three editions from 1940 to 1963),[28] Louis R. Gottschalk's *Understanding History* (1951),[29] Chauncey Sanders's *An Introduction to Research in English Literary History* (1952),[30] Jacques Barzun and Henry F. Graff's *The Modern Researcher* (six editions from 1957 to 2004),[31] and *A Guide to Historical Method* (three editions from 1969 to 1980) by Robert Jones Shafer and colleagues.[32] A German-language manual on research methods that included instructions for a *Zettelkasten* was *Technique of Scholarly Work* (multiple editions from the 1930s to 1970) by Johannes Erich Heyde.[13]:288[33]



Examples of ways of arranging a card-file note-system, from Earle W. Dow's *Principles of a Note-system for Historical Studies* (1924)[25]

American historian Frederic L. Paxson (1877–1948) filed notes on 3×5-inch paper slips daily throughout his career, and by the time of his death all the slips filled about 80 wooden file drawers.[34] The notes were ordered chronologically and topically, with cross-references on each card to related subject headings, linking each subject through various stages in time.[34]



Example of a numbering hierarchy for organizing notes in a card file, recommended in Carter Alexander's *How to Locate Educational Information and Data* (1935)[6]

German philosopher and cultural critic Walter Benjamin (1892–1940) used a card-file note-taking system with a numbering system to create his *Arcades Project* written between 1927 and 1940. Though the project was terminated by Benjamin's death, it was later edited and published in a final form.[35]

French theorist, philosopher, and writer Roland Barthes (1915–1980) kept a *fichier boîte* or index card file beginning in 1943 until his death. Curator Nathalie Léger has indicated that there are 12,250 slips in Roland Barthes's bequest at the Institut Mémoires de l'édition contemporaine (IMEC).[36][37] Louis-Jean Calvet explains that in writing *Michelet*, Barthes used his notes on index cards to try out various combinations of cards to both organize them as well as "to find correspondences between them".[9][38] In addition to using his card file for producing his published works, Barthes also used his note taking system for teaching. His final course on the topic of *The Neutral*, which he taught as a seminar at Collège de France, was contained in four bundles consisting of 800 cards which contained everything from notes, summaries, figures, and bibliographic entries.[9] In his autobiographical *Roland Barthes*, Barthes reproduces three of his index cards in facsimile.[39] Published posthumously in 2010, Barthes's *Mourning Diary* was created from a collection of 330 of his index cards focusing on his mourning following the death of his mother. The book jacket of the book prominently features one of his index cards from the collection.[40] In a well known photo of Barthes in his office taken by Henri Cartier-Bresson in 1963, the author is pictured with his card files on the shelf behind him.[36][41]

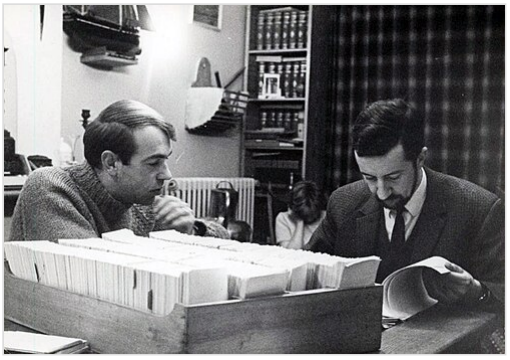
Starting in the 1940s, German philosopher and intellectual historian Hans Blumenberg (1920–1996) compiled more than 30,000 cards into his *Zettelkasten*, which now occupy 32 conservation boxes at the German Literature Archive in Marbach.[20][42] Blumenberg was inspired by the previous notetaking work and output of Georg Christoph Lichtenberg who used waste books or *sudelbücher* as he called them.[20]

In the creation of the *Great Books of the Western World* (1952), which also includes *A Syntopicon*, Mortimer J. Adler and many collaborators created a large shared collection of tagged and indexed cards to collate the ideas and information for their series.[43]

Argentine-Canadian philosopher and physicist Mario Bunge (1919–2020), who published about 70 books and 540 articles,[44] used index cards in boxes to teach and to write publications starting in the mid-1950s.[45]

One researcher famous for his extensive use of the method was the German sociologist Niklas Luhmann (1927–1998). Starting in 1952–1953, Luhmann built up a *Zettelkasten* of some 90,000 index cards for his research, and credited it for enabling his extraordinarily prolific writing (including about 50 books and 550 articles).[46] He linked the cards together by assigning each a unique index number based on a branching hierarchy.[46] These index cards were digitized and made available online in 2019.[47] Luhmann described the *Zettelkasten* as part of his research into systems theory in the essay "*Kommunikation mit Zettelkästen*".[48]

Other well known German *Zettelkasten* users include Arno Schmidt (who used a large card file to write *Zettels Traum*, published in 1970), Walter Kempowski, Friedrich Kittler, and Aby Warburg, whose works along with those of Paul, Blumenberg, and Luhmann appeared in the 2013 exhibition "*Zettelkästen*. Machines of Fantasy" at the Museum of Modern Literature, Marbach am Neckar.[49]



Writer and lexicographer Roland Desnerck with a lexical card file in the 1960s

Australian writer Kate Grenville, in a chapter of *The Writing Book* (1990) devoted to using "piles" of notes as part of the writing process, said that screenwriters are known to use index cards to help organise their scripts,[50] and American writer Anne Lamott devoted a chapter to a writer's use of index cards in her book *Bird by Bird* (1994).[51]

German writer Michael Ende kept a *Zettelkasten*, and in 1994, a year prior to his death, he published *Michael Endes Zettelkasten: Skizzen und Notizen* (translation: *Michael Ende's File-card Box: Drafts and Notes*), an anthology of some of his writing as well as observations and aphorisms from his card file.[52]

Twentieth-century American comedians Phyllis Diller (with 52,000 3×5-inch index cards),[53] Joan Rivers (over a million 3×5-inch index cards),[54] Bob Hope (85,000 pages in files),[55] Milton Berle and George Carlin (paper notes in folders)[56] were known for keeping joke or gag files throughout their careers. They often compiled their notes from scraps of paper, receipts, laundry lists, and matchbooks which served the function of waste books. U.S. president Ronald Reagan kept quotes and aphorisms which he frequently used for speeches in a card collection.[57]

Literary references

- Jean Paul's idyll *The Life of Quintus Fixlein* (1796) has the subtitle *as Drawn from Fifteen Boxes of Paper Slips*.[7][19]
- In the preface to the novel *Penguin Island* (1908) by Nobel laureate Anatole France, a scholar is drowned by an avalanche of multicolored index cards which formed a gigantic whirlpool

streaming out of his overflowing card boxes.[58]

- In chapter two of Robert M. Pirsig's philosophical novel *Lila: An Inquiry into Morals* (1991), the main character describes an index card system of notes he's keeping for a book. While the German word *Zettelkasten* isn't used, the descriptor "slips" is used repeatedly (as opposed to index card which appears four times) and the system has the general form and function of a card file as commonly used by writers.
- In *Paper Machines* (2002), Markus Krajewski's history of card catalogs (*Zettelkataloge*) and card files (*Zettelkästen*), as both thinking devices and precursors of today's computers, Krajewski draws connections to literary authors like Jonathan Swift, Georg Christoph Lichtenberg, Gotthold Ephraim Lessing, Heinrich Heine, Goethe, Jean Paul, Vladimir Nabokov, Arno Schmidt, and Nicholson Baker.[10]

See also

- Argument map – Visual representation of the structure of an argument
- Bullet journal – Method for note taking
- Comparison of note-taking software – Comparison of computer software designed for taking notes
- Edge-notched card – Index card with notches to store data
- ENQUIRE – Tim Berners-Lee's program, predecessor to the World Wide Web, that used a card file metaphor
- Hipster PDA – Satirical pen and paper personal organizer
- Issue-based information system – Argumentation scheme
- Kanban – Japanese business method
- Memex – Hypothetical proto-hypertext system
- Outliner – Type of software to organize texts
- Personal information management – Tools and systems for managing one's own data
  - List of personal information managers
- Personal wiki
  - List of wiki software § Personal wiki software
- Reference management software – Software to use for recording and utilising bibliographic citations (references)
- Tag (metadata) § Knowledge tags

References

1. Moeller, Hans-Bernhard (1989) [1971]. "Perception, Word-Play, and the Printed Page: Arno Schmidt and his Poe Novel" (https://archive.org/details/contemporarylite56detr/page/392). In Matuz, Roger (ed.). *Contemporary Literary Criticism: Excerpts from Criticism of the Works of Today's Novelists, Poets, Playwrights, and Other Creative Writers*. Vol. 56. Detroit; London: Gale Research. p. 392 (https://archive.org/details/contemporarylite56detr/page/392). ISBN 978-0-8103-4430-3. ISSN 0091-3421 (https://search.worldcat.org/issn/0091-3421). " 'Zettel' is German for an index card, and a 'Zettelkasten' is a writer's index card file. Schmidt prepared for *Zettels Traum* with a collection of more than 100,000 index cards in his legendary card file."

2. Eco, Umberto (2015) [1977]. "The Work Plan and the Index Cards". *How to Write a Thesis*. Translated by Caterina Mongiat Farina and Geoff Farina. Cambridge, MA: MIT Press. pp. 107–144. doi:10.7551/mitpress/10029.003.0008 (https://doi.org/10.7551%2Fmitpress%2F10029.003.0008). ISBN 978-0-262-52713-2. JSTOR j.ctt17kk9g5.10 (https://www.jstor.org/stable/j.ctt17kk9g5.10). OCLC 897401730 (https://search.worldcat.org/oclc/897401730). A book on the same topic published a decade earlier was: Teitelbaum, Harry (1966). "Note-taking" (https://archive.org/details/howtowritetheses0000teit/page/29). *How to Write Theses: A Guide to the Research Paper*. Monarch Notes and Study Guides. Vol. 888–8. New York: Distributed by Monarch Press. pp. 29–39 (https://archive.org/details/howtowritetheses0000teit/page/29). ISBN 978-0-671-18726-2. OCLC 189085 (https://search.worldcat.org/oclc/189085).
3. Mattern, Shannon (December 2020). "The Spectacle of Data: A Century of Fairs, *Fiches*, and Fantasies". *Theory, Culture & Society*. **37** (7–8): 133–155 (146). doi:10.1177/0263276420958052 (https://doi.org/10.1177%2F0263276420958052). S2CID 225124110 (https://api.semanticscholar.org/CorpusID:225124110). "Over the decades, cards put to personal use have provided aesthetic and intellectual inspiration to myriad artists, writers, and designers."

4. Conklin, Jeff (September 1987). "Hypertext: An Introduction and Survey" (http://www.cognexus.org/Hypertext-_An_Introduction_and_Survey_(1987).pdf) (PDF). *Computer*. **20** (9): 17–41. doi:10.1109/MC.1987.1663693 (https://doi.org/10.1109%2FMC.1987.1663693). S2CID 9188803 (https://api.semanticscholar.org/CorpusID:9188803). Archived (https://web.archive.org/web/20170813004401/http://www.cognexus.org/Hypertext-_An_Introduction_and_Survey_(1987).pdf) (PDF) from the original on 2017-08-13. "One kind of manual hypertext is the traditional use of 3×5 index cards for note taking. Note cards are often referenced to each other, as well as arranged hierarchically (for example, in a shoebox or in rubber-banded bundles). A particular advantage of note cards is that their small size modularizes the notes into small chunks. The user can easily reorganize a set of cards when new information suggests a restructuring of the notes. ... Perhaps the best known version of full hypertext [software] is the NoteCards system developed at Xerox PARC."

   Neuwirth, Christine; Kaufer, David; Chimera, Rick; Gillespie, Terilyn (November 1987). "The Notes Program: A Hypertext Application for Writing from Source Texts". *HYPERTEXT '87: Proceedings of the ACM Conference on Hypertext: November 13–15, Chapel Hill, North Carolina*. New York: Association for Computing Machinery. pp. 121–141. doi:10.1145/317426.317437 (https://doi.org/10.1145%2F317426.317437). ISBN 978-0-89791-340-9. OCLC 612420419 (https://search.worldcat.org/oclc/612420419). "The Notes program has an analog in earlier technology: 3×5 note cards. The following section, which outlines some key components in the writing process, lays the theoretical groundwork for exploring the benefits of note cards for writers, the limitations of conventional note cards, and the expected benefits of computer-based note cards. ... At least one of the general network-based editors, NoteCards, could probably be specialized to support the task-optimized linking of the Notes program."

   Halasz, Frank G. (July 1988). "Reflections on NoteCards: Seven Issues for the Next Generation of Hypermedia Systems" (https://doi.org/10.1145%2F48511.48514). *Communications of the ACM*. **31** (7): 836–852. doi:10.1145/48511.48514 (https://doi.org/10.1145%2F48511.48514). "NoteCards was designed to help people work with ideas. Its intended users are authors, researchers, designers, and other intellectual laborers engaged in analyzing information, constructing models, formulating arguments, designing artifacts, and generally processing ideas. The system provides the user with a network of electronic notecards interconnected by typed links. ... Fileboxes are specialized cards that can be used to organize or categorize large collections of notecards."

   Lin, Liang-Yi (1989). *Learning to Use Hypertext Systems with Metaphors: An Interface Design Perspective* (https://www.proquest.com/docview/303766704) (Ed.D. thesis). Urbana, IL: University of Illinois at Urbana-Champaign. ISBN 979-8-207-82289-1. OCLC 23103660 (https://search.worldcat.org/oclc/23103660). ProQuest 303766704 (https://www.proquest.com/docview/303766704). "NoteCards provides the user with a "semantic network" of electronic notecards interconnected by typed links. This network serves as a medium in which the user can represent collections of related ideas. It also functions as a structure for organizing, storing, and retrieving information. In the NoteCards system, a note card is an electronic generalization of the 3 by 5 paper note card. ... Links are used to interconnect individual note cards into networks or structures of related cards. ... The note card metaphor embodied some of the important elements of hypertext systems which the book metaphor did not have."

   Nielsen, Jakob (1995). "NoteCards (1985)" (https://archive.org/details/multimediahypert00niel/page/47). *Multimedia and Hypertext: The Internet and Beyond*. Boston: AP Professional. pp. 47–50 (https://archive.org/details/multimediahypert00niel/page/47). ISBN 978-0-12-518408-3. OCLC 31709144 (https://search.worldcat.org/oclc/31709144). "NoteCards may be the most famous of the original hypertext research systems ... Each node is a single *notecard* ... The *links* are typed connections between cards."

5. Leuf, Bo; Cunningham, Ward (2001). *The Wiki Way: Quick Collaboration on the Web* (https://archive.org/details/isbn_9780201714999). Boston: Addison-Wesley. pp. 15 (https://archive.org/details/isbn_9780201714999/page/15), 365 (https://archive.org/details/isbn_9780201714999/page/365). ISBN 978-0-201-71499-9. OCLC 45715320 (https://search.worldcat.org/oclc/45715320). "Ward called it '*the simplest online database that could possibly work*'. In 1994, he wanted a quick way to collaboratively publish software patterns on the Web. Ideas that had developed from his work with program development and HyperCard stacks went into it, and the first 'wiki server' was born. ... Wiki shares some history with the use of index cards in object-oriented programming. Both Wiki and CRC Cards credit an unpublished HyperCard stack as their common ancestor."
6. Alexander, Carter; Burke, Arvid James (1958) [1935]. "Note-taking in Work with Library Materials" (https://hdl.handle.net/2027/uc1.b3389054?urlappend=%3Bseq=190). *How to Locate Educational Information and Data: An Aid to Quick Utilization of the Literature of Education* (https://catalog.hathitrust.org/Record/001163857) (4th ed.). New York: Teachers College, Columbia University. pp. 168–180 (https://hdl.handle.net/2027/uc1.b3389054?urlappend=%3Bseq=190). hdl:2027/uc1.b3389054 (https://hdl.handle.net/2027%2Fuc1.b3389054?urlappend=%3Bseq=190). OCLC 14603864 (https://search.worldcat.org/oclc/14603864). This book, which was also translated into Spanish, grew out of a pamphlet titled *Educational Research* first published in 1927. For other editions, see: "Alexander, Carter 1881–1965" (https://worldcat.org/identities/lccn-no2003068107/). *WorldCat*. Retrieved 16 September 2022.
7. Haarkötter, Hektor. " 'Alles Wesentliche findet sich im Zettelkasten' " (https://www.heise.de/tp/features/Alles-Wesentliche-findet-sich-im-Zettelkasten-3398418.html). *heise online* (in German). Archived (https://web.archive.org/web/20200715113150/https://www.heise.de/tp/features/Alles-Wesentliche-findet-sich-im-Zettelkasten-3398418.html) from the original on 2020-07-15. Retrieved 2020-05-31.
8. Cevolini, Alberto (2016). "Storing Expansions: Openness and Closure in Secondary Memories". In Cevolini, Alberto (ed.). *Forgetting Machines: Knowledge Management Evolution in Early Modern Europe*. Library of the written word. Vol. 53. Leiden; Boston: Brill. p. 155–187 (158). doi:10.1163/9789004325258_005 (https://doi.org/10.1163%2F9789004325258_005). ISBN 978-90-04-27846-2. OCLC 951955805 (https://search.worldcat.org/oclc/951955805). "The user may enlarge his collection of extracts, but he can also multiply the number of cross-references, links, and pointers ... Historical research has demonstrated that scholars became aware of this structural feature between the seventeenth and eighteenth centuries. For example, according to Christoph Meiners, the connection of facts and thoughts which are entrusted to a private card file can produce a substantial number of combinations and insights that otherwise might not have existed."
9. Wilken, Rowan (2010). "The card index as creativity machine" (https://culturemachine.net/wp-content/uploads/2019/01/373-604-1-PB.pdf) (PDF). *Culture Machine*. **11**: 7–30. Retrieved 23 April 2022.
10. Krajewski, Markus (2011) [2002]. *Paper Machines: About Cards & Catalogs, 1548–1929*. History and Foundations of Information Science. Vol. 3. Translated by Peter Krapp. Cambridge, MA: The MIT Press. doi:10.7551/mitpress/9780262015899.001.0001 (https://doi.org/10.7551%2Fmitpress%2F9780262015899.001.0001). ISBN 978-0-262-01589-9. JSTOR j.ctt5hhmbf (https://www.jstor.org/stable/j.ctt5hhmbf). OCLC 698360129 (https://search.worldcat.org/oclc/698360129).
11. Havens, Earle (2001). *Commonplace Books: A History of Manuscripts and Printed Books from Antiquity to the Twentieth Century*. New Haven: Beinecke Rare Book & Manuscript Library, Yale University. pp. 34–35. ISBN 978-0-8457-3137-6. OCLC 47767194 (https://search.worldcat.org/oclc/47767194).

12. Zedelmaier, Helmut (2016). "Christoph Just Udenius and the German *ars excerpendi* around 1700: On the Flourishing and Disappearance of a Pedagogical Genre". In Cevolini, Alberto (ed.). *Forgetting Machines: Knowledge Management Evolution in Early Modern Europe*. Library of the written word. Vol. 53. Leiden; Boston: Brill. p. 102. doi:10.1163/9789004325258_008 (https://doi.org/10.1163%2F9789004325258_008). ISBN 978-90-04-27846-2. OCLC 951955805 (https://search.worldcat.org/oclc/951955805). "His [Johann Friedrich Blumenbach's] example is the sixteenth-century Swiss naturalist Conrad Gessner, who recommended gluing slips onto bound sheets."
13. Blair, Ann M. (2010). *Too Much to Know: Managing Scholarly Information before the Modern Age*. New Haven: Yale University Press. doi:10.12987/9780300168495 (https://doi.org/10.12987%2F9780300168495). ISBN 978-0-300-11251-1. JSTOR j.ctt1nptsm (https://www.jstor.org/stable/j.ctt1nptsm). OCLC 601347978 (https://search.worldcat.org/oclc/601347978). S2CID 187487133 (https://api.semanticscholar.org/CorpusID:187487133).
14. Placcius, Vincent (1689). *De arte excerpendi vom gelehrten Buchhalten liber singularis, quo genera & praecepta excerpendi, ab aliis hucusq[ue]; tradita omnia, novis accessionibus aucta, ordinata methodo exhibentur, et suis quaeque materiis applicantur ...* (https://archive.org/details/bub_gb_IgMVAAAAQAAJ) (in Latin). Stockholm; Hamburg: Apud Gottfried Liebezeit, bibliop. literisq[ue] Spiringianis. p. 138 (https://archive.org/details/bub_gb_IgMVAAAAQAAJ/page/n156). OCLC 22260654 (https://search.worldcat.org/oclc/22260654).
15. Harrison, Thomas (2017). Cevolini, Alberto (ed.). *The Ark of Studies*. De diversis artibus. Vol. 102. Turnhout, Belgium: Brepols. ISBN 978-2-503-57523-0. OCLC 1004589834 (https://search.worldcat.org/oclc/1004589834).
16. Blei, Daniela (2017-12-01). "How the Index Card Cataloged the World" (https://web.archive.org/web/20210508022255/https://www.theatlantic.com/technology/archive/2017/12/how-the-index-card-catalogued-the-world/547271/). *The Atlantic*. Archived from the original (https://www.theatlantic.com/technology/archive/2017/12/how-the-index-card-catalogued-the-world/547271/) on 2021-05-08. Retrieved 4 July 2021.
17. Malcolm, Noel (September 2004). "Thomas Harrison and his 'ark of studies': an episode in the history of the organization of knowledge". *The Seventeenth Century*. **19** (2): 196–232 (220–221). doi:10.1080/0268117X.2004.10555543 (https://doi.org/10.1080%2F0268117X.2004.10555543). S2CID 171203209 (https://api.semanticscholar.org/CorpusID:171203209).
18. Müller-Wille, Staffan; Charmantier, Isabelle (March 2012). "Natural history and information overload: The case of Linnaeus" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878424). *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*. **43** (1): 4–15. doi:10.1016/j.shpsc.2011.10.021 (https://doi.org/10.1016%2Fj.shpsc.2011.10.021). PMC 3878424 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878424). PMID 22326068 (https://pubmed.ncbi.nlm.nih.gov/22326068).
19. Paul, Jean (2013) [1796]. *Leben des Quintus Fixlein, aus funfzehn Zettelkästen gezogen. Nebst einem Mustheil und einigen Jus de tablette. Geschichte meiner Vorrede zur zweiten Auflage des Quintus Fixlein*. Werke: historisch-kritische Ausgabe (in German). Vol. VI, 1. Berlin: de Gruyter. doi:10.1515/9783110303711 (https://doi.org/10.1515%2F9783110303711). ISBN 978-3-484-10917-9. OCLC 881295864 (https://search.worldcat.org/oclc/881295864).
20. Helbig, Daniela K. (17 April 2019). "Ruminant machines: a twentieth-century episode in the material history of ideas" (https://jhiblog.org/2019/04/17/ruminant-machines-a-twentieth-century-episode-in-the-material-history-of-ideas/). *Journal of the History of Ideas Blog*. Retrieved 8 June 2021.
21. Langlois, Charles Victor; Seignobos, Charles (1912) [1897]. *Introduction to the Study of History* (https://www.gutenberg.org/ebooks/29637). Translated by G. G. Berry. New York: Henry Holt and Company. OCLC 2849202 (https://search.worldcat.org/oclc/2849202).
22. Good, Carter V.; Scates, Douglas E. (1954). "Note-taking and Note Systems" (https://archive.org/details/methodsofresearc0000good/page/187). *Methods of Research: Educational, Psychological, Sociological*. New York: Appleton-Century-Crofts. pp. 187–188 (https://archive.org/details/methodsofresearc0000good/page/187). doi:10.1037/13206-004 (https://doi.org/10.1037%2F13206-004). OCLC 310881 (https://search.worldcat.org/oclc/310881).

23. Antonin, Sertillanges (1948). *The Intellectual Life: Its Spirit, Conditions, Methods* (https://archive.org/details/intellectuallife0000sert). Translated by Mary Ryan. Westminster, Maryland: The Newman Press. pp. 186–198 (https://archive.org/details/intellectuallife0000sert/page/186). OCLC 6033719 (https://search.worldcat.org/oclc/6033719). Translated from the 1934 new French edition. For other editions, see: "Sertillanges, A.-D 1863–1948" (https://worldcat.org/identities/lccn-n89632727/). *WorldCat*. Retrieved 3 November 2021.
24. Chavigny, Paul (1918). *Organisation du travail intellectuel: recettes pratiques à l'usage des étudiants de toutes les facultés et de tous les travailleurs* (https://hdl.handle.net/2027/loc.ark:/13960/t3cz41v8p) (in French). Paris: Delagrave. hdl:2027/loc.ark:/13960/t3cz41v8p (https://hdl.handle.net/2027%2Floc.ark%3A%2F13960%2Ft3cz41v8p). OCLC 489977122 (https://search.worldcat.org/oclc/489977122).
25. Dow, Earle W. (1924). *Principles of a Note-system for Historical Studies* (https://books.google.com/books?id=evg1AAAAMAAJ). Century Historical Series. New York: The Century Company. OCLC 4562633 (https://search.worldcat.org/oclc/4562633).
26. Hockett, Homer Carey (1948) [1931]. "Note-taking" (https://archive.org/details/introductiontore0000home_o8w7/page/46). *Introduction to Research in American History* (2nd ed.). New York: Macmillan. pp. 46–55 (https://archive.org/details/introductiontore0000home_o8w7/page/46). OCLC 1374221 (https://search.worldcat.org/oclc/1374221).
27. Webb, Sidney; Webb, Beatrice (1932). "The Art of Note-taking" (https://archive.org/details/b31357891/page/83). *Methods of Social Study*. London; New York: Longmans, Green & Co. pp. 83–97 (https://archive.org/details/b31357891/page/83). OCLC 904856 (https://search.worldcat.org/oclc/904856). An earlier version of this chapter was published as: Webb, Beatrice (1926). "The Art of Note-taking" (https://archive.org/details/myapprenticeship0000webb_d0l9/page/412). *My Apprenticeship*. London; New York: Longmans, Green & Co. pp. 412–421 (https://archive.org/details/myapprenticeship0000webb_d0l9/page/412). ISBN 978-0-404-14045-8. OCLC 392496 (https://search.worldcat.org/oclc/392496).
28. Williams, Cecil B. (1963) [1940]. "Notes and Note-taking" (https://archive.org/details/researchmanualfo03will/page/95). *A Research Manual for College Studies and Papers* (3rd ed.). New York: Harper & Row. pp. 95–105 (https://archive.org/details/researchmanualfo03will/page/95). OCLC 1264058764 (https://search.worldcat.org/oclc/1264058764). Chapter 9, "Notes Into Manuscript", describes how notes from a card file are used during the process of writing a work. The first edition, titled *A Research Manual*, was co-authored with Allan H. Stevenson.
29. Gottschalk, Louis Reichenthal (1969) [1950]. "Note-taking" (https://archive.org/details/understandinghis0000gott/page/73). *Understanding History: A Primer of Historical Method* (2nd ed.). New York: Knopf. pp. 73–85 (https://archive.org/details/understandinghis0000gott/page/73). OCLC 3861 (https://search.worldcat.org/oclc/3861).
30. Sanders, Chauncey (1952). "Tools of Research" (https://archive.org/details/introductiontore0000sand/page/86). *An Introduction to Research in English Literary History: With a Chapter on Research in Folklore*. New York: Macmillan. pp. 86–88 (https://archive.org/details/introductiontore0000sand/page/86). OCLC 990373 (https://search.worldcat.org/oclc/990373).
31. Barzun, Jacques; Graff, Henry F. (2004) [1957]. *The Modern Researcher* (https://archive.org/details/modernresearcher0000barz_b3i6) (6th ed.). Belmont, CA: Thomson/Wadsworth. pp. 22–31 (https://archive.org/details/modernresearcher0000barz_b3i6/page/22), 176–183 (https://archive.org/details/modernresearcher0000barz_b3i6/page/176). ISBN 978-0-15-505529-2. OCLC 53244810 (https://search.worldcat.org/oclc/53244810). The authors opine that "the researcher who has to travel is better off with notebooks than with stacks of cards" (23). Chapter 8, "Organizing", describes how notes from a card file are used during the process of writing a work.
32. Shafer, Robert Jones; et al., eds. (1980) [1969]. "Research Notes" (https://archive.org/details/guidetohistorica0000shaf/page/117). *A Guide to Historical Method*. The Dorsey Series in History (3rd ed.). Homewood, Ill.: Dorsey Press. pp. 117–126 (https://archive.org/details/guidetohistorica0000shaf/page/117). ISBN 978-0-256-02313-8. OCLC 6400352 (https://search.worldcat.org/oclc/6400352).

33. Heyde, Johannes Erich (1933). *Technik des wissenschaftlichen Arbeitens: eine Anleitung, besonders für Studierende* (in German) (4th ed.). Berlin: Junker und Dünnhaupt. OCLC 38252126 (https://search.worldcat.org/oclc/38252126). For other editions, see: "Heyde, Johannes Erich 1892–1979" (https://worldcat.org/identities/lccn-no97060626/). *WorldCat*. Retrieved 22 August 2022.
34. Pomeroy, Earl (March 1953). "Frederic L. Paxson and His Approach to History". *The Mississippi Valley Historical Review*. **39** (4): 673–692. doi:10.2307/1895394 (https://doi.org/10.2307%2F1895394). JSTOR 1895394 (https://www.jstor.org/stable/1895394).
35. Benjamin, Walter; Tiedemann, Rolf (1999). *The Arcades Project* (https://archive.org/details/arcadesproject0000benj). Translated by Howard Eiland and Kevin McLaughlin. Cambridge, Mass.: Belknap Press. ISBN 978-0-674-04326-8. OCLC 41176710 (https://search.worldcat.org/oclc/41176710).

    Hanssen, Beatrice, ed. (2006). *Walter Benjamin and the Arcades Project*. Walter Benjamin Studies Series. London; New York: Continuum. ISBN 978-0-8264-6386-9. OCLC 53912748 (https://search.worldcat.org/oclc/53912748).
36. Hollier, Denis (2005). "Notes (On the Index Card)". *October*. **112** (Spring): 35–44. doi:10.1162/0162287054223918 (https://doi.org/10.1162%2F0162287054223918). JSTOR 3397642 (https://www.jstor.org/stable/3397642). S2CID 57564798 (https://api.semanticscholar.org/CorpusID:57564798).
37. Krapp, Peter (2006). "Hypertext *Avant La Lettre*" (https://archive.org/details/newmediaoldmedia00chun/page/359). In Chun, Wendy Hui Kyong; Keenan, Thomas (eds.). *New Media, Old Theory: A History and Theory Reader*. New York: Routledge. pp. 359–373 (363 (https://archive.org/details/newmediaoldmedia00chun/page/363)). doi:10.4324/9780203643839-36 (https://doi.org/10.4324%2F9780203643839-36). ISBN 978-0-415-94223-2. OCLC 60492092 (https://search.worldcat.org/oclc/60492092).
38. Calvet, Louis-Jean (1994). *Roland Barthes: A Biography* (https://archive.org/details/rolandbarthesbio0000calv). Bloomington, IN: Indiana University Press. ISBN 978-0-253-34987-3. OCLC 31295073 (https://search.worldcat.org/oclc/31295073).
39. Barthes, Roland (1994) [1975]. *Roland Barthes* (https://archive.org/details/rolandbarthes0000bart/page/75). Translated by Richard Howard. Berkeley: University of California Press. p. 75 (https://archive.org/details/rolandbarthes0000bart/page/75). ISBN 978-0-520-08783-5. OCLC 29954608 (https://search.worldcat.org/oclc/29954608).
40. Barthes, Roland (2010). *Mourning Diary: October 26, 1977-September 15, 1979* (https://archive.org/details/mourningdiaryoct0000bart). Translated by Richard Howard. New York: Hill and Wang. ISBN 978-0-8090-6233-1. OCLC 526809468 (https://search.worldcat.org/oclc/526809468).
41. Yacavone, Kathrin (2020). "Picturing Barthes: The Photographic Construction of Authorship" (https://www.researchgate.net/publication/342437620). In Knight, Diana (ed.). *Interdisciplinary Barthes*. Proceedings of the British Academy. Vol. 228. Published for the British Academy by Oxford University Press. pp. 97–117 (105). doi:10.5871/bacad/9780197266670.003.0007 (https://doi.org/10.5871%2Fbacad%2F9780197266670.003.0007). ISBN 978-0-19-726667-0. OCLC 1130361272 (https://search.worldcat.org/oclc/1130361272). S2CID 242966795 (https://api.semanticscholar.org/CorpusID:242966795). See also: Cartier-Bresson photograph on ResearchGate (https://www.researchgate.net/figure/Henri-Cartier-Bresson-Roland-Barthes-1963-C-PAR79520-Henri-CartierBresson-Magnum_fig2_342437620).
42. Helbig, Daniela K. (January 2019). "Life without Toothache: Hans Blumenberg's *Zettelkasten* and History of Science as Theoretical Attitude" (https://pure.mpg.de/rest/items/item_3026314/component/file_3327044/content). *Journal of the History of Ideas*. **80** (1): 91–112. doi:10.1353/jhi.2019.0005 (https://doi.org/10.1353%2Fjhi.2019.0005). hdl:21.11116/0000-0002-F4A8-D (https://hdl.handle.net/21.11116%2F0000-0002-F4A8-D). PMID 30713207 (https://pubmed.ncbi.nlm.nih.gov/30713207). S2CID 73416765 (https://api.semanticscholar.org/CorpusID:73416765).

43. Beam, Alex (2008). *A Great Idea at the Time: The Rise, Fall, and Curious Afterlife of the Great Books* (https://archive.org/details/greatideaattimer0000beam). New York: PublicAffairs. ISBN 978-1-58648-487-3. OCLC 191926328 (https://search.worldcat.org/oclc/191926328).

    Campbell, James (2008-11-14). "Heavy Reading" (https://www.nytimes.com/2008/11/16/books/review/Campbell-t.html). *The New York Times*. Retrieved 29 October 2021.

44. Matthews, Michael R., ed. (2019). *Mario Bunge: a Centenary Festschrift*. Cham: Springer-Verlag. p. 1. doi:10.1007/978-3-030-16673-1 (https://doi.org/10.1007%2F978-3-030-16673-1). ISBN 9783030166724. OCLC 1109956992 (https://search.worldcat.org/oclc/1109956992).
45. Bunge, Mario (2016). *Between Two Worlds: Memoirs of a Philosopher-Scientist*. Springer Biographies. Berlin; New York: Springer-Verlag. pp. 129, 273–274. doi:10.1007/978-3-319-29251-9 (https://doi.org/10.1007%2F978-3-319-29251-9). ISBN 978-3-319-29250-2. OCLC 950889848 (https://search.worldcat.org/oclc/950889848).
46. Schmidt, Johannes (2016). "Niklas Luhmann's Card Index: Thinking Tool, Communication Partner, Publication Machine" (https://pub.uni-bielefeld.de/download/2942475/2942530/jschmidt_2016_niklas%20luhmanns%20card%20index.pdf) (PDF). In Cevolini, Alberto (ed.). *Forgetting Machines: Knowledge Management Evolution in Early Modern Europe*. Leiden; Boston: Brill. pp. 289–311. doi:10.1163/9789004325258_014 (https://doi.org/10.1163%2F9789004325258_014). ISBN 978-90-04-27846-2. OCLC 951955805 (https://search.worldcat.org/oclc/951955805). Archived (https://web.archive.org/web/20201127182630/https://pub.uni-bielefeld.de/download/2942475/2942530/jschmidt_2016_niklas%20luhmanns%20card%20index.pdf) (PDF) from the original on 2020-11-27. Retrieved 2020-09-04.
47. Noack, Pit. "Missing Link: Luhmanns Denkmaschine endlich im Netz" (https://www.heise.de/newsticker/meldung/Missing-Link-Luhmanns-Denkmaschine-endlich-im-Netz-4364512.html). *heise online* (in German). Archived (https://web.archive.org/web/20200712193714/https://www.heise.de/newsticker/meldung/Missing-Link-Luhmanns-Denkmaschine-endlich-im-Netz-4364512.html) from the original on 2020-07-12. Retrieved 2020-05-31.
48. Luhmann, Niklas (1992). "Kommunikation mit Zettelkästen: Ein Erfahrungsbericht". In Kieserling, André (ed.). *Universität als Milieu. Kleine Schriften* (in German). Bielefeld: Haux. pp. 53–61. ISBN 978-3-925471-13-1. OCLC 28139214 (https://search.worldcat.org/oclc/28139214). Essay originally published 1981; translated in: "Communicating with Slip Boxes by Niklas Luhmann" (https://luhmann.surge.sh/communicating-with-slip-boxes). *luhmann.surge.sh*. Archived (https://web.archive.org/web/20160307152755/https://luhmann.surge.sh/communicating-with-slip-boxes) from the original on 2016-03-07. Retrieved 2020-05-31.

    Cevolini, Alberto (October 2018). "Where does Niklas Luhmann's card index come from?" (https://www.researchgate.net/publication/328624186). *Erudition and the Republic of Letters*. **3** (4): 390–420. doi:10.1163/24055069-00304002 (https://doi.org/10.1163%2F24055069-00304002). hdl:11380/1165387 (https://hdl.handle.net/11380%2F1165387). S2CID 149942238 (https://api.semanticscholar.org/CorpusID:149942238).

49. Gfrereis, Heike; Strittmatter, Ellen (2013). *Zettelkästen. Maschinen der Phantasie*. Marbacher Kataloge (in German). Vol. 66. Marbach am Neckar: Deutsche Schillerges. ISBN 978-3-937384-83-2. OCLC 835530478 (https://search.worldcat.org/oclc/835530478). "Der Zettelkasten ist die leibgewordene und vordigitale Variante dieser Phantasiemaschine: Lesefrüchte und Schreibeinfälle werden hier gesammelt und einsortiert, vernetzt und verschachtelt und – durch Glücksaufschläge, Buchstaben- oder Zahlencodes – immer wieder in neue Zusammenhänge gebracht: -Es- denkt und schreibt."
50. Grenville, Kate (1990). "Sorting Through" (https://archive.org/details/writingbookworkb0000gren/page/18). *The Writing Book: A Workbook for Fiction Writers*. Sydney: Allen & Unwin. p. 18 (https://archive.org/details/writingbookworkb0000gren/page/18). ISBN 978-0-04-442124-5. OCLC 655778675 (https://search.worldcat.org/oclc/655778675).
51. Lamott, Anne (1994). "Index Cards" (https://archive.org/details/birdbybirdsomein00lamo/page/133). *Bird by Bird: Some Instructions on Writing and Life*. New York: Pantheon Books. pp. 133-144 (https://archive.org/details/birdbybirdsomein00lamo/page/133). ISBN 978-0-679-43520-4. OCLC 29791864 (https://search.worldcat.org/oclc/29791864).

52. Ende, Michael (1994). *Michael Endes Zettelkasten: Skizzen & Notizen* (https://archive.org/details/michaelendeszett00mich). Stuttgart: Weitbrecht. ISBN 978-3-522-71380-1. OCLC 30643329 (https://search.worldcat.org/oclc/30643329).
53. "Transcribing The Phyllis Diller Gag File" (https://transcription.si.edu/phyllis-diller-cards). *Smithsonian Institution*. Retrieved 1 July 2021.

    BredenbeckCorp, Hanna. "Help us transcribe Phyllis Diller's jokes—and enjoy some laughs along the way!" (https://web.archive.org/web/20210708185357/https://americanhistory.si.edu/blog/help-us-transcribe-phyllis-dillers-jokes). *National Museum of American History*. March 1, 2017. Archived from the original (https://americanhistory.si.edu/blog/help-us-transcribe-phyllis-dillers-jokes) on 8 July 2021. Retrieved 1 July 2021.

54. "The Joan Rivers Archives: An exclusive look inside the lady's library-esque joke bank" (https://www.gq.com/gallery/joan-rivers-archives-comedy). *GQ*. Condé Nast Inc. 22 July 2010. Retrieved 1 July 2021.

    Barron, James (2017-10-22). "Sorting Through All the Laughs Joan Rivers Left Behind" (https://www.nytimes.com/2017/10/22/nyregion/sorting-through-allthe-laughs-joan-rivers-left-behind.html). *New York Times*. Retrieved 9 September 2022.

55. "Bob Hope and American Variety: Joke File" (https://www.loc.gov/exhibits/bobhope/jokes.html). *Library of Congress*. 10 May 2000. Retrieved 1 July 2021.
56. Rothman, Lily (2017-09-29). "Discover George Carlin's Foolproof System for Organizing Ideas" (https://web.archive.org/web/20210620140339/https://time.com/4949766/george-carlin-joke-system/). *Time*. Time Inc. Archived from the original (https://time.com/4949766/george-carlin-joke-system/) on 2021-06-20. Retrieved 1 July 2021.
57. Page, Susan (2011-05-08). "Ronald Reagan's note card collection being published" (https://web.archive.org/web/20130901192748/http://usatoday30.usatoday.com/news/washington/2011-05-08-reagan-notes-book-brinkley_n.htm). *USA Today*. Archived from the original (http://usatoday30.usatoday.com/news/washington/2011-05-08-reagan-notes-book-brinkley_n.htm) on 2013-09-01. Retrieved 6 August 2021.
58. France, Anatole (1922) [1909]. "Preface". *Penguin Island* (https://books.google.com/books?id=6UpWAvkPQaEC). Translated by Arthur William Evans (8th ed.). New York: Dodd, Mead & Co. pp. xiv–xv (https://books.google.com/books?id=6UpWAvkPQaEC&pg=PR14). ISBN 978-0-7583-1755-1. OCLC 7340292 (https://search.worldcat.org/oclc/7340292).

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