

Digital note-taking and Second Brain

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Overview of the session

- Introduction
- Importance of (digital) note-taking
- Break
- Second brain: digital knowledge management system
- Break
- Walk through of a knowledge management system

Preliminary survey



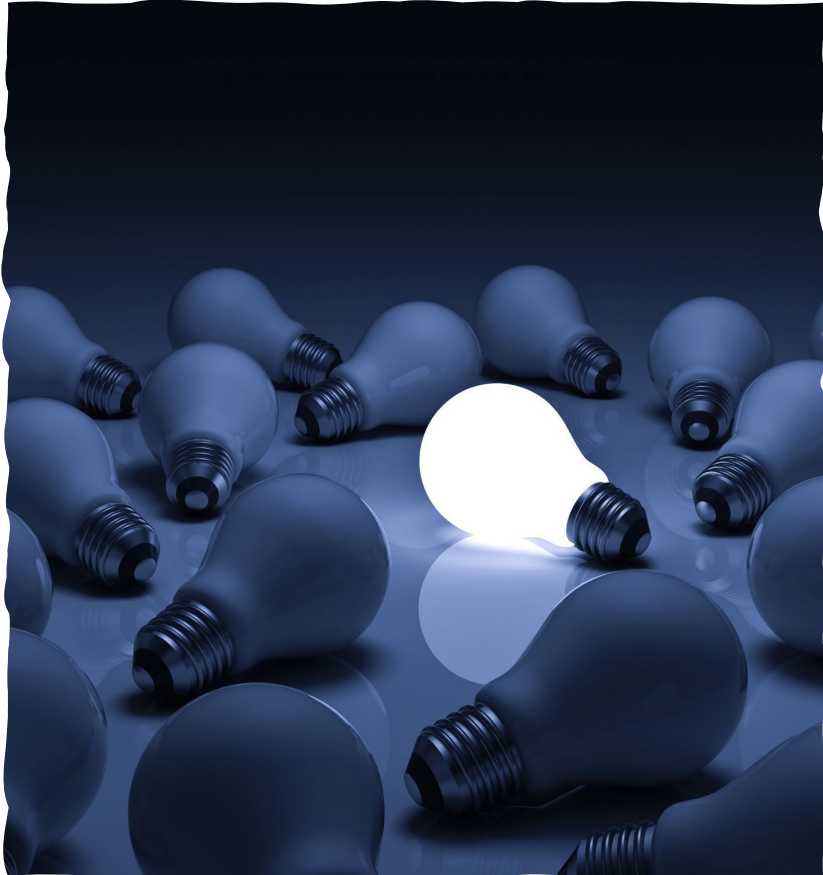
- What note taking tool do you use at the moment?
- Rate your ability to reliably capture notes from diverse sources (1-5)
- Rate your ability to retrieve information from notes when needed
- Rate your ability to use your notes to promote interpretation or perspective
- Rate your ability to make spontaneous and intuitive connections between notes
- Rate your ability to share/collaborate your notes



Problems with your current note taking system

Why is it important for
Academic writing?

A thick, hand-drawn style orange line underlining the text.



Sure, you need to be smart to be successful in academia and writing, but if you don't have an external system to think in and organize your thoughts, ideas and collected facts, or have no idea how to embed it in your overarching daily routines, the disadvantage is so enormous that it just can't be compensated by a high IQ.

--Simon Senek

Why to take notes at all?

What is a note?

- Knowledge building block
- It is a discrete unit of information interpreted through your unique perspective and stored outside your head.
- Can be used to build up bigger ideas



Why is notetaking important?

- Every intellectual endeavor starts with a note.
- Writing is not what follows research, learning or studying, it is the medium of all this work.



Feynman and Franklin agree

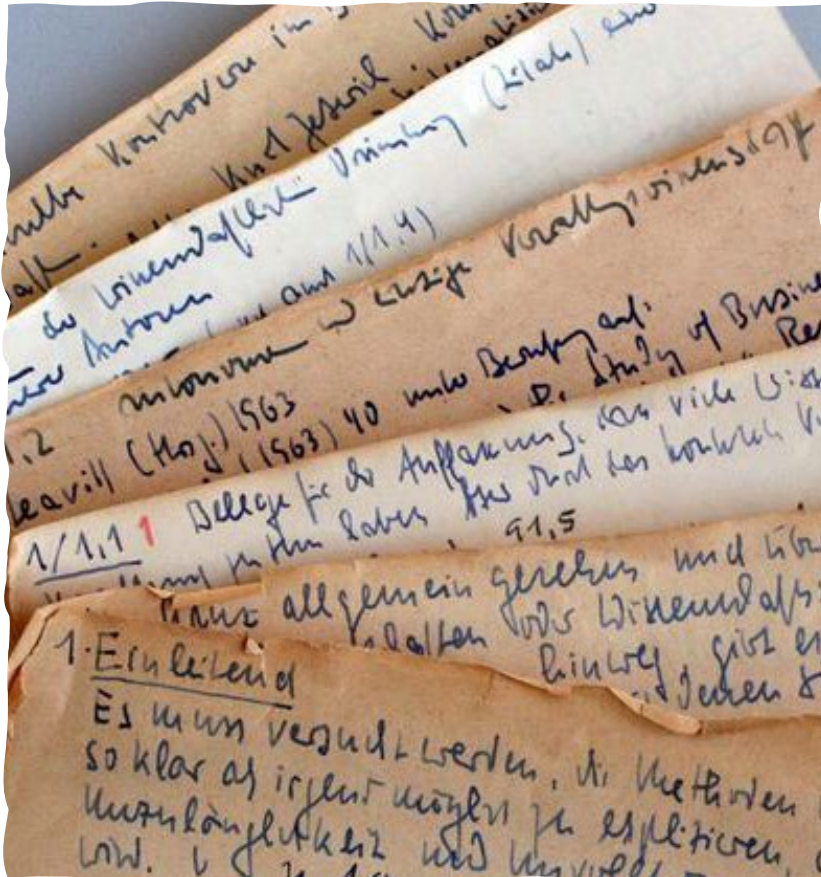
- You have to externalise your ideas, you have to write. If we write, it is more likely that we understand what we read and remember what we learn and that our thoughts make sense. And if we have to write anyway, why not use our writing to build up the resources for our future publications?

Zettelkasten method

A thick, hand-drawn style orange line that underlines the title 'Zettelkasten method'.

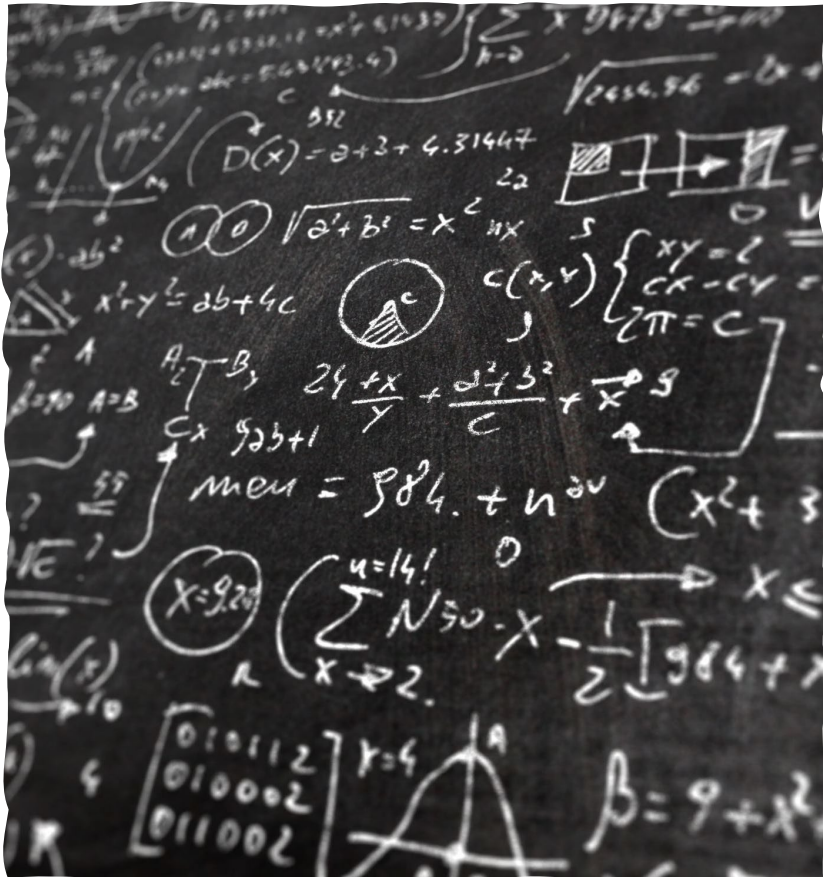
“One cannot think without writing.” — Niklas Luhmann

Zettelkasten method

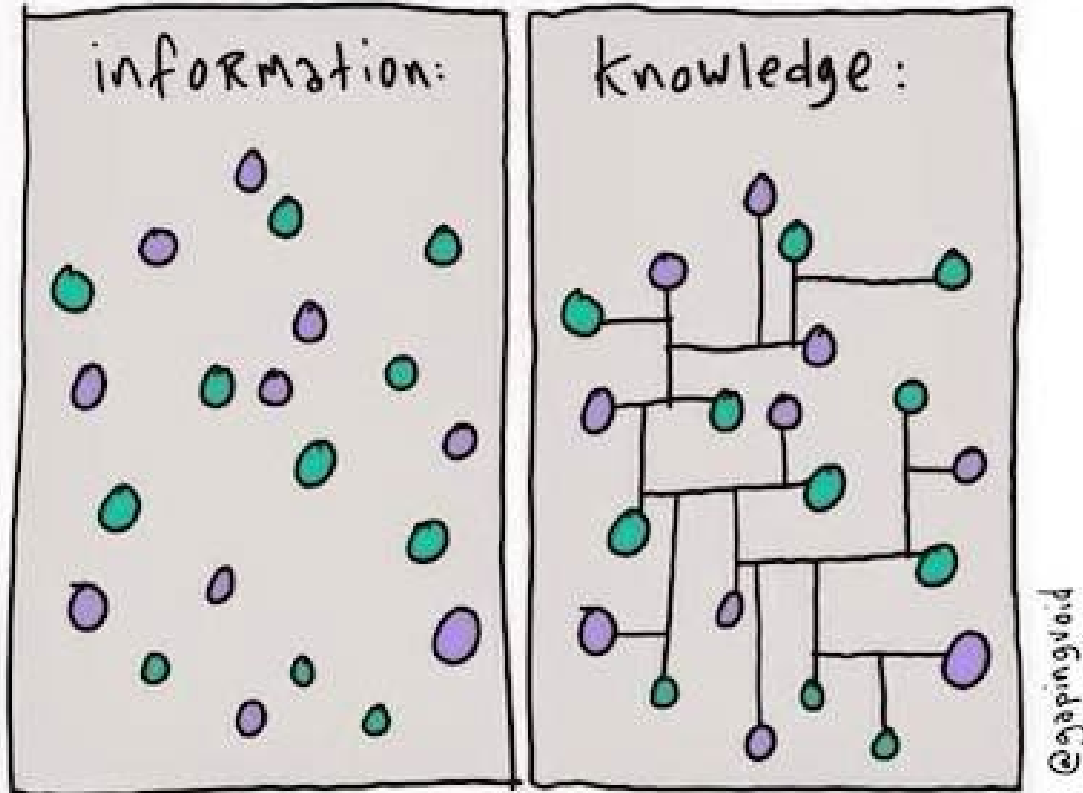


- The interconnected, decentralized, bottom-up approach
- Lehmann had two slip-boxes:
 - bibliography: contained the references and brief notes on the content of the literature
 - the main one: for collecting and generating ideas, mainly in response to what he read.

Notetaking: in your own words



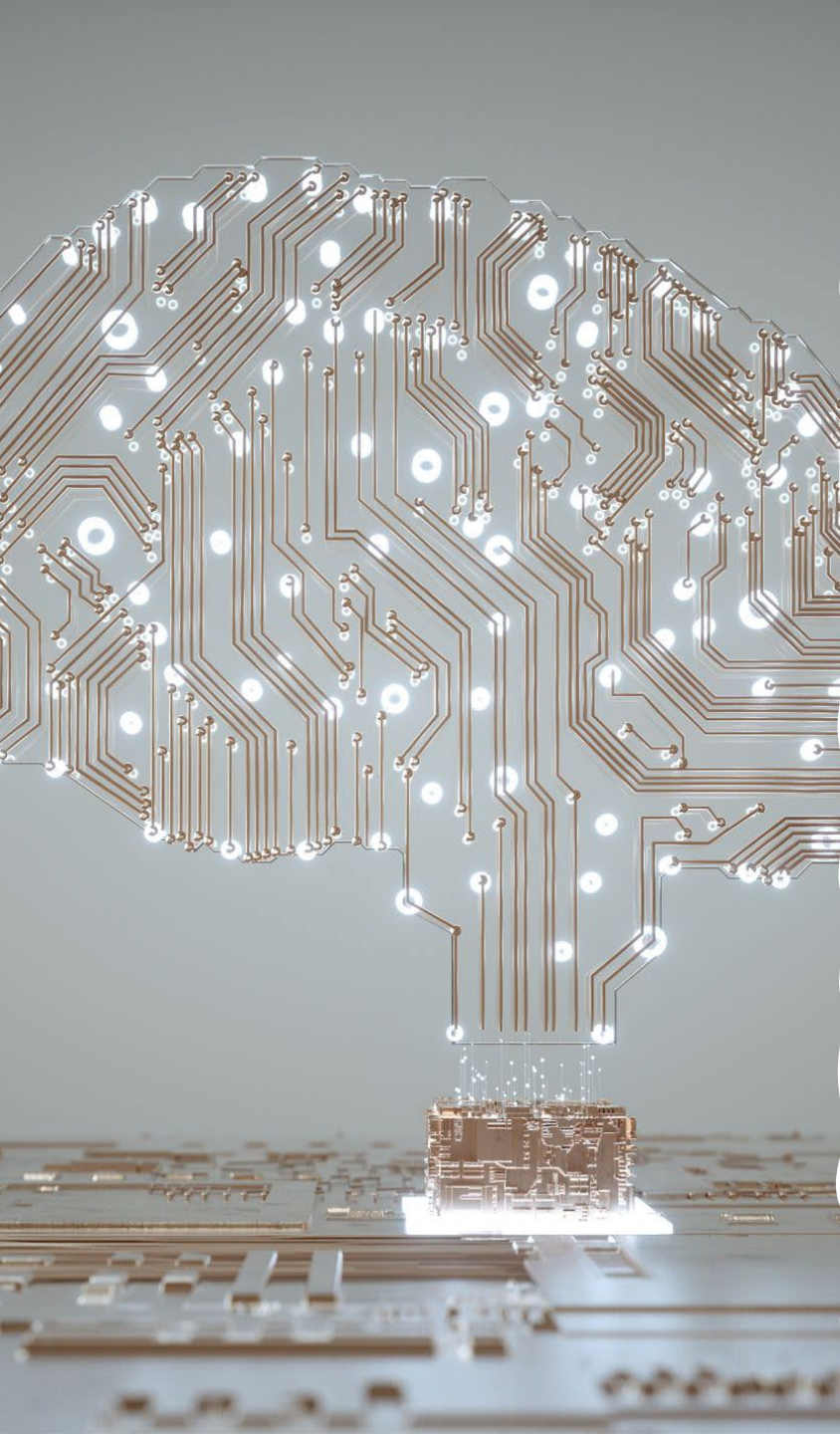
- We tend to think we understand what we read – until we try to rewrite it in our own words.
- “If you can’t say it clearly, you don’t understand it yourself.” –John Searle
- Luhmann did not just copy ideas or quotes from the texts he read, but made a transition from one context to another.



Take smart notes

- Read a text with questions in mind and try to relate it to other possible approaches rather than adopting the question of a text and the frames of the argument and take it as a given.
- Write the reasons of its importance for your line of thought: What does this mean for your line of research? Why is it interesting?

Why digital notetaking
system?



Why we need a digital system

- Our brain is good at thinking, creating new ideas, connections between the ideas.
- Attention and short-term memory are limited resources.
- The brain is a machine for jumping to conclusions -- Kahneman.
- And a machine that is designed for jumping to conclusions is not the kind of machine you want to rely on when it comes to facts and rationality – at least, you would want to counterbalance it.

Importance of a good system

- a system is needed to keep track of the ever-increasing pool of information, which allows one to combine different ideas intelligently with the aim of generating new ideas.
- To make this process effortless and efficient, you need a system that works for you. That makes it ridiculous easy to not only take the notes but the ability to organize them, search through them, link them, find interconnected paths.

Notetaking for Academic writing

Basic requirements

- Something to write with and something to write on
- A reference management system (Zotero, or whatever works best)
- The slip-box.
- An editor (Word, LaTeX, Google Docs or whatever works best).

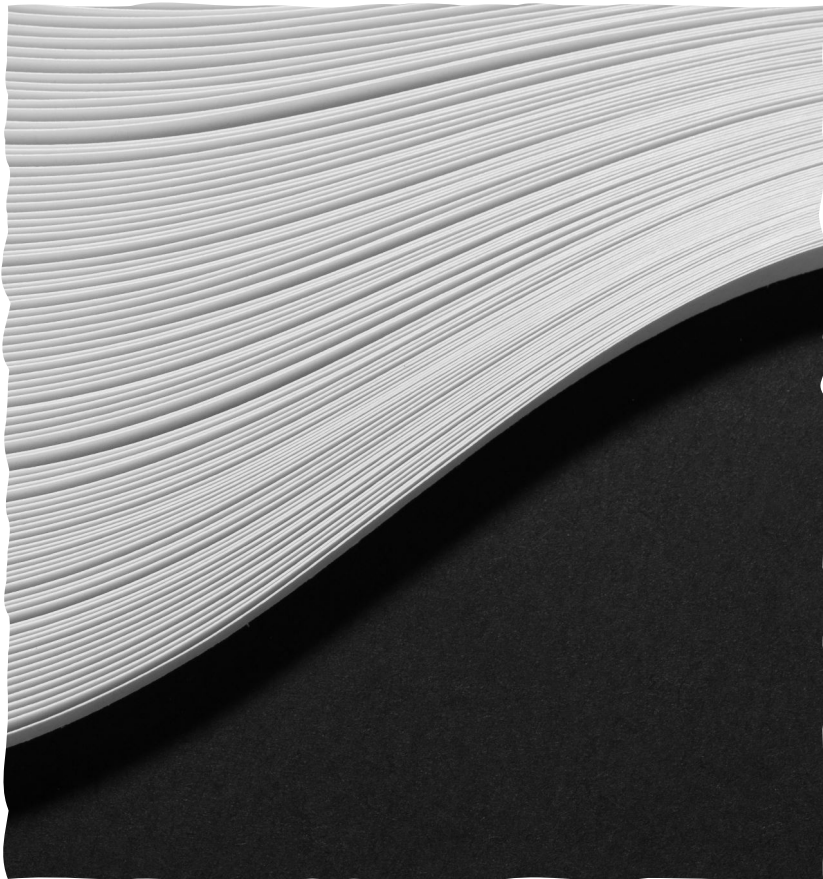
More is unnecessary, less is impossible.

Basic process: Luhmann style



1. Make fleeting notes
2. Make Literature notes
3. Make permanent notes
4. Add it to your system
5. Distill, connect ideas, develop topics, questions, research projects
6. Find the specific topic you are pursuing
7. Turn your notes into a rough draft
8. Edit and proofread

Academic writing



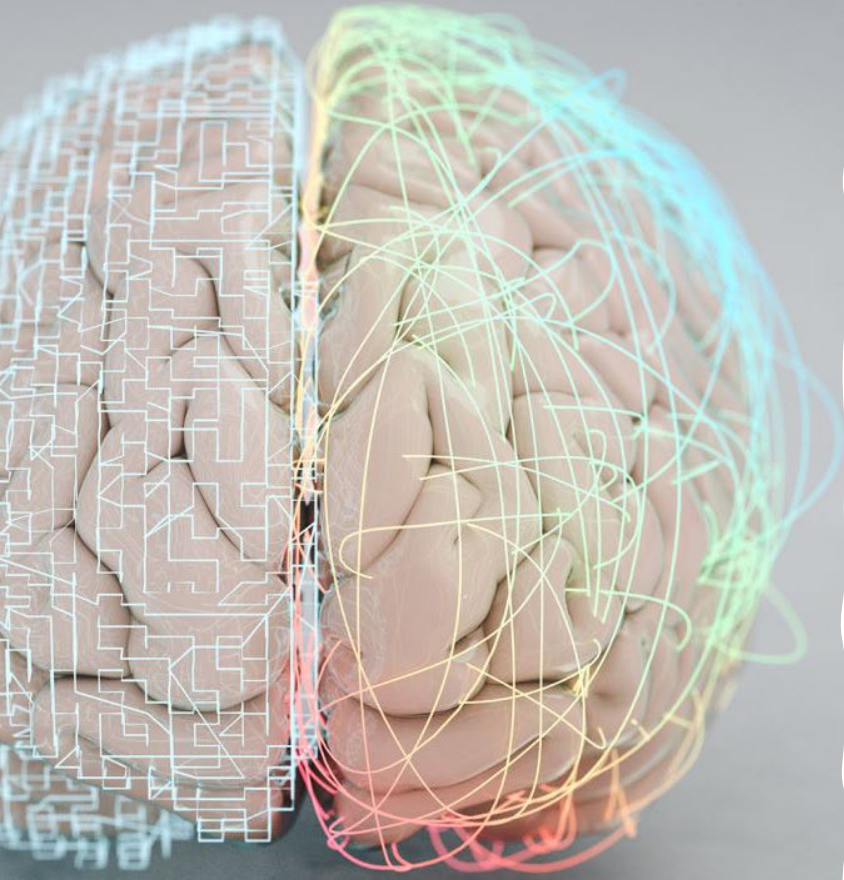
- It would certainly make things a lot easier if you already had everything you need right in front of you: The ideas, the arguments, the quotes, long developed passages, complete with bibliography and references.
- To get a good paper written, you only have to rewrite a good draft; to get a good draft written, you only have to turn a series of notes into a continuous text. And as a series of notes is just the rearrangement of notes you already have in your slip-box, all you really have to do is have a pen in your hand when you read.

Academic writing is not just writing

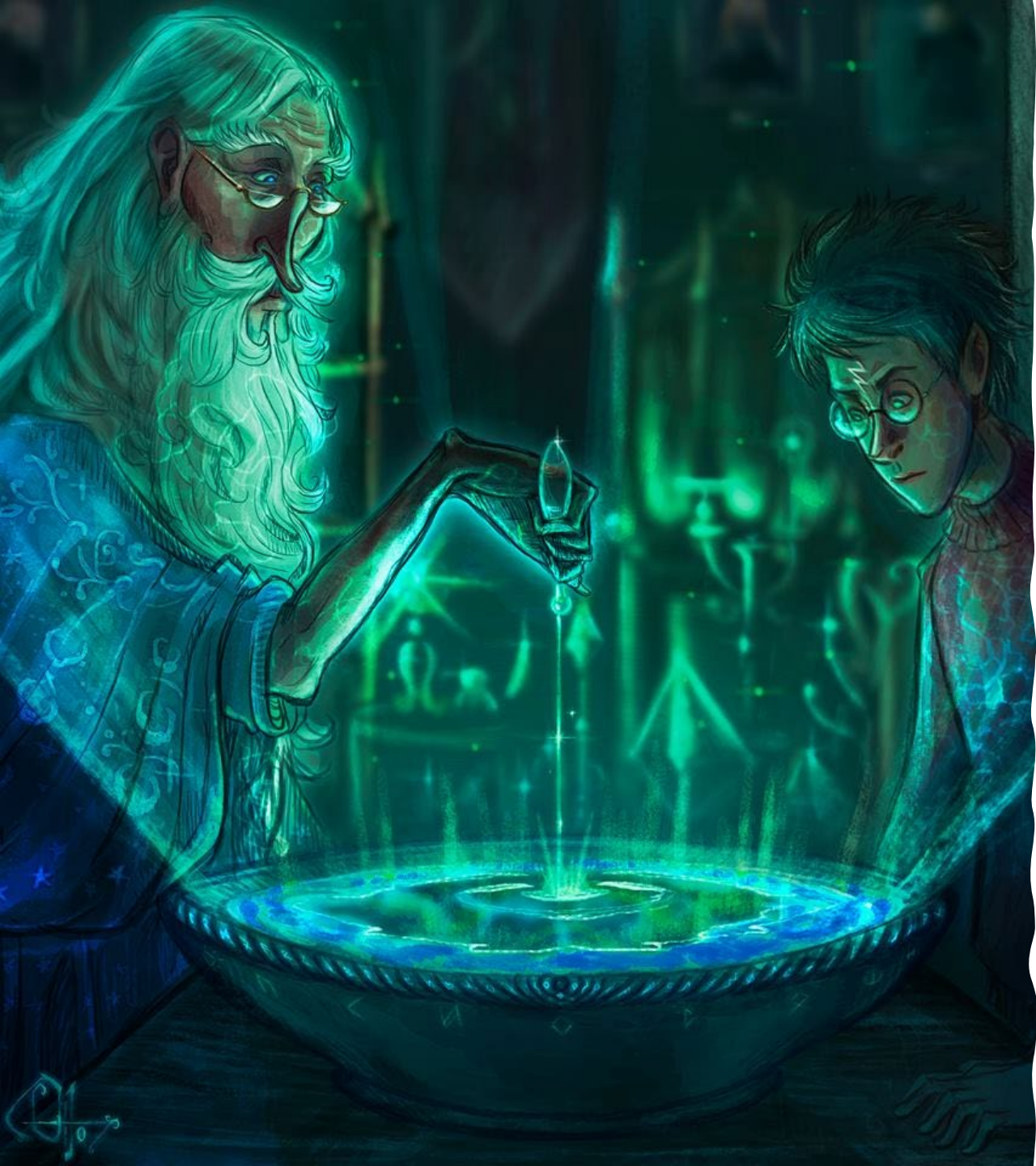
- Combining and developing thoughts
- Writing/formulating
- Proof-Reading
- Outlining

Added on benefits

- Intrinsic motivation
- Reduced clutter
- Clear well-defined task
- Personalized productivity mapping
- Better gut feelings



What is a Second brain?



Pensieve, is
that you?

What is Second brain?

- Digital knowledge management system
- Digital archive of your most valuable memories, ideas, and knowledge.
- Helps us in making ideas concrete, revealing new associations between ideas, incubating our ideas over time and sharpening our unique perspectives.

Why do we need a Second brain?

- Incubate ideas over a long period of time
- Storing short term notes/information
- Create visual objects that can be interacted with
- Raw materials for unique perspectives
- Store your learnings
- Reveal unusual connections between different notes/pieces of information.

Requirements from the Second brain

- Central system for all your notes
- Connects easily with all your incoming notes
- Ability to edit and distill notes
- Searchable
- Works on different systems (mobile phone!)
- Easy to sync
- Available all the time, even offline
- Easy to see connections between notes

- My favorite: Obsidian

Main
components
of Second
Brain: CODE



CODE: Capture

- What is important enough to capture? Or rather, what not to capture.
- Keep what excites you, what resonates with you, what surprises you.
- Keep the clutter away. Curate, don't hoard. Be selective.
- Capturing should be streamlined, quick and easy. Low threshold

CODE: Capture

- Examples
 - Highlights from ebooks, articles, blog posts
 - Excerpts from emails and messages
 - Checklists and instructions
 - Notes from conferences and courses
 - Journal or diary entries
 - Meeting/conversation notes
 - Internet bookmarks, save webpages
 - Photos, screenshots
 - Social media posts
 - Mindmaps, diagrams, brainstorm
 - etc

Examples of capture tools

- Read it later apps (Pocket, Reader)
- Highlighting apps (Readwise, Reader)
- Research paper readers (Zotero)
- Scheduling apps (ToDoist etc)
- Saving Tweets
- Screenshots, photos
- Word documents, slides

CODE: Capture



- App is not important
- What works for you
- Should be simple and streamlined
- Will keep evolving

CODE: Organize

- Instead of organizing ideas by where they came from, organize them by where they are going
- Based on actionability: PARA system
- Projects: Short-term efforts in your work or life that you're working on now
- Areas: Long-term responsibilities you want to manage over time.
- Resources: Topics or interests that maybe useful in the future.
- Archive: "cold storage" for inactive items from the other three.

CODE: Organize example

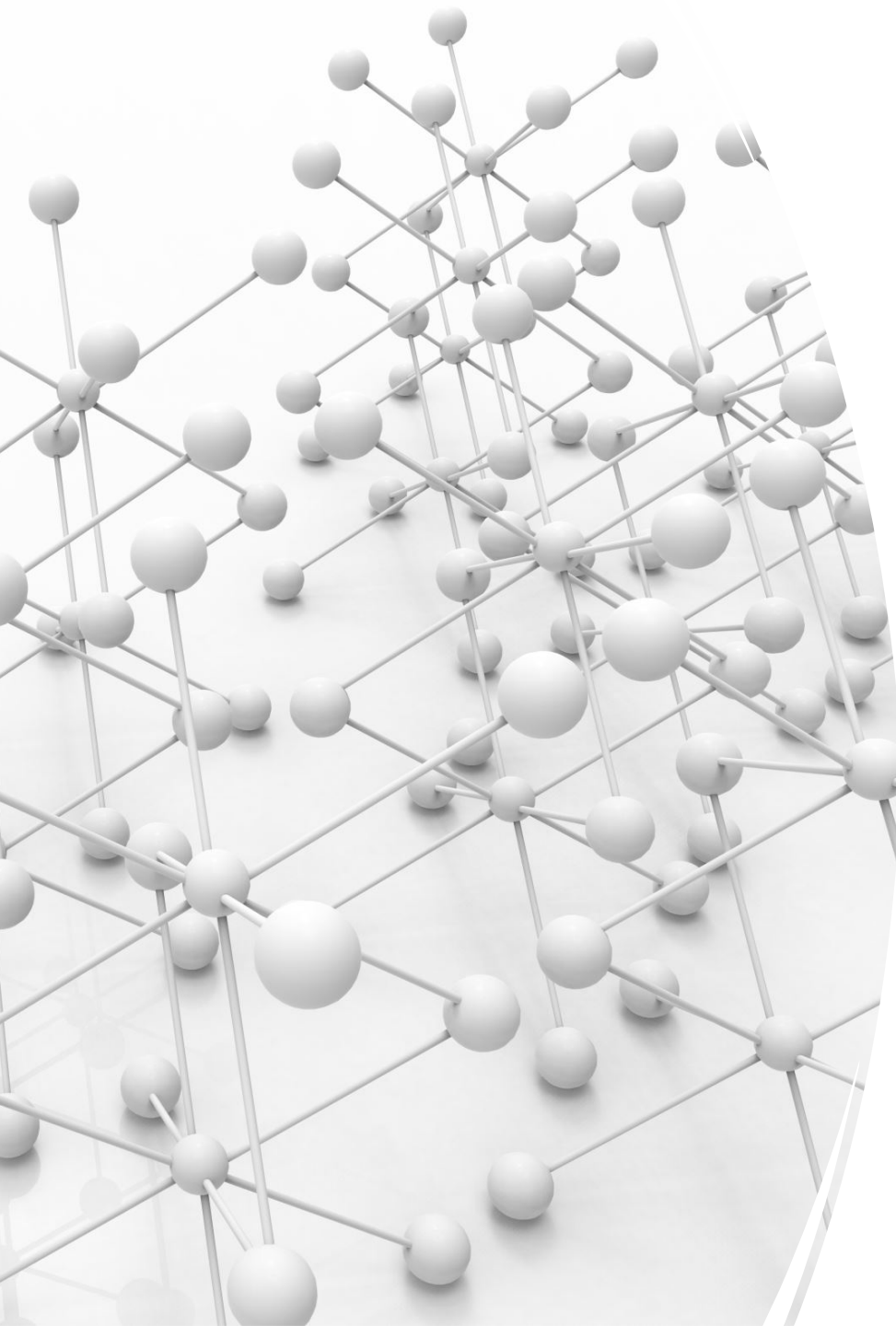


- Projects: Prepare presentation for the second brain lecture
- Areas: Time series forecasting, productivity, parenting
- Resources: Recipes, Travel ideas
- Archive: Finished projects

CODE: Organize

Organize notes with the categories

- Index to note reference
- Note-to-note reference



CODE: Distill

- Going through the note and 'distilling it'
- Through your own perception
- How does it fit with your current belief system (knowledge base)
- Things we understand are connected, either through rules, theories, narratives, pure logic, mental models or explanations. And deliberately building these kinds of meaningful connections is what the second brain is all about.

CODE: Distill

- Progressive summarization
- Write in your own words
- Connect with other notes (if any)
- Make it visual: space, highlights, bold

CODE: Distill

- When is the right time to distill your captured notes
 - Weekly manner
 - When needed by a specific project
- Campsite rule: Always leave it better than you found it
 - More useful
 - More distilled, effective
 - Easier to find next time
 - More connected

CODE: Express

- Intermediate packets: raw note that is refined into a building block of the project
 - research
 - notes
 - brainstorm
 - examples
 - outlines
 - prototypes
 - drafts
 - last minute crazy ideas

A modern piece of content/work is not created, it is assembled.

CODE: Express



- Share what you know
- Research papers
- Presentations
- Lectures

CODE: Express

- Divergence: spreading out and find different paths, options to solve a particular problem.
- Convergence: narrow down the scope, cut off some options.
- They are not a linear path, but a loop: once you complete one round of convergence, you can take what you've learned right back into a new cycle of divergence.

Habits for a Second brain

- Project Kick-off and completion checklist
- Weekly reviews (emails, Calendar, Desktop, Notes, Tasks)
- Monthly reviews (Review/update goals, projects, areas, re-prioritize)
- Opportunistic habits:
 - Capturing ideas
 - Highlighting excerpts
 - Moving/linking a note
 - Combining notes into bigger deliverables
 - Sharing notes

Second brain system: Iterative system

- There is no quick feedback system
 - Don't architect your entire Second Brain system from scratch up front.
 - Focus on moving one project at a time through each step from capturing to expressing.
 - Re-calibrate your system based on your requirements and your working style.
 - Re-iterate the process with a new project.
-
- It took millions of years of evolution and iterations to get here.

Why to take notes in the world of AI

- Google, ChatGPT-3
- Tools can give you a summary of the content, but what it means for you, which project it could be important for, what you can do with that, on the shoulders of the personal knowledge you have built up over years is not replaceable.
- It cannot tell you what to do with this summary, not yet at least.
- Perspective

Biggest benefit of Second brain: Perspective

- Scarce resources: Land, Time, Attention and now Perspective
- We moved from information scarcity to information overload, within a generation. We didn't evolve this fast. In the past, each incoming information, sound, could be important for our survival. Second brain helps to be a bit more intentional and systematic towards what information we consume and how we process it.

Second brain: additional benefit

- It is when you begin expressing your ideas and turning your knowledge into action that life really begins to change. You'll read differently, becoming more focused on the parts most relevant to the argument you're building. You'll ask sharper questions, no longer satisfied with vague explanations or leaps in logic.

Examples for note-taking apps

- Obsidian
- Notion
- Overleaf
- Roam Research
- Mem
- LogSeq
- ..

My System: Obsidian

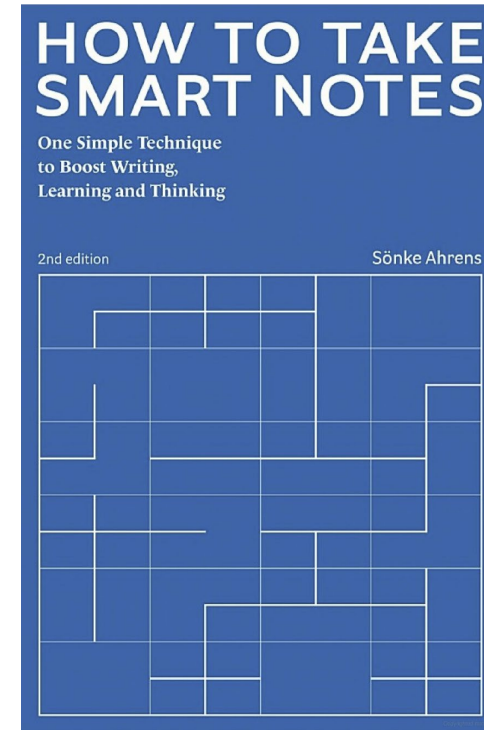
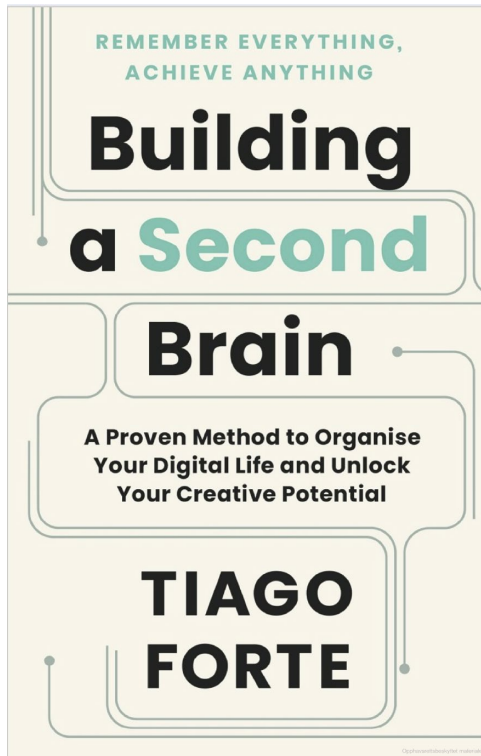
- Mobile app, works across different platforms, OS
- Text format (Markup based), easily adaptable
- Free
- Offline availability
- Backlink compatibility
- Keywords not necessary, Text based associations
- Visual Mind map
- Templates for repeated actions
- Well supported by passionate community
- Easy to publish/Share notes with others
- As simple and as advanced as you want it to be

Integrates with

- Zotero
- Readwise/Reader
 - Integration with Web browser
 - Twitter
 - Kindle, OCR via photos
 - PDFs
 - Newsletters
 - Read it later apps: Pocket/Instapaper
 - Medium
 - Goodreads
 - Youtube (highlights from subtitles)
 - Airr Podcasts, Snippd podcast app (highlights from subtitles)

Quick walkthrough of the system

References



Questions

