

How to Make a Complete Map of Every Thought  
You Think

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# Introduction

This book is about how to make a complete map of everything you think for as long as you like.

Whether that's good or not, I don't know- keeping a map of all your thoughts has a "freezing" effect on the mind. It takes a lot of (albeit pleasurable) work, but produces nothing but SIGHT.

If you do the things described in this book, you will be *IMMOBILIZED* for the duration of your commitment. The immobilization will come on gradually, but steadily. In the end, you will be incapable of going somewhere without your cache of notes, and will always want a pen and paper w/ you. When you do not have pen and paper, you will rely on complex memory pegging devices, described in "The Memory Book". You will NEVER BE WITHOUT RECORD, and you will ALWAYS RECORD.

YOU MAY ALSO ARTICULATE. Your thoughts will be clearer to you than they have ever been before. You will see things you have never seen before. When someone shows you one corner, you'll have the other 3 in mind. This is both good and bad. It means you will have the right information at the right time in the right place. It also means you may have trouble shutting up. Your mileage may vary.

You will not only be immobilized in the arena of action, but you will also be immobilized in the arena of thought. This appears to be contradictory, but it's not really. When you are writing down your thoughts, you are making them clear to yourself, but when you revise your thoughts, it requires a lot of work- you have to update old ideas to point to new ideas. This discourages a lot of new thinking. There is also a "structural integrity" to your old thoughts that will resist change. You may actively not-think certain things, because it would demand a lot of note keeping work. (Thus the notion that notebooks are best applied to things that are not changing.)

For all of this immobility, this freezing, for all of these negative effects, *why on Earth* would anyone want to do this?

Because of the INCREDIBLE CLARITY that comes with it. It may feel like, doing this, that for the first time in your life, you REALLY have a CLEAR IDEA of what kinds of thoughts are going through your head. You'll really understand your ideas. And you'll also see connections that you were never consciously aware of before. You'll see a structure and a pattern in your life. You're goals and psychology will become clearer to you. You'll be clearer too

about what you do NOT understand.

It is like taking a microscope to your brain. You'll see the little thoughts moving around, *literally*, as you walk them through the maps you discover within yourself.

You'll see what you care about, quite clearly. You'll be familiar with your mental terrain. Incredible clarity. Addictive clarity. Vast clarity. Extraordinary clarity.

You will Love it, if you are anything like me. It will feel natural and free; There will be a freedom within your mind. You'll create astonishing things, and you'll find great tools that will help you in your life after you are immobilized.

Or at least, *it will seem that way*.

Time will tell whether such an experience has been useful to me or not. I still do not know, and will not know for some time now.

The experience is very much a modern version of the "walkabout". Except for instead of going out there somewhere in the world, you hole up in your mind.

Is it useful? I still don't know.

Thus it is with great hesitation that I present for the public this work on notebooks. (That is, my notebook technique.)

I want to digress and say something here as well:

I am astonished that there isn't a field of study of notebooks. I have searched on the net, and while I have found a page here and there on some type of notebook method, it is almost ALWAYS one of the following two things:

**The Diary** A bunch of entrees, chronologically based, maybe with a TOC, in which a person keeps a record of their thoughts. AKA "The Journal".

**The Category Bins** A bunch of notes, stuffed into category bins, maybe 2 or 3 levels deep.

That's IT. In all the world, people have only been putting their notes in the above two ways.

Sure, there are a few others, but people aren't comparing notes, talking about such things. <sup>1</sup> <sup>2</sup> I would think that something like intelligence augmentation through notebook study would be one of the first things that people talk about on the Internet! I would think that one of the first things we would be greeted with on the Internet would be, "Did you know how to use Notebooks to be smarter?" At the very least, it would be accessible.

Instead, there is a vast desert.

My solution to understanding this lack is my faith in what I call "The Anarchist Principle": If there is something *really cool*, and you can't understand why somebody hasn't don it before, it's because *you haven't done it yourself*. That's DIY for those in the know: Do It Yourself.

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<sup>1</sup>Ted Nelson in a very special case and deserves particular comment. Sadly, he seems a bit unhinged, and doesn't write much about the topic of keeping notes openly on the web.

<sup>2</sup>Note added Later: David Allen's "Getting Things Done" system is actually pretty cool. Sadly, it does not appear on the Internet. But it's a cheap book. If you are interested in contributing to a study of notebook systems, this is a must read.

Now I have a third thing I want to talk about, before getting on with the text.<sup>3</sup>

I am just SPITTING THIS TEXT OUT. I know that my understanding of personal projects and getting them completed is low. I know my weaknesses—that I am bad at getting huge projects done. So what I’m doing is just SPITTING THIS TEXT OUT.

I figure that if you are reading this, you’d much rather have this than nothing at all. And that’s what’s out there, if you aren’t reading this— NOTHING AT ALL. I mean, you can always keep a diary or a bunch of category bins, if you like. That’s a real no brainer. But besides those two, and treatises on Ted Nelson’s madness, you won’t find a whole lot.

So please excuse the poor formatting of this. It’s raw, coercive, straight text. It’s unorganized. It’s terrible.

Maybe one day I will improve this. But that day is not today. Today is a day for spitting text out. With God’s mercy, I will learn how to finish big projects. I pray for that ability frequently. If you can mentor me in the subject, I will happily hear you out. But I have not learned it yet.<sup>4</sup>

Let’s see: We’ve talked about:

1. The Terrible Things this notebook system will Do to you.
2. The Nonexistence of an Internet field of Notebook study.
3. How I am just spitting this text out into the world.

Lastly, I want to briefly introduce some of the unique features of my notebook system. Things that my notebook system does that NO OTHER NOTEBOOK SYSTEM that I have ever seen does. These are the results of years of keeping different types of notebook systems, and taking the best ideas from each.

1) Strategy.

This notebook system allows you to STRATEGIZE. Very few notebooks do that. I mean, sure, you can start some pages on, “what will my strategy be now?”, but then you have to figure out what all your options are. The notebook system I describe has built in strategy management. You will always know what your options and priorities are in notebook management.

It does this with the aid of maps...

2) Maps.

Tables of Contents (TOCs) are TERRIBLE. TERRIBLE TERRIBLE TERRIBLE. Their main utility is in providing you the next number to number something.

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<sup>3</sup>First, I wrote about the things that my notebook system will do to you, then I wrote about the dearth of notebook study on the Web, and now I’m writing about this third thing.

<sup>4</sup>I actually believe that we should all communicating with what Robert Horn calls “Visual Verbal Language”. The problem is that we don’t have good tools to do so. Damn. It’s a shame. When the tools come, there will be a revolution in communication just as big, if not bigger, than the revolutionary introduction of the Internet. So: Double Apologies for swabbing a mass of text at you.

You want MAPS of Contents, or what I call “MOCs”. This is like a table of contents, but far more dynamic. Is an entry really important? Make it’s MOC entry really big. Unimportant? Make it small. Or even pull out the name, and just surround the page number in parenthesis. If you are ever investigating that area, you can look it up to see what it is.

You can put related concepts close to each other, REGARDLESS of the actual physical position of the pages.

You can move things around. Trace paths of connection through. Make non-ordinal order apparent. All with Maps.

So don’t keep a TOC, unless the material is intrinsically linear (a chronology, without episode tracking.) Keep a MOC!

More in the text on this subject. This is just a brief introduction for the sake of introducing some major concepts from my notebook system.

### 3) Color and Glyph Management

Abbreviations/Shorthand, and Color. You MUST use a 4color pen. (I mean, you don’t NEED one, but it’s so amazingly helpful, that once you start using it, you’ll NEVER want to go back.)

You’ll develop shorthands, and you’ll want to trust that you can decipher them later. You’ll thus need systems for cataloging your shorthands, and there is such a system in the notebook system I am describing.

### 4) Speed Lists

You will be capturing EVERY SINGLE THOUGHT. Well, every thought that is more interesting than “I need to go to the bathroom”, or ”I need to take the trash out”.

(Actually, needing to take the trash out may enter, as per the Getting Things Done system. SHOULD you decide to integrate my system with the GTD system. More later on the subject.)

Speed lists are the answer to the demand. Speed lists are vast lists of simple thoughts- about 1-50 words. Generally around one line.

There are two types of speed lists- pan-subject and subject. Pan-subject speed lists are for all thoughts, you take a pan-subj speed list out with you to work or to wherever you are going. Subject lists you keep in a cache notebook, and you have one per subject. You’d prefer to just use your subject lists, but sometimes you have to make do with a pan-subject speed list, and then transfer out from there to the individual speed lists. More on all of this later.

In particular: You do NOT want to be just scribbling thoughts out on a piece of any old paper. You want at least a pan-subj speed, with a few exceptions. (If you are having a thought-attack, you may need to make do w/ just any old piece of paper, and then go from there to the subject pages.)

Okay: I’m getting too much into details.

So four advantages are:

- Strategy
- Mapping
- Color/Glyph

- Speeds

They work together marvelously. In particular, Strategy, Mapping, and Speeds all directly affect and rely on one another.

So there we have it.

1. What this system will do to you. (EXPECT IT.)
2. The nonexistence (to date!) of an Internet study of Notebooks.
3. How I am spitting this text out.
4. The advantages of my system.

The Introduction is over.



# System Overview

I will be talking about the following things:

- Intra-Subject Architecture
- Extra-Subject Architecture
- Materials
- The Question of Computers - don't get all excited now.
- Theory of Notebooks
- General Principles

Let me talk at a high level about what this is all about.

The notebook system roughly divides all of your thoughts into “Subjects”. What subjects? Depends on your thought patterns. In the Subjects section, we'll talk about how to divide your thoughts amongst subjects.

Now, there are two domains: “Extra-subject” and “Intra-subject”: that is, outside and inside of your subjects.

*Intra-subject*: Within a particular subject, you'll have an organization. You'll have your speed thoughts for that subject, you'll have your maps, you'll have your big dissertations (“Point of Interest”, or “POI”), you'll have your cheat sheets, your abbreviations/shorthands (“A/S”) particular to that subject, all sorts of wonderful things. Most important though, are your speeds and your maps.

Now, beyond the subject, there is a whole field of all your subjects. You'll have the “GSMOC”- the “Grand Subject Map of Contents”, whereon you'll see a gigantic map of EVERY THING THAT YOU THINK ABOUT. Just imagine that right now: *Wouldn't you be interested in seeing such a thing?* When I think about my GSMOC, I see a mirror of my mind, for the 3-5 months that I kept my notebooks. (The borders are fuzzy, because I gradually evolved into the notebook system I am describing to you.)

I mean, that, right there, is worth the price of admission. The GSMOC is a pretty impressive thing. =^\_^=

Okay. So there are steps and promises that apply beyond the field of a single subject, and there are steps and promises that apply within the field of a single subject.

Now extra-subject and intra-subject *float on top of* your *MATERIALS*. We're talking about pen and paper and your binders. And some other things: You'll need those little donut holes things to protect your paper, and you'll need little stickies to put onto your paper, your maps. This will help with strategy and other map management functions. So I have a section on materials and all that stuff. Great stuff. What to look for in picking a binder. Wonderful.

There: We've knocked off the first three:

- Intra-subj
- Extra-subj
- Materials

Three more to go:

- The ? of Computers
- Theory of Notebooks
- General Principles

Okay, I'll take the ? of Computers last. General principles first, then Theory, then ?'s of Computers.

*General Principles:* There are many patterns common in the steps and promises of the notebook. Things such as "How do I lay out a page?", the concept of "Late Binding" and how it applies to the notebooks. "Out cards." The use of color. Partitioning strategy. Writing quality. Psychology. General mapping principles. Important stuff, but not specific to a particular position in the hierarchy.

*Theory of Notebooks:* Why use notebooks at all? (Partly talked about in the introduction.) How does this work? Observations about how subjects gestate. How information flows, becomes knowledge, then becomes wisdom as it integrates into our life. How thoughts integrate. How the speeds grow. And a theory of (conscious) thinking. Many things to talk about.

Finally, the *Question of Computers*. My least favorite subject, because people can get so damn irrational about computers.

I don't know HOW many times I've seen people twiddling about with their little palm pilots, convinced that because they have "technology" on "their side", that they are being more effective than a man holding a piece of paper and a pen. The absurdity of these devices is astounding.

I know that there are legitimate uses for these things. I see doctors carrying them around with up-to-date info dictionaries and what not, I know that they use them, yadda yadda yadda. And yet the simple fact is, 99them. They'd be much better served with a small pad of paper that they keep with them, and a pen.

There are exceptions to this: You can argue a good case for using them to play games (though I'd rather use a Game Boy Advance), or for using them to use as an address book. Great. I love it.

But for the Love Of God, if you live within the time period of 2003-2005 at the very least, do NOT try to use one of these devices to keep your notes!

This extends further to computers.

Now: All this will change. IN THE FUTURE, computers will be the way to go. But we are not there yet, NOR will we be there in the next 3-5 years. Remember: Even if the computer is fast, you still need software that won't get in your way.

I will address this subject again, later in the book. Feel free to skip it, if you plan to use paper. But if you are one of the "I paid big money for this thing, and it's high tech, and it's sooo cyber, that it must be better than anything pen and paper can give me," please give serious thought to what I have to say.

I'm positioning it later in the book, so that you can have already have read about maps. I mean, maps right there- these little devices, and even my big computer, doesn't get maps right. But you'll see how this works as we read- no need for me to go off the deep end now.

SO.

In Summary:

- Intra-subj
- Extra-subj
- Materials
- The ? of Computers
- Theory of Notebooks
- General Principles

That's what I'm going to be talking about now.

Here, let's put that in order:

1. Materials
2. General Principles
3. Intra-subj
4. Extra-subj
5. Theory of Notebooks
6. The Question of Computers

By the way- in case I hurt your feelings about computers- I want to add two things:

1. I am an experienced programmer. I've been programming computers since I was 7 years old, typing in BASICA programs by hand on my mom's COMPAQ 8088. I formatted her hard drive by accidentally going into low level format instructions using "debug", experimenting with assembly language, when I was about 10. I am now 25. I love computers. I just happen to recognize the limitations of where we are at right now, that's all.
2. Computers will be the SALVATION of this whole system I am describing right now. So if you feel offended knowing that I am dumping on them right now, know that that's not going to be the case for long. Paper is unwieldy, large, requires storage, and a host of other ills. Copying from page to page to page is just a nightmare. It is a necessary nightmare, right now, but it is a nightmare. Computers will save us from it.
3. Hah! I'm sneaking in a #3. (Part of my "no-edit policy" when spitting stuff out. Apologies.) I WILL DESCRIBE, if I DO NOT FORGET, just WHAT steps you can take NOW, IF YOU ARE INTERESTED, to "get the ball rolling". There are some easy programs that you can make right now that would make this system AWESOME. I just don't have the time to code them up right now. But I will describe them, and if you like, you can code them up. Hell, I'll even throw in a description of the ideal computer notebook system- assuming I have "magic paper"- and how it will dramatically increase our intelligence, provided that we can solve the versioning problem as well. (Note: Ted Nelson and Company went pretty batty WRT the versioning problem. Did they solve it? I don't know. I have heard rumors that some of Ted's protege's work for the CIA now, though.)

Speaking of the CIA- I want to include in this book somewhere (right here I guess) a comparison between this notebook system, and an Intelligence Agency. INTELLIGENCE is having Good Information available at the Right Time at the Right Place. Notebooks help with that by moving information to a place where it will be seen at the right time- when you access the notebook. There are a lot of similarities there with an Intelligence Agency. Okay. I'm done. Interlude out.<sup>5</sup>

Where were we?

1. Materials
2. General Principles
3. Intra-subj
4. Extra-subj

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<sup>5</sup>Yes, I do recognize the irony. I'm just spitting this out with poor organization. But damn it, I'm not a skilled writer, and I have SO MUCH I want to express, so you'll just have to make do for now. Sorry.

5. Theory of Notebooks
6. The Question of Computers
7. Getting Started

Okay. And be aware I'll probably need to skip back and forth a little bit. Sorry, just one of the problems of having a straight linear text, rather than a fully mapped out domain.

# Chapter 1

## Materials

Some topics for “Materials”:

- Paper
- Pen
- Binders
- 3-hole punch
- donut rings
- stickies (NOT yellow sticky tabs!)
- tab dividers
- pockets

And associated issues:

- Storage
- Carrying
- Archival
- Handling Optimizations

So lets start with the materials- what you need to have with you.

## PEN

You need a pen. Actually, you need three. And they need to have little four color clippies- Red, Green, Blue, and Black.

Theoretically, you can do this all with a black pen, but TRUST ME, you don't want it. Your ability to very rapidly switch colors will way more than make up for the nicer line that the G2 gel pens give you. Really.

You need one to carry with you, you need one for backup, placed in a trusted place, and you need one to be a backup to the backup. YES, you really need this. If you are wasting time looking for a pen that you lost, you are just wasting time. The pen will come back. In the mean time, you need to write, so you've got to fetch your backup. You have a backup to the backup. If you have ready access to a store, you need to buy another pen, should you not find your first pen by then.

These 4-color pens are expensive. Remember: Buy 3. *Your pen is your life - don't lose it.* But when you do, don't hesitate to start in with the backup.

Next: You want to have a list in your notes of the locations to search for your pen. Mine looked like this:

1. Jacket
2. Pockets
3. Pants
4. Pockets
5. Buried
6. Inside Notebooks.

Re: the last: "Buried Inside Notebooks." IF YOU DO THIS SYSTEM, that will actually be a VERY common occurrence. Because you'll have 2-3 inches of paper. Those 4-color pens are BIIIIIG and FAT. But they aren't so big that they can't get completely lost amidst a big fat chunk of paper. Trust me. So actually open up the book and flip through sections, looking for your pen.

I'm not going to talk about this much; This is just something you'll find with experience.

So that's the deal with the pen. I'll talk more about what the colors are for in the "General Principles" section.

Next.

## PAPER

You want lots of it. Always have at least 2 reams unopened, of about 150 sheets each.

Get COLLEGE RULE. You want as many lines on these as you can, because information density is the name of the game. 3 holes, of course, so it'll go in your binder.

8 1/2" x 11", or the new 8" x 10 1/2"?

Don't laugh- it's a serious question.

There are trade offs to both.

I used 8"x10 1/2" for most of my notes. It was good because they fit within the larger tab dividers. Yeah. 8x10.5 is also a lot cheaper. With the volume of paper that you will purchase, price can become an issue.

But if I were to do this again (and I intend to- I intend to do this once, for three months, once every 3-5 years, to gain a "situation awareness" I would use full 8.5x11".

Why? It's not really the "extra bit of page" that is important (it isn't- having a better rule is far more important), but rather that your paper conforms to the global standard for paper.

You are invariably going to want to include leafs from outside your notebook system. And you should eventually make your own templated papers: You'll make standard form sheets, print them onto printer paper, and include it in your notebook.

Printer paper doesn't come in 8.5"x11". So you have some big pages and some little pages. Yuck! When it comes to quickly flipping through pages to find a particular page number- yuck! It gets difficult.

So get 8.5x11" college ruled 3-hole-punch paper.

## BINDERS

Major important.

First, let me dispel notebooks: Don't use them. I'm talking about spiral bound notebooks.

I used to use them. I have a huge collection of spiral bound notebooks in my closet. I love them, they are so cute and self-contained. And partitioning them is kind of fun, even.

But the binder system just so completely blows them out of the water, that I will just never go back to those things.

This isn't to say that notebooks don't have a place- THEY DO! Just not in this system.

Notebooks are great when you are doing a straight chronology. Or you are keeping JUST RECORDS. Not a big fat intricate total-thought-keeping system that I am describing here, but rather, I'm talking about- you have a business, and you are keeping records for it, and so you buy a notebook because it's nice and self contained and stuff like that. Another nice thing is that you know the pages aren't going anywhere. There are times where that's not what you want. And you can turn pages easier. It's just easier.

But this system that I am describing:

Impossible. You cannot do it like that.

In this system I am describing, you MUST be able to insert pages between pages. And it's so incredibly useful to be able to lift 50 sheets and put them in another binder entirely.

Okay, so, please don't use notebooks. You will die. Quickly.



Now, on to Binders.

What you want to look for:

- Inside Pockets
- Transparent Outside Pockets
- Obstructions on the Outside Spine
- Sheet lifters
- Ring Type
- Width/Size
- Durable vs. Sucky

So, let me start with the last one. I forget what they call the “non-durable” ones. They cost less. Maybe “Economy” or something like that. DON’T GET THEM! YES, they are CHEAPER. BUT, even on the budget that I’m on, you do NOT want them. Because they are going to snap open when they shouldn’t. Believe me, there’s nothing worse than being on the bus, hitting the notebook the wrong way, and suddenly WHAM- 100 pages on the floor. Luckily they are numbered and you can put them all back in the original order, but-

*Trust* me- Go with Durable.

You’ll have to unthink both sides to open the ring, but you’ll do so with the knowledge that it’s keeping your data safe!

DURABLE! All the way!

Okay, next, we’ll talk about width/size and the ring type.

If you are getting, say, a 1“-1.5” notebook (my carry-about notebook is somewhere in there), then just get the normal rings. They are three loops, bound to a metal binding, blah blah blah.

But if you are getting anything larger (and you should have at least one of these, for your common store- it’s going to be BIG), then you want to get what I call a “half-loop”. I’m sure there’s formal names for this stuff, but I don’t care. These things look like one half is a loop (as normal), but the other half is straight, and has a 90 degree crook at the end. ALSO, it’s not attached to the binding of the binder..! It’s attached to THE BACK SIDE of the binder.

These things are SO great. It costs more, but GET IT.

What it does is it keeps your papers from flying out all over the place when you open your deeply packed notebook. That little 90 degree crook stops the pages. It’s great. You’ll have to see it to believe it, but do. It’s wonderful.

So: Big Notebook, get the half-loop. Small notebook, I think they are all just normal full-loops. Never seen a small notebook with a half loop.

Sheet lifters. If your binder has a sheet lifter, Awesome. I like these. I’m not sure why. They just seem to help. This is more of a spiritual belief on my part; I’m not really sure. But I leave them there and they seem to be useful.

Now I'll talk about inside and outside pockets, and then the possible obstructions on the outer spine. Then we'll be done talking about binders. (It's a fetish thing, I guess.)

The inside pockets are really useful. I use them to store tabs in when they aren't in use.

Oh- REMEMBER that you (if you could) bought those pockets, right? Stick one at the front of every binder. Store donut holes and stickies in them. That's just the place to do it. And you'll store the tabs' "guts" in there too. You know, these long sheets of 1" wide paper, perforated at about 1/6" in height. You write whatever the tab's name is on them, tear them off, and put them in the tab page, right? And then you put the tab page into your notes, and you can quickly flip to them. Tab page guts- you know what I'm talking about, right?

Good. (One day, I may, or someone may, put pictures in this description. Then those of you who don't get "tab guts" can see what I mean.)

In the inside pockets, you'll store larger things like your tab pages themselves. And when people give you stuff, and of course they didn't triple hole punch it, you'll put it in there until you get home and punch it yourself.

Outside pockets. This is really important.

You're going to identify your notebooks quickly by the outside pockets. You can get away with not doing this, but it's a pain in the butt. Pay the extra money (this is becoming a theme, is it not? trust me, I'm not rich, if you haven't picked up by reading this yet- [HEY, I'm a PROGRAMMER, and it's the year 2003] but pay the extra money nonetheless) and get the pockets.

Here's what I do with them:

For archive notebooks, I put the letters that are archived. For example, "A-M" and "N-Z".

My common-access notebook (a big fat one) doesn't have covers. I think that's because I got it for free at a college giveaway, and wasn't being picky. No matter, it is jet black, and none of the others are, so I can easily identify it.

My carry-about notebook has, "default", two pictures of Lions on it. My name is Lion, so I put Lions in there, and people are able to put it together that it's mine. The Lions are smiling, and it communicates something of my nature to people. I think.

But usually the "default" isn't there. I keep a variant of the GTD system running ("Getting Things Done" by David Allen), and so I generally have my day's alerts, options, and chores on the very front. (Not that this is strictly defined in GTD, but I've adapted it a bit.)

And I usually have on the back cover, covering a Lion, a general plan for how my day will go out and bus trips (<http://transit.metrokc.gov>) for the day. It is very, very useful.

Finally, you want to look at the spine, if you have outside pockets, and make sure it is not obstructed. Frequently there are three "bolts" on the outer spine, and they sometimes pass it through the transparent pocket on the spine. NOOOOOOOO! We don't want that!

That means you can't stick an identifying paper back there! Or if you can, you can only dig it in half an inch. No, that's not for you! You want to be able to put a paper in there that has the name of the binder on it, so you can quickly ID it when a bunch of binders are stacked in a row.

There. I am done dissecting binders. If I omitted something, mail me at [lion@speakeasy.org](mailto:lion@speakeasy.org)

3-hole punch

Again- you're going to want to print out sheets, and then include them. Or you're going to want to include things that people give you. Very well then, you're going to need to x3 hole punch it. It's a wonderful tool to have, and it will go a long way. I absolutely adore mine.

Lets go through these small items quickly:

- Donut Rings

I don't know what the official name is for these things. They are flat, round, have a hole in the middle, and they reinforce paper.

When you have a lot of papers in your notebook, they will eventually start to rip at the holes. The rip will grow, and grow, and the next thing you know, your paper doesn't stay inside your notebook. The solution is to, when one hole tears, immediately reinforce all three with these donut rings. I don't know if you need to, but to be safe, I put 6 O-rings to a page. Three on the front of the holes, and three on the back.

I've never had a problem since. I've never seen a donut tear.

- Stickies

Okay- these are NOT yellow sticky tabs!

What these are, are these little tiny stickers that look like small rectangles. They are about .5" wide, if that. You can stick and unstick and restick them to paper, AND THE PAPER DOES NOT TEAR OR DROP INK AS YOU DO SO.

These are AMAZINGLY useful.

You will use these extensively as you STRATEGIZE over your notebook.

A brief explanation for now:

Strategy is ultra-time-sensitive. It also involves a lot of prioritizing, and the priorities will change- rapidly.

You don't want to mix up your rapid-change stuff with your low-change stuff. That is, you don't want permanent marks on your pages for things that are changing rapidly. So you use these stickies.

On your GSMOC (Grand Subject Map of Contents), you'll have stickies pointing you to major important areas of work or thought. You'll take them off when they cease to be important, or when you fulfill them. The same goes for the subject maps within each subject.

That's basically it. Small idea, but EXTREMELY useful. I'll write more about it when it comes time to talk about it.

- tab dividers

You will use these to keep your subjects apart, and a few other things.

- pockets

Now I REALLY don't know what these things are called. My girlfriend got them for me by stealing a few from work. When I saw them, I understood why.

These are little pockets, that you can stick ANYWHERE. They have a plastic white back, and a transparent front. The back and front form the pocket, which opens from above, and is sealed around the edge. But the back ALSO has a sticky thing. You peel off a layer, and you can stick the whole pocket ANYWHERE. This is VERY useful.

I use the pocket to store the following things:

- my donut holes
- my stickies
- stamps (as in, postal stamps)

It has worked like a charm.

So in recap, your shopping list is:

- paper - get about 8 reams, college rule, 8.5x11", to start with.
- pen - 3 four-color pens.
- x3 hole punch - get it at a thrift store if you want it cheap.
- donut holes - get 1-2 packages of many sheets.
- stickies - get 1-2 packages of many sheets.
- tab dividers - get about... 50 tabs. To start with.
- pockets - if you can find 'em, get at least 4 or 5.

Now we talk about transport issues:

- Storage
- Carrying
- Archival
- Handling Optimizations

Storage, Carrying, and Archival will be one big topic here. It's all intermingled.

SO.

You are keeping notes. You have papers. Here is a sort of scale of your papers:

1. scrawled notes on fortune cookie papers, backs of napkins, etc.,.
2. scrawled notes on blank paper.
3. notes collected onto pan-subject speed lists.
4. notes collected in your carry-about binder.
5. notes collected in your common-store binder.
6. notes in the archive.

There is another category, hovering around 5.5: special purpose collections. For example, I have a binder for "Computers". In it, it has subjects such as "Networking", "Debian", "Programming", "Software", "XSLT", etc., etc.,.

I should mention there is also item ZERO:

0) stored in your mind on a peg list.

I'll talk about that later. If I forget to, mail me, and let me know that I forgot: lion@speakeasy.org. Yes, I know that I could keep a list of promises to keep here in my Emacs buffer. But to be frank, after having been keeping so many lists for so many months, that I really just don't feel like making one. Pardon my rudeness, but if you actually DO what I am describing here, you'll understand what I'm talking about. Back to the subject at hand.

So let me describe each of these sources.

#### SCRAWLED NOTES ON FORTUNE COOKIE PAPERS

Some times, you just flat out DON'T have your carry-about binder with you. And you don't have your pan-subject speeds paper. And you don't even have a blank paper. And your peg list is full, or you don't feel like cycling it.

So you just have to make do with what you have.

You put a note on the back of the envelope and stuff it in your pocket. Or you take that fortune cookie slip out and write on it. Or whatever.

GREAT!

I mean, it sucks. But at least you got that thought! Good for you.

#### SCRAWLED NOTES ON BLANK PAPER

Or maybe you have a blank piece of paper in reach. Write the thought of it, and put it in your pocket.

#### PAN-SUBJECT SPEEDS

But if you can, be prepared in the morning, and put a pan-subject speeds page in your pocket.

I'll talk much more about speeds in my exposition on "Intra-Subject Architecture", but a little bit should appear here.

The Pan-subjects speeds page is optimized to have graduate-student rule. This is beyond College rule. You want 40+ lines on a pan-subjects speed page to cram thoughts into. Again: DENSITY is the name of the game.

Furthermore, the pan-subject speeds is partitioned. It has:

- Transcription Check-off
- Subject
- Hint
- Content

You can put whatever you want in there. Mine also has a place for a “Psi” marker. That’s where you list what type of thought it is, in terms of “Principle” or “Observation” or “Warning” or “Possible Action” or “Goal” or “Problem” or “Starting Point” or a host of other glyphs. I’m not going to talk about these because they are beyond the scope of Notebooks. They go more into mental techniques; Has to do with mental structure and the anatomy of thought. While related and quite fascinating, I’m just not going to go there. Whole ’nother discussion for a whole ’nother day.

The point is, the format is malleable. Include whatever you want. I also have a date marker at the top of the page, for the Chrono archives. Whatever you want.

DO NOT PUT THOUGHT NUMBERS on the Pan-Subject Speeds page though. Bad idea. The purpose of the Pan-Subj speeds is to be a TEMPORARY placeholder for ideas.

So what are these four things:

Transcription Check-off: You check the box after you have moved the idea OUT to where it needs to go. Don’t check it when you first put the thought in.

Subject: This will tell what subject the thought will go into. Remember: The subjects are the big things divided by the tab delimiters that have their whole own infrastructure on their own, that I will describe later.

Hint: Now, this is a quick 1-2 word, maybe 3 word, description of how this thought fits into things.

Something I learned late, but that is very important, and very essential to this whole process, is that:

WHEN A NEW THOUGHT APPEARS  
IT DOESN’T DO SO IN A VACUUM  
IT DOES SO IN A CONTEXT.

Words to the wise.

So the “hint” describes the context. This is VERY IMPORTANT!

The context is fresh in your mind when you get the thought! It would take a while to recognize the thought, and then identify the context, if you didn’t.

I used to try to think of every context a thought could fit in, and then try to place it in as many places as I could. WHILE THIS IS THE STRATEGY TO

PURSUE WHEN USING A COMPUTER SYSTEM<sup>1</sup>, this is NOT the strategy to pursue in the paper system!

Besides, the thought is MOST useful in the ORIGINAL context, 95th time.

And your hint- that's going to be USED. In some respects, it's EVEN MORE IMPORTANT THAN THE THOUGHT ITSELF! Because, as you will see if you do this for a while, it is STRUCTURE and INTEGRATION that is important- the actual contents of the thoughts are far less meaningful. Once you have the structure in front of you, the content becomes almost obvious..! We'll use that fact in a bit, as we shorten titles to just Speed Numbers. Don't worry about that now, though.

And then there's the content of the thought itself.

Now, say you're in a hurry- right? You just want to jot down a thought. You're running medical records, and you can't carry your carry-binder with you as you do so. Hey, there are limitations in life. But you were good, and folded up a pan-subj speeds with you to carry around. You unfold it, and write down the content of the thought, greatly abbreviated, into an open "content" slot.

Do you have to fill in the hint as well? And the subject?

NO!

Just wait for break. In break, you can flesh out the content if you like, and you can also fill in the subject and the hint. It won't be hard. Just don't wait a whole day to get to it- do it SOON.

Now focus your thoughts on the very next work step, because you want to STOP thinking ASAP.

Note that the pan-subj speeds paper is FAR better than a blank piece of paper, because it provides order and space to fill in. Believe me: When you start transcribing off the pan-subject speeds to the speed pages, you'll understand how useful this is.

NEXT:

NOTES COLLECTED IN YOUR CARRY-ABOUT BINDER

Your carry-about binder will be YOUR BEST FRIEND.

That's right: You are going to carry this EVERY PLACE THAT YOU CAN. Going to the movies? Riding the bus?

Wherever you go, your carry-about binder is going with you.

Thus you will want to be very particular, even religious, about your carry-about binder.

(Note: As mentioned, there will be times where you will be ripped apart from your carry-about binder by force of circumstance. If you can, bring a pan-subject speed with you. Always keep your carry-about well stocked with pan-subj speeds so that when you depart, you can carry a catch away with you.)

A "Catch": "Catch" is a word I use to describe any device that is used to keep thoughts as they come.

There are two basic types of thinking: Intentional and Incidental. Intentional is you sitting down, thinking some issue out. You'll be doing that, mostly amidst POI's ("Point-of-Interest Pages"). But most of your thoughts will come while

<sup>1</sup>See <http://speakeasy.org/lion/weird.html> to see an example of this

you are out-and-about. So you'll have to catch them. There are various traps, called "catches", that do this. The speed lists are the first good line of defense. You have some poor ones to: the aforementioned napkins and fortune cookie slips and envelopes, and blank pages. You also have the peg's<sup>2</sup> But those require a lot of processing and rotation and can get pretty funky when overused.

Back to topic.

Your carry-about binder. It shouldn't be too thick- not more than 1.5". But it shouldn't be one of those thin things either- you're going to be carrying A LOT of STUFF in there.

What kind of stuff is going to be in there?

You're going to have:

**Blank Paper** Say, 30-50 sheets.

**Blank form paper** such as pan-subj speeds, blank speeds, map pages, and whatever other templated form paper you invent.

**A Zillion Speeds and References** Speed lists for your myriad subjects. Some will be accompanied by references lists.

**Other Stuff** (I personally keep a lot of GTD related materials in there.)

**Perhaps a Subject** Sometimes you carry a subject around from the common store, because you are processing it, or adding new content to it.

You won't be carrying ALL of your subject speeds in there- only the speeds that you are still filling out. For example, if you have 140 speeds in a subject, and the last page of speeds starts with S127, then the last page, with S127-S140, is the only speed page that will be in your carry-about binder. The rest are back wherever the subject is presently residing (probably the common-store binder, or maybe in the archives).

All of your references go there, however, because you want to be able to give people references quickly. When you talk with people about a subject, show them your list of references, so that you can recommend good references to them.

Next: NOTES COLLECTED IN YOUR COMMON-STORE BINDER

Particularly, the notes will be organized into subjects. You'll also have a place called "CHAOS" (which will be quickly dumped to archive, because it is nearly the most useless thing you will have, though very occasionally used), and a place called "UNPLACED", for pages that are important but haven't been placed, and for pages that would be placed, but that they aren't numerous enough to warrant a full-on subject. (You'll indicate the subject that they WOULD belong to at the top. Organize A-Z by would-be subject. When reach about 5-10 pages, make a full-on subject for them, with all that entails.)

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<sup>2</sup>"Tie Noah Ma Rye Law Shoe Cow Ivy Bee Dice Tit Ton Tomb Tire Towel Dish Tack Dove Tub Nose..." - yes, I chose Dice-Tit-Ton, I know... Though Toes-Tot-Tin were harder to work with.



But mostly, the common-store is just the subjects you have been using lately—say the last 20-40 days.

Occasionally, you'll go through the common-store, and take subjects out that you haven't touched lately, and put them into...

Lastly: NOTES IN THE ARCHIVES.

These are big binder that store old subjects that you won't be putting anything into for a while. Start with A-Z, split into A-M/N-Z, and further as you fill them up. Make sure they have transparent covers and transparent spines that you can put papers into in order to declare their letter ranges quickly.

The “Chaos” subject- a non-subject, should go under “C”. Dump chaos into the archives frequently.

The archives have a second use as well: In addition to storing subjects that aren't being used, it is also used as an archival space for subjects that ARE in use, but have archival content.

Some subjects have old junk in them, but old junk that you still want to be able to follow up links to. You mark old junk with a red mark at the bottom of the page (I use the Japanese/Chinese mark for “Old”), and then you store it at the end of the subject space. (We'll talk about this later, in the Intra-Subject pages, discussing page layout.) The archival content is at the back. When you decide to get around to it, you can take the archival content and throw it into the Archive subject. Even though you are still using the majority of the content in the common-store binder, or perhaps even carrying it temporarily in your carry-about binder.

So. We're about done discussing Materials; The last topic is handling optimizations. That is, tricks for dealing with papers.

I'll talk about papers you are going to throw away, and then I'm going to talk about handling speed lists.

Paper you will throw away.

Put a gigantic big “X” over any paper you are throwing away. You don't want to keep running back and forth to the trash. Just start a stack of pages you are throwing out. Put a big X on them as you decide to throw them out. In RED, if you can.

If you have a page that you are GOING to throw away, but are still using, temporarily, put a DASHED X on the page. That signifies to you that the page is on its way out, but still in use. THEN, when you are done with it, put a solid X over the dashed X.

Speed lists.

It is always best to put a speed onto the subject page's speed that the speed is going to.

Let me make this clearer: You do NOT want to use the pan-subject speeds list! Yeah! You don't! Even though we made them! Because it's another transcription step, and we want to minimize transcriptions. What you want to do is put it on the destination speed list first.

The only reason we have the pan-subject speeds lists is because we don't always have access to the carry-around binder, where we are storing the latest speed list for every subject.

But when you CAN, when you have access to the carry-around, put the thought directly into the carry-around.

NOW: Frequently, you'll be thinking about some subject, but thoughts about another subject are also coming to you. What you want to do is to TAKE OUT those speed lists that thoughts are going to frequently, and you want them close by your side. That way you don't have to go rifling through dozens of speeds. You just have 3-7 by your side, and work through those. Much quicker.

Next: When you have a big pan-subject speed list, with multiple entrees to a single subject, you want to use that to your advantage. You want to check them all off onto the one subject speed list while you are there. Yes, seems like common sense, but I had to figure out a lot of this stuff over time, so I'm telling it to you, even though you may already know. Just in case you don't.

But remember: Avoid using the pan-subject speeds.

And now, having just told you that, I am going to give you another case where you should use pan-subject speeds. Some times, you are trying very hard to work on one thing, but thoughts just keep coming at you from all angles. But you are trying so hard to stay on one topic, and don't want to deal with all of the maintenance promises. In this case, use the pan-subject speeds. Yes, it means more work for you later, but, at least, you get to concentrate on your task at hand, and trust that everything is caught into your pan-subject speeds.

There you are.

That is what I have to say here about handling optimizations:

- Trash X's
- Pull out speed lists that are frequently accessed during a writing session.
- Transcribe pan-subj speed lists in batch.
- Avoid pan-subj speeds, save when you absolutely need them, either by being unable to carry your carry-about binder, or by difficulty concentrating amidst flipping from speed list to speed list.

So in recap:

We talked about:

- Raw Materials
- The carry-about, common-use, and archival Binders
- Handling Optimizations

So you know what I have to say about the materials that the notebook system rests on.

Next, I'll talk about general principles that apply across the entire notebook system.

Then, we'll go into the intra-subject architecture, followed by the extra-subject architecture.

Then I'll talk about the Theory of how this all works together.

Finally, for those techno-philes out there (and you are many), I'll write about the Question of Computers. Why they suck for what we are trying to do, why it doesn't HAVE to be that way, describe a simple program, that, if written, could alleviate 50-90% of the burden of this system (albeit at a cost...), and I'll describe my notion of the ultimate note-keeping computer system.

I will also talk in that last section about the versioning problem, a problem that plagues even the existing notebook system, as I have described it, though it is a bit more manageable on paper. Maybe Ted Nelson has solved it. Maybe he hasn't. I don't know. He's not telling us. I do not believe it can be solved. Not in a way that we really like.

## Chapter 2

# General Principles

This is a description of some general principles, some general themes, that apply to the entire note-keeping process.

1. Information Presentation issues:

- Page Layout
- Partitioning
- Info Density
- Page Numbers
- (Maps)

2. Process:

- Late Binding
- Out Cards
- Tolerance for Errors
- “Starting in the Middle”
- “Divide when Big”

3. Writing Form:

- Color
- Quality

4. Psychology

5. Maps

We'll start with Information Presentation issues: Information Density, Partitioning, Page Layout, Page Numbers.

Information Density has to do with how much information we can cram on to one page. There are times where you are going to want a loose density, and times where you will want very tight density.

When you are working with things like MOC's, TOC's, or any other form of presenting raw data, then you want to make things as tight as possible.

There are many ways of doing this, but one of the best ways is to have a template that helps you write small and cram things together. For example, I have standard form speeds (both subject and pan-subject) that keep 45 lines of text- far more than a college rule. It makes you write small. And it's not just height- when you write small, you write small in width too, so something that once took 3 lines now only takes 2.

Information density is a MUST for tables of contents. No double spacing, unless you love flipping pages and scanning with your eyes! You want to be able to see as much as possible in as small a space as possible.

On the other hand, there are times where you will want things spaced out. If you are writing in a POI, you'll want to have plenty of room for comments from the future. You'll want to have space to interrupt yourself, or maybe later draw diagrams. You will want LESS information density.

So keep these things in mind as you work on your notes.

Next: Partitioning.

Partitioning will be a recurring theme as you keep your notebooks.

Let's take the example of a single page: Do you have a space for the Title? How big will you want it to be? How about the page number? How much space will you allocate for revision? How about the page's date- do you want to leave space for that?

Content. As mentioned in information density, you'll want space for future comments. Perhaps you are anticipating a lot of work in the future, so you'll allocate more space for that possible future content.

Now let's get off the page, and talk about namespace.

Whenever you create a system for naming things, you are working in partitioning. You have only so many letters. True, you have infinite glyphs, but they are kind of hard to make indexes out of- they have no intrinsic ordinality, the way letters do.

Some time you may want to reserve a space of page numbers for some particular thing to be filled in in the future. We'll talk about page numbers in a moment.

Partitioning is difficult for me to talk about in the abstract, so I just want to leave you with understanding that "Partitioning is something that I'll be spending some time thinking about." When the particulars of your immediate situation become clearer to you, you'll see what needs to be done. You will have options. The strategies in this book will describe many to you. Over time, you will gain skill in partitioning.

Page Layout.

The last two topics have been pretty vague: "Think about info density, think about partitioning."

This one is going to be pretty specific.

On a given page, you can find the following things:

- Content
- Date
- Title
- Page ID (“Page Number”)
- Sequence Identification
- Archival Mark

You are probably familiar with the first four, the last two may be a little bit of a mystery to you.

The details of the first four:

Content will fill most of your page. I need not explain it.

The date goes in the top right corner. It reads something like “(Sunday) 25 May 2003.” I use the Japanese characters for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. I highly recommend learning those particular characters. They are not hard, they are very useful, and they look far more different than one another than the letters for Sunday Monday Tuesday etc.,. You’ll be able to mark down the day of the week a lot quicker, and you’ll have greater information density. Highly recommended.

The Title appears at the top of the page, centered. Usually the title will include some sort of identification. For example, a title may read: “POI#26 - the Kitty Model”. The title is “the Kitty Model”, “POI #26” is the identification for the sequence of pages: This is Point-of-Interest #26. You needn’t always have a title, nor need an identification. But it’s best to have both.

Titles are most important for POI’s, because they delimit the boundaries of the POI. Anything that goes beyond the boundary of a POI’s point of agreements or title are basically lost, as far as retrieval at a later date goes. That is, if it isn’t described by the title, you won’t be able to find it. Stay in bounds, spark new POIs when you need to. I’ll talk about this more later, when talking about POIs.

Now we have the “Page ID”. It’s a whole topic on it’s own, so I’ll talk about it after I talk about “sequence marks” and “archival marks.” For now, let’s just say that the page number goes in the bottom right corner, so that you can flip pages and find what you are looking for.

Sequence Marks.

When you create POI #28, it may consist of 1 page, it may consist of 3 pages, it may consist (you want to avoid this) of 27 pages.

But you don’t want to have to turn the page to see if there is more material or not. That’s a waste of time. So what we have are “Sequence Marks”. They effectively say whether there is another page in the sequence or not.

As we see when we talk about Page ID’s, some times you can tell just by the Page ID. (“P27”, alone, means that there is no next page, that this is a

one-sheeter. But if it reads “P27-1”, than you know that this is the first of several.)

But generally you can’t.

In the bottom right corner, you put a little glyph- a little arrow pointing to the right- to mean “Continues on the next page.”

And if there is nothing on the bottom right corner, that means that you were too busy to put the arrow there, but that you can still, probably go to the next page as well.

However, if you see a little “box”, a little square, drawn in the bottom right corner, then that means that that’s the end of the sequence.

Unless! Unless! You might extend the POI (or whatever sequence it is- maybe some Research, or a Reference, or whatever) later, in which case you need to put an arrow through the box.

The box is made transparent, so that you can later put something in it to cancel the box.

So if you see a box with an arrow on top, that means that once this was the last page of the sequence, but that you later extended it, so: Turn the page.

The sequence mark appears ABOVE the page ID.

Archival Marks.

Archival Marks appear to the LEFT of the page ID. (This is all in the bottom right corner of the page, now.)

The archival mark is a RED mark (unlike the BLUE page numbers and Sequence markers). It can look like whatever you want, I personally use the Japanese Kanji for “Old”.

It looks like this:

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Looks sort of like a tombstone.

If you put that mark there, that means that the information on this page is no longer required in the subject, in the common-store binder. However, it may still be the target of some links you set up some time long ago, so you want to keep it around. (In the Archives! Not carrying it around with you everywhere.)

So what you do is POINT to the MOST RECENT information on the page- put a note in red saying, “SEE ALSO: (page id of more recent information)”, and then at the very bottom of the page, to the left of the page ID, put your red glyph for “Archive.”

Archival pages are in the back part of your section, in terms of physical page layout. Not the VERY back- that special page is for abbreviations and shorthand. But generally, you throw archival stuff out back. Then when you

want to save space, you take all of the archival stuff, and merge it into the archive binders.

Finally- Page Numbers.

I use the word “Page Numbers”, but I should really be saying “Page Identification”, because it’s actually much more than a number.

Here’s are some actual “page numbers” from my notebooks:

“Notebook S27-S47” “GKI REF 1-II-1, 1-III-1” “Mental Technique P7-1” “P2-3”

The first one means: “This is a page in the Notebooks subject, representing Speed Thoughts numbered 27-47.”

Next: “This is a page on the Global Knowledge Infrastructure; It’s a commentary on reference number 1; In particular it is commentary on sections II and III of the document.” (In the references list, you would see that reference number 1 was “Towards High-Performance Organizations: A Strategic Role for Groupware”, by Douglas C Engelbart in June 1992.)

Next: “This is a page on mental techniques, the first page in POI #7.”

The last, “P2-3”, says nothing more than “This is page #3 of POI #2.” How do you know what the subject is? Because it’s in the tab “Personal Records.” Since you don’t move pages around (we’ll actually talk about that later on—there ARE times when you do—see the section on “Out Cards” below), there’s no need to worry that you won’t be able to put it back, unless there’s some freak disaster (such as hitting an economy binder the wrong way, pages spill out, and then something happens to ALSO, further, put the pages radically out of order— I’ve never seen that last part happen).

So the parts of a page ID are:

Subject - Segment - Segment ID - Page ID

It’s a little different for reference segments, because they adapt to the form of the book that they are commenting. But I’m getting ahead of myself.

The “Subject” part is optional. You don’t HAVE to repeat the subject over on every page. I’d argue that it’s not even good to do that, unless you have good reason to believe that your binder is going to explode and all the papers fly out in completely different, unordered, directions. If you fear that kind of thing, put the Subject on every single page. Or at least an Acronym for the subject. (Replace “Global Knowledge Infrastructure” with “GKI”.)

There ARE places where it’ll be good to put the subject on EACH page, and you’ll even want to spell it ALL the way out.

In particular, I am thinking of the Speeds pages, and your P and P pages. Your latest speeds pages, and your P and P pages, from myriad subjects, will all be living right next to each other. You will need to flip between them, thus necessitating the appearance of the subject name in the Page ID. More than that though, you will need THE FULL SUBJECT NAME spelled out, because otherwise you are going to have to expand out the full name of the acronym when you are ordering the speeds. “Does MTK come before or after MP?” quickly grates on the nerves. (This is “Mental Techniques” vs. “Metaphysics.” N is #12, and T is #19, so MTK does indeed come before MP, even though by



acronym, it would appear to go the other way.) So just spell everything out on your speeds and on your P and P's.

After the (optional) subject is the (required) segment.

The segment signifiers I use, in no particular order, are:

- PJ - "Project"
- POI or P - "Point of Interest"
- RS - "Research"
- REF - "Reference"
- A/S - "Abbreviations/Shorthand"
- P and P - "Purpose and Principles"
- I - "Index"
- SMOC or M - "Subject Map of Contents"
- S - "Speed Thought"
- Cht - "Cheat Sheet"

We'll talk about these segments more in "Intra-Subject Architecture." All you need to know for now, is that there are these segments, and that they have a short identifier, and you'll be sticking that identifier in your page ID.

Most common will be:

- S (Speeds)
- M (Map, or more appropriately, Subject Map of Contents [SMOC])
- P (POI, the Point of Interest), and
- REF (Reference).

Sometimes I use "R" rather than "REF", but it's problematic because it is easily confused with "RS"- Research. Quite different things, though similar.

Immediately following the Segment Identifier, you will have a NUMBER.

That number can mean one of either two things:

It can be a TOC #, or it can be a VERSION #.

They are only slightly different.

The TOC number means "Ordinality in a table of contents." Even if you aren't keeping a table of contents yet (there's not much reason to make a table of contents over only 2 or 3 POI), you still have the notion of ordinality, and that the pieces in the segment are in some sort of addressable order. So that's the first.

The second, "Version number", is when you have things that don't really have a table of contents.

Consider A/S (“Abbreviations and Shorthand”) for example. You never have multiple A/S’s. There’s just one- the A/S. Holding all of the abbreviations and shorthands that you use.

Ah, but maybe it’s getting over stuffed. Maybe you’ve filled out all your hash tables in the A/S section, so you need to make a new version- “A/S2”. You’ll copy all of the original A/S (just “A/S”; though you can write in a “1” if you like) into the new, larger tables, you’ll archive A/S1, and then just use A/S2.

There you go.

The same goes for the maps. You usually start with just a single page map. But eventually, you need to scrap it, and replace it with four pages of map. So the first map was v1, and the next map is v2.

Your first map page was just “M”, meaning “This is a map page, the first map page ever, and there isn’t even a sequence for it, it’s just a single page.”

But your next map pages will be “M2-1”, “M2-2”, “M2-3”, “M2-4”, denoting their pages within Map #2.

You can later expand out with “M2-5”, “M2-6”, “M2-7” if you like.

And eventually, you’ll do a major reorg, and you’ll go afresh with “M3-1”, “M3-2”, “M3-3”, and so on.

So these are more like Version numbers, in this case, rather than TOC entry numbers.

Finally, after the subject, segment, and TOC/version number, you have the page ID.

Most of the time, this is straight forward.

You start with 1, then you go to 2, then you go to 3, yadda yadda yadda.

But there are two special things to note:

1. It’s totally different in the REF segment.
2. Sometimes you want to put a page between two existing pages, so you give it a “half number” or a decimal value. For example, if you want to put two pages between P7-4 and P7-5, so what you do is you make P7-4.3 and P7-4.7. Hey! There’s no binder police. You can do whatever you like, as long as it works for you.

By the way- I want to briefly comment on that principle. “There’s no binder police.” I’m writing this complex system to you, explaining how I made it up, and how it works. What’s most important is that you get the IDEAS here, not that you actually replicate my entire system exactly. In fact, I hope that you *DON’T*. For one, you are living in a different mind than I am, so you are going to probably want to put things in a different way than I do. But more than that, I WANT TO HEAR NEW IDEAS. I want to know what people do with this. And if you just say, “Hey, I did it exactly like you,” well, what growth is there in that? I mean, it might be good for a little while, but I really want to see what else is out there. My system changed in a major way at least once every 2-4 months. And it was always a positive change. So I want to hear what you all do. And remember: There’s no Binder police, like my girlfriend always

tells me about cooking. “You want to put paprika in there? Throw paprika in there. There’s no cooking police that are going to go after you.”

So get the meat of what I am saying, the IDEAS on how you can organize stuff, and then adapt it to your domain.

THEN TELL ME ABOUT IT LATER! Yeah! I’d be astonished to hear that people are doing this- for one- but to hear that you even carried it FORWARD and tried out NEW Things. That’d just validate my life right there, on the spot. *laugh;*

Okay. So where were we. Decimal pages. All’s fair in love, war, and binders. Decimal pages if you like. This isn’t BASIC programming, where you have to renumber if you want to put something between lines 2 and 3.

But References.

I have found that it is best to annotate references by using the book’s own organization.

For example, say a book (or web page) is organized into three parts (I,II, and III), and those parts are divided into chapters (1,2,3...)

Then as you annotate, USE THAT STRUCTURE.

The page ID for comments on chapter 3 of part II should begin with “II.3”.

At the VERY END of the book’s structure id, THEN put your normal page numbers, “1,2,3...”

So for example, if you wrote three pages to go along with “II.3”, they should be ID’d “II.3-1”, “II.3-2”, “II.3-3”.

Or more completely, assuming this is reference #7, in subject “Robots”: “Robots REF7-II.3-1”, “Robots REF7-II.3-2”, and “Robots REF7-II.3-3”.

And that’s that for page numbers and Information Presentation issues!

We talked about page layout, partitioning, info density, and page numbers.

Maps are related, but we’ll talk about them independently.

Next we’ll talk about general PROCESS principles:

- Late Binding
- Out Cards
- Tolerance for Errors
- “Starting in the Middle”
- “Divide when Big”

I want to start with my favorite of these: “Tolerance for Errors.”

This is ALL IMPORTANT.

You can’t do this and be a perfectionist. (Well, okay, it does require some sort of perfectionism to insist on recording and integrating every meaningful thought. But lets ignore that for the moment.)

I had a good friend in high school. Every day, he would make sure that the entire classes notes fit onto 1 page. This wasn’t done for any good reason, it was just the sort of thing like ”step on a crack break my mothers back”, and

you just get into it and can't stop. So he write REALLY REALLY SMALL on the page. And each page was perfectly, identically formatted.

That will absolutely NOT work here.

Now, suppose you are stuck in this. Just say.

Then THERE IS A CURE.

What you must do, first, is realize that the imperfection is imperfect, because it is getting in the way of optimal experience of life.

The second, is to INTENTIONALLY FUCK UP YOUR PAGE. And you must do it a different, unique, creative way, each time, until you no longer have a phobia of imperfection.

Take a big fat pen, of the "wrong" color, and put a big line down the middle of the page.

Or!

Intentionally- On Purpose- Completely Mis-ID the page. Say it's a page from another section, another segment, and a TOC entry ID number like "Infinity" or draw a little happy face where the page ID goes.

Put "Yesterday" as the date. Or whatever.

Just mess it up. On purpose.

And then sigh a breath of relaxation.

You've screwed the virgin. There's no need to worry now.

Similar to this notion of Tolerance for Errors is "Starting in the Middle."

Suppose you have a new idea on how to organize your notebooks. That's GOOD! You want to evolve your system. Most of your ideas will be good! You'll have some bad ones, but all in all, most will be good, and you'll want to encourage the process of evolving.

What you DON'T want to do is go back to your months worth of previous notes, and adapt them all the the new system.

Absolutely not. If you do that, you're going to be stuck forever in your old thoughts, whenever you get a new idea.

So the trick is to "Start in the Middle." Just start NOW with the new system.

If you want, you can partition out part of your name-space for a new experiment. Maybe have a segment named "X" for a while, until you figure out whether you like it or not. Then you can rename it if you like. (When devising naming systems, always leave "outs" if you can.)

So we've talked about tolerance for errors, and starting in the middle. These are process issues we're talking about, again.

Now lets go back now and talk about Late binding, and out cards.

Out cards: When you move a page from one place to another place, you need to put an "out card" in the old place. That is, you put a page in the old place that the same PAGE ID as the old place, that points to the new page.

That's because sometimes you have links to the old place. You don't know, and you don't care to keep track. If you had bidirectional links all over the place (this seems to be one of Ted Nelson's favorite ideas), it would take forever to do (you couldn't refer to something without actually digging it up and then linking

back), and you'd have all these irrelevant links all of the place. Sometimes a forward link matters a lot more than knowing that you are linked. Anyways.

You don't know if you are linked to or not, or by how many. I suppose you could count, but it seems like a waste of time. The solution is the OUT CARD.

If you find that a bunch of out cards are next to one another, you can just consolidate them into one, with a wide-range page ID. For example, "POI3, Pages 4-7".

Now that we've talked about out cards, it's easier to talk about late binding. Late binding is a common theme in the notebooks.

You want to do work that doesn't apply to the present moment, and that might be rendered completely unnecessary, AT THE LATEST TIME POSSIBLE.

A demonstration.

You make a page, but later move it. So you have an out card.

Now you move the page AGAIN, so you have two out cards.

Out card 1 points to Out card 2 points to the page.

Now, suppose you find a link to out card 1. "That's interesting, what's this?" You find out it goes to Out card 2. "Curious and curiouser!" Finally you find the page.

Now, generally, if you follow a link, you are more likely to follow it again in the future. It's a subject of thought and what not. So what you do, after looking up the final link, is that you go to outcard 1, and correct it to point not to card 2, but to the final destination. And then you go to the ORIGINAL link, and have it not point to card 1, but cross that out and put in the final destination.

Yeah! That's late binding. You fix it all up when you ACTUALLY FOLLOW THE LINK.

But you don't do that before, because it would just take too long and be too boring to fix up everything before hand. There's no need. Just do it at the last possible moment.

Finally, "Divide when Big."

Sometimes a subject gets BIG. REALLY BIG.

And as it grows, you start to see dissimilarities where before you didn't.

It's a little like Mozart or symphony music. One symphony sounds pretty much like another symphony, if you don't listen to them a whole lot. "Oh, there's some classical music playing."

But then, as you start to listen, and think about what you are listening to, you'll start to notice distinctions and connections, where you didn't notice them before. And as you do so, you'll see this new structure.

That same exact thing happens with the musical stream of thoughts going through your head.

The most dramatic example in my case was the fate of two subjects: "Society" and "Metaphysics". I now laughed thinking that I had them as just singular buckets. But I can't really blame myself, because: How should I have divided them?

The subjects are not logically arranged, by some sort of cosmic organization. They are arranged subjectively, by their own connections in our lives. The process of keeping these notebooks exposes the connections in your mind. They give you a MIRROR to understand your mind and thoughts.

Okay, so what happened to “Society” and “Metaphysics”?

They blew up!

“Society” became: Military. International Powers. Meetings. Festivals. Communes. Anarcho-Science. Global Knowledge Infrastructure. Democracy. Social Ideologies. Social Goals. Electronic Collaboration. Activism (which later gave way to Strategy.)

Wow! To think, it was all just one subject before.

And “Metaphysics”? Spirit. Mind First. Admonishment. Ethics. Values. Imagination. Personal Identity.

So: Divide when Big.

It’ll help you focus your thoughts. I’ll talk a little bit about how to do it in “Extra-Subject Architecture”, talking about how to spawn out subjects from existing subjects. (Easier than you think. It’s MERGING subjects that’s terrible. But that’s pretty rare. Happens, but it’s rare.)

SO. We’ve talked about process. We’ve talked about dividing when big, about tolerating errors, starting in the middle, we’ve talked about late binding and out cards. This is all process stuff.

Before we talking about information presentation, like page layout, partitioning, info density, page numbers. We’re talking all together about general principles.

Next we’ll talk about Writing Form, Psychology, and Maps.

Writing Form first.

There are two major things to mention here: COLOR, and QUALITY.

And this is where paper and pen really start kicking the computer’s ass, and the computer-fanatics don’t even know it.

Discussing quality is really made a lot easier by contrasting it with computers, actually.

A long time ago, I stored all of my thoughts in a computer text file. It was actually an AWESOME system. The computer has so many advantages that the paper world doesn’t. For example, you don’t have to put a thought in just ONE place- you can easily put it into 5 different places! I call it “Multi-cat” or “Multiple Categorization.” It’s easy- just put tags. (It baffles me to this day why people who make computer notebooks DO NOT do this more frequently..! There’s all this notebook software out there, and you STILL have to put a thought in one place, and one place only..! They just have a single category tree, and you have to put a thought in a single place. To do otherwise, you have to copy and paste or something. Terrible.) Any ways.

For all this awesomeness in the computer, you are unconsciously pulled into a problem:

ALL OF YOUR TEXT looks EXACTLY THE SAME.

I mean, lets ignore the obvious problems with including picture. (Yeah, like you really want to scan in every single image you make. And like you really

want to be so punished for visual thinking- the BEST thinking.) Just consider straight text.

In the computer, ALL of your text is EXACTLY THE SAME.

YES, YES! I CAN HEAR YOU COMPUTER-PEOPLE'S COMPLAINING. "But you can use FONTS!" But you can make it Bold! But you can make it Italics! yes! Yes! YES! I know it! You CAN do all those things.

But that doesn't make it *FAST*. In keeping notes, you don't want to constantly be dicking around with your UI. You want to be able to JUST WRITE.

It annoys me enough that to switch pen colors, I have to flick a tab at the top of my pen. But at least I don't have to move my hand away from my pen, or move to a completely different section of the screen to set a font, or move the cursor around. To change fonts for a segment of text, you have to do all that stuff. And you STILL don't get all of the variation you want.

And look: there are ADVANTAGES to having SLOPPY TEXT.

It tells you something about the development of your thoughts. When you see sloppy text, that means "This is just a quick idea I spat out." When you see regular solid text, that means "This is something I thought over for a while." You have your own writing style, and it communicates to you things that are important to you, though you may not consciously register it. (Actually, that's good: Unconscious communication is far stronger, and doesn't get in the way of your thinking.) All of this, all of this telegraphing, disappears on the computer.

The diagrams, the writing style, all disappears.

And consider maps. Maps are basically the backbone of this whole operation that I'm describing. You just can't do it on the computer easily. It takes WORK on the computer to say, "This text is tiny," to give the nuances of positioning, size, quality, all of that stuff.

And icons. I use icons all over the place. That's hard to do in the computer.

So, by contrasting with the computer, I have described the kinds of things you want to concentrate on in your notebook. USE DIAGRAMS EVERYWHERE. They are FAR better than coercive linear text. And USE VARIABLE WRITING STYLES. Write sloppy, write neat, and everything in between. It communicates to you. Use shorthand and abbreviation. Know Gregg's script? Use that when it suits you. You can late-bind decode it later. It's probably not as important as something else.

Okay.

Enough on that.

Now lets talk about color.

Your pen has four colors: Red, Green, Blue, and Black

You will want to connect meeting with each color.

Here's my associations:

RED: Error, Warning, Correction

BLUE: Structure, Diagram, Picture, Links, Keys (in key-value pairs)

GREEN: Meta, Definition, Naming, Brief Annotation, Glyphs

BLACK: Main Content

I also use green to clarify sloppy writing later on. Blue is for Keys, Black is for values.

I hope that's self-explanatory.

If you make a correction, put it in red. Page numbers are blue. If you draw a diagram, make it blue. Main content in black.

Suppose you make a diagram: Start with a big blue box. Put the diagram in the box. (Or the other way around- make the diagram, then the box around it.) Put some highlighted content in black. Want to define a word? Use a green callout. Oops- there's a problem in the drawing- X it out in red, followed by the correction, in red.

Some times, I use black and blue to alternate emphasis. Black and blue are the easiest to see.

If I'm annotating some text in the future, and the text is black, I'll switch to using blue for content. Or vice versa.

Some annotations are red, if they are major corrections.

Always remember: Tolerate errors. If your black has run out, and you don't want to get up right away to fetch your backup pen, then just switch to blue. When the thoughts out, go get your backup pen.

BY THE WAY- I forgot to mention this in the materials section, but it'll do just fine here.

Those four color pens- I think they're made in France or something. At any rate- YOU CAN SWAP COLORS. For example, say that you have one pen, but it ran out of black. So you start using your next pen. But then say that you run out of BLUE in the new pen. You CAN open up the pen, pop out the blue, and put it in the newer pen. Yeah! The procedure is difficult to describe. You just have to yank really hard on the ink. Then push it into the new pens place. It works! It's not advertised, but it works! So there you go.

Key-value pairs: Sometimes you have a big hash. For example, in abbreviations lists- you'll have letters A-Z running down the left side of the paper. One line may have, say, 3 key-value pairs in it. In my "People Abbreviations", for example, under "MNO", I have "MT", "NC", "NH", "ME". Those letters are written in BLUE, because they are keys. The values, written in black, are "Michael Turner", "Noam Chomsky", "Napoleon Hill", and "Michael Ende." Quite an interesting collection of people, no? That's why they get to be two-letter people. ;smile;

NEXT, the Psychology of notebooks.

I want to talk about being excited, "stewing", and "The Kitty Model". All three very different things, but all about the psychological aspects of notebooks.

Being Excited: Be excited about keeping your notes. Imagine what can come of it! Experience the vision. You are building CLARITY. You are organizing all of your thoughts together, and seeing what it adds up to. The results \*WILL\* surprise you, and you \*WILL\* see things that you have NEVER seen before.

Next: Avoid STEWING.



Stewing is what I call it when you are just floating over your notebook, putting things in, maintaining it, and being overall pretty directionless. Just watching connections form.

I suppose it's all right for a little while, and that it has its uses. You certainly have to do a degree of processing as you keep your notes. But if you just found out that you spent 3 hours stewing over your notebook- you want to, and can, avoid that. Focus on the priority tabs, and decide on thoughts to calculate out. You have problems in your thoughts: figure out solutions. Go for "major notions per minute", don't get so bogged down in details.

Finally: "The Kitty Model."

So-called because my girlfriends name is Kitty.

I really want to just scan in the page that she made (and that I included in my notebooks.) However, our scanner has broken for the 3rd time, and we really think it's dead now, SO, I'll just have to tell you what "The Kitty Model" page depicts.

Words in parenthesis are either cartoon images or Kanji.

I am "Lion". "Kitty" is my girlfriend. "Kitten" is our daughter. (I should introduce you to my family. Amber is my girlfriend. Our daughter's name is "Sakura.")

Straight from "Notebooks P26":

-----  
POI \#26: The Kitty Model

(Mon) 26 May 2003

(Lion) "Oh! I Thinked a Think!" (Lion) Writes think down.

10 years later.

(Lion) "How will I develop all these thinks?"  
(2 stacks of notes.) "One at a time I guess."

(Kitten) - "Daddy!"

(Lion) (a page) "OK this is a good think,  
let's develop it a bit."

(Kitten) - "Daddy, I'm getting married!"

(Lion) - "Oh shit! I got another think!"

10 years later...

(Kitten) (Lion) (4 stacks of notes.)

"Daddy?" "Shit. I have all my thinks written down!"

... (grave marker) <- Lion

(Kitty) (Bonfire) <- Lion's thinks.

-----

Note the page ID in the bottom right corner, the title on the top, the date in the top-right corner, and the page contents in the middle.

This cartoon speaks for itself. Particularly, on the immobilizing features of the notebook system, and the perils involved here.

Contemplate deeply on this image.

Otherwise, you may find yourself in very dangerous territory.

I'm fucking serious. If you don't worry about this, then you are going into major spiritual self-damage. If you don't believe in that kind of thing, then consider damage in terms of however you contemplate your life. But it can be REALLY BAD to do this for prolonged periods of time.

I'm not saying it isn't a good idea to do this for a little while, or even periodically. But you don't want to do this for much longer than a few months at a time.

Unless you are a monk. In which case- go for it. :)=

Let me know how it goes.

FINALLY.

I want to talk about Maps.

They are SO CRITICALLY IMPORTANT TO THIS WHOLE THING.

Because they are the ASSEMBLY POINTS. That's where ALL OF YOUR THOUGHTS come together into one place.

Your POI, your Speeds, your Research, your References, just everything. You assemble it all together on the map.

And the map you construct- that MAP is FAR MORE IMPORTANT than the sum of the CONTENT of all of your thoughts. Because, with that map, you can reconstruct the WHOLE THING.

Take this book for instance. What I've basically done, is taken my two map pages from my "Notebooks" notebook, and I'm just going over the maps I have. Serializing them out into text.

For example, on "General Principles", there's a link to "Psychology", with ".33 .37 p26" next to it. In green, next to "p26", it reads "the Kitty Model." Can you guess what .33 and .37 are about? They're about being excited, and about not stewing. If I had put under ".33" the word, in green, "Excited," and under .37 "Don't stew", I wouldn't even need my speed lists. I could just reconstruct the whole thing for you here in text, based on the map.

So there is that.

Now I want to talk about constructing maps, in the particular. (For this, I'm going over to my "Visual Language" notes, and looking at the SMOC, pulling out the section on "MAPS".)

And there I have it:

Multi-dimensional MOC's, Possibilities, in Explanations, and Why Better.

For the sake of writing this book, I'm going to skip the possibilities of mapping, and explanations, and focus in on Multi-dimensional maps, and maps the are better than TOCs (in most cases.)

(I'm demonstrating this to you, so that you can see, as I go with this, how they work.)

I see off in the distance "Mental Coercion." It's it's OWN topic, within this SMOC for Visual Language ("VL SMOC"). The big things in this area are "MAPS" and "Mental Coercion." Between them is the "Why Better field." Surrounding that are "Uncoersive" (which itself links to "Mental Coercion"), "Structure" (which links to the hypertext movement), "Enables Strategy", and "Only read NEW ideas."

Those things are written in tiny little lower case letters. And the are surrounded by lots of little dots with small numbers by them- references to the VL Speed Lists.

And before we go much further: YES, I do realize the irony here. YES, I do realize that my writing here is terrible. I'm not a writer. And YES, I realize that this should be written AS A HYPERTEXT. And YES, I realize that for being such a strong proponent for visual language, that this document should be VISUAL. And YES, I realize that it should be mapped out, rather than a big long didactic mentally coercive text.

YES, I realize all of these things. But I also know that my computer skills of actually inputting those things- are actually pretty poor. I'm a great programmer, but I don't know how to use photoshop. And the tools out there are pretty poor for the kinds of things I am describing.

And I realize that if I try to write in those ways, that this book will never appear on the Internet.

And I further realize that there is NEAR ZERO content on the Internet that has to do with the kinds of things I am describing.

SO. In conclusion. I say "better a little than none at all."

I only believe that, if you are actually reading this, if there is ONE PERSON in the world interested in this subject- that you will be grateful that this work appears, even in this ultra-crummy form.

YES, I have talked with people who have read MY ENTIRE WEIRD FILE (<http://speakeasy.org/lion/weird.html>), SO. I believe people will read this. And that someone may even follow the directions and do something like this themselves. Please contact me if you do.

I MAY (I would say "Will", but I don't really know for sure) make a 2nd draft of this document. (Whoa! Concept!) And if I DID, I would put it in DOCBook. Than you'd at least have a table of contents, and organized pages. As much as I hate tables of contents for their weaknesses. And I MAY even scan in pictures and diagrams from my notebooks, and if I DO, the text would become incredibly more clear and accessible. And it is CONCEIVABLE, THAT, IN THE DISTANT FUTURE, I would put together this all in a mapped, hypertext, icon including set of pages. It would be a lot of work, but I could go that far. If people were interested.

So the lesson is: If you are slaving through this, if there is a Single Soul out there actually reading this: You MUST let me know. It is a MORAL IMPERATIVE.

Thank you.

Back to maps, from Irony.

I want to write about why maps are better, and about how to frame the first page of a bunch of map pages. I also want to write about creation techniques.

Maps are better than TOCs because:

- They are mentally uncoersive.
- They reveal structure in ways MOCs cannot.
- They enable Strategy.
- Incredible (useful) Subtlety

“Mental Coercion”. Let me describe this idea for a moment.

Think about a Shakespeare play. Now think of a map of, say, the Earth.

The Shakespeare play is “Mentally Coercive.” To get it, you have to go through the whole thing, start to finish. You can’t watch it backwards, and get the same thing. It’s possible, but difficult, to just look at portions of threads that interest you, without significantly processing other sections. You have to scan a lot, if you want to do that.

Now contrast that with a globe. If you are interested in a particular thing, you can just go straight to that thing. Focus in on the State of Washington, or whatever have you.

In your mind, the rest of the globe disappears. You’re just looking at Washington, and Canada, and Oregon, and what not. (“Yes, I am a US-ian and Seattle-ite. Anything north of the border is just ‘Canada’. Quebeque, BC, what are those things? It’s all just Canada, to my untrained ear.” No cruelty intended. Apologies to the rest of the world for the incredible harm our country inflicts.)

That’s what I mean when I talk about “mental coercion.”

It is my opinion that most books (textbooks in particular) are unnecessarily mentally coercive. I believe that you could also write fiction that was not mentally coercive, and still get around “but do they understand the build-up?” problems that hyper-text fictions have. But I am not here to talk about hyper-text fiction, I am here to talk about maps right now.

So one: Maps are mentally uncoersive. Much of the remaining advantages are based on this.

Next: Maps reveal structure.

Maps reveal structure in ways that TOCs, by nature of their forced ordinality, CANNOT.

How could I possibly represent the links from MAP - to Why better - Uncoersive - MENTAL COERCION in a TOC?

Both “Map” and “Mental Coercion” are “high level” constructs.

Can I imagine:

I. MAP 1. Why Better 2. Uncoercive II. MENTAL COERCION

..?

Not only does it not work, but “Uncoercive” should be connected BENEATH why better, and we’re also screwed up because as soon as we put in item 3, the link is broken between Uncoercive and ”Mental Coercion”.

No, that’s all wrong. I am convinced that the only reason that we do TOCs is because we just haven’t built the tools to make Maps. We are being beat up by the constraints of our medium of expression.

Fortunately, this will all change in the future. Scott McCloud and Robert Horn etc. all are hard at work at correcting this mistake, now that we have the computers that can express what we really WANT.

Complex structure cannot be represented by a TOC. It can only be represented by a Map. Even then, there are still problems, (for example, non-graphable interconnections), but we are still light-years beyond the TOC.

Next: Maps enable Strategy.

You can zoom in on precisely what you want to read. To be STRATEGIC, you need CONTEXT. Without context, you cannot make strategic decisions. With a TOC, you are limited to TWO pieces of context: What’s above, and what’s below. (Actually, you also get to go back an indentation level, and you can also look at children of a super-topic. So that’s two more.) So you are confined to a grid. But we don’t want that. We want to be able to go every which way, in order to more fully see the context, the terrain, so that we can make strategic decisions about what to read, or what to write.

Finally: You have the possibility of incredible subtlety.

I’m not talking useless or ”This is so incredibly subtle, you will never even get it.”

I mean- that you can position things, precisely, in order to make statements that require no words. This goes back to the sort of “unconscious communication” idea I mentioned. It’s BEST when you can communicate complex ideas, without even speaking a word- and people “just get it.”

What am I talking about here?

I’m talking about how you can position ideas that are related close to one another, and you don’t even have to assign a label to the group of ideas.

Or you can position one idea right smack-dab between two other ideas, if there is a relationship between them. *And people will get it.* People can figure out what you can mean. And even if you don’t draw a line between them, people will pick it up.

This blends into my next topic, which is constructing maps.

When you create a map, as per my system, you have two basic types of “materials”.

You have your LINKS, “Hard content”: That is, your speeds, your POI, your References, your whatever. Even other maps. Every thing you keep in your subject, appears as “Hard content” on your map.

Then you have your MAGNETS. These are words that “pull” on the hard content. They build your structure.

Here's an example from my notebooks, particularly "PFT" - Public Field Technologies. I wanted to make a map of what PFT meant to me. I made a big list of all of the public field technologies:

1 - Visual-Verbal Language 2 - Self-help Books 3 - Personal Notebooks 4 - Home Organizing 5 - Community 6 - Co-ops 7 - Communes 8 - Community Dollar Networks 9 - Free Software Dev Practices 10 - Community Democratic Self-Rule 11 - Babysitting Networks 12 - Community Public Papers 13 - Community Wireless Networks 14 - Festivals that INVOLVE Participants 15 - Toolshare Networks 16 - Activist EDU Networks 17 - OpenSpace Technology (OST) 18 - Social Blueprints 19 - Social INET Organizing Blueprints 20 - Group-Help Books 21 - Arguments Databases 22 - Collaborative Mapping 23 - Groupware 24 - Wiki 25 - Anarcho-Science 26 - Collaboration Techniques and Study 27 - Field Advancement Study 28 - Visual Facilitation 29 - Public Field Technology self-Study 30 - Open HyperDocument System (OHS)

That's a list of what I call "Public Field Technologies." But I don't want to get lost talking about it all right now. The focus is on the mapping process right now.

First that was just an unnumbered list. Then I numbered it. (1-30).

Then I started to look for patterns. I tried a few ways, and then I realized that I could handle a substantial number of the items by making a scale:

From Individual, to Family, to Clan/Tight-Community, to Loose Community, to Global. Yeah!

So 2 and 3: Self-help books, Personal notebooks (this!), those are on the "Individual" end of the scale.

Then on Family, there's "Home Organizing."

You don't want to actually write out "Home Organizing", because it's a lot of space, and a lot of writing. You just want to put "4" on the map. That way, if you decide to move it later on, you just cross out the "4", and put it somewhere else. Much easier. Much more agile.

Once it's all solidified and you are happy with it- you can turn on the Green, and expand out the numbers. But for now, you want just numbers out there.

So the word "INDIVIDUAL" appears, pretty big, on the page. That's a "MAGNET" word. It's "attracting" '2 and '3 to itself. They are right next to it.

Now let me point out something interesting:

'10 is "Community Democratic Rule." Where did I put that?

It's not attached directly to a magnet word! Actually, it appears BETWEEN two magnet words: "Clan,Tight Community", and "Loose Community."

Clan/Tight Community has, immediately connected to it, "6 co-op" and "7 commune". And Loose community has connected to it "5 Community (Local)", "14 festivals involving participants". Interestingly enough, it also has some magnet words on it's sides- "Community Communications Line" (w/ 12 and 13 attached) and "Community Resource Collection" (w/ 8,11, and 15 attached).

But Democratic Self Rule, #10, floats between them.

So this is an example of some of the subtlety that maps allow, that TOC's do not, and how they work out. Yeah!

Incidentally, for those who wonder:

The line from Individual - Global was just one half.

The other half is centered around Collaboration, and Communication itself (Visual-Verbal Language).

So there you are. You should be able to map things now, at least crudely. Your skill will increase with practice.

Now I want to talk about what to do when maps get big, and multiple categorization of maps.

When maps get big, you want to rebuild them, and have a "distant view". You also want to respect multiple-categorization. Frequently, there are three ways of looking at the same thing, and you will want to capture all of them.

The first map in a sequence of maps should be a MAP of MAPS.

Oh, by the way. Yes, you can have icons and pictures and smiley faces on your maps. **THERE ARE NO MAP MAKING POLICE. YOU CAN DO IT HOWEVER YOU LIKE!**<sup>1</sup>

So have a map of maps at the beginning. And have super-maps as you need them: Maps that give you a birds eye view of other maps.

And have teleporters and warps from map to map. Really, you can do *whatever you want.*<sup>2</sup>

ahem.

So. You now know why maps are cool, and how to make them.

You won't just make them in your SMOC and GSMOC, you may also make use of them in your POIs, as I did with the PFT map.

And we're done with this section! We've discussed the general principles!

A brief rehash:

- Information Presentation (page layout, partitioning, density, page numbers)
- Process (late bind,out card, errors, start middle, divide when big)
- Writing (color, quality)
- psychology (the kitty model)
- maps

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<sup>1</sup>I kind of like Tony Buzan. I kind of don't. I think that his rules are a bit constrictive. WHY must you use millions of colors? WHY must you draw them LIKE THAT? I don't want to. I think it's a waste of time. And I want to draw the maps how I want to. I don't find your way particularly perfect or anything like that. And I don't think that the ability to draw maps requires certification or anything like that. Okay. I have too much of an Anarchist in me. Drawing Power for the People! Much more a Mark Kistler guy. draw3d.com - YEAH! You're ALL Creative Geniuses! YEAH! Okay- I'm done.

<sup>2</sup>I swear, I have just been touched by the spirit of Mark Kistler, by the mere thought of the man. Por la Sociedad Libre! I swear- that man wears too much black and red- and that big red and black star? The Raised Fist holding a pen? His insistence on the intrinsic value of people? Hmm...

Next, we'll talk about the architecture within a subject.

Then we'll talk about the super-architecture, binding all of the subjects together.

Then a bit about the theory of notebooks, and finally, the question of computers.



## Chapter 3

# Intra-Subject Architecture

Within a subject, you have a large collection of papers. They have a logical organization (into segments), and a physical organization (the sequence of papers).

The major segments are:

- P and P - purpose and principles
- Speeds - speed thoughts
- SMOC - subject map of contents
- POI - point-of-interest studies
- RS - research
- REF - reference
- PJ - project
- I - index
- Cht - cheat sheets
- A/S - abbreviations, shorthand
- X - experimental, temporary (UNLINKABLE)

At least, those are the major segments I have hammered out well. There are MORE segments that I would like to practice, formalize:

- CEP - chronological episode
- TD - topical deliberation
- DD - data dictionary (definitions)

- L/T - lists and tables (high info density)

Something to recognize here is that you can make up whatever you like. However, you don't want to just make up a new thing every time you have a new thought or format. You want to think about your divisions, and create new ones sparingly. If you can fit something into an old one, and nothing suffers, then preserve the old situation. It's only when you have something really "new", that is best served by a new category, that you will do well.

I haven't studied and thought out the details of why this is the case; It is just something that I happen to notice. With practice, you can flesh this out. One day, YOU can write a great explanation on how it works, and we can consolidate everything into one huge glorious document.

Now- YOU DON'T HAVE TO HAVE ALL THESE SEGMENTS. Remember: Late bind, late bind, late bind! Only build what you have to when you need it.

I should add here also that- for many of these, you'll want to make TOC's for them. When you start a subject- you know, you've collected a few pages in the "Unplaced", all with the same subject marker. And after it reaches about 5-10 pages, you say, "Well, let's make this into a full-on subject now." So your subject starts with roughly 5-10 pages. You don't have to start writing a POI TOC if you only HAVE 2 actual POI. Wait until you actually could USE a POI, before you write one. After you have about 10 POI, THEN make a POI TOC. Late bind.

So we have segments. What else do we have in the subject?

We have the physical organization to talk about as well- the way papers are physically laid out, from front to back.

It is the shorter topic, so I'll describe it immediately.

#### PHYSICAL LAYOUT

(Title Layer) The Subjects Tab Page SMOC - subject map

(Lookup Layer) S - speeds TOCs - tables of contents I - index

(Contents) (Just about Everything Else) (Archival Store)

(Quick Access) Cht - cheat sheets A/S - abbreviations

(Note: The P and P page does NOT go in the subject. The P and P pages, one for each subject, are collected into a grand P and P collection area. More on this in the "Extra-Subj Architecture".)

That is:

You start with the actual tab page, that delimits the subject in your notebook. You know- it's a big yellow/tan sheet, it has a plastic tab sticking of the edge, and you slip a little paper in. On that little paper you slip in, you place the name of the subject. Simple as that. Your subject starts with that.

Then you have the SMOC- this may be one page, it may be many pages. If you have many pages, the first one should be the page that points to the rest of the MOC pages, or presents your "super-map", or whatever.

By the way- SMOC means "Subject Map of Contents." That is, it's a MOC that applies over a subject, rather than a GSMOC, which we'll talk about in "Extra-Subject Architecture".

Following the SMOC, you store your Speed Thoughts. Now realize- you WILL be missing some of your speeds- the latest ones, in fact. Because you are carrying those around with you, in your carry-about binder. But most of the time you are dealing with your subjects, you'll be in your common-store binder, or maybe even in an archive binder. But the speeds that are not on the latest page, you will store right after the SMOC.

Why? Because your SMOC will refer intensively to your Speeds. You'll have little "28"'s and "33"'s that you are going to want to collapse, by using the Speed lists. You don't want to have to fish around into the middle of your binder, looking for the speeds. So put them RIGHT AFTER the MOC.

If you are in the process of doing a LOT of work with a particular map, you're just going to want to open up the binder, pull out your speeds, close the binder, and work with the pages side by side.

So immediately after the MOC is a convenient place.

THEN, you follow the older speeds with the TOC's- the table of contents for the rest of the stuff.

Again, for similar reasons. You'll have "(5)" or "P5", however you choose to notate it, on your map. And you're going to not want to go fishing through the contents of your subject. You're going to want to just glance at the TOC, and see that POI5 is about "Naming", or whatever.

(BTW, after you perform a lookup on a map, and you are pretty sure the item won't be moving around a bunch, switch your pen into green, and write a 1-3 word description/mnemonic next to the link on the map.)

Ah- there's a very SPECIAL TOC- that is, your references list..!

References can be either "expanded"- meaning that you've actually gone to the work of analyzing them on paper, or "not expanded". Meaning you just keep a reference to it, so that you can write bibliographies, or refer it to friends, and what not. Remember that reference page numbering partially adopts the actual reference's structure. So, the actual reference pages serve double as a TOC.

Sadly, the pages can be in only one place at a given time. I keep them in the carry-about binder, immediately coupled with the latest speed list, so that I have it on hand to cite to friends who are interested in something I am talking about. It also helps in libraries and bookstores when I decide to make good use of my time by looking things up. More on references later. The point is: The References pages are a special form of TOC over your reference analysis, consideration.

Now: What order do you put your TOC's in?

Put them in alphabetical (expanded, not abbreviated) order.

Let's suppose you have 4 research entries, 2 expanded references, 13 POI, and 1 project.

Research  
Reference  
Point of Interest  
Project

...alphabetically:

1. Point of Interest - POI
2. Project - PR
3. Reference - REF
4. Research - RS

After the TOC's, you place your Index.

I'll describe it later, but for now: It's basically an A-Z/123/Symbol mapping from a subject, to ALL of the resources you have on that subject.

It's LATE BOUND- that is, it isn't current. Maintaining a current index would take for ever, and you'd only use some parts of it anyways. Maintaining it would be a constant interruption. Bad Bad Bad!

What you do is- whenever you find yourself flipping through your notebook looking for all occurrences of a subject- a minor subject, since major subjects already appear nicely on your MOC- then you cache your results onto the index page. More on it later.

After the Index, you have pretty much "Everything Else" that hasn't been already described.

How do you organize it? The same way you organize the TOC: Alphabetically, by full expansion.

If you have 3 references, say REF3, REF9, and REF21, then they should (obviously) appear in the order REF3, REF9, and REF21- numerically.

After you have placed "Everything Else", then you have the "Archives".

Archival pages are the ones with the red glyph at the bottom denoting an "Archival Page".

You organize ALL archival pages in Alphabetical order, based on Segment.

YES- ALL of them. Even including your Maps, TOC's, and Indexes, A/S's, whatever. It all goes in alphabetical order, when it comes to the archives.

Do remember: When your archival section grows unwieldy, or if you just want to "get rid of it", you can pull all those pages out, and merge them into the archival binder's place for the section.

Finally, you have your cheat sheets, and AT THE VERY BACK, your abbreviations/shorthands lists.

Remember that the EASIEST places to reach within your subject are: The VERY FRONT, and, the VERY BACK. So we keep important, frequently used things there. The very front is the most important map of all of your maps, and the very back is your most frequently accessed abbreviation sheet.

You SHOULD be using abbreviations- LOTS of them. Unfortunately, I haven't written much on abbreviations, but there's a reason for that: Many people have already written a lot on the Internet on the subject. Look it up on the Internet. If you want to get really wild, use Chinese/Japanese Kanji, or use Gregg script. Best: Use a visual language's iconography.

So, that, in short, is the paper layout.

Now, let's talk about the individual segments themselves. Then we'll talk about some of the experimental segments.

#### PURPOSE and PRINCIPLES

The P and P is unique in that it has ZERO presence in the actual subject pages, unless it is an old version in the archival pages.

The purpose of the P and P is to determine what goes IN the subject, and what goes OUT. It describes the BOUNDARY OF THE SUBJECT.

If it turns out that something goes OUT of the subject, the P and P page also gives you some hints on where to send it.

There are two ways that I have denoted P and P pages.

The old way is to take a page in half, make the top have "INCLUDES", and the bottom half "EXCLUDES".

Form:

```
-----
      (subject name) P and P           date

INCL

* (inclusion)
* (inclusion)
  * (exception)
* (inclusion)

EXCL

* (exclusion)           (target)
  * (exception)
* (exclusion)           (target)
* (exclusion)           (target)

                               (subj name) P and P(ver\#)
-----
```

Here's an example from my books:

```
-----
      Personal Psychology P and P           [no date!]

INCL  * Clearly Psychological Forces
      * Self-Image
      * Motivation
      * Feelings
      * Self-Help Techniques
```

- EXCL \* Non-Mechanical Forces (->MP)  
 \* National Forces (->MP?)  
 \* Very Broad Modeling of my Life (->MP)  
 \* Gender Studies (->SOC?)  
 \* Imgn (->IMGN)  
 \* Values, Goals (->Values)  
 \* A.C.T.S. functional details (->ACTS)  
 \* Inter-Personal Psychology (->PPL)  
 \* Though Focus Techniques (->MTK)

Personal Psychology P and P

-----

Let's note something first though- This page is out of date!

So as a demonstration of Late Binding, let me fix this now.

"MP"- that is, "Metaphysics", was blown up a while back. I don't think many of these redirects are correct now.

What is pointing to MP? "Non-Mechanical Forces", "National Forces", and "Very Broad Modeling of my Life."

I know right off that "Very broad modeling of my life" should go into "Personal History."

Switch the pen to red, cross out "MP", and replace it with "PHist".

How about "National Forces" and "Non-Mechanical Forces"? Those DO belong in Metaphysics. Just to be sure, though, I check the GSMOC, and see if the ideas would rather gravitate elsewhere. The GSMOC suggests proximity to Spirit, Values, Imagination, Personal Identity... No, it's none of those. So we'll keep it in MP for now. If there are enough related thoughts in MP, these subjects may "break out", be ejected from MP, but for now, they'll live in there. The closest is "Spirit", the purpose of which is explained in the "Spirit and Awareness P and P" page, but glancing at the page makes it clear that the ideas don't fit in there. MP it is.

So that's how P and P works. It tells you what to include, and what to exclude. And the things excluded, it tells you where else to put them. (Or maybe not. If there is no such place yet, just leave the target blank.)

There's another way to do P and P-

That is to make a diagram. You put a large circle in the center with the P and P's subject. Then you draw lines out to words representing other subjects. What is included goes center-ward, what is excluded goes to the extremities, to the subjects that are their actual targets.

When inclusion and exclusion are along an axis, the axis takes the form of a line, with subjects at either end. Put the exclusion/inclusion specification at the ends of the line. That way you can visually see how to cut topics.

There is usually only a single P and P page per subject; I have never seen one grow beyond one page.

Now you understand P and P.



Next comes a funny little “@” sign column. Actually, I use the character “Psi”. You can omit this column if you want.

I use it to provide some information on what *type* of thought it is. This connects into something I call “Icons for Thought”, and it’s part of my MTK (Mental Technique) notes. I’m not going to describe the system here; This is a book about notebooks. Maybe some day I’ll write about it. A brief description will do though: Some thoughts are “problems”, “goals”, “questions”, or “incentives.” Some are “starting points.” Some are requests to “analyze”, to pick apart, and some are requests to “articulate”. Some are notes on “maps”, some are “rules” or principles, some are “names” or “borders”. Some are “see also” (but NOT references, which go in REF), some are “quotations”, some are “hazards” or “rebounds”. There are many variety of types of thoughts.

Free free to skip that column.

Lastly, there is the content.

Some times, you’ll just put a word in there, or maybe two words. Some times, you’ll fill three rows of content.

Put in what you are comfortable with. Lean toward the terse, away from the verbose. Use abbreviations and shorthand.

You can use the speed lists as a “to-do” sheet as well- maintenance events that you want to see show up later. Check them off in the first column when you complete them.

Again. There are NO Speed Thought Police. You can lay out whatever you want. Add columns, subtract columns. Whatever you do- let me know about it, or let the world know about it somehow. I want notebook creation to be a creative science, after all..! Your thoughts and experiences MATTER!

Now, I’ve presented the description of the Speed page, but I also want to talk about some issues connected with Speed thoughts here.

\* Pan-Subject speed-thought lists \* Growth Process (Memento-;Speed-;Articulation)  
\* “Completing” a speed

Remember that there are Pan-Subject speed thoughts. The page and form for a Pan-Subject speeds page looks exactly the same, except that instead of #, you have “Subject”- where you tell what subject’s speed list is the target. And instead of checking off when you’ve mapped it, you check off when you’ve transcribed the speed thought to the appropriate speed list.

Next: When you are recording speed thoughts, there is a sort of “growth process”- a scale of articulation.

0. the idea
- 0.2. (repeating in your mind?)
- 0.5. (paged?)
1. Memento
2. Speed
3. Articulation

First you have an idea in your head. You might repeat it in your mind to not lose it, you might add it to a peg list and review it periodically, until you have access to paper.



There are strategies for holding thoughts in your head. Very briefly- take the thought, reduce it to a short, few-syllable, word. As you pack in thoughts, cycle through the words.

When you UNPACK, unpack only a single word first, for each item, until you have them all out. Then go over the list again, adding a SECOND WORD. After you have two words out, you're pretty safe. Then add a third. Now you're solid. Now go over the list and give a single line description.

Don't start with two words- just go parallel, striping one word first, then the second, then the third, then you are safe.

Your 1-3 word description is what I call a "memento". Then if you expand it out a bit, I call it a "speed". 1-5 lines, tops. Anything more, and you should probably be writing a POI entry, or some other "articulation".

The speed lists should contain memento's and speeds.

So, you have a view of where the speeds fit in the scale of "an idea" to "full on articulation".

Most thoughts are best left at stage 1 or 2. Just place them on the map, and check them off. Some thoughts, however, you will need to delve into.

Be sure to do so strategically.

When I talk about MOC's, I'll talk about strategy. IF I FORGET TO, MAIL ME AND LET ME KNOW! Using strategy, you can figure out what to articulate and what to leave un-expanded.

Yes, I'd use a speed list to maintain these promises, but hey- I'm going to build that list later. (I am an experienced notekeeper, not an experienced book writer.) I'm aiming for raw content right now. In future book experiments, I'll try other stuff. Right now, I'm just racing to the end.

What more?

Ah- Speeds to Completion. You want to eventually be "DONE" with a speed thought.

Generally, the speed thought is "done" when it's mapped.

What happens when the map is fundamentally changed? You move to a new map version? Well, when you redo maps, you want to lose as little information as you can. You will invariably lose SOME, because your old ways of looking at things are frequently wrong, or deficient in some way. If you like, you can mark a RED check into the speed's box when it is "retired". I personally haven't done this. If you put red checks in all of the boxes, check the archive box  at the bottom of the page, and you can safely put the speed list in archive.

I find it best to LOOK FORWARD, rather than LOOK BACKWARD, in the notebooks. (Psychology note!) Thoughts die. That is good. They are reborn, symbolically, in your new map structure.

Is there anything else I want to say about speeds?

I once thought it would be a good idea to take speeds that were taken off a map, and transfer them "back" to the speed list. That is, white out it's checked box. As I said above, I think it's best to just let them die. We WANT to forget old thoughts. And as Michael Ende likes to point out, that something has entered our mind and then been forgotten- it still leaves a trace on us, in our unconscious. I agree with Michael Ende. Let it go. That thought HAS

helped you, carried you forward. It contributed to helping you recognize a new map, a new order. It's time is done now.

There. I have said what I want about speeds. I'll talk about how they can "navigate" over maps in the maps section. Which- is- coming right up!

SMOC

The Subject Map of Contents. In the "General Principles" chapter of this book, I already wrote a lot about SMOC. I want to fill in some holes here, now.

In particular, I want to talk about:

- page layout
- strategy
- trickling speeds over the map
- icons
- transitioning maps

That is, I want to write about how a page is laid out, how to use the SMOC to make strategic decisions, how to trickle speeds (and other entries, but mostly speeds) over the map, icons on the map, and transitioning from an old map structure to a new map structure.

A map has a simple page layout:

```
-----
                        Map Title
(creation date)
(freeze date, once frozen)

                        (your content here)

                        [] (subj) SMOC(v\#)-(page\#)
-----
```

I'm not going to write about what map content looks like- go back to the "Maps" section in "General Principles" to learn about that. I'm going to talk about specifics in SMOC pages here.

The creation date- list that first. That's when you make the map. Once you retire a map, you give a "freeze date". That's when the map is done. (Check the "archive box" [] at the bottom, too.)

Next: Strategy.

After you accumulate, say, 20 speeds, a POI or two, and a few references, and whatever else you have, it's time to get a good overhead view of your thoughts on your subject. That will both suggest places for thinking to plug in holes, and show you the "boundaries" of your thought, so that you can expand those boundaries.

Almost always- when you complete a map, you'll suddenly have an avalanche of thoughts..! Not just immediately, but over the next few days as well. Your mind, upon seeing the structure, will suddenly have a ground to go further from. You've turned on the lights in the present room, and can now find the door to continue to the next.

Now: Your map is 2D, but time flows linearly. You need a path of progress. What you do is this:

You take out all those little sticky tabs that I told you to buy in the materials part. They are about 1/2" wide, at most, and maybe 1/4" tall. You pick the subjects and locations that need the MOST work- somewhere between 1-10 of them.

You write red words onto 1-10 of your sticky tabs, describing the work to do. Then you place the red tags onto the map.

THOSE are your options. THOSE are the places where you should likely devote your attention. As discussed in the theory section of this book (next-to-last chapter), the source of input to your notebooks isn't the speed lists- the source of input to your notebooks is your ATTENTION, which THEN produces speedlists.

Now: A note about these strategy tabs.

You don't have to wait for a remapping effort to make these. Any time you have a thought about "what to work on", you can make a sticky, and put it on your map. If there IS no place on the map for it, just put it out floating in space on the map. That's just fine. You'll map it out later.

AND: As things become unimportant to you (happens a LOT), just take tabs off. Throw them away.

If you want to remember to put a tab on, but you aren't there at the moment, just put onto your speed list, "#43:blahblah:Remember to work on BlahBlah." Then when you are processing your speeds, and you see that, if it is still important to you, check off the speed, make a red sticky, and put it on the map in the right place.

The speeds don't just catch ideas- they also catch work requests. Remember that.

So, where were we... I want you to leave this strategy session with this in mind:

You have your sticky tabs. You stick them onto the map, to indicate where work needs to be done. You take them off when you they become irrelevant to you, or when you complete whatever issue it is. Then you just throw the little sticky in the trash. It's work is done.

You do NOT want to write priorities on the map. The priorities change VERY frequently. They should be going on and off pretty frequently. You'll

mess up your map if you keep writing all over it. No need to replace it that often.

Anything else I need to say here?..

One last thing:

This really belongs in the “extra-subject architecture”, but it’s related, so I will describe it here.

You may take off ONE sticky, the most important one to you at the moment, and stick it on the GSMOC. I haven’t described the GSMOC yet, but for now, just know it is a map of all of your subjects.

That way, when you are pouring over all of your subjects, you’ll see what is the most important first thing to think about in that subject. At least, what you thought was most important the last time you were in there. (Things change quickly.)

And also: Try to keep only one sticky per strategy idea- try to avoid keeping copies at multiple levels. I tried multiple levels once, and it just became a maintenance nuisance. Whenever you have multiple levels, just take ONE item from the lower level, take it off of the lower level, and stick it onto the higher level. Have only one higher-level item for each lower level island that exists.

Now I’m done talking about strategy.

So, we’ve talked about the simple page layout, we’ve talked about strategy- next, we talk about trickling speeds over maps.

Okay: So you have a big list of speeds, and an empty map.

You make a new map version.

Suppose you were on Map #1. But you have 100 speeds, and Map #1’s getting old. Now you are making Map #2.

Let’s suppose- actually, that you need a “temporary map”- a “scratch map.” A wise idea- because you might make mistakes, no? And you’ll want to correct them.

What should you number the scratch map? (Or should you keep it at all?) I say “YES!” You should number it #2! Not 1.5, and don’t throw it in the trash. Just call the scratch map “M2”. Then when you make the “real” map, label it “M3”. That’s TOTALLY OKAY.

And besides, I’ve been surprised by how many times the “scratch” map ends up being the “real” map. And you are going to be interrupted some times, too. So just treat the scratch map as a real map, and don’t be afraid of growing numbers.

We have a versioning system. USE IT!

So you have either no map (you are making the first one), or you have a poor one, and you have a big list of unmapped speeds.

The procedure is as follows:

1. Take an idea off the speed list, preferably from the bottom.
2. Think, “How do I think about this idea, in terms of structure?”
3. Build missing structure, if it isn’t there.

4. Put the speed thought on there.
5. Check off the speed thought.
6. Are all speeds done? Or are we satisfied? Or are we interrupted? If No, go to 1.

Here's an example.

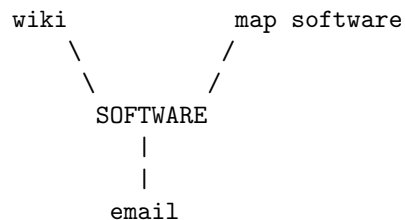
Here's a Speed List:

"Electronic Collaboration"

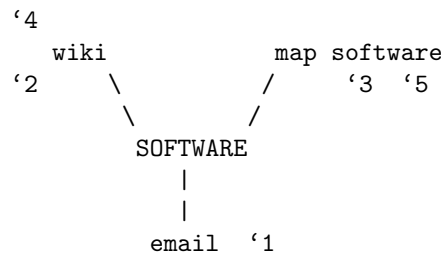
#	Hint	Content
1	Structured Email	Should people structure their Email? ex name-sys f titles, 1 email/topic address. ref to "Struct Considered Harmful."
2	Wiki, Populating	Can't just have wiki, MUST have ppl to populate it, or pop yourself. ppl add later. note: opposes "if build, will come." some will, but few, in my experience.
3	Map Software	(?) Collab make/chg map of subject. refs: pt to webpage, books, individuals, orgs, articles, ... diff sizes, colors, fonts... also: big changes affect many should be psbl
4	Wiki, Canonicalizing	ways make changes, harden w/ time
5	Software Map	keeps research map, 2d collab and maintained. ppl submit refs for incl, ] vote, pass=good. fail: apply elsewhere, correct xyz, mark spam. Book, WP, PPR, PROJ...

Looking at the hints, we see we are talking about email structures, wiki, mapping software. But there are OTHER ways to cut this as well. What structures does this suggest?

First, let's take the obvious ones: Types of software.



Okay, so there's one map. And we put those thoughts on it, too:



Okay, but, I get the feeling that this is sort of shallow, don't you?

What else can we do with this?

Well, the first was talking about STRUCTURE- structuring people's communication. That's definitely something I want to think about.

And the second- that's about RECRUITING people, and POPULATING your collaboration space, right? We're going to want to keep our eyes on those.

Now, let's look at the third: We're talking about mapping software, but it also has to do with CHANGES, and it suggests VERSIONING to my mind as well. These are concepts we're going to want to have structure for.

S4 is similar. It's also about making changes, and hardening with time. I wouldn't be surprised if I had those ideas at a similar time, in fact. Another idea for "CHANGES", maybe versioning as well. "CHANGES" and "VERSIONING" are pretty close to one another, no? We'll represent that graphically, in the map.

S5 is similar to S3, wherever S3 is, we'll have S5 as well. We talk a bit about VOTING, no? And it's connected to changes as well.

So supposing that we wrote those key words we realized on paper, we get the following:

STRUCTURE

RECRUITING

POPULATING

CHANGES

VERSIONING

VOTING

(Note on Topical Deliberation, "TD":)

Notice that we've got some ideas that we're capturing as we go over these lists? I used to throw these away. But I think these deliberations actually have some value, after having done these for a while.

I call it "Topical Deliberation". My new experimental segment is "Topical Deliberation", or TD, and I record it by straight chronology in it's TOC, and on their pages.

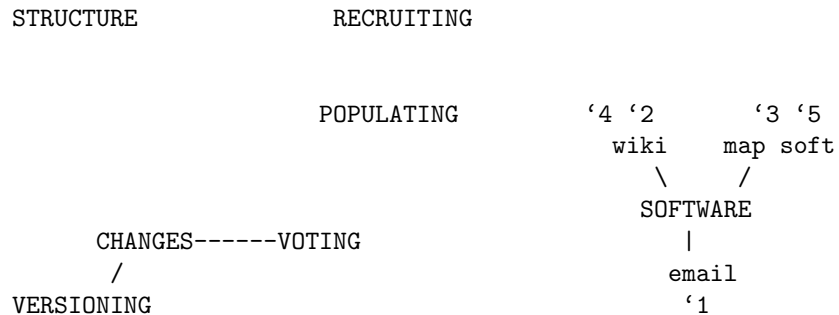
(Note out.)

Now- before we go on- I want to remind you of something, something I said earlier. I said that THE MAPS WE FORM HERE are MORE IMPORTANT than the ACTUAL CONTENT ITSELF!

Keep your eye on that, and reflect on that, as we move on here.

So, we need to be a map.

After playing around with it, and remembering our connections, we draw the following:



How's that? Isn't that neat?

Yes, it'll get better.

Let's note some things here- like, some of the subtleties expressed in the map. (Note: Many are missing, because this is on a computer, and not on paper. I only have two levels here: lower case and upper case... But I digress.)

Recruiting and Populating are not DIRECTLY linked, but we can see an *implied* connection between them, just by proximity.

And look at how CHANGES and VERSIONING are close together, and bound by a line. VOTING and CHANGES are connected by a line too, but we've let "VOTING" go out a ways. Isn't that interesting?

In a TOC, you just smash everything together. And you can't express much more than "above", "below", "indented in", and "further out." You can simulate a forest of trees, but your trees can't intermingle (into webs), and you only have so many levels, and you can only place your trees in a row.

Most depressing.

But maps are "alive". They give you warm fuzzy thoughts and feelings. YAH! Some times they even feel electric. RAH! Pikachuuu!

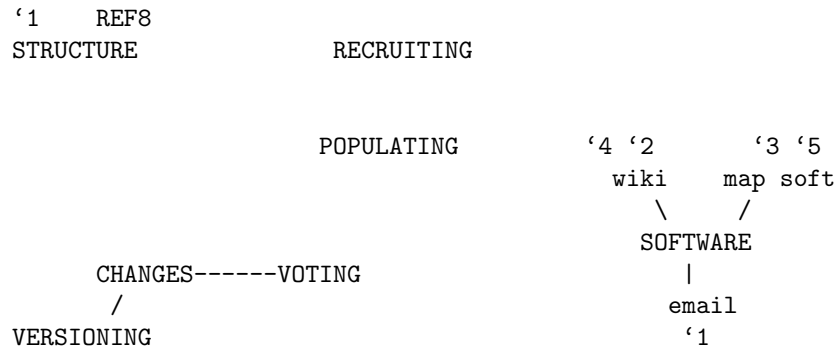
Okay. Now lets populate the rest. Do we just want to automatically put our speeds on there? No: We want to consider them 1x1. Just because a speed helped SUGGEST some structure, doesn't mean we necessarily want to place it in CONTEXT with that structure.

S1: That was the one about email, and wondering if people should structure their emails. Referred to "Structure Consider Harmful."

Let's look in the references- there it is. "Structure Considered Harmful." It's REF#8. Let's put that on our map. (NOTE: Putting references on maps is difficult at times, because a book usually talks about a LOT of stuff. If you want to, you can link in individual chapters of a book, but you'll need to note them

on the references section. Generally, references appear at the “top” of trees, or by “key nodes” in webs, because they refer to so much amidst the children. Sad but true. In this case, we are lucky. The map is new, and so we mostly only have “tops of trees”, and there is perfect match between the reference, and the top of this tree.)

I think that S1 is fair game for “Structure”. Same with REF8.



Now we are running into the ugliness of computers. Sorry, I just can't easily make “REF” appear in ittie bittie capital letters, above and to the left of the number 8- superscript.

Computers are so frustrating in these primitive days of ours.

Now we'll go through S2-S5 a little quicker.

S2: This says that you can't just make a wiki, you have to get people to populate it as well, or you have to populate it yourself.

Okay, this is very relevant to populating, so we'll put it there.

S3: This says you you want mapping software where people can make changes. It also says that people should be able to make big changes.

Now, I have some reservation here, because it also has a LOT of stuff about the mapping software that doesn't have to do so much with changing in the abstract. To it's grace, it DOES say that big changes should be possible, and that's an idea that abstracts- there is a general idea of big changes, and little detail work.

What I'd probably do if this was on paper is take out my green pen, (green = icons, markup, meta,...), or maybe (tolerate errors!) my blue pen (blue = structure), and put a little letter “a” by irrelevent stuff for this purpose, and a “b” by where it says ”big changes affect many should be possible.” So the designation on the page would be “3b”.

Okay, pretend I made those edits, and we'll put “3b” on.

S4: “ways make changes, harden w/ time.” Talking about wikis.

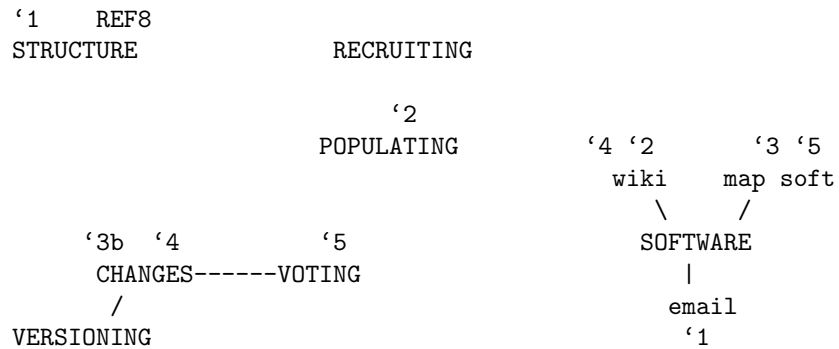
If I were using my “Psi” icons, I would have put the ”This is a starting point for thought; Reflect on this” icon there. But I don't want to go into that system; That's a Mental Techniques thing, not a notebook thing, for my writing purposes. Maybe some other day.

So, we DEFINITELY want to put '4 onto the map, by changes. The idea of hardening with time is interesting.



S5: Now- this is about voting, and what to do with bad votes, and what not, on the subject of Electronic Collaboration. Only a little is really about software maps. This could apply equally well to wikis, say, or any other type of collaborative system. Well, not email, right? Well, maybe so, I can conceive of that. So this definitely attaches to voting.

So this is what the map looks like when we are done:



Ah- Now isn't that interesting?

If it were just a TOC, it would look something like this:

ELECTRONIC COLLABORATION

1. SOFTWARE
  - (a) Wiki
  - (b) Email
  - (c) Map Software
2. CHANGES
3. VOTING
4. VERSIONING
5. RECRUITING
6. POPULATING
7. STRUCTURE

Ref8, as traditionally done, would appear in the back of the book, not associated with "STRUCTURE".

The connection between "RECRUITING" and "POPULATING" is not apparent. I mean, sure, they are next to one another, but so is "VOTING" and "VERSIONING" and "RECRUITING". So you don't go looking for those patterns, with so much nonsense there. (You could put in section delimiters here, but most people don't, and you still have to put those section delimiters in a row- a web isn't possible.)

Isn't that interesting?

But there's so much more! We just have only 6 items here- when it gets much larger- say, 100 items, or 200 items, the differences become much more dramatic and apparent..! The superiority of the MOC becomes far greater.

Now: We've trickled speeds onto the map.

Sometimes, you will become aware that further work is needed, over time.

Consider, that in my notebooks notebook, I used to have, attached to "New Section Ideas", about 9 speed thoughts.

Whoah! 9 of them! Gets a bit unwieldy. So what you do, when one part starts to build up, is look up the items, and then further divide them.

As it was, 4 of the ideas were related to chrono/episodes. So I extended a line out from New Section Ideas, put "Subject Chrono" on the end of it, crossed out S121, S112, S114, S120, and moved them to orbit "Subject Chrono". Great!

Whenever an area is getting congested, grow out.

Going in the other direction: Don't build too much unnecessary structure! If you've got only 2 ideas in a location, don't put 8 magnet words out there. Just park those 2 speed thoughts next to one magnet word, temporarily. As you build more speed thoughts there, THEN build structure AS NECESSARY.

And a note about the structure: This isn't supposed to be some "absolute cosmic eternal perfect ontological structure." This is the associations YOU make in YOUR head. It's a map of YOUR mind. I don't even think a good ACEPOS can exist. TOLERATE ERRORS. (If you're having a hard time tolerating errors, again, intentionally fuck things up.)

Anything else about trickling speeds over the map?

Put them on the map. Park them somewhere. Push them out when they get too close.

Um: Push "Down" too. If a section of the map gets too dense, start another map page. Draw a big blue or red dashed line around the map section that was dense, and write "M7" next to it, if the next map page is Map Page #7.

Oh- and don't try to fit too many maps to a page. You have to balance not-wanting-to-flip-to-the-next-page and not-wanting-to-have-to-replace-the-whole-page because of a big problem on just one map. You have plenty of paper- USE IT. BUT... Information density, information density... It's a natural tension, until we get these maps computerized. (See the "Killer Easy Notebook App" in the "Computer Question" chapter- the end of the book.)

Ah: HAVE A TEMPORARY SPACE ON YOUR MAPS FOR SPEEDS. You might want to draw a little parking lot "U" shape for the hard-to-place thoughts. And you might want to draw a little black hole too- that's for thoughts that should probably go to some other subject somewhere else, and you just aren't taking the time to transcribe them over yet.

YES: You CAN have fun with this. Draw whatever you like. It's OKAY, it's YOUR MIND after all. =^\_^=

Of course, if you are not like me, I guess you can do it crystaline, or however you like. If you're a bohemian, you can type it all up on a typewriter, if you like. Whatever floats your boat.

OKAY. I'm feeling "done" here. Anything else? No? Going.... Going...

-Let me say something for a moment.

Remember: There are two types of thought- intentional, and incidental. This writing process- this is mostly *intentional*. The framework I am writing to you is from my INCIDENTAL analysis. I collected speeds (incidental), a few POI's (intentional), mapped them out, and almost the Entire Structure of this book is based on the resulting structure. However, that structure isn't everything. You also have to "reach out" with your thought. As I write and expand this, I am also "reaching out." Thus responsible for all of the "Um, anything else?"'s.

Yes. When I write a second draft, or whatever, I'll take all this stuff out. (I'll leave this old one around, for those who prefer this, too. God bless your souls.)

Um- oh!

Write BIG THOUGHTS BIG. For example, if you have a speed thought that is WAY MORE IMPORTANT than the others, make it's "dot" bigger, and make it's number BIGGER. How big? In proper proportion to the neighboring territories..! And the same in reverse. If it's mindbogglingly unimportant, write it so small that you need a magnifying glass to see it.

OH! OH!

And another thing. This is what I was fishing my unconscious for.

Your speeds- if you have TWO SPEEDS that are almost COMPLETELY IDENTICAL (happens more than you'd think!), identify them with a SLASH between them.

For example, if speeds 47 and 98 are almost identical, put it on the map like this:

“47/98”

But if S84 and S33 are VERY SIMILAR, but warrent individual attention- put a COMMA between them:

“84,33”

There you are.

Done with talking about how speeds park on the mpa.

Now I can continue.

Icons.

ICONS? ICONS on the map? What the hell did I mean by “ICONS” on the map? Let me go back to my Notebooks notebook... There it is! It says “icons” in green, next to “P7”, right there next to “maps”. (I'm telling you my process, so that you can see that the notebook system works, and how it works.) So I look up POI 7. Ah-HAH! There it is!

“Subject MOC Icons - Type Recognition Icons.”

OKAY, so this is about how you pin stuff onto the map. Unfortunately, now I am really mad at our primitive computer technology, at this ASCII I am using to write this in.

When I put this in DocBook/HTML, I'll be happy.

Here, briefly, are my link designators, on the map:

‘# a speed thought (the “” is just a little dot, top-left corner)

(#) a POI entry

**P#** also a POI entry! (the “P” is just a little p, top-left corner) (this form is standard, and applies to everything below.)

**R#** reference - special notes below

**Cht#** cheat sheet

**RS#** research

**PJ#** project

**J#** also a project

REFERENCES: I use the kanji for “book”, in tiny form, top-left of the ref#, to further denote that this is a “book”. The letters “ws”, or a little icon of a web, denotes a website. The kanji for “person” means a person, the kanji for “people” (3 persons) make an organization (that is a reference.) Make up your own icons, if you don’t know kanji! It’s fun and easy. :)= Just write them down and keep them somewhere in your notebooks system. I DO believe ever notebook keeper, by this system, should keep a “notebooks” subject.

These are just my icons. Make up your own!

But I STRONGLY recommend just “ # ” for a speed thought, since they are the most common, and the “ (#) ” shorthand for your POIs, because they are 2nd most common.

Now the last part of talking about maps:

Transitioning your maps.

I’ve already talked about map transition a bit here, I’ll try to repeat myself to a minimum.

As I wrote before: Keep your “scratch maps”. Give them version numbers.

If you are only changing a PAGE of a map- that’s a situation I’ve never run into, but it should be solvable. I’d version off that page number, using letters. “M3-5c” would be version 3 of the whole map, version c of page 5. Archive “M3-5b” back with where you archived “M3-5a”.

As you make a new map, you’ll find that some old POI and Speed thoughts and other things are now obsolete. They are either notes on an old structure that no longer exists, or they are commentary on things that are no longer important to you.

It’s up to you what to do: If you want, you can go to the old thought, and place a note reading, “Idea obsolete; See XYZ”, where XYZ is whatever is still present, but responsible for putting the old note to sleep. Or, you can just not write anything.

It depends on how much time you have, how important that idea is to you, how frequently you linked to that idea (or a predecessor pointing to it), a number of other factors.

Personally, I think it’s healthiest to LOOK FORWARD as you keep your notebook. Let the dead bury the dead.

For stuff that is still on the new map: Just move it on over. If magnet word “A” had number 124, 56, and 200 around them before, put them around it now too.

If in doubt, put something on the new map. You can cross it off later, if you like.

And that’s it for the SMOC section! Let’s recap:

- page layout
- strategy
- trickling speeds over the map
- icons
- transitioning maps

There’s a simple page layout. You can use little stickies to keep your strategy in order. Speeds (and other content) build the structure of the map. (More accurately, your *attention* builds the structure of the map- remember: This is a map of your mind.) There are icons that you use (such as “55”, “(12)”, and “REF5”) that you place on the map. When you transition maps, keep your scratch work, and you can point obsolete entrees to the new structure as you like.

We’ve talked about P and P, we’ve talked about Speeds, we’ve talked about the SMOC; Next up are the POI!

Point-of-Interest (“POI”)

A POI is like a journal entry, but specific to a particular point of interest. The title specifies the point of interest.

I have three things to say about POI:

1. Content under the POI
2. Transgressing the POI boundary
3. Interlinking POI

The first has to do with content within a POI.

What you write in the POI *MUST* be consistent with the title of the POI.

The title usually outlines a problem that you are trying to solve (“These components are interfering with one another.”), or a goal that you are trying to reach (“A Theory of XYZ”), or something that you want to articulate in greater detail (perhaps you have collected a bunch of speed thoughts that are related, and you want to describe their interrelationship), a question you want to answer, a subject you want to reflect on, whatever.

Then you write. You try to solve what you want to solve, or reflect, or analyze, or whatever.

Anything that doesn’t have to do with the title is effectively “lost”. When you look on the MOC, and are looking for a piece of information, if it’s buried

away in some POI *with a title that doesn't describe it*, then you can't find that piece of information.

Thus the great importance of KEEPING THE POI ON TOPIC.

Which takes us to (2): Transgressing the POI boundary.

When you get off topic, you are “transgressing the boundary.”

If you catch yourself early enough, just get a new page and make it the beginning of a new POI.

Sometimes you catch yourself late, though. In that case, CIRCLE IN RED what has transgressed. Start a new POI page. Put a link from the red circled part in the old POI to the new POI page, and vice versa. Then continue in the new POI as if everything was fine.

If, at a later point, you decide that this particular POI is important enough, and the link annoying enough, you can always make a new version of the POI page, which brings us to the next subject.

(3) Interlinking POI

POI can be linked topically, or by version.

Topical links are easy- you just say, “See also: XYZ”, where XYZ is the id of the other resource. For example, if you are referring to POI#25, you just write “See also P25”, and maybe a little note on what P25 is about.

If you are linking beyond the subject, include the subject as well: “See also GKI P25”, were GKI your target subject.

(I personally use an icon in place of “See Also”; I recommend doing the same. Just make one up. Mine looks like O—O with a circle around it.)

How do you version POI? Not the same way as maps are versioned.

To make a new version of a POI, just start a new POI entry. Then link the new version back to the old, and vice versa.

If you ever follow a link to the old version, update the link to point to the new version, wherever the link's source is.

If you get a long chain of versions, you can put additional navigation information by the links- you can write “First version, P4; Last version, P14; Latest version, P46”. However you like.

And that's it for POI! They are very simple, really.

“RS” - RESEARCH

Research pages are like POI, but they are particularly about researching some problem using other people's comments.

POI are ALWAYS ORIGINAL to YOU. RS is ALWAYS BASED on OUTSIDE RESEARCH.

There is a bit of a blur between them. You will have to exercise your own judgement. There are better guidelines I could write, but I'm in a hurry, dammit.

I should distinguish RS from REF (reference).

REF is your own notes, attached to ONE, and ONE ONLY, REFERENCE.

Furthermore, REF comes out of attempts to UNDERSTAND A GIVEN REFERENCE.

Abstract models that form in your mind because of a REF should be in a POI (as an articulation of your thoughts). But the attempt to decypher the reference itself goes into REF.

But RS is for when you are bouncing back and forth between multiple references, and you have a train of thought going.

The title of the RS reflects the train of thought going on.

Inside of an RS, you refer to several REF's.

It can be as formal or informal as your needs meet.

If you are writing an RS, but don't want to take the time to cite your references, *that's okay*. You realize that you can only lookup later what you write. But sometimes, that's not your purpose. You're just trying to establish a line of thought, citations be damned.

You STILL want to KEEP that paper. It is a valid RS, though rough.

If you later care about it more, and want to add the full citations, you can just write them on the paper, or make a new version of the RS. Whatever you like.

REF - references

Reference pagination is something I've already talked about. Remember that it works basically like this:

(subject) REF(reference #)-(reference page scheme)-(page number)

So for example, if you wrote three pages of notes while reading a book on the Noosphere, your three page numbers might look like:

GKI REF13-II.4.A-1

GKI REF13-II.4.A-2

GKI REF13-II.4.A-3

That is "GKI" for "Global Knowledge Infrastructure", "REF13" being the 13th reference in your references list, "II.4.A" meaning "part 2, chapter 4, section A", and 1 (or "2" or "3") being your *personal* page number.

I want to say something important here:

**IF AT ALL POSSIBLE, JUST KEEP YOUR NOTES IN YOUR BOOKS!**

If your book belongs to you, and it has a granger, then by all means, grangerize it! It's *your* book! It'll be worth MORE to you if you put YOUR thoughts in it. That's what a granger is THERE for: So that you can write in it. So do so. Write in your books, whenever you can get away with it. No need to keep paper in your binders when you've already got it between your book covers. AND you don't have to do any expensive linking operation. So there you go, those are my thoughts on the matter. I've said it.

(Some people are religious about their books. Ah well.)

Keep your notes on whatever isn't original to you in here. Books, interviews, notes on people, the backs of bubble gum wrappers, letters, whatever.

Okay, REF is done. The hardest part about REF is the page numbering. After that, it's obvious what to do.

PJ - Project

The PJ segment is where you keep notes that have to do with your projects, *if they aren't complete subjects in themselves!*

If you are going to be working on a project for some time, make it its own subject. (It'll probably be predominantly POI, with a Chrono segment, and many strategy notes, as well.)

But if you have a small project that, won't take more than 3-5 sequences, just keep the notes for it within your subject, and label them with the PJ segment identifier.

I - index

Some times, you'll be looking for ALL of your thoughts on a particular subject.

If you do that, you may repeat the search again in the future. Why go to all that work, AGAIN?

So what you do is you cache the results of your lookup. The Index is the place to do it.

I recommend making a printer template for index pages, keep the template printouts in an informal "blank papers" or "templates" section in your common-store binder. That way, you don't have to keep making these things over and over. (Note: This is something that I have NOT done myself, but believe would be a good idea. Perhaps when I put this online, along with accompanying format pages, I'll make an index as well, in both 1-page and 3-page format.)

To start an index for a small subject, just do this:

- Get a blank piece of ruled paper.
- Write "Index" at the top.
- Put the letters A-Z on the left.

Now, whenever you start a search for a subject, pull out the index sheet. Write, IN BLUE (because your search word is a "key"), the search word, NEXT to the letter that the word starts with.

So for example, if I'm looking in my Social Ideology subject for everything having to do with "Anarcho-Socialism", I'm going to put that word next to the letter "A".

Then start your search, beginning over the MOC. If you don't find what you are looking for (MOC miss), then you may have to start going page by page (generally happens when your MOC isn't up to date.) Write the results (the "hits") as you find them. Then put the index page back.

Sometimes the page you were looking for, wasn't even in the subject! That's okay. When you find the page, link to it from the same index you started the search from. Your brain is messy. The notebook system is messy. It's GOOD, it's USEFUL, it WORKS, but part of the reason it works so well is because it TOLERATES ERRORS. (If you don't tolerate errors, you are going nowhere with this all.)

By the way- in case I forget to mention it later: It's good to have an index like this for YOUR ENTIRE Notebook system, as well. Keep the Index at



the front of your common-store binder. Link words to subjects that they are featured in.

You can start with one page, but as you search, and as your subject grows, you may need to expand to a 3-page index.

Just give each letter three lines.

Symbols and numbers: I put numbers after Z. I also put all symbols after the numbers. Depending on your symbol system, you may be able to find a way to form a hash key (perhaps a circle, if half your symbols involve a circle), you may not. Just part of the trick of dealing with symbols.

That's it for indexes.

Cht - CHEAT SHEETS!

Cheat sheets are great!

I do this a lot in my computer notebooks.

You take your most commonly used pieces of information, and fit them all onto a single cheat sheet. You use it to work with. It will probably be highly abbreviated. Good organization is important. Information density to the max.

The cheat sheet goes near the VERY END of the subject, so you can find it quickly.

If you have several cheat sheets, you may need a TOC for them. You can put the TOC in front of the cheat sheets (that is, near the back of the subject), or with the rest of the TOCs near the front of the subject- it's up to you, really.

The cheat sheets are followed by:

A/S - abbreviations, shorthand

The A/S is placed at the far end of the subject, because you will want quick and ready access to it. You will probably want to even take it out of the binder, if you will be writing a lot.

As you invoke abbreviations, or create symbols or shorthand, record them on the A/S. That way, in a year, you can figure out what in the world you were talking about.

DATE YOUR A/S sheets. It's important, so that if you stumble across an old POI, and you find a symbol that's not on the present version of the A/S, you can go back into the archives and find which A/S was relevant at the time. If you can remember to, FREEZE your A/S sheets as well: Write the date that you stop using the particular A/S sheet.

A/S sheets frequently look like index pages- you have the letters on the left, and you write keys in blue and values in black.

You will probably want a "global A/S sheet", that you keep in your carry-about binder, and that applies over all notebooks. Mine personally is 4 pages long, with different sections.

It has entries like "t: To" and "f: Of" and "w: With", "WO: Without", as well as a person table "NH: Napoleon Hill NC: Noam Chomsky ME: Michael Ende".

By the way- I should probably put this somewhere else, but when you are dealing with English names, you get good packing with the following division:

AB

C  
 DEF  
 GHI  
 J  
 KL  
 MNO  
 PQR  
 ST  
 UVWXYZ

Don't believe me? Try it! You'll be amazed how evenly names fill into it.  
 Now, I've described the major segments that I use:

**P and P** - purpose and principles

**Speeds** - speed thoughts

**SMOC** - subject map of contents

**POI** - point-of-interest studies

**RS** - research

**REF** - reference

**PJ** - project

**I** - index

**Cht** - cheat sheets

**A/S** - abbreviations, shorthand

I now want to describe segments that I am EXPERIMENTING WITH. That is, what MIGHT WORK.

Remember: There's NO BINDER POLICE. And there's NO ENORMOUS INSTITUTION telling you what is cutting edge and what is not, what you can research and what you can't, and who will ignore you without proper credentials. Nothing of the sort. (And if there were, you may have good reason to ignore it or no.)

So make shit up, and post to the web the results of your experiments. At the very least, email me. I'm interested.

The FIRST experimental segment is "X".

That enables you to experiment within a segment, without worrying that the rest of your notebook system will fail.

The special thing about "X" pages is that they are temporary, and it signals to you: "DO NOT LINK TO THIS PAGE!" Because it might be gone later. It's extra-volatile. BOOM! Your notebook just went up in flames! AUGH!!!

If you find that you are relying on your experimental pages later on, than that's pretty good. That means it isn't really experimental any more. Just

white out your X's, or cover them up with a big blob of ink, or turn the X into a star, or something like that.

Now, there are four particular experimental segments I am working out, lately:

CEP - chronological episode

TD - topical deliberation

DD - data dictionary (definitions)

L/T - lists and tables (high info density)

We'll go over each in turn:

CEP Chronological Episodes

I've always had subjects that were NOTHING but your traditional diary/journal.<sup>1</sup> Most notably, I do that in the "Strategy" subject, which is intrinsically temporal.

But we can standardize the concept for other subjects that need it, and we can make it stronger as well.

For example, the events in our lives aren't just individual frames; They frequently belong to threads, or "episodes."

So I have been experimenting with creating GANTT style charts that map out episodes. You write the "TOC" (no, not a MOC, because time is intrinsically linear) side-ways, and "up-down" identify threads, "across" identifies time.

Your first thread should be "unthreaded" or "non-episodic." Anything that is not episodic, or theme bound ("how I feel today") goes in that top band.

For your themed entrees, or progression in episodes, you use the lower bands.

So that's something I think is worth looking at more.

(Presently, I am in a mobilization phase, not a vision phase, and am thus NOT working my binder system, so I don't have a chance to try it out right now. Let me know how it works and how it doesn't work.)

NEXT:

TD - Topical Deliberation

Remember how- when we're constructing a new version of a map, or we are focusing on where to place something-

We're making a bunch of judgements. Some times we even use paper to help us form those judgements. I would call those things "topical deliberation."

I'd store 4-6 topical deliberations to a page. This is sort of like speeds- we can keep 45 speeds on a single page, and id them individually. Similary, I'd put TD1, TD2, TD3, TD4, and TD5 on a single page (they are usually brief). These are our hard-earned "judgements", so we can refer back to them in the future.

Then mark them on your MOC. They don't need a single "spot" though- the topical deliberation usually applies to a REGION or an AREA. So I think it'd be best to put a dashed line around the region of controversy, that the TD

<sup>1</sup>What? Nonsense you say? That's not according to the system? Hey! Fuck you! There's no binder police! Tolerate errors!"

clears up, and then label it with the TD. I'd put it in blue or green (since the magnet words and structure lines are already blue). Not red- it attracts to much attention. And it's not normal content- definitely not black. Green is nice and easily ignored. You can consider it GREEN as in "markup for the map." Which it is.

#### DD - Data Dictionary

If you do this long enough, you'll find yourself making up words. And the meaning of those words may change (sigh), or spawn off new words (better).

(Confucious thought our problems came from shifting language- words meaning something other than they meant. Ted Nelson experimented with interpreting this literally, but ran into some problems with it- too many new words constantly springing into existance, I believe it was.)

I'd keep track of this in a data dictionary. It would probably not be A-Z, since definitions are BIG, and we don't want to partition one page per letter- that's 26 pages, of which you may only use a few.

Probably best would be to just add entries as you think them up. Then, periodically, type it all into a computer, alphabetize it, print it out, and then stick it back in your notebooks. Keep additions on new pages, and modifications in red. Then go back to the computer when the time comes, and lather, rinse, repeat. <sup>2</sup>

You can also link to the DD's from the SMOC wherever it would be helpful to be reminded of particular terminology. Yah!

This is the way! (Yes; It's FF Tactics.)

#### L/T - Lists and Tables

I frequently find myself maintaining lists and tables within POI entrees. These are things I access frequently, and would probably best go near the end of the subjects, to share space with cheat sheets.

At the very least, they just don't "feel like" POI. So I want another section for them.

L/T is my answer to this tugging feeling.

I have not tried it yet.

SO!

There you go! Those are the segments of the intra-subject architecture!

We've talked about physical pages layout (may want to reread, now that you've seen the segments logicly described), and we've talked about the segments themselves.

We're half-way through the book! Woo Hoo!

Coming up next, is the Extra-Subject architecture.

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<sup>2</sup>Much better way!

Partition your "dictionary" pages into 4 squares. A single data dictionary page has 4 DD (or maybe use "DEF"?) entries.

ex: First pages has DD1-DD4, next has DD5-DD8, then DD9-DD12, yadda yadda yadda.

Now what you do is have a hash TOC for the DD's..! You just put the alphabet on the left side of the page- your keys- over 1-3 pages. Start at 1, then later expand to 2, then later to 3- and then set your keys up as the words that are defined, and the values to the DD# of the word defined.

There you go.

After you understand that, you have everything you need to start working this system..!

Then if you want to keep reading, you can read the "Theory of Notebooks", and "The Question of Computers."

## Chapter 4

# Extra-Subject Architecture

Topics:

- the physical representation of the complete system
- GSMOC - the Grand Subject Map of Contents
- Subject Registry - hash of all subjects
- Subject sectioning - how subjects are made, gestate, interconnect
- Process of Constructing and Linking a New Subject
- Special Subjects - Chrono, Strategy, Zeitgeist Tracking, and others

These things bind everything together in the system.

THE PHYSICAL REPRESENTATION OF THE COMPLETE SYSTEM

You have three major categories of binders:

- Your carry-about binder (medium)
- Your common-store binder (enormous)
- Your archival binders (size irrelevant, but enormous is good)

Your carry-about binder will contain the following:

- Blank Paper
- Blank Speed Pages
- Blank Pan-Subject Speed Pages
- GSMOC
- Subjects Registry

- Subject Speeds and Refs TOC
- Global A/S
- Optionally, 1 or 2 subjects (“locally cached subjects”)
- Other Stuff

Your common-store binder will contain the following:

- Blank Paper
- Blank Template Pages (such as indexes, maps, tocs, etc.,)
- Subject P and P’s
- Chaos
- Unplaced Pages
- As Many Subjects as you can Stuff In There

Your archive-store binders will contain the following:

\* THE REST OF THE SUBJECTS.

Archive-store binders are kept by alphabet ranges. For example, if you had two binders, they might be “A-M” and “N-Z”, depending on how you decided to balance them.

Chaos is stored in the archive-store binders under “C”. It might be big. Every now and then, you might just want to dump out whole sections of “Chaos.”

What IS Chaos?

Chaos is just papers that have hoards of thoughts on them with no obvious subject placement, or that are so hopelessly beyond recovery (or take so LONG to recover) that you might likely just throw it out, but that you’d like to give it “one last chance”. After staring at it for a while, though, you decide, “Nah. Toss it.” And you do.

Or you don’t. I’ve occasionally found a jewel in there. Whatever you like.

The Archives are pretty straight forward, you just store stuff in them.

Now let’s consider the common-store binder.

I frequently call it the “subject cache”. It’s where the subjects that you have been using for the last 2-6 weeks go; Ones that you are accessing frequently.

Whenever you need some space in the common store, you can do two things:

- Put archival pages in your subject on interest into a corresponding subject in the archive. You have fewer pages now, AND a more nimble subject. But you can only do this if you have archival pages in your present subject.
- Put a whole subject, ideally one you haven’t touched in a few weeks, into the archive. Done! This is the most common way of clearing up some space. This includes “CHAOS”. Just take all the chaos pages out and put them into the archival’s CHAOS section.

You may need to buy (or scrounge around for) another archival binder, but there you go.

Now, in your common store, what are we keeping again?

- Blank Paper
- Blank Template Pages (such as indexes, maps, tocs, etc.,)
- Subject P and P's
- Chaos
- Unplaced Pages
- As Many Subjects as you can Stuff In There

Put those sections in the following order:

1. P and P
2. Paper (Blank first, then Templates last.)
3. Unplaced
4. Chaos
5. Sections

Most of these you are already pretty familiar with. I'll talk a little bit more about P and P and "Unplaced" here:

P and P:

You want EVERY SUBJECTS P and P here, arranged alphabetically. Almost all are 1 page only- I've never seen a two pager. If you have older version, the older version should NOT appear here- only the most recent. (The older version get's an archive bit set, and you throw it in either the subject's archive back pages, or into the archival binders.)

That's pretty simple.

Unplaced:

These are for "proto-subjects": You have a few pages on the subject, but you don't have quite enough pages to warrant actually putting a tab-delimiter in place, using some of your template pages, and what not. You just want to give the pages a temporary rest stop, and see what happens. Maybe one day you'll have some more thoughts on the subject, maybe you won't.

Important considerations: DO NOT NUMBER THE PAGES. There IS NO SUBJECT yet, and thus no pagination.

HOWEVER, you DO want to CLEARLY IDENTIFY the subject that they *would* go in, both at the bottom of the page (as if it were a full page id, just without anything more specific than the subject name itself), and at the top-left of the page. (I don't know why. It just seems to "work" for me. You don't really have to.)



When an “unplaced” subject reaches a sufficient size, say 7-10 pages roughly, then take your pages out and promote the pages to a full subject. TaDa! Start a MOC, maybe a relevant TOC, fill out the tab, update the GSMOC, registry, and you’re done.

There- we’re done with the common-store notebook- ALSO a relatively simple subject.

And now for the carry-about notebook.

This is a MID-SIZED binder. It’s not one of those really ultra-thin binder, but it’s not a gigantic daddy-long legs binder either. *mid-sized*. It needs to be COMFORTABLE to carry.

IT MUST BE DURABLE. Moreso than the others must be.

This thing is going to get pretty messed up. You’re going to be constantly fiddling with it. It is going to get dropped. Lost. DROOLED ON.

Keep it safe. PROTECT IT WITH YOUR LIFE. You’re going to hold an incredibly vast amount of information in there- your latest speed thoughts on every single subject. That’s information density. And you’re going to be carrying it into a hostile environment: THE WORLD. The rest of your binders- the common store, the archive, they are not going to be in the world. They are going to be in a pocket universe called your book shelves. But your local cache, your carry-about notebook- that’s going to be with you in every where, except where there’s water.

It contains:

- Blank Paper
- Blank Speed Pages
- Blank Pan-Subject Speed Pages
- GSMOC
- Subjects Registry
- Subject Speed Pages and Refs TOC
- Global A/S
- Optionally, 1 or 2 subjects (“locally cached subjects”)
- Other Stuff

Here’s their order in your binder:

1. Other Stuff (?)
2. Blank Paper, Blank Speeds, Blank Pan-Subject Speeds (in that order)
3. GSMOC
4. Subjects Registry

5. Subject Speeds and Refs TOC
6. Global A/S
7. MORE “Other Stuff” (?)
8. Optionally included Subjects (?)

Question marks mean “optionally present.”

Let me start with the easy ones first, then tackle the complex things last.

Other Stuff: I have a hybrid between this notebook system, this “thought” system, and the GTD system (“Getting Things Done”, David Allen). I call the combination “ACTS”- the Act-Communication-Thought System. It requires pages in my carry-about binder. They go either at the beginning or the end.

Frequently, people will hand you stuff, like fliers, or whatever. Just keep it at the back or front of your binder.

Blank papers- nothing needs be said. Keep it well stocked. Global A/S- we’ve already talked about this, in the Intra-subject architecture. This is the same thing, just for things that apply to your entire notebook system, or for roughly more than 2-3 subjects.

Optional subjects-

Some times you are busy performing some maintenance operation (mapping speed thoughts), or are working on a POI or something, and you just CAN’T leave the subject. So you’re going to have to carry it with you.

Easily done! Just open your common-store subjects, pop out the subject you want, and place it into your carry-about notebook, at the very end. Work on it while you are away, over the objections of your girlfriend, and then when you get back, you can pop it right back into the common store.

Now we’re just left with “hard stuff”:

- GSMOC, Subject Registry
- Subject Speed Pages and Refs TOC

We’ll tackle subject speed pages/refs TOCs first.

Things to keep in mind:

- Subject speeds and references are together.
- Organized alphabetically.
- Only LATEST speeds,...
- ...but ALL REFERENCES.

That is:

You take all of the latest speeds and all of the reference TOCs for ALL of your subjects. Then you arrange them ALPHABETICALLY (fully- expand out your acronyms) by subject, in pairs (speed-references pairs). The latest speed page comes FIRST, followed by ALL of the references.

Or, not. You could just keep the references in their respective subjects, most likely in the common-store or the archives. But I prefer to keep the references with me in my carry-about, so that I can add to them when I talk with people, and so that I can share them with interested people.

Or you could keep the references separate from all of the speeds. However you like. This is just the way I've done it.

It's important to remember that only the latest speed needs to be in the carry-about notebook. Since there is a higher risk to data that's in the carry-about, I try to keep as much as possible in common-store or archives. Speeds are VERY dense, so all the more reason to be careful about them..!

Now, that wasn't so hard. Finally, the GSMOC and subjects registry. Then we get on talking about:

- Subject sectioning - how subjects are made, gestate, interconnect
- Process of Constructing and Linking a New Subject
- Special Subjects - Chrono, Strategy, Zeitgeist Tracking, and others

So. The GSMOC and Subjects Registry.

- What they are like, what they look like.
- Placing subjects on the GSMOC.
  - proximity
  - tight vs. loose connections
  - mental association, *not* logical connection
- "1/2 subjects" - subjects without contents.
- What to do with the Subjects Registry.

The Grand Subject Map of Contents (GSMOC) is a map of all of your subjects. It will probably start out being just a single page, and will likely balloon out to be several pages large.

You'll use it for a number of purposes, not limited to:

- Finding subjects for your thoughts.
- Discriminating the subject to place a thought into.
- Organizing the subjects of your thought.
- Reorganizing the subjects.
- Locating thoughts that you've thought before.
- Keeping track of subjects.

- Being amazed at. Reflecting on who you are and what you are doing. (Or not doing, as the case will likely be, at that particular moment.)

The GSMOC isn't alone; It has the subject registry right behind it. That is, two pages (at least), with a hash of your subjects over their first letter. That is, you have "ABCDEFGH..." written down the left side, one letter to two lines. As you create subjects, you'll list them in the hash.

You want a LIST of all of your subjects, in addition to your map. Why? Because you're going to have some sorts of tags that you are going to attach to subjects, that should be accessible in the context of the map. The map is AWESOME at helping you find stuff by area, by field, but if you already know the NAME of your subject, and are holding that NAME in mind, rather than a vague intention, the LIST is going to help you a lot more. Sort of like the difference between the general google index lookup (you know- the one that everyone uses and that hangs out on their front page), and the google directories (which are actually DMOZ).

You may well have some subjects that are NOT MAPPED. I listed those in GREEN on the directories. In particular, I have a holdover from previous days (pre-system) called "Lists." It shows up in green on the directories, but nowhere on the maps.

(You don't have to do it that way. Nowadays, with what I know now, I would just make a place on the maps for "unplaced" or "unplacable", and parked the "subject" name in there.)

The "Unplaced" section itself (!)- for pages that are unplaced, also appears in the Grand Subject Registry (GSR). Again- it could go on the map too in a "unplacable" location (I might even draw a little warehouse picture next to it, or draw a little empty car-parking-spot "U" around it, or something like that), but I happen to have put it in the GSR.

I also keep track of my archived subjects in there, as well. For example, I used to have "ACTION" and "REBOUND", before I started the present notebook system, which has assimilated and canibalized them somewhat. They appear on my GSR, with a little red "old" character (the Chinese character I showed before) next to them, indicating "You don't put stuff in here, it's old.

Incidentally- they also appear on the GSMOC. They are drawn faintly, and also have the "old" character next to them. But it is not my promise with myself that it will be the case- My promise is that every subject has an appearance on the GSR. But they don't need an appearance on the GSMOC. It's just a good idea.

As you work with the system, you will feel the desire to have a GSR- a place where you can flag subjects conveniently, all in one place, but without using the GSMOC. You'll LOVE your GSMOC, but you'll want the GSR as well.

So, I am done talking about the GSR.

Now, what does the GSMOC look like?

Well, it depends on if it is small or big. GSMOCv1 will be so puny, in fact, that it should include the GSR, on the same page..! That's what I did.

The top 2/3 of the page represent your map.

GSMOCS *ALWAYS* get convoluted with time. In fact, this applies to any map. Then there's a revolution- you toss the old map (well, archive it), make an interim map (remember! give it a full version number!), and then (perhaps) rewrite the interim into a nice new clean well organized map. This happens with programming, too. Lots of systems. So there it is.

Then the bottom third is just your GSR. It doesn't even have to be alphabetical, because it's so small. Just hunt and peck at what's there.

When one page is no longer enough, you'll do what I said above. And remember: The **FIRST** page of your new, multi-page map, is just a map of your maps. I drew the small maps in miniature on the front page. Sort of like maps of the USA: The first page is the whole usa, and it shows you the subdivisions over the maps to the rest of the USA. And they usually have this special cutout for Hawaii and Alaska. And that's what your first page of your GSMOC looks like. Include little page numbers, in blue, to the actual pages themselves- the page numbers have got to *stick out*. You could even put it in red, though blue is more consistent with the color scheme I've described. (Blue: Structure, Page Numbers, etc.,)

Now remember: Your GSMOC is also a major strategy point. You're going to be putting those little tabs on the page. So size your subjects accordingly. We want **DENSITY**, but we **ALSO** want to be able to see the strategy tabs. You'll know how big your strategy tabs are, once you've bought them.

Ah- I knew I was fishing around in my mind for something. Okay: We're moving along to placing subjects on the GSMOC.

- proximity
- tight vs. loose connections
- mental association, NOT logical connection

Then we'll talk about half subjects.

I sense that I am missing some things. Unfortunately, I cannot articulate what they are. My notebook system has done what it can for me here. The notebook system works- it works **GREAT**, but it doesn't always give you **EVERYTHING**, and sometimes you'll feel that there is "something missing". Sometimes the feeling is wrong, but often it is right. Even the notebook system, an amazing and wonderful catch, even it, is bounded by the laws of time and priority. It works far better than not having one at all, but it is not immortal or omnipotent. If I was carrying out my notebook today, there would be two results:

1. This section **WOULD** be complete, in the notebook.
2. You would not be reading this, because I would be immobilized. Because of the way the notebook system works.

Remember the dialectic between **INTENTIONAL** thought vs. **CAUGHT** thought. The **INTENTIONAL** thought is you actively going out into a mine

and getting yourself some thoughts. That’s what I’m doing now, as I’m writing. I’m using the notebook to GUIDE me, based on the content and structure accumulated before.

I ASSURE YOU: If I had NOT been keeping my notebooks, this document, that you see in front of you now, would NOT have been possible to write. I might be able to write some thing here, and a little something there, but it would be nowhere NEAR as structured (yes, I know the structure is not visible yet, but it’s there), nor nowhere NEAR as complete (even with the tiny things that I miss), as it is now. You’ll experience the sense of “completeness”, as well as the heightened sense of “incompleteness”, as you practice the notebooks, and envision Xanadu<sup>1</sup> in your mind.

(DIVERSION ALERT! DIVERSION ALERT!) Thinking about Information Architecture will be EXTREMELY important to society in the future. All these programmers wondering, “Why aren’t we reusing each others components?” Yes, very significantly, our languages and practices are limiting us. Quite severely. But even if we had the best reuse languages mechanisms and what not, we STILL need it to be easier to figure out what other people have written. The RETRIEVAL problem is MASSIVE. Even with Wiki’s and automatic lists and Orieilly books and stuff like that, it’s STILL enormously difficult. Just reading the Lex/Yacc book is extraordinarily intimidating, if you’re just trying to make a simple command language for your app. Yes, we know that simple languages turn complex quickly. But don’t beat people up about it. Write a better explanation of how to use Lex/Yacc. Or better yet, realize that its complex, and write a simplified version, and then take the time to hook it into our programmer’s social system. And suppose you DO intend to write a better one. What are you going to do: Spend two years reading every guy’s paper in the world on the subject? Or are you going to maybe spend a few days looking, and then start? You aren’t going to spend two years looking for and reading all the papers. You’re just going to sit down and do it. And some guy somewhere is going to say, “Outrageous! He didn’t read my paper!”

So, there are several things here:

- We need collaboratively constructed and canonical MAPS. This is hard to do but worth doing. Probably not strategic at the moment, there are better PFTs to work on. (For example, figuring out how to just colaboratively build a map with friends over a blank piece of paper, and then writing about it, would be a good first step...)
- We need a few canonical (perhaps competing, if they fork) “bases” for work.
- We need the public to be involved- indeed, PRIMARY- for all this stuff.
- People need to teach shit visually, so people can get up to speed and contributing as quick as possible. Thus, we need visual tools and explaining

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<sup>1</sup>Ted Nelson’s name for the infinite mental noosphere database; I *think*. I may have misunderstood what he meant.

tools light-years beyond anything we have now. Yes: I realize this book is all text. Sorry! A good diagram could lop off a ton of paragraphs here. But with today's tools and my skill using them, it's much quicker for me to make a ton of paragraphs. YOU end up losing here, because you have to read my tonnage.

I have a general picture of how all these things fit together: "Public Field Technologies." I want to write about it in the future. It's not on the immediate roster, though. Okay, back to wherever we were. Let me figure this out...

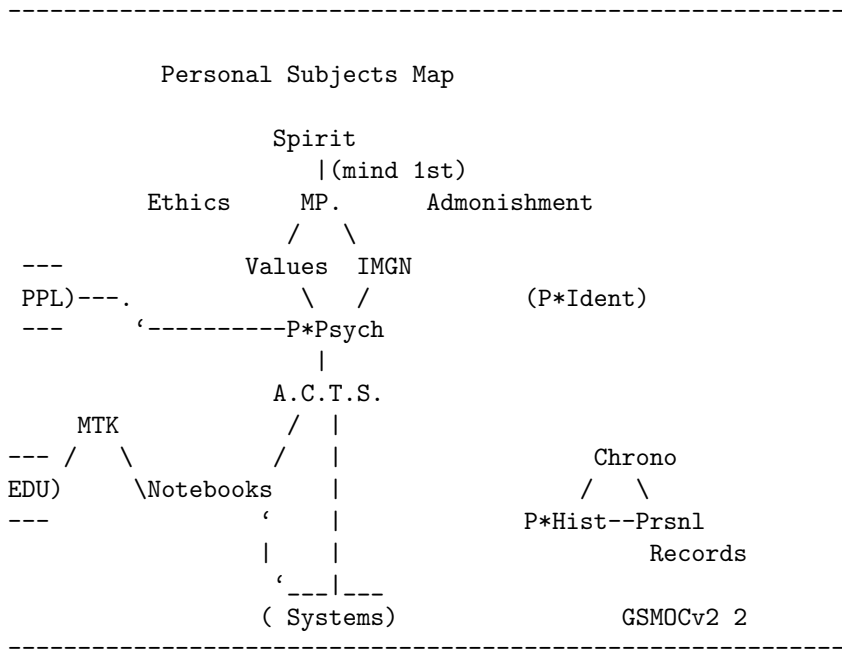
Replay:

- proximity
- tight vs. loose connections
- mental association, NOT logical connection

Then we'll talk about half subjects.

You put your subjects on the map, like we described before about maps. You put things that are sort of connected close to one another, and those that are distantly connected far from one another.

This is based on YOUR MENTAL ASSOCIATIONS, not on any sort of ACEPOS (Absolute Cosmic Eternal Perfect Ontological Structure.) Examples. Examples are good.



I've removed some things which are difficult to draw in ASCII, such as the fait "Action" and "Rebound" and accompanying "old" marker.

Also, this just doesn't do justice to the real deal, at all. Another strike against computers with today's technology. But anyways- I'll try to make it clear.

The page marker is on the bottom right, it says "GSMOCv2 2" meaning that this is version 2 of the GSMOC, and that it's *page 2* in particular.

I've titled this particular GSMOC page, though I didn't have to; The title is "Personal Subject Map". There are others: "Communication Subject Map" (which is the page "left" of this one), "Society Subject Map" (to the left of communication), an untitled map beneath these three, and beneath that is "ComputerLand", where I've got all sorts of computer subjects.

The title is written in blue.

On the left, are two subject names with dashed lines instead of full circles, indicating that the subjects aren't actually on this page. Those are "PPL" (People) and "EDU" (Education), both of which exist on the Communications page, again, to the "left" of the present page.

I put "left" in quotes because the page is actually GSMOCv2-4. That is, "page 4". Two pages after the present one. But it is arranged on the front page of the GSMOC as if it were to the left. Think back to the analogy of the USA map: California may well be West of Alabama, but Alabama's map may show up first, if the map is presented in alphabetical order. This is not a difficult concept.

I include the links to make the connections clear. You don't have to, but I think it's a good idea.

"Systems" is similar, but it's "below" rather than on the left.

Now, there are two special items on the map, "Mind 1st" and "P\*Ident". Those are what I call "half subjects". I'll write more about those in a moment, but basically, they are subjects that are ONLY speed lists at this point in time, or perhaps they are accumulating mass in "unplaced", but not yet a full, formally recognized subject.

The two half subjects are not actually written on the page..! They are written on the little strategy stickies. They have a fat red dot drawn on them, to differentiate them from strategy stickies.

Half subjects, after all, may be retracted. They don't appear on the GSR. They may be merged with something else. Whatever. They are in flux. So they don't get inked onto the paper.

Actually, you know what- I don't have much more to say about half-subjects, so lets just consider that I've talked about them. Not much more to them.

The half-subjects here are demonstrating what I was saying about proximity and distance reflecting subject matter.

Mind 1st is a speed list of thoughts pertaining to the notion that we are primarily, in mind, mental beings. It has to do with recognizing our identity as minds, that everything we experience, even the world, is a bunch of symbols and mind-images and what not that are thrown at us. I don't believe that minds are our *core* identity (awareness), but that we happen to be inhabiting



them, and that our particular configuration is unique to ourselves by various accumulations and circumstances. We seem to be reshaping the world based on our mental constructs; If we were omnipotent, or telekinetic or what not, it would become very apparent to us that the world was based on our minds, not on the environment that gave birth to us. So, all those kinds of thoughts appear in “Mind First.” (My true calling, however, could be titled “Spirit first”, or “Awareness First”, and is encapsulated in the “Spirit” subject position.)

“Mind First” is CLEARLY in the metaphysical domain. But I don’t see it quite as good as the eternal Spirit. There’s a sort of semiotic rule that above is considered higher, and so I am positioning “Mind 1st” above and to the right of MP (MetaPhysics), but beneath spirit. It’s closest to Metaphysics.

Now- we’re talking about Spirit and Ethics and Metaphysics and Values and Imagination and what not.

Don’t be frightened. Remember: I’m not saying that these connections are REAL or anything, or even necessarily the logical best connections. I’m saying that THESE are my mental ASSOCIATIONS. But this is by no means an ACEPOS, or even an attempt at an ACEPOS. This is just the way I hook things up in my mind.

There are times where I perform radical reconfigurations, and everything changes. Not only in my notebooks, but sometimes in my life as well..! The notebook is a MIRROR of whats going on in your MIND. Manipulations in the notebook are manipulations in your mind, and *vice versa*. WHEN YOU ARE MANIPULATING YOURSELF, *IT CAN BE A GOOD IDEA TO DO SO BEFORE A MIRROR*. There is no brain mirror (well, okay, surgeons differ, but...), but there is this notebook, which is a mind mirror. So there you go.

Think about that. I mean, I do. I contemplate that a lot. I think it’s profoundly interesting. If it means nothing to you; Well, okay. But I think that’s fascinating. Amazing.

But No. I’m not making the Kaballah here. This is not Ein Soph and Kethery and Chokmah and Binah and the Void or whatever. If you want to study that kind of stuff, great. The notebook system can help. Make a section called “Kaballah”, study in there, and link it into your system on the GSMOC however you like. But the system above is not Kaballah. It’s a mind map. If you feel there are cosmic connections, fine. Maybe “Personal Identity”, “Chronology”, “Personal History”, and “Personal Records” can be modelled by some abstract timeless pattern.

Wait a sec- what am I doing? I’m “poo-poo”ing the idea of using other people’s established structures. I shouldn’t be doing that. It’s true- I don’t want to alienate people who are very anti-spiritualist and anti-religious, and things like that. At the same time, I don’t think it’s right to say no to people who ARE spiritualists. And there ARE fundamental patterns. We know this in programming for a *fact*; We call them “Design Patterns”. Similarly, in life, there are patterns as well, and people have codified them into legends, and they have moved people in powerful and useful ways, and have helped people organize and understand their lives.

So, I take that back. If you are a Kabbalist, and you naturally associate things through the mental framework you've inherited from the Kabbalists' tradition, DO so. That comes naturally to you. We are mirroring YOUR mind after all. So you should do it that way.

I would just suggest that you not feel confined to that structure.

At any rate: I want to make clear to EVERYBODY that this structure above is just a map of things I think about. I think there's a "Metaphysical" quality to my thoughts about values, and certainly my thoughts about Imagination. Similarly, ethics is related to values, but it is kind of separate, and the same between ethics and metaphysics, but more distant.

This conversation isn't nonsense: I'm demonstrating the working of the mapping process. I could say it more literally, but as I said: I'm just spitting this out. So, my apologies if I have offended anyone's sensibilities. MAJOR apologies to everyone for writing so poorly.

So, that was a lengthy demonstration of how subjects are placed, and configured. It's a combination of semiotics and proximity/distance and other stuff. And the maps you make will make the most sense to you. As it should be. No ACEPOS here.

Now I think I have one thing to add.

Sometimes, a subject comes directly out of another subject. "PTUI!" One subject (like Metaphysics) got so many thoughts that were easy to isolate (like Values), that it SPAT IT OUT. So you have two subjects.

Sometimes, until the two subjects get some more distance from one another, I will notate the link between the two with something other than a line. It denotes "Tight Coupling."

Loose Coupling:

```
.----- .-----
( SUBJECT A )----- ( SUBJECT B )
'-----' '-----'
```

Tight Coupling:

```
.----- | | | | .-----
( SUBJECT A ) | | | | ( SUBJECT B )
'-----' | | | | '-----'
```

It doesn't have to be horizontal- that's just an artifact of writing with ASCII.

However, do notice that I've placed them closer, and that I use a bunch of perpendicular lines (perpendicular to the direction of connection) to denote the link.

Sometimes, over time, the coupling loosens. On the next version of the map, I turn denote the loose connection on the map.

And remember: Very loose connections don't even get a line at all.

You just rely on proximity alone.

Now: I've described that links appear because there are associations between subjects. But it gets better than that! Did you know that there's a VERY good

way to determine the proximity/connection type, in a very *objective* way?!? As in: A computer could figure it out? It's true!

Think about it: What tells us about the connection between subjects?

The P and P! The Purpose and Principles Page!

The MORE COMPLEX the protocol is between two subjects, THE GREATER THEIR COUPLING! Or at least, it *tends* that way.

So if you have a bunch of rules in the P and P over how thoughts divide between two subjects, that's a good indicator that those subjects tightly coupled. If there's just a single P and P reference, then it probably means a "normal" or "distant" link, but still one worthy of an explicit line.

So, there you go. You can see P and P at work while you determine your GSMOC tensions.

Oh: I want to make sure something is very clear:

VARY the length of your links. You WANT to VARY them. There's this sort of "pristine computer ethic" going around, that we want precision and equal lengths and stuff. I agree: We want precision. But we don't find it in uniformity. (A manifestation of the design vs. iteration tension in Computer Programming...) We find it in the variable. We want to be able to vary the length of the connection. Things that are more closely related- pull them in. Things that are further afield, but still connected- let the go out a bit.

Okay.

Oh; It just occurred to me. I recently observed something on my GSMOC. There's a pattern that I now call a "Subject Feeder". That is, I was working on a bunch of individual subjects (GKI, Anarcho-Science, Communes, Meetings, Electronic Collaboration...) and was getting some names confused. I was routing Speeds between subjects a lot. "Does it go there? No, it goes over there... (much later) What was I thinking? This doesn't go here- it goes THERE... (much later) What?! Where the hell does this thought go?!" It was confusing, and that meant that I had a framework flaw. So I reorganized my maps, standardized my names for things, until everything was clear, and found I had a new subject: "PFT", or "Public Field Technologies." It was DIFFERENT than my conception of anarcho-Science, and it was DIFFERENT than my thoughts about the global knowledge infrastructure, and it was DIFFERENT than all these other things. And it turned out to be what I am calling a "Subject Feeder". That is: It did a REALLY good job of showing WHERE to put other thoughts. Sometimes I'd even throw a speed into the subject feeder's speed list, because I hadn't quite internalized the new organization, to be able to quickly place the speed, and maybe I had important things to do at the time. So I just threw it into the subject feeder bin. Or in this case, "PFT". Then as I processed my speeds, with map in hand, I would forward the speed to where it needed to go. (Computers come in really handy around now. Anytime you are transcribing shit, you're always kicking yourself wishing for computers. I have things to say about this in the "Computer" chapter- chapter VI.)

So you may witness the same thing: "Subject Feeders". Or whatever we want to call them.

Okay. So, we've talked about:

- What the GSMOC looks like, what the GSR looks like.
- What you do with a GSMOC and GSR
- placing subjects on the GSMOC:
  - proximity
  - tight vs. local connections
  - mental associations, not logical connection (“ACEPOS”, in the extreme.)
  - connection with P and P
- 1/2 subjects
- “Feeder Subjects” pattern

We’ve also talked about things I didn’t plan originally and don’t really “fit” here:

- use of metaphysical structures.
- information architecture’s future.
- more on PFTs.

So... It’s talked about! We’re done!

What else is here in the Extra-Subject Architecture..

- Subject Sectioning - how subjects are made, gestate, interconnect
- Process of Constructing and Linking a New Subject
- Special Subjects - Chrono, Strategy, Zeitgeist Tracking, and others.

Okay, just a moment. It’s hot here in Seattle, this summer.. I need a glass of water. Done.

So, Subject Sectioning.

Let’s see- what’s on the map.

What follows is just gibberish in my lookup process:

```
-----
S5 S14 S19 S82 S43 S44
Transfer: P2 S74
Interface: S15
```

```
S5: Purpose, Mis-sectioning, Re-sectioning, Growth Process, Can get
right first time?, Constellations (SYS:S4)
SYS-S4: (Carry-about, Systems, S4, looking up...)
SYS-S4: Programming and Bsns and Notebooks have in common- diving up
functionality/work/thoughts into constellations. Dealing w/ border
```

cases, ambiguity. Ideally multi-categorize.

S14: Dividing when big- many speed-thoughts = division likely

S19: Splitting Subjects - when 1 domain knowledge used make conclusion in 2nd, 2nd is primary. If many-many try go more general. If 1 object many contexts, the object. ex: ACT2:S9. Particular relevance in a domain gets it. ex:ACT2:S39. If 1 object in 1 context, the context, to aid in mapping. Action suggested in particular domain gets it. ex:ACT2:S26 (or28?)

--- (ACT2 lookups)

ACT2-S9: (Archives, Action 2, S9, looking up...)

ACT2-S9: Ideals, Spirit, and Self Image. Spirit in Context of ideals and Self-image (where am, where go). [Sent to ‘‘Spirit’’]

ACT2-S39: It’s okay to hold social theories, just don’t believe you are right. Understand your ideas are non-scientific, inductive. Connected S37, Forwarded to SOC.

ACT2-S37: ‘‘Give up being right!’’ -Super-complexity, Non-scientific thinking, (science IMPOSSIBLE), w/in abstract domains of political issues in life. Much happier w/o.

ACT2-S26: Keeping sched for interacting w/ friends. -->ATS

---

S82:Subjects can become big.1 Things ordinarily small may take on great importance in your life, and grow own place in framework. ex: If x-tian, Bible may be whole subj, or even individual books in Bible!

S43:Thought-focus areas can be TIGHT (ex:IMGN) or LOOSE (ex:MP)

S44:Identifying Key Locusts and Peripheral Locusts

Transfer

P2: (POI Transfer entry)

S74: Moving Entrees. Don’t renumber if don’t have to. Open spaces AOK.

Interface

S15: Interfacing between subjects of note-keeping, and P and P

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Ahem.

There’s NO WAY that I’d just come up with all that just by sitting here typing away. I’d be lucky to have recalled half of it. I’m CERTAIN I would have missed ‘‘Splitting Subjects’’- a very important ruling that I have so internalized, that I’ve forgotten I know it. Okay, so, here we go. Serializing time.

One way of cutting it up:

- Thoughts in a Subject
  - Subject Purposes
  - Constellations of Thought within the Subject
    - \* How this is like other things in life. Skill in one is skill in the other.
  - Mis-sectioned Thoughts

- \* How did it happen?
- \* Interface between subjects. (P and P)
- \* Resectioning Mis-sectioned Thoughts
- \* POI Transfer
- Splitting Subjects
- Growth Process of Subjects
  - Can we get the subjects right the first time? (No.)
  - Dividing Subjects
    - \* Why subjects get big
    - \* When to do it
    - \* How to do it
  - Tight and Loose Subjects
  - The Ultimate Stage of Growth - The Book.

I like that. I'll use that as the guide for discussing Subject sectioning.

First: "Thoughts in a Subject." How you get a thought, and then figure out where to put it, and then how to move it from one subject to another when things get mixed up.

You get a thought, and you want to place it in the subject that's purpose it best aligns with. Most of the time, you know where to put the thought immediately, but some thoughts are tough. Your first line of defence is the GSMOC. You look in the general vicinity of where the thought goes, and see what your options are. 9 times out of 10, this tells you what you need to know. Occasionally, you'll need to go back to your P and P, and figure out what you intend. When you decide, you may need to annotate your P and P, especially if it was silent when you needed its help.

Now remember- your P and P is to be interpreted *loosely*. It says "INCLUDE" and "EXCLUDE", but it doesn't say "ONLY include." It just says "INCLUDE." Anything between INCLUDE and EXCLUDE is up to YOU to think about. Otherwise, we'd be spending all day writing a single P and P, or constantly updating the P and P.

But some times: Even with this "loose" interpretation of the P and P, you will STILL not be able to place the thought.

THat's GOOD! There are three things this can mean.

1. You've got to put the thought on the "unplacable list". A mysterious list that I never gave second thought to, appears before all the speeds, and forgot to write about. Dou! Doesn't even appear on my notebooks SMOC. This is the case for "out there" thoughts, that have nothing to do with anything you've been writing. This is the boring case.
2. You're splitting thoughts. More on that below.

3. This is the exciting case. Your thought has “broken” your conceptualization system. There’s something wrong with the way you’ve been thinking about things, and you need to go in and reorganize your thoughts, in such a way that it can account for this new thought of yours.

It’s a lot of work some times, but you’ll find that the “automatic” processes of the notebook system are not the major benefits. YES, they HELP, but they BRING YOU to the places where you can clearly see the HARD work that needs to be done. Incidental thought is great, but there’s difficult work to be done in Intentional thought as well. (I say difficult because: The process is not well understood (I’m working on it), and because: It generally takes a while to do, especially relative to Incidental thought, which requires minimal “work”). Reorganizing can be time consuming, but the rewards are enormous: You are moving to a whole new way of thinking about whatever it is that is important to you! A revolutionary change. Congradulations!

But it is still a lot of work.

So, you place your thoughts by purpose, and it may involve some difficult cross-subject work, but for the most part, 99it’s a pretty easy process.

**YOUR THOUGHTS BUILD CONSTELLATIONS WITHIN YOUR SUBJECTS.**

This is a very important, and a very powerful metaphor. This is something that I have found true in many fields. I believe this is something that AI resesarchers should be paying attention to (though they probably are already).

Oh: By the way. I think that anyone who is interested in AI should read this book and practice it. This process is very, very, very mechanical. That’s boring to us humans, but computers love it. And I think that computer AI would be performing a much more complex version of the process. But I think that the basic framework *may very well be* this process, just more formal. Okay, I’m done pretending like I know about the field of AI. (I don’t.)

When you are building a computer program, you have all these little “thoughts”. But they aren’t thoughts: They are requirements, promises, stuff like that. You can scatter them out, then organize. Collect related ones. There’s usually multiple ways to organize them, different ways of considering the same exact thing. You put closely related ones together, and that’s called “cohesion.” And others are apart, but connected, and that’s “coupling”. Sound familiar? They are little constellations of requirement. The process is half art and half science.

Same for business construction, where it’s basically the same process, but with people.

So, why mention this? Because it’s general. If you know the practice in one, you know it in the others; Here too as well.

Now: What happens when you mis-section your thoughts?

First, you want to think about what that means. Is this something that you are doing a lot? Perhaps you need to clarify your organization, or you want to set up some sort of process for thoughts in this domain, until you’ve internalized the organization.

Next: Determine where the thought is going. Say you're moving something from PFT (Public Field Technologies) into ECollab (Electronic Collaboration). You made a mistake by putting it into PFT, and it's a straightforward matter to move it to ECollab.

First, you put the thought in the ECollab speeds. Give it the next available number. Then, cross it out of PFT, in red. Also in red, write "ECollab S57". Or whatever subject and Speed number is the target. Simple enough. You want to keep the record of where it went, because you might have links to the original.

If you are ABSOLUTELY CERTAIN that you've NEVER mentioned the original anywhere else, you've never linked to it, then you can completely cross it out, without linking to the new location as well. But I usually just link it; I don't like to worry about absolute certainty.

Your POI are a little more difficult. If you've written a POI, but later find out that you put the entire POI in the wrong place, the process is a little more involved.

What you do is you take the POI out of the first, insert an out-card in it's place (pointing to the new location), and then insert the POI in the new location. You also have some renumbering to do.

Now- what's the new location?

If there's not already a POI with the given number, you can just take that number.

For example, if I'm moving a "PFT P7" to be "ECollab P7", but ECollab only has 4 POI (ECollab P1, ECollab P2, ECollab P3, ECollab P4), then just let the POI# remain the same.

Who cares if there are gaps? Put it in the 7th slot on the TOC, or don't list it on the TOC at all, until the 6th has been reached, at which point you can list P7.

But sometimes you just have to renumber the whole thing to a new POI#.

When renumbering, whenever possible, you want to CROSS OUT rather than WHITE OUT, or eliminate. That is, you'd like to be able to see the history, if at all possible, without fucking this up too much.

But, like all rules, some times you'll just have to say "history be damned."

Look to the future.

Finally, in this area of placing thoughts in subjects and resectioning, I want to talk about some tough nuts to crack.

I call it "Splitting Subjects".

This is a thought that isn't merely "out there." NOR does it somehow break your system.

It's just clearly highly relevant to more than one subject.

I have built some general rules for such thoughts, and you may want to make up some of your own.

Now hold on- this is pretty abstract. Don't worry, I'll give examples of each. They are:

1. When 1 domains knowledge is used to make conclusions in a 2nd domain, the 2nd domain is primary.



2. If there is a many-many relationship among domains, try to go with the most *general* domain, if at all possible.
3. If there is 1 object in MANY contexts, try to put the object in it's own, native domain. If such a thing exists.
4. But: If you have 1 object in ONE context, put the object in the CONTEXT.
5. If there is a PARTICULARLY relevant domain, that domain gets it. In order to aid in mapping.
6. An action in a particular domain: the domain gets it.

Yes, that is pretty heady and out there. It's also fairly arbitrary- you can and should make up your own rules, as you come up with them. Just be consistent: Record them somewhere. (I would imagine that you would have a "Notebooks" subject, like my own, or something like it.) This is just something to go from.

So, examples.

1. "When 1 domains knowledge is used to make conclusions in a 2nd domain, the 2nd domain is primary."

So, say you have some thoughts about ethical rules in electronic collaboration. I happen to have both "Ethics" and "ECollab" in my notebook. Which should it go in? Ethics, because I want to collect all my thoughts about ethics into a coherent framework, or ECollab, because I want to be aware of ethical considerations when I work on Electronic Collaboration?

I put it into ECollab, and I use this rule to help me make decisions like that. There is *certainly* such a thing as thinking about Ethics abstractly.

This is highlighting a limitation of paper systems: It's difficult to put a thought in two places at once. Computer systems, when they overcome their too-costly restrictions, will solve this problem for us.

When you obey this rule, you don't need to place a link on the GSMOC. If you did so, it would quickly become a big enormous tangled mess.

If you want to, you can run over to the Ethics subject and put a link on the map to your thought way o'er in Electronic Collaboration. But I wouldn't do that. Such a promise to yourself would be waaay too costly to keep. We must live with the imperfect. TOLERATE ERRORS. If this is hard for you, start fucking things up by attaching imaginary false links in one place (I guess). Start making up links that go to creatively unrelated places. That's my solution to your dilemma, at least.

So: Applying subj 1 in subj 2, put thought in subj 2.

2. If there is a many-many relationship among domains, try to go with the most *general* domain, if at all possible.

HOWEVER, if you have some situation that is incredibly complex, with multiple applicabilities, just go for the most general one you can find.

This is just a messy situation. See if maybe another rule applies, if you don't like this.

3. If there is 1 object in MANY contexts, try to put the object in it's own, native domain. If such a thing exists.

So, I have an actual real example from real life here. I had a thought like this: "Reflect on the role of Spirit in the Context of Ideals and Self-Image- where it is at, where it is going."

So, it was fighting amidst "Spirit", "Values", and "Personal Identity." (Actually, at the time, Personal Identity didn't exist, so technically, it was between "Spirit", "Values", and "Personal Psychology". But that's just nit-picky.)

Where did that go? It went to "Spirit". The focus of the thought was clearly on spirit, in these other contexts, so I put it in Spirit.

4. But: If you have 1 object in ONE context, put the object in the CONTEXT.

This is just a special case of rule 1 (two subjects, go with the one that's the context).

5. If there is a PARTICULARLY relevant domain, that domain gets it. In order to aid in mapping.

I had a thought that "it's okay to have social theories, just understand that all positions are fragile, and necessarily, by the shape of things, non-scientific, inductive."

I put that in "Society". (Later, it would have gone into "Social Ideology".) I WOULD have placed it in "Science" or epistemology, or something, but I REALLY WANTED to see this thought whenever I thought about society- it's an important self-admonishment.

So, put your thoughts wherever they will serve best.

6. An action in a particular domain: the domain gets it.

If you have a "possible action" that you can apply in a particular domain, put it in that particular domain. This is again a special case of rule 1: Put specific things in specific places.

A good general "super-rule", I guess then, is "Put specific things in specific places, and general things in general places."

And *that* is what I call "Splitting Subjects". I have the image of throwing a stone thought tablet over a pile of rocks, and seeing where it rests.

I guess it's a bad name. In future versions of this text, I can call it something better.

So: We've talked about how thoughts roll over subjects. How they get in, how they settle somewhere, how they get kicked out, how they go somewhere else. This is all in the context of extra-subject architecture. It doesn't make much sense to talk about this within the framework of a single subject.

Next, I'm going to talk about the growth process of subjects:

- Can we get the subjects right the first time? (No.)
- Dividing Subjects
  - Why subjects get big
  - When to do it

– How to do it

- Tight and Loose Subjects
- The Ultimate Stage of Growth - The Book.

So, you have a subject. You pick a good, 1-3 word title.

It can be as specific or general as you like.

Frequently, you start out general, and then, with time, as you collect thoughts, you extract items that are specific.

For example, I started with “MetaPhysics”. After about a hundred speeds collected, however, I pulled out “Spirit”, “Ethics”, “Imagination”, and “Personal Psychology.”

You pull them out by looking at your thought “stars”: You’ll identify “constellations”, and you’ll separate out those that are clearly separate and distinct from the others.

Some times you’ll pull out things that are still pretty interconnected. That’s still useful- just document the interconnections on the P and P, and you might want to draw in some “wormholes” on your maps, linking across subjects.

Now: “Can you get a subject right the first time?” That is: Can you predict how your thoughts are going to come out?

I have found that it’s rarely the case that I can do a very good job of it beforehand. That’s because of what I call the “symphony principle.” (If someone knows a canonical name for this, let me know, lion@speakeasy.org.) It works like this: If you don’t listen to symphony music a lot, and then you hear some, you say, “Oh, it’s symphony music.” And then if you hear another, you say, “Oh, it’s more symphony music.” There’s little difference between the two pieces. But if you listen to it *a lot*, then you start to discriminate better. You can start to identify major trends big differences. With time, you can even identify subtle differences. With even more time, those previously subtle differences become vast enormous chasms, and you are picking out *still subtler* differences. The same is true for art. If you pay attention to an art style for a while, you start to understand things that other people don’t- the meaning of a slightly thicker line, a slightly different shade, a slightly different position. Or clothing. Some people are experts at what clothing communicates to ourselves, or to others, and they can make subtle differences that we cannot cognize, yet still influence us. Lots and lots of subtly.

And the same thing happens with our notebooks. We approach a subject. It has meaning to us, for some reason. We feel drawn to it. But it is amorphous, we cannot divide it. If we *could* divide it, we’d be much cleverer people. But we cannot, at the moment. So we approach it, and “subscribe” to that sound stream of thought. We start writing it, and then graphing the night sky. We telescope in on it, and find pinpoints of still smaller stars, and we identify constellations, and constellations within constellations.

So: I don’t believe we can just “get it right the first time.” We have to listen to it first.

So: If in doubt, go general in the beginning. Then, extract subjects within as you discover difference.

Now, how do you separate out subjects?

Just as we have described before. You take the speed thoughts, and transcribe them (argh!) to new speed lists. Make sure that when you cross them off from the source speed list, that you include a note about where it's going—perhaps the initials of the destination subject, and the speed #. Move other resources as well—REF, PJ, RS, POI, everything. Place out cards that point to the new location.

It is tedious, but not nearly as tedious as keeping several subjects in the same exact notebook.

Transcribing speeds is the most tedious. In the computer section, I'll describe a program that, if written, could take 90% work off of our hands. Basically: Most of the work in the notebook system is based on *speeds*. But speeds are also the most non-graphical element of the system! If we just program in a good *mapping* system, which requires some graphic manipulation, but not a whole *lot*, then we could enter the speeds from pan-subj's, quickly, because we're typing, and then we never ever have to transcribe again... 90% print out the maps and speed lists, hole punch'em, and put them into the notebooks... But I'll talk about this program more in the computers section..!

When you perform this pattern, of listening to a subject, and then separating out the constellations, you find yourself frequently with what I call "tight" and "loose" subjects.

That is, the ones pulled out are "tight"—that have a specific focus. But the source subject— that's still "loose". It serves as a sort of "anything that's not one of those things." The loose source can serve as a source, *yet again*, but attention distributes out to the tighter subjects. Over time, the tighter subjects take on a life of their own, and occasionally spawn off even more subjects.

I had Society, which had a child named "Global Information Architecture", which had children named "Anarcho-Science" (about the motion of traditional study from corp/gov/mil/university to the public field) and "Public Field Technology" (about fields that can help people benefit and organize themselves.) PFT then dramatically reshaped the GSMOC. So, these things take on lives of their own, mirroring what occurs in your mind.

Sometimes, however, a subject reaches an "fullness". You feel good about what is present. You do not want to lose it. It is reasonably complete. You may have improvements or changes in mind, but you want to preserve what you have made.

At that point, I believe, the appropriate thing to do is: To Write a Book!

I mean, that's what I'm doing right now. My "Notebooks" section reached a certain "fullness". Obviously, my notes were not perfect, but "intentional" thinking (rather than "incidental") can fill out some of the things I either felt was missing, or too obvious to me to have noted (but that a stranger might not know about).

After you have written a book, you have a solid base for further progress.

I think everyone should do this if they have a subject that is not researched yet. Hell, there are even some justifications if something *is* researched yet.

You may see where this leads: I'm talking about not just the integration of thoughts within *your* mind, but *between* us as well. I'm talking about social organizing. Right?

One of the interesting things about the notebook system is that, unlike most other endeavors, *you don't really need a purpose*. Napoleon Hill said that major efforts require "Definiteness of Purpose". But what can we say? We live in a universe without clear purpose. But maybe, buried within ourselves, is some motion, that is pushing us. I don't know if this is "purpose" in the same way, but it feels to me like there is some kind of motion, and that it is expressing itself. I agree that this is metaphysical, but I am only describing what I have observed. When I start keeping notes, I need no purpose. You need no purpose to analyze the traffic in your head- the traffic of all these thoughts zooming about. But you start analyzing them, and you start detecting patterns, and seeing what's happening. And it's amazing. Perhaps you *do* see a direction there.

You never had a sense of "purpose" before, but you *do* see that there is a direction inside of yourself, and you see it visually, mapped out in front of you. Anything you think about- maps out in front of you. If you have an unconscious urge, it will appear, in your notebooks. Low frequency patterns get captured and mapped. Whatever is inside of you.

Perhaps I'm going off the deep end here, and perhaps I'm just seeing something in myself, and overly generalizing it to all people. Nonetheless, I wouldn't feel right if I didn't write about what I saw. You need not believe me, nor agree, nor see the same thing yourself in order to practice the notebook system.

But let me know if you have any thoughts on the matter.

I have big dreams for these ideas, but I also have difficulty seeing this as anything more than an intellectual novelty item right now.

Now: Back to writing books.

You don't have to write books in order to show to other people. You can just write it for yourself.

That way, you feel okay saying that the subject is "done". You can put the notes in archive, and have no fears that your notes will be incomprehensible to you a decade later.

But I would put it online, for people to see.

We have no way of mapping our thoughts together, yet, online. We have google indexing, we have DMOZ, but these are not quite the same thing as *maps*, they are TOCs and indexes, they have great limitations in making *structure* clear. We talked about this already.

We also have the "References" problem to address on a social level- that a single reference covers many-many-many topics. That's why we sometimes, in the REF TOCs, that we may pick out a single chapter of a book as a reference, or distribute a single book's contents over several subjects REF TOCs. Similarly, posting our books online, we will have difficulty linking contents from a single

source across multiple maps. However, I believe we can and will link contents effectively, far more effectively than we do so far.

This book, itself, is a single element of what I call the PFT's. It is on the personal end of the spectrum from individual to global empowerment. (That is, if I'm not completely bonkers, and that this system is actually of some use to somebody..! Though I would not be surprised at all if this is actually a *poor* system, and that there are far better ways of doing things than I have described here.)

There is also the question of: "Are we amassing some knowledge, laboring to build something, when someone elsewhere, whom we cannot access, for whatever reason, has already far surpassed what we are laboring to build?"

Was it useful for Indians to invent bows and arrows, when people across the globe had guns? I think it *was* useful for them. Because, locally, within their sphere, it was better than anything they had before. The people who are distant and inaccessible are just that: Distant and inaccessible. We can only affect what we affect: Our local sphere.

I believe we should take efforts to be as strategic and open and as international as possible.

I believe that these thoughts are not original to me, that these are ideas that many people have, everywhere. I don't like it when some writer says, "Ah, these are my great ideas. Others have gone before me, but these are my ideas, extending on those before." Many people don't have the resources to articulate what they've had. I've seen many times that it is clear in a field what steps need to be taken, though not everyone is jumping to write about them- it just seems like common knowledge. Individuals and corporations jump to claim the credit for themselves. I believe all of this will change in the future. Not because it would be "nice" if it did, but because as our ability to communicate, out here in the "public field", is increasing dramatically. The reasons why corporations "work" is because they are organized by communications, dollars, and geographic proximity. But proximity is becoming meaningless. And there are *far more* people out here in the public field, than the dollars can support in the comparatively small private networks. Further, the communications gap is narrowing- with instant messaging and video networks, people who just happen to be interested, but are across the globe, can organize just as well as the guys at the company, struggling to find a meeting time. So I believe it is very possible that we can, if we take action, make our public field powerful.

But nobody knows the future.

I've diverged considerably; Most of this should have gone into the "Theory of Notebooks" chapter- chapter V.

Sorry; I'm getting ahead of myself. If I take the time to reorganize the book, or if a reader re-writes the book (you are welcome to do so, please respect the public license if it applies, and feel free to write about the same exact things in your own words, with your own thoughts), then we can put these things in the right places.

We talked about subject sectioning, how subjects are made, interconnect, gestate.

Next is a very brief section, about the process of constructing and linking a new subject. FINALLY, we talk about special subjects, like chrono, Strategy, Zeitgeist Tracking, and others.

#### CONSTRUCTING AND LINKING A NEW SUBJECT

This is just a checklist, for you to follow in your mind, as you create a new subject. No need to be exact, of course. Tolerate errors.

- Make a new tab for the subject, and put it in the common store.
- Put your pre-existing pages (for example, 1/2 subject speed lists, unplaced notes) in the new tab.
- Place an entry for the subject in the GSR, and the GSMOC, in the carry-about binder.
- Write up a P and P, and place it in the P and P section of the common-store binder, up front.
- Take out one of your Subject Speed pages, and set it up for the new subject, supposing you don't already have one. Put it in the carry-about binder.

That's about it. I don't remember if there is anything more you need to do at the time.

It doesn't need to be a big process. For about 1/2 of my subjects, I don't have P and P pages. It works just fine; Many subjects are self-explanatory, and not intertwined with other subjects.

Finally:

#### SPECIAL SUBJECTS

- Chrono
- Strategy
- Zeitgeist Tracking
- and others

There are some subjects that are special.

Sometimes, you have subjects that cut across several subjects, such as "strategy". That's where I've collected my ideas about "What should I do? What would be most strategic?" Within individual subjects, you may have strategy ideas as well, particular to that individual subject.

My strategy subject was just a TOC and a bunch of chronologically sorted pages, numbered simply "1,2,3..."

My chrono subject was the same way, except instead of being about strategy, it was basically just a standard diary or journal: How I felt, what was going on around me, etc.,.

I also kept in my notebook my calendar month pages (from my implementation of the GTD system), as months passed, and my Zeitgeist lists.

“Zeitgeist Tracking” is an interesting thing that I did. At the start of every month, you make a blank sheet, and write “Zeitgeist, Mar 2003” (if this is a Zeitgeist sheet for the month of March, 2003.)

Whenever I found myself in a subject for a while, I’d put a brief 2-3 word description of the type of thing I was thinking about, if it wasn’t already present on there.

At the end of the month, you have a list of about 10-20 general items, showing what you’ve been thinking about. You store the page in the Chrono notebook as the month rolls over, and you can look back and see how your thinking has changed over time- what you are thinking about, what is important to you, etc.,.

If I were to do this all again, I would probably make up a special segment for the Zeitgeists (“ZG”?) within Chrono, and I’d use CEP (the experimental Chronological Episodic segment) to track threads through time. It can definitely be structured better.

There are no notebook police: You can make up your own special subjects. { : ) } =

Done! We’ve talked about the physical representation of the complete system, the GSMOC, the subject registry, how subjects are made, gestate, interconnect, the process of constructing new subjects, and the special subjects. Woo Hoo!



## Chapter 5

# Theory of Notebooks

In this chapter, I want to talk about:

- Why Notebooks? What are we trying to do?
- How do the notebooks work on an abstract level?
- Ideas about thinking.

This is a short chapter; I've already intertwined many of the ideas about how things work in the previous chapters.

WHY NOTEBOOKS?

Major reasons:

- Reduce Repeated Thinking
- Prevent Lost Progress
- Observe Mind

Minor reasons:

- Storage and Retrieval
- Living Strategically

“Repeated thinking” is when we think the same thoughts, over, and over, and over again, without really getting anywhere.

“Lost progress” is when we have solved a situation before, but we go back and return to it.

Frequently we find ourselves in one frame- a frame that we've already solved before. Surely, if we kept records and mapped our thoughts, we could keep a map in mind, and identify our position on the map and the transitions to solved states.

This applies technically; It may be possible to apply psychologically as well. My technical attempts have been very successful, but my psychological attempts have had only very limited success.

The best function has been to keep myself internally “up-to-date” with my thoughts; I did not lose much knowledge.

I can give a demonstration of something that I gained:

I discovered at one point that large scale social ethics are too complex to calculate, and that social ideologies are necessarily unscientific.

It something that I had discovered before in my life, but somehow had “lost”. This time, when I learned it, it was clearly there in my notebooks. Any time a thought came that ignored that conclusion, it had to be placed into the integrated structure. It would eventually come to the test of the principle that large scale social ethics are too complex to calculate, and thus died, or was cast as a member of a particular social ideology; Either one I subscribed to or didn't. But I recognized over time that even though particular social ideologies are more in line with my values than others, that the whole thing is so complex that I cannot say with a degree of certainty which is better than another.

That progress was not lost, as it was before.

Now, I am not using the binders. It has been a few weeks since I have stopped. I am not testing everything against the binders: Is everything lost?

I don't believe so.

(We're getting into ideas about thinking, so we'll just continue into it.)

I mentioned that the binders have a “freezing” affect on the mind. That's true- it can stagnate your mental growth. (Perhaps there is a way around this, by computerizing parts of the system, as I describe below, in order to make it more fluid.) But by the same token, it is also reinforcing.

I am no master of psychology or metaphysics, by any stretch. But, I have found a model of learning that is agreeable to me.

Michael Ende wrote that we learn things and forget them, learn things and forget them. His idea was that these build layers in our mind that, though we can't see them, are still there, and support us. Thus, they still benefit us.

Performing the notebook system for a period of time seems to be like organizing your conscious thoughts, and etching a foundation in your mind. Whether it is good or bad- it can be remade later.

Since we're here, I have a couple other ideas about thinking that I want to explore:

- Repeating thoughts, incidental thought, and active thinking.
- Is our thinking process structured?

I'll start with: Is our thinking process structured? Just at a glance, it seems rather chaotic: There's a thought here, a thought there, and another one. However, it once occurred to me to find a pattern in my thinking.

I found one, and built a collection of markup icons to label the different pieces. I am not alone in this idea; Robert Horn did something similar, but

he did it to technical documentation, rather than to an individual writing his thoughts, thinking a problem through.

See: “What Kinds of Writing Have a Future?” by Robert Horn <http://www.stanford.edu/~rhorn/images/>

I have not seen his full classification system for elements of explanation, but I can describe my own loose structure for elements involved in my thought process:

It includes:

- Incentive
- Problem (to solve)
- Question
- Goal
- Starting Point, Reflection, Contemplation, Brainstorm
- Collapse, Organize, Order
- Articulation Request - (“Articulate this hidden thought”)
- Analysis/Dissection Request - (“Analyze this situation into parts”)
- Map, Model, Vision, Structure
- Rule, Principle, Law
- Name, Definition
- Exclusion, Boundary
- See Also, Connection
- Quotation
- Hazard, Warning
- Rebound, Redirection, Leads To
- Research Request
- List
- Point
- Concluding Principle, Therefore
- Possible Action
- Possible Future
- Concluding Question

- Concluding Goal
- Concluding Problem
- Flag
- Double-Check Request

These are the primitive elements of thinking that I have found so far, and I have found a few common aggregates as well.

This is beyond the domain of a book on notebook systems, but I thought it was related enough that I should include the idea.

I use the above icons (graphics not included, sadly) to identify the major elements of my thinking, and how they piece together. They appear most commonly in POI and on speed lists (my “psy” column).

Next: There are different “thought moods”.

**WARNING:** This is not something that I have tracked, and not something that I have given any organized thought to. So what follows is off the cuff, and may well be wrong.

Most of our time, we’re either doing work and focusing on the very next task to complete (if we are fortunate), or we’re repeating thoughts about just whatever. Those thoughts are largely uninteresting, rehashing whatever we already know in a particular domain. After a while, however, we can come across a “solution”, or glimpse a new vision, or get something that is truly useful. We stumble across a puzzle piece.

*Somehow*, I don’t understand quite how, it seems that the mind gives you solutions if it knows that they will be implemented. If you are habitually throwing out good ideas, over time, it seems to me, your mind stops giving you solutions. But by keeping your thoughts in a trusted system, the mind gets happy about solving problems, and gives you more pieces.

This is what I have observed; Now that I am not keeping my notes, and have been tossing good ideas left and right, they appear to be dissipating.

I don’t worry about this; I know that I can pick up my notebooks whenever I like, and good thoughts will start surfacing again.

There’s also a certain mental mobility possible when you aren’t keeping notes. While you can “lose ground”, you can also “leap high” in ways that the note keeping process makes difficult.

There frequently come points in the day, where, all of a sudden, a million thoughts come to you at once. I don’t think that it’s that your brain suddenly gets hyper; Rather, I think it’s that one idea triggers another idea, and then that another, and the frequently trigger ideas across subjects- across great mental distances even, and there’s this sort of chain reaction. Recording it is quite a wonderful experience, unless you don’t happen to have a piece of paper around, in which case it’s a miserable experience as you start pegging thoughts and compacting them into itty-bitty syllables.

So, we’ve talked about “day-to-day repeating”, about how good ideas come spontaneously, and about when we are concentrating (the icons of thought fit in here.)

Finally, one of my favorite topics in theory:

HOW DO NOTEBOOKS WORK ON AN ABSTRACT LEVEL?

As opposed to the previous section, this is something I have thought out well, and carefully integrated.

We have the subject matter- information, knowledge, and wisdom. And then we have the process of handling all that, with the aid of the notekeeping system.

First, the subject matter:

- Information
- Knowledge
- Wisdom

Information is little pieces of idea that you have. Your speed lists will probably consist mostly of information.

After you collect a bunch of information, you'll detect patterns and relationships. As you integrate ideas together, it becomes far greater than the sum of the individual pieces- it becomes *knowledge*.

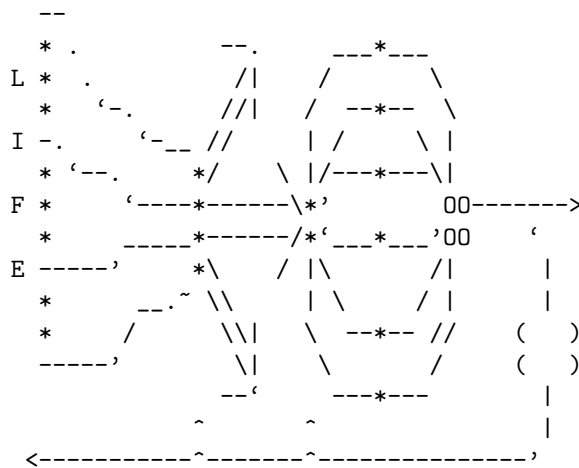
What is Wisdom? I define it as *knowledge* that has been *integrated with your life*. Or "integrated with your living systems."

That is: IF your knowledge makes a difference in how you life, THEN it is not just knowledge, but Wisdom as well.

The old Dungeons and Dragons handbook never had such a description, but suggested by analogy. To paraphrase: "Knowledge is knowing about rain. Wisdom is knowing to come in when it rains." By my criteria for Wisdom, it explains the D and D analogy perfectly. The person who knows about rain is thinking about rain as collections of integrated information, but the person who is wise is actually DOING something based on that knowledge.

Now, the notebook system is a system for manufacture Knowledge and Wisdom!

Here's a diagram of how it works:



How's that! Do you like it? Isn't that great?

What, you want me to explain it to you? Okay. :)=

Lets start at the left:

That's your life. Your life emits many many thoughts through your mind. The thoughts are the little stars: \*'s. However, most of the thoughts are uninteresting.

The first step is to collect the good thoughts together. You put them onto your pan-subject speeds and your speed lists.

Then, through various mechanisms (such as the subject speed lists, and the "hint", maps, and just looking over your speed lists and recognizing), your thoughts are placed into "locals", places where related thoughts are found.

That's represented by the three major arrows, pulling the collected thoughts into specific locations.

After a few thoughts are collected in the same place, you think about them. That's the "opening part" of the diagram: There are two little stars at the end of the middle big arrow, and those thoughts are then reflected upon, likely in a POI entry.

Whoah! Suddenly your two thoughts became a gigantic number of thoughts!

This is a time for *EXPANSION*. You're brainstorming, the thoughts are flying. You don't necessarily want to *limit* your thinking right now: This is time for explosive hot thought-on-thought action.

Your job is to write down what these things make you think of. You have "reflect ons", "analyze this's", lists to build, all sorts of things. It blowing out.

After you reach a certain point, you've written up your major ideas.

Now, you can see them all, and you can start *organizing* them.

This goes in the *OPPOSITE* direction: Instead of making ideas, you are reducing them, by packing them together into a synthesis. Some will go away, some will be compacted, some will be found to be identical representations of the same thing, etc., etc.,.

Finally, you end up with a *synthesis*: the square arrangement of four O's on my diagram.

Congratulations! You have a conclusion, a synthesis! Not necessarily- it may be that you've created a model, too, or something else. Regardless, you have a product.

It can be "shipped"- arrow to the right.

But what happens now is that it feeds back into your system.

Perhaps, by building your synthesis, several previously existing Speed thoughts are unimportant, since the POI does such a good job of encapsulating them. You can put the POI# on the map, take off the S#'s. If you like to "preserve" the S#'s, you can put them in their place in the final POI entry where they end up.

There are many things you can do.

The resulting thoughts *also* affect your thought-collection system. Perhaps new subjects are suggested, or new constallations within existing subjects. Perhaps new maps need to be made.

And finally, your new synthesis affects your life. This is akin to Michael Ende's "learning and forgetting." The thoughts coming out of your head will now be different, by the new addition.

This is my understanding of the process.

There is room for greater understanding:

- Identify the types of thoughts that come through. As I mentioned above- I've attempted to identify some basic elements of problem solving.
- Identify the types of synthesis, and the impact they have on other sections.

I cannot shake the feeling that this model has implications for the AI community. If the types of thought and synthesis' were understood better, it may be mechanically implementable.

There is still the "life" region of the map- where the ideas come from in the first place. I think that by some analysis of personal psychology, that could be understood better, and abstracted for computers. Something to do with placing attention by strategic consideration and the mere position of the organism.

I have now described my system to my satisfaction.

The next two chapters are on the Question of Computers, and how to get started.

## Chapter 6

# The Question of Computers

Ah, my favorite chapter. { :) }=

This is where the future is. Not just the DISTANT future- but the near future as well.

But face it: Computers suck at giving us the detailed and speedy drawing capabilities we need to think fluidly on paper. It just takes way too long to diddle with selecting text, changing font size and colors, quality, and lets not even talk about drawing, even IF you are armed with a WACOM.

For anything that requires small levels of drawing power, you're pretty much going to have to ignore the computer.

HOWEVER: THE MOST TEDIUS PARTS OF THIS NOTEBOOK SYSTEM HAVE *NOTHING* TO DO WITH DRAWING!

What are the most tedious parts of the system?

- Maintaining TOC's.
- Transcribing Speeds
- Redrawing Maps

Of those three, the first two take up about 90time, and are major pains in the ass!

Fortunately, COMPUTERS EXCELL AT THOSE THINGS!

Maps is a little more difficult, because it requires *some* drawing power. However, I believe that map construction *too* can be safely taken over by the computer.

HERE'S MY VISION:

During the day, you use the ultra-convenient (but in the present pure paper notebook system, *dangerous*) pan-subject speeds. You don't number them, you just keep them.

Then, at night, you go to your computer, and, with your mad 133t typing skills, *quickly* transcribe the pan-subject speeds (which are 90went our icons and images...). You run the magic program, and bam!



It spits out updated pages over your printer.

You take out the pages, hole punch 'em, and put them into your binder. Yah!

The speed lists that come out are ULTRA-DENSE, but in a READABLE size (that you chose). With columns, you're fitting *100 speeds* to the page!

And when you want to split a subject into pieces, you just tell the computer where you want your speeds to go:

```

MTK
S
13 Eth
19 Spt
43 Eth
44 Eth
49 Imgn
51 Imgn
62 Eth
93 Eth
121 Spt

```

That could mean, "In Mental Technique, regarding the Speed thoughts, send #13 to Ethics, #19 to Spirit, #43 to Ethics, #44 to Ethics, #49 to Imagination, #51 to Imagination, #62 to Ethics, #93 to Ethics, #121 to Spirit..."

*So much Faster!*

Right now, doing that work will require at least 10, maybe 20 minutes, as you write the speed thoughts allllll over again.

Such speed! Such automation!

And the best part is:

This isn't complicated AT ALL!

A programmer of 1 YEAR could do this!

Do it in C# or Python. Hell, you can use "using Word;" and command Word to write the text in, and perform the printout.

I've thought a little about the architecture of such a program, I'll describe it in just a moment, in a "Geek Block". If you are not a programmer, just skip it when we get there. If you ARE a programmer, and you think you might want to implement this, READ THAT SECTION.

And it's NOT just about the Speed Lists-

Put your POI titles in there too!

And put your REFs in there too!

If there's a TOC for it, put it in there!

It can print out high quality laser printer ultra-info-density tables for us. Just imagine having all of that power on a single page, and so *quickly!*

Let me tell you something:

I LOVE my notebook system. You already know that. And I wouldn't switch my paper notebook system for my old computer systems, ever.

But the *hybrid* I am describing- the hybrid will tap the incredible power that the computer system has. What's that power?

RAW SPEED. It's Low on Quality, (and sadly, for POI's and RS's and REF entries, that's the real killer, despite the speed.) but it's FAST.

I used to capture HUNDREDS of thoughts per day, EASILY, with my weird file. It's just so damn easy to control-tab into a text buffer and start yakking away. Next thing you know, you've control-tabbed back and you didn't even notice you were gone. You DIDN'T have to fish out a page. You DIDN'T have to open a binder. You DIDN'T have to pick up a pen. You just started yakking. And it was stored. You didn't even think about it afterwards.

So many thoughts.

The problem was that you couldn't make diagrams and stuff, and there was no way to map.

But we have an interface to those capabilities, namely, the Printer.

So I have high hopes for THE HYBRID.

But WAIT! There's MORE!

After that- After we have this system going, which will get rid of just ENORMOUS quantities of the LABOR of the system, and bring in SO many missed thoughts-

It gets even better!

After this is going on- We can build something cooler.

We've already taken the TOC's and Speeds of our hands. Next to go is:

The MOCs!

...(breeze and tumbleweed)....

The MOCs? But aren't they ... Graphical?

Doesn't that mean... Graphical input? Isn't that what the computer *can't* do well?

Well, yes, that's true.

BUT:

Our maps using ONLY A TINY LITTLE BIT OF GRAPHICS.

That is, we are drawing LINES, and changing the signs of TEXT, and using a FEW STANDARD ICONS.

With some UI work, I believe strongly that we can make this program, and make it easy to use to boot.

It'll be easier to use than Dia or Visio. How can that be? Because we are performing a LIMITED set of STANDARD operations on our maps.

I believe those operations are VERY finite, and can be mapped over key combinations very easily. It shouldn't be hard.

AND IT CAN BE MADE TO INTEROPERATE WITH THE PRECEEDING SYSTEM- that is, they system that just maintains TOCs and Speed Lists.

Imagine this:

You open up the "mapping" program, and are faced with the GSMOC.

You see the GSMOC, and in the distance, in the distance are floating the "unplaced" ideas, in a long list. But you aren't concerned about that right now; Your strategy tabs are reminding you that it's really important that you are focusing on Global Knowledge Infrastructure right now. "Ah, yes."

You click on GKI and find yourself within the next map, the GKI. You see the front page map, and you see a bunch of unplaced thoughts in a list.

You start clicking and dragging the thoughts through the map. You can even doubly or tripply place them, if you have multiple views on the same subject, and naturally thoughts apply in multiple places.

You can build wormholes in empty space pointing to other worm holes. You can access a clipart library, and place clipart in.

You can hide or show text for speeds. If you roll your mouse over an iconified speed, the entire text of the speed appears in a window. You can click the speed to switch between “titled” and “iconified” form.

With this tool, you never have to redraw a map, because the blemishes have built up.

And when you are done with a session, the printer will print out the updated pages, so that you can keep the physical notebook current.

If you are carrying a subject with you, you can then access your beautiful maps, and show them to people, and quickly use them in the heat of a conversation.

Now HOW'S THAT?!?

I think that's awesome!

I want to do it!

I want it!

The first program is EASY. The second one is a LITTLE MORE DIFFICULT. A UI Master could really help build the 2nd.

But the first: A First Year Programmer could do it, ALONE, without too much trouble.

So.

If this was done, the notes system may take so little labor, that we might not even be paralyzed by it.

Or not. After all, I don't necessarily know that it's the LABOR of the system that induces paralysis. It may very well be that "map switching" is still cumbersome, and induces mental paralysis, or that the mere fact of *taking the notes* is interruptive enough to induce mental paralysis.

I don't know.

But, I'd like to DO this improved system, and we can FIND OUT for ourselves, first hand.

—

Reflect.

—

Let me know if you start a project to implement this system.

I may start implementing it myself, I may not. Who knows what I'll do after I finish this version of this book. I may revise it. I may go on to work on the programmed system described here. Or I may go on to work on organizing a Visual Language conference here in Seattle.

We'll see what happens.

Finally, (well, not “finally”- there’s still the “GEEK BLOCK” to write,) I want to briefly describe this system, as applied in the far future- maybe a decade or two away.

In this far future, we have “magic paper.” We have paper that we can roll out, and it has a computer system in it, and we can write on it *as if* it were paper, and it would work just like paper.

So there would be no difference between physical paper and this magic paper, except that the magic paper is better.

What would the notebook system be like?

Well, it’s a little hard to say. I hope the hybrid system, once completed, and then once *evolved* beyond what I can see right now, will have more to say about that.

But basically, the binders could be eliminated completely.

Here’s my wish list for the future system.

- Multi-categorization.
- Scroll wheels (or something like it) on the side.
- *Infinite* canvas, and a zoom dial.
- Multicolor/font selections on the pen.
- Text OCR to dimensions, font, quality, italics and bold (style)
- sloppy niceness tools.
- Icon programmability.

In turn:

Multi-categorization: I am ASTONISHED by how many “MODERN” notebook systems allow you to write your thoughts, and then...

...throw them into a category tree.

Really. You should be able to throw them into zillions of category trees and maps.. And not by a “directory tree” mouse navigation system, but with speedy tab-completions and smart DWIM (to handle typos and stuff). And you should be able to navigate to all of the maps that the thought participates in *quickly*.

Because UI mechanisms are in their infancy these days, it’s understandable that you can’t throw thoughts into maps. But there’s poor excuse for not being able to throw them into multiple tree structures. It’s just so EASY to implement, and yet ALL of these “award winning” computer notebook systems don’t let you do it.

I mean, I’ve *done* it. I made the weird file. And a casual Internet browser (and later friend) made a simple program that interpreted my weird file, and drew up the category trees. It was neat: I downloaded his program, and could navigate my thoughts! Wow! Cool! So it’s definitely not complex.

So dammit; If they put in all these cool features in the next decade or two, the least they can do is allow very simple multi-categorization..!

Scroll Wheels:

Call me a luddite, but I do believe there are times when physical things ARE better than just drawings of them on a computer screen.

I'd like a nice physical scroll wheel on the left side and on the bottom side (or whatever- just pick two perpendicular sides) that I can scroll to move about the screen.

Maybe not my brightest idea. Maybe it'd be better to put the "hand grab" button on the pen itself.

INFINITE Canvas and Zoom Dial:

Okay- again- maybe the zoom *dial* isn't the best idea.

**BUT THE INFINITE CANVAS STAYS!**

If you can pan and zoom easily, then there is no reason to limit the size of a paper.

Now, slightly more radical:

I'd like to be able to zoom in and out *infinitely*.

Yeah.

I'd like to be able to fit an entire world in the dot of a lower case "i".

Or I'd like to be able to zoom in, and the GIGANTIC words fade away, and are replaced with the zoom in of the contents beneath.

I really want this, because I'd like to pack LOTS of detail. I'd like to have a big 2d diagram that is an overview of a system, and then zoom in on a portion, and see THAT system in it's entirety. You should be able to say, "Visible within depth range 1000-100", and then content smoothly alphas into oblivion outside of that zoom range.

So there.

The color wheel may have been dumb, but THAT wasn't.

\* Multicolor/font selections on the pen.

I don't know why the Wacom pen doesn't have any buttons or a selector on it. Who wants to move the the pen over to the side of the screen to change color? Just flip a switch. You can switch between 4 settings, perhaps: Red, Blue, Green, and Black. (Whoah! So original!)

\* Text OCR to dimensions, font, quality, italics and bold (style)

The OCR needs to discriminate the DIMENSIONS of text that it is "nice-ifying", and try to match font as well. It should recognize italics. If you are pressing hard on the pen, it should be bold.

If possible, it would be neat if it could simulate *distortion*- if you write sloppily, the text would come OUT a little sloppily.

People assume that we want all text to look nice. In reality: WE DON'T! Most don't know it consciously, but when you are thinking about something seriously, YOU WRITE BETTER. And when you are thinking offhand, YOU WRITE SLOPPILY. And when you look at the page, YOU CAN DISCRIMINATE GOOD FROM BAD by the QUALITY OF THE TEXT.

**THAT IS NOT AN ABILITY WE WANT TO LOSE!**

Thus, it would be good if the OCR system can detect "degree of sloppiness", and then simulate the sloppiness after it's done it's OCR thing.

Of course, there is going to be text sooo sloppy, (or context sooo unsure), that the OCR system can do nothing but leave the input as it was. Se la vi.

Sometimes I can't read my own handwriting. How could OCR? Se la vi.

\* squarej-¿sloppy niceness tools.

Finally, I want a setting on the pen for when you are drawing. On the pen, you flip the switch, (or maybe it's on the paper, whatever), and now the system knows to "nicify" what you are drawing.

You draw a sloppy square, it renders a square square. Sloppy circle to circle circle. Sloppy oval to oval oval. Sloppy poly to nice poly. Nice nice nice. Even sloppy text to nice text. (It would turn off the "distortion detection".)

That helps you build maps and stuff.

\* Icon Programability.

As our visual language grows and grows, our references to icons and clip art will likely grow and grow.

You will need to be able to say, "When I draw a sloppy circle with a sloppy arrow pointing roughly to the right inside of the sloppy circle, I want you to replace it with this nice pre-established green pristine circle with a precise standard arrow pointing exactly to the right inside of the green pristine circle."

Or, "If I draw the kanji for a man in here" (-that's just two subtle strokes-), "I want an nice icon of a man to appear here in it's place, sized to the dimensions of the kanji, and line balanced evenly with the rest of the nice text on this page."

Okay. So. You've seen my laundry list. That's the far future. With luck, it's within the next 2 decades.

When these days arrive- what great things we can do! What coordination we will be capable of! What collaboration!

What *SELF-ORGANIZATION* we will be capable of when we can FINALLY COMMUNICATE CLEARLY and UNIVERSALLY.

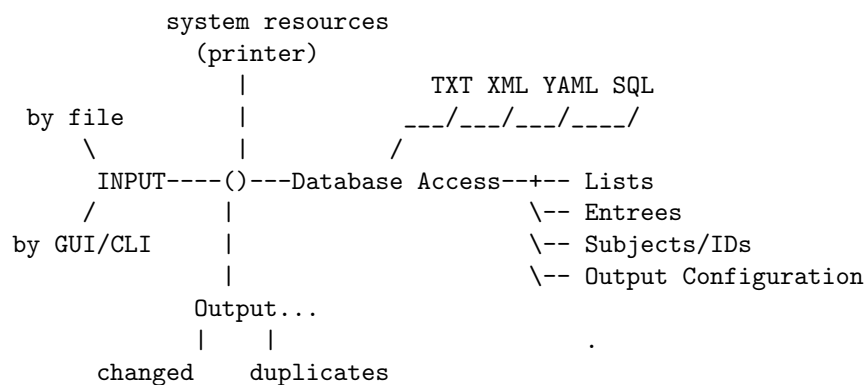
We will be able to THINK with NEW CLARITY, and GAIN from the THINKING OF OTHERS.

Finally, at the end of the chapter, is the Geek Block.

GEEK BLOCK BEGINS

A possible architecture for TODAY.

I would code it in C# or Python.



```

    pages |   |
          |   |
-----
Page Output System - -
  |           |
.doc         .txt

```

You can input by file (changes), or by GUI/CLI (invocation, diagnostics, output requests).

#### INPUT

Change requests:

- add entries
- change/update/annotate entries
- move entries
- mark to archive
- new subjects

Output requests:

- request duplicates of pages
- request all pages updated since last request

Invocation:

- update from the latest request, and return a receipt.

Diagnostics:

- debug information
- manual vision/manipulation of internal databases
- database statistics

#### DATABASE

Abstract the database system. May want to use pure interfaces, or a bridge pattern.

Can use XML, YAML, SQL, TXT file, or whatever, to be the form of the database.

I myself would go with YAML.

The database keeps track of your lists (TOCs, speed lists), the entrees in the lists (Speeds, TOC entries; their contents, hints, and titles), the subjects and their abbreviations, and the present output configuration (txt? doc? rtf? font? size? color? blahblahblah?).

#### OUTPUT SYSTEM

START SIMPLE. While you could do a lot of cool tricky output things, I'd start dirt simple. For a word.doc output, just say "2 columns, point 8 text, tabbed, fit 70 to the page."

Don't worry about making optimal use of space for now- that gets tricky when you start updating speeds- making some longer- and then text rolls over onto the next page, and then *that* page might roll over, and you have to keep track of which pages need reprinting and which don't- yadda yadda yadda.

Just keep it dirt simple for this first trial.

And that's about it!

It's really a VERY simple program!

And it helps you out SO MUCH!

GEEK BLOCK ENDS



## Chapter 7

# Getting Started

Let's face it: This system is big. This system is complex. This system is: Formidable.

I originally didn't have this chapter in mind, but after talking with my first adopter, found myself writing additional information about how to start. So here it is.

The most important thing to do is: START SMALL.

Here's the plan:

1. Make a pan-subjects speed list.
2. Identify Patterns. Make 1/2 Subjects. Make a GSMOC.
3. Create your first subject.
4. Onward and Upwards!

### 1. MAKE A PAN-SUBJECTS SPEED LIST.

You can either make one on your own, or, (and I highly recommend this:), go to <http://speakeasy.org/lion/nb>, and download the Word .doc pan-subjects speed template.

Make/Print-out a few of them.

Then *just start taking notes*.

As interesting ideas occur to you, *just start taking notes*.

Don't worry about "subject". Hell, if you are uncomfortable with it, don't even worry about "hint".

You're new to this. Cut yourself some slack!

Just do this for a while. Maybe a day or two, until you get about 20-50 speed thoughts, whatever you are comfortable with.

### 2. IDENTIFY PATTERNS. MAKE 1/2 SUBJECTS. MAKE A GSMOC.

Go over your pan-subject speeds. Locate patterns- Ask yourself:

- What kinds of things am I thinking about?

- What do I care about?
- What are some important studies among these thoughts?

From these, you should get some ideas for your first subjects.

*DON'T WORRY* if you find that among 20 speed thoughts, you have 15 different subjects..!

Don't worry **AT ALL** about the scatter!

What you will find, is that, as you develop your subjects, many will *\*attract\** your thoughts to them, and become *\*focuses\**. It's sort of like a gravitational mass: You start collecting some thoughts, and then they start collecting more thoughts- and then...

And don't worry, we're just putting these ideas into *half* subjects. That means we aren't doing tabs and what not here. We're just maintaining speed lists for the subjects.

So, you're finding patterns.

Then, either make your own subject speed lists, or print some out from the web page. (I recommend the print-outs.)

Don't worry- they're free. I'm not charging for this. (Because I'm craaaAAazy All!) Just get 'em and print 'em out.

Transcribe from the pan-subject speeds to the half subjects.

At this point, we're doing good, but we haven't really transcended the "bucket" level of notebook systems.

(Remember what I said at the beginning of this book: 99notebook systems out there today are just the "bucket" system, or the "diary" system, or some basic combination of the two.)

Now, you should get a binder at this point. Put the subject speeds into the binder. Put some blank template pages (blank pan-subject speed pages and single subject speed pages) into the binder, and put in your subject speeds, alphabetically.

You'll also make GSMOCv1- the first version of your GSMOC. Remember, the first version will contain your first GSR on it as well. No need to alphabetise, the list is so small.

Now do this for a while.

Do this until one of your subjects reaches, say, 10-20 speeds.

### 3. CREATE YOUR FIRST SUBJECT.

Since you have only one, you can just store it in your carry-about binder, at this point.

Make a SMOC, and start practicing the mapping process.

Make your first map of your thoughts- you may want to reread the walk-through in chapter 3 of making a map, *\*BUT THIS TIME WITH YOUR VERY OWN THOUGHTS!\**

Now you'll start to see the **POWER** of this system.

The **MAP** is where it all comes together- *LITERALLY!*

### 4. ONWARD AND UPWARD!

**DO THIS AGAIN!**

Make more subjects!

And start writing POIs!

Start getting a little strategic.

You'll also start having problems- REREAD THIS BOOK!

You'll start seeing *why* things are set up the way they are. You'll start having dilemmas in placing thoughts- reread my suggested rules for subject splitting, and see if they make sense to you.

You are just starting to learn this system! When you've DONE it yourself, it's a totally different thing- and VERY exciting!

You'll start to see the need for P and P, and you'll start having tensions between subjects. REFLECT THEM ON THE GSMOC.

Keep building new half subjects, and then promoting them to full subjects.

You'll find that time is limited- NOW USE THOSE STICKY TABS!

Arrange to go on your shopping trip, if you haven't already, and get the pieces that can help move you along.

By this point, you shouldn't need much help.

You'll see how the ideas at work here fit together, and your paper intake will increase. You'll start integrating your study and research into the system, and lining it up on the maps.

You'll probably start to see little things that I knew but forgot to put in here, and you'll start to see what I mean by "immobilizing".

And yet, if you are anything like me, you'll perceive value in this, and continue on.

TIME WILL PASS.

I predict:

The more you think and value and reflect, the more you will be COMPELLED TO ACTION. You will gravitate towards something, or some things, and you'll see things in your head that you've never seen before. Things that are so real - you can touch them.

You may question the relative significance of the physical world, compared to the realm of ideas. Things take on new dimensions.

And you are COMPELLED TO ACT in NEW WAYS.

EVENTUALLY:

You will NEED TO STOP.

And you will do so.

And you will ACT.

And your acts will be organized.

I am just speculating now- I am the only person who has ever practiced the notebook system I am describing.

But let me tell you-

I HAVE NEVER COMPLETED A MAJOR PROJECT.

I mean, sure, there have been some minor projects. And I have completed major WORK projects, that I was paid to complete.

But I have very rarely completed MAJOR projects. Not that I can remember.

WELL, I'm IN THE LAST LINES OF THIS BOOK.

Granted, the book is rough.

Granted, the book is gritty.

But GOD DAMN IT, if I'm not writing on the 6,831st line..!

I, who have never written a complete book, have finished this thing.

Well, maybe I'm overthinking things, but this is not common in my life. I know my weaknesses, I accept them.

But I have a theory: That the Notebook system is somehow a focusing system of not only THOUGHTS, but ALSO of some sort of MENTAL ENERGY. And that it BUILDS, and BUILDS, and BUILDS as you THINK, THINK, and THINK.

And that when you are DONE THINKING, you are COMPELLED TO ACT.

And the action WORKS.

Again: I HAVE NEVER WRITTEN A BOOK.

Now: To be honest, it's a shabby book. I know. I'm not an experienced writer. But here it is..! It's shabby, but it's a book! It's practice!

And I am immensely proud of this.

I suspect it is due to the notebook system working.

So:

Let me know how it works for you.

I am tired now. You can tell in my writing. This has been an exhausting effort, this whole last week and a day. But it's over now.

I feel like I've just lectured for a whole week straight. With work in between. So please forgive my tiredness.

But I want to say:

LET ME KNOW HOW IT GOES!

EMAIL me: lion@speakeasy.org. Tell me, personally, how it goes.

And if you implement the computer system, or want to, or want to help, or want to see how it's going, go to my web page:

<http://speakeasy.org/lion/nb/>

...and check to see how it's going. And if it's NOT, maybe that's probably because you're the first to try: Email me at lion@speakeasy.org, and let me know you want to start, and I'll link people to you.

You can work together or separate, however you like.

And feel free to call me, or write to me.

I LOVE TO HEAR FROM YOU!

Lion Kimbro 12038 31st Ave NE #201 Seattle, WA 98125

206.440.0247 j- YES, you can CALL! Just say "I read your notebooks book."

Call at whatever crazy hour. Let me know.

Maybe you live in India or China or something. But if it isn't too expensive, call and let me know. I'd love to hear from you.

And if you have any questions, or thoughts, or anything, feel free to let me know what they are.

If you want to help with the web page, or make a discussion board, or a wiki, or SOMETHING, let me know.

Oh! If you want to donate money! You can do that to. My paypal thingy is also under “lion@speakeasy.org”.

That’d be great. Then Kitty (my girlfriend) might also feel that the notebook system was worth something. *laugh*;

Okay.

Take care.

With Love, Lion { :) }=

# Appendix A

## Acronyms

**ACEPOS** - Absolute Cosmic Eternal Perfect Ontological Structure. Something we try to avoid in this notebook system. The structure maps YOUR brain, not the universe. Don't even try. Madness that way lies. Leave it to the standards committees- it's not your job here. (Unless you are using your notebooks to engineer a standard. In which case, you already know about the madness.) A term I made up on the fly, while writing this. I kind of like it now. "ACEPOS." Heh! At least it's not as cheesy as "Universal Cosmic Habit Force."

**ACTS** - Act-Communication-Thought System. My own personal hybrid between GTD, and the notebook system described in this book. I do not describe the interface between the two; It isn't all that complicated, and is of little interest to most readers of this book, I suspect. Keep in mind that the notebook system here is anti-ethical to GTD: GTD promotes action, this system DE-motes action. If you DO maintain GTD as you perform this system, you will have to realize that you are going to VASTLY reign in the GTD. Your action pages will dramatically dwindle. On the other hand, your Someday/Maybe's will balloon out vastly- no small wonder than that as part of the interface, I've absorbed the someday/maybes into the subjects' speed lists. If people write to me asking for elaboration on the ACTS notebook-GTD interface, I'll write about it. But for the most part: GTD just withers in the presence of this system. See "The Question of Computers" for some software ideas that, if implemented, may open up the possibility of having both doors open at the same time. I think my most common use of the GTD system was for looking up books at libraries, getting to web pages to look at, doing my chores, keeping dates, and as a mechanism to remember when to refill my blank papers and what not.

**A/S** - Abbreviations/Shorthand. Where you will keep your shorthand notes and abbreviations so that you can write quickly, and yet still be able to figure out what you were talking about a few years later. Each section has

it's own A/S, and there is a global A/S across all subjects as well. Global A/S should have a page for names, and some hash pages for common abbreviations.

- FF** - Final Fantasy. I wrote “This is the way!”. I was quoting “Final Fantasy Tactics”. You perform “jobs”, and your characters say things like “I had a feeling...” and “This is the way!” Never mind. SOOOo totally not important, save in some sort of strange schizophrenic holistic universe way. In which case, THIS ENTRY is the CRUX of this entire book. “This is the way!” You be the judge.
- GKI** - Global Knowledge Infrastructure. Like PFT, something that happens to be a subject of mine, but I like it, and I used the acronym in the book, so I get to advertise the concept here. Heheheh..! I'm tricky, aren't I? GKI is the study of who knows what, and where. It's the study of how fields grow and fall. It looks at things like the CIA and Corporate knowledge bases and public understanding and universities and says “What does that mean? Who's got the information? Who's got the knowledge? How is it spreading? Where does it come from?” Ideas such as Anarcho-Science, studying the motion from University/Gov/Mil/Corp to the public sphere are interesting. How Computer Science makes more progress in the public and corporate sphere than it does in the university system. Something to pay attention to, especially if you are interested in a Democratic society. And know too: That there are enormous fields, VAST fields, that are completely untouched. Why? Because there is no profit in them. But there IS profit to the public. It just has to study these things..! The government's not going to do it. The corporations sure as hell aren't going to do it. We have to do it OURSELVES. See “PFT.”
- GMOC** - same as “GSMOC.”
- GSMOC** - the Grand Subject MOC. This is a map of every subject, and the central strategy point. Every subject that is not obsolete (archived) appears on the GSMOC. Frequently runs multiple pages, with the front page being a map onto the other pages.
- GSR** - the Grand Subject Registry. A two page (or more) list of all of your subjects. It comes right after the GSMOC. It lists all subjects- even those that may not appear on the map. You use it to attach flags and other metadata to subjects identified by NAME.
- GTD** - Getting Things Done, by David Allen. Incredible book. Integrates best ideas from time management in ways that no other book does. Most books just give you a piece of wisdom here, a piece of wisdom there. This book puts it all together for you. Not really about notebooks, because he focuses on ACTION, not THOUGHT. The GTD system and the system I describe are REALLY at ODDS with one another. Regardless, I still found utility in his GTD system..! Read it! (Lookup also: “ACTS”)

**I** - Index. An alphabet based index. (Can contain numbers and glyphs as well.)

**M** - Same as “MOC”. NEVER same as “GSMOC.”

**MOC** - Map of Contents. A visual map, frequently multiple pages (though not uncommon to have just 1 page, for little-reached subjects), of some domain. Generally, this is either a SMOC, GSMOC, or a piece of one of those two. But rarely, within the notebook system, independent of those two. The function of a MOC is to integrate, after all, so they tend to be all-encompassing (within a subject, or for the GSMOC.) The first page of a series of MOC pages is generally a map of the reminder of the pages, and how they fit together.

**MTK** - Mental Techniques. Not related to notebooks, but like PFT and GKI, ... you’ve read it before. So anyways. This is stuff like forming theoretical architectures of thought and using them to think fast. And memory techniques. And any other sort of mental gymnastics or study thereof. Read “The Memory Book”. Great book. Cheap. Far better than any other memory course I’ve ever seen, far better than the multi-\$100 courses I’ve seen out there. I could tell you many humorous stories. But I’m not going to. Not here, anyways. Read the Internet Memory HOW-TO; It has many of the Memory Book techniques in it, if you are impatient. But the book is better.

**PFT** - Public Field Technologies. This isn’t related to notebooks- it just happens to be something that I’ve had as a subject in my notebook. Regardless, I am evangelical about the topic, and I *DID* use the acronym in my book, so I’ll take this space to advertise it. There are SOME THINGS that are just so incredibly cool, and have to do with benefiting the WHOLE PUBLIC- \*if\* people are interested in them, and want it. Self-help books are sort of a well know thing, but tools for mental techniques and for keeping notebooks are not. And that’s all in the personal arena. Communities can help themselves too! Learn about Ithaca HOURS and stuff like that. There are ALL sorts of things that people can do. Refer to my list in the middle of the book and learn about those things. This whole book, about notebooks, is an example of a Public Field Technology- IF it actually turns out to be good for something, and IF people actually band together and study it. If PFT’s “work”, then we’ll have a radically different- and FAR more Democratic (in the REAL sense of the word) world in the future. The Internet has such revolutionary potential, and its great to see it turn Kinetic. PFT’s are divided (by me) into roughly two spheres: The scale from personal to global, and the sphere of group collaboration, communication. For example “Visual-Verbal Language” is a PFT, but doesn’t really have a good position from individual to global integration. So there you go.

**PJ** - Project. Pages connected to a particular project.



**POI** - Point of Interest. Usually multiple pages devoted to one, limited subject (delimited by the title.) Found within a Subject. Bound by a TOC, generally. Placed on the SMOC.

**P&P** - Purpose & Principles. This is a very special page in each subject. It is usually just one page; I have never had more than 1 sheet per entire subject. It describes the BOUNDARIES OF THE SUBJECT, and how to delegate, and in some cases even split, issues that transcend the edge. It features “inclusions” and “exclusions”, either in text or by diagram. P&P’s, like Speeds, rarely live within the subject’s paper layout (following the tab for the subject). Speeds are collected into the carry-about binder, joined with every other speed. Similarly, P&P for all subjects are collected into a special tab (labeled “P&P”) at the beginning of the common-store binder. You refer to the P&P whenever there is a question about whether something belongs to a subject, or not, and you are trying to decide where it goes.

**REF** - Short for “Reference”. Reference items are annotations of books. If you can, just write in your books and be done with it. But if it’s a library book, or a borrowed book, or a web page, you’re going to have to keep your co-writing and your side notes on your own pages. And then you put them in the “REF” section. The ref section is unusual in that you don’t do normal page numbering, and you don’t even do normal TOC-ing. You do your page numbering to match the way the text is organized. And you assign the reference number not by the number following the last thing you wrote about, but by the number connected to the reference on your references list. Your references list is like your Speeds, but it captures references. When you actually get around to reading a particular book, you take the number of the reference to be the first number in the page sequence. It doesn’t matter if it’s the second book you read in the subject- if it is number 7, you will number the pages starting with “7”, not 2. See also “RS”.

**RS** - Short for “Research”. Research is like reference, but usually focused towards an end, and not tied to a particular source reference. Don’t feel like you need to have a REF articulation for each reference you touch. Just make sure you note the REF#’s in the RS, so you can find it later, and dance from book to web page to person to book, and keep a linear flow in your RS#. Have conventional TOC’s over material, and, like everything else, appear in the SMOC.

**SMOC** - Subject Map of Contents. A map of contents over an entire Subject. Ideally, points to every single resource in the subject domain that is not in an archival stage.

**TOC** - Table of Contents. I frequently wish that these things would just DIE. Sadly, our computer software infrastructure and UI notions don’t seem to understand how to deal with anything that isn’t text well. We don’t

even have tools to make MOCs quickly and well. So we are stuck with these archaic information destroying beasts. Basically, these are just an index of titles connecting them to page numbers. Icky icky icky icky. Use a MOC if you can. But you frequently need a TOC as well, if for no other reason than to see what to number your next item. (There are ways around this- just keep a record of “next numbers”.) Still, it is comforting to have TOC’s over your POI’s and Ref’s and RS’s.

**V** - I frequently use as short for “Version”. Generally it’s a lower case “v”.

**VER** - same as “V”.

## Appendix B

# CVS Information

The information that follows is taken directly from the CVS database and is intended only to ease the translation of the book into L<sup>A</sup>T<sub>E</sub>X.

```
$Id: book.tex,v 1.5 2003/08/06 05:01:02 abg Exp $
```

```
$Log: book.tex,v $  
Revision 1.5 2003/08/06 05:01:02 abg
```

```
Added (and debugged) the glossary. Final big piece is in place.  
Found out that my regexp for replacing the double quotes with \LaTeX quotes  
was too greedy. (Read: It did what I said, not what I meant.) Built a  
fixer that corrected the problem.  
Fixed a few misspellings.  
Removed the global sans-serif font directive now that I've seen how nice  
pdflatex works.
```

```
Revision 1.4 2003/07/26 03:36:49 abg
```

```
Changed the default font to sans-serif to make it look better in PDFs.
```

```
This is not the font that is desired for actual book printing, it will  
be removed for the 'book version' as well as the 'one-side' documenting.
```

```
Revision 1.3 2003/07/26 02:58:06 abg
```

```
Added a CVS chapter to the book to aid in version tracking.
```