

STRUCTURE AND LAY-OUT

The order of things as you understand them needs to be reflected in the general lay-out of your thesis. Make use of your word-processing programme so the structure can be changed in line with your growing understanding easily.

A. STRUCTURE

This is not about the table of contents that will help your readers orientate themselves once your thesis is finished; it is about the structure, the underlying form of your thesis as a work in progress.

I. WHAT IS IT?

To realise what it is we're talking about, it helps to take a closer look at the exact meaning of some words:

- structure: n 2 The arrangement and mutual relation of the constituent parts of a whole; composition, make-up, form.
 v. t. 1 Build or form into a structure; give structure to. More widely, construct, organize.
 2 Place in or integrate into a structure.
- precision: 1 The cutting off of one thing from another; esp. the mental separation of a fact or idea.
 2 The fact, condition, or quality of being precise; exactness, definiteness; distinctness, accuracy.
- precise: [L *praecisus* past participle of *praecidere* cut short, abridge]
 1 Marked by definiteness or exactness of expression; strictly defined. Of an instrument: exact, accurate.
 2 Distinguished with precision from any other; identified with exactness. (from *The New Shorter Oxford English Dictionary*)

So this is about how to build up your thesis properly – and to do that, you need to cut up your topic or theme and organise any sub-topics according to their proportions and relations, for:

*The proportions and relations of things
are just as much facts as the things themselves.
(Dorothy L. Sayers: Gaudy night)*

II. HOW BUILD IT?

Any thesis (as a dissertation) starts with a thesis (as a statement or proposition), a topic, a theme – which is basically a question you put to yourself: what exactly is it you want to know, to find out about, to prove true or not? Once you've established that, this is the starting point for your thesis structure: what sub-questions will you need to answer first? and what sub-sub-questions for which one of these? It may help to do an outline with pen & paper first instead of using your computer; a lot of people find it easier to "draw" relations rather than write them down. Whatever enables you to get a clear overview of what you need to do is good – try things out and find out what works well for you. Yet whatever form you choose, make sure that the structure (i. e. what goes where, what's a part of what) is literally to be seen easily.

Simple as it may seem, a rational analysis like that is basically the heart (or rather: mind) of Western thinking, and more often than not this is the hardest part of your work: figuring out how things are related. Usually you will have an idea where to start from when you decide on a topic for your thesis, but quite often in the beginning all you can do is a very rough outline. Don't worry, that's absolutely normal; it's only when you read more, think more, know and understand more that you will be able to structure things more finely. (But don't start to read before you've figured out which questions you want to answer! Don't mistake the means for the end!)

What you have to be aware of though: in most cases there isn't just one way, the "right" way to cut up things. Quite often there are a number of ways that are equally correct (although there are some that aren't). It all depends on the purpose: why you do the cutting up defines how to do it.¹ And whatever you choose to do, it should be consistent and in line with the laws of logic.²

III. HOW USE IT?

As said before, a structure like this is nothing less than your programme of what to work on: questions and sub-questions to answer, what to write on and what to forget about. Yet since your thesis is a work in progress, since your understanding of your topic, of relations and proportions of things is growing all the time, you will feel the need to change the structure of your thesis accordingly. Never hesitate to do so – and always keep an up-to-date print-out at hand whenever you're working on your thesis!

1 There's a good example in Robert M. Pirsig's "Zen and the art of motorcycle maintenance" (which is a lot more about thinking and academia than it is about motorcycles): you can analyse, i.e. divide and sub-divide, a motorcycle by means of its component assemblies – or by means of its functions. Definitely worth reading! The same applies to the mentioned "Gaudy night", which is set in Oxford university life. Reading (good) prose is necessary for your writing skills anyway, so don't tell yourself you haven't got the time.

2 So, yes, it does help to know about these, even if you're not a mathematician or philosopher...

B. WORD-PROCESSING

This is why should make good use of the outlining options most word-processing programmes offer these days; get down to them right from the beginning, and you will save a lot of time later: you can complete re-arrange anything you've written without much effort, and the software will take care of numbering your chapters and sub-chapters as well. (So don't start to number your chapters yourself!) To keep things easy, I will refer only to Microsoft's Word 2007,³ since most of you will be using that or one of its predecessors.⁴

Click on the "view" button and then on the "outlining" tab, or directly go for the "outlining" icon, forth from the left at the bottom of the window. Now you see all the outlining levels already existing (i. e. none yet).

Type in your first topic and press the return key; Word will automatically turn this into a first level headline. There's a minus in front of the headline, meaning there aren't any sub-levels yet. To demote items to a lower level, either go to the "outline level" bar, click on the green arrow pointing to the right, or use the tab key (or the other way, to promote to a higher level). Any time you press the return key now, you will create a new item of the same outline level. Easy, isn't it?

Now you've got your headline, you will want to produce a body of text as well (in former times this was known as "to write" ;-)). Place the cursor at the end of your headline, press enter – voilà: an empty headline. Now write... To convert your text to "body text", choose this as outline level. Just as easily you can choose any outline level; or you can move whole items up or down within the outline by using the blue arrows.⁵

What's as important: Word allows you to show only what you need to see now. So if you want body text to disappear, simply double-click on the symbol (+/-) in front of the headline; another double-click, and it will reappear. Or you might want to see only the first three levels of your outline, just to check whether they're consistent or because you want to orientate yourself within your text: just go for the "show level" tab and choose which levels to show – easy again.

³ The University of Iowa offers a helpful guide to "Life after Word 2003" on the internet.

⁴ Regrettably I haven't been able to get hold of a good manual or reference book in English yet. Should you know of any, please tell me. If your command of German is up to that, Winfried Seimert's "Wissenschaftliche Arbeiten mit Microsoft Office Word 2007" (or the one for Word) contains everything you need, including a cd-rom, and it's only € 9.95. Dan Gookin's "Word 2007 für Dummies" (translated from English) is good as well, more detailed and € 19.95.

⁵ That's easier with only the levels/headlines, without body text being shown – see below.

To change the way Word numbers your chapters, go for "home" – "paragraph" – "multilevel list" and choose one that suits you – or define a new list. (What's appropriate depends on conventions in your field or faculty, and on what you think makes sense...)

And once your thesis has grown to more than a few pages, items and levels, the "document map" will help you to get an overview again.

To refer to another part of your thesis, use the "insert" tab and then go for a cross-reference or a hyperlink, depending on what you prefer. So even if you completely re-organise your thesis, your cross-references will still be correct. Great, eh?

Most importantly, be happy if you come up with more and more questions instead of just simple answers:

*If a man will begin with certainties, he shall end in doubts;
but if he will be content to begin with doubts, he shall end in certainties.
(Francis Bacon)*

Just build them into your structure – and have fun working on the answers...