



DoctorTiger
Editions

From Thoughts To Thesis

Tips and testimonies on the
challenges of writing a PhD
n.º 2 in an ongoing series
PhDDesign UP/UA/ID+

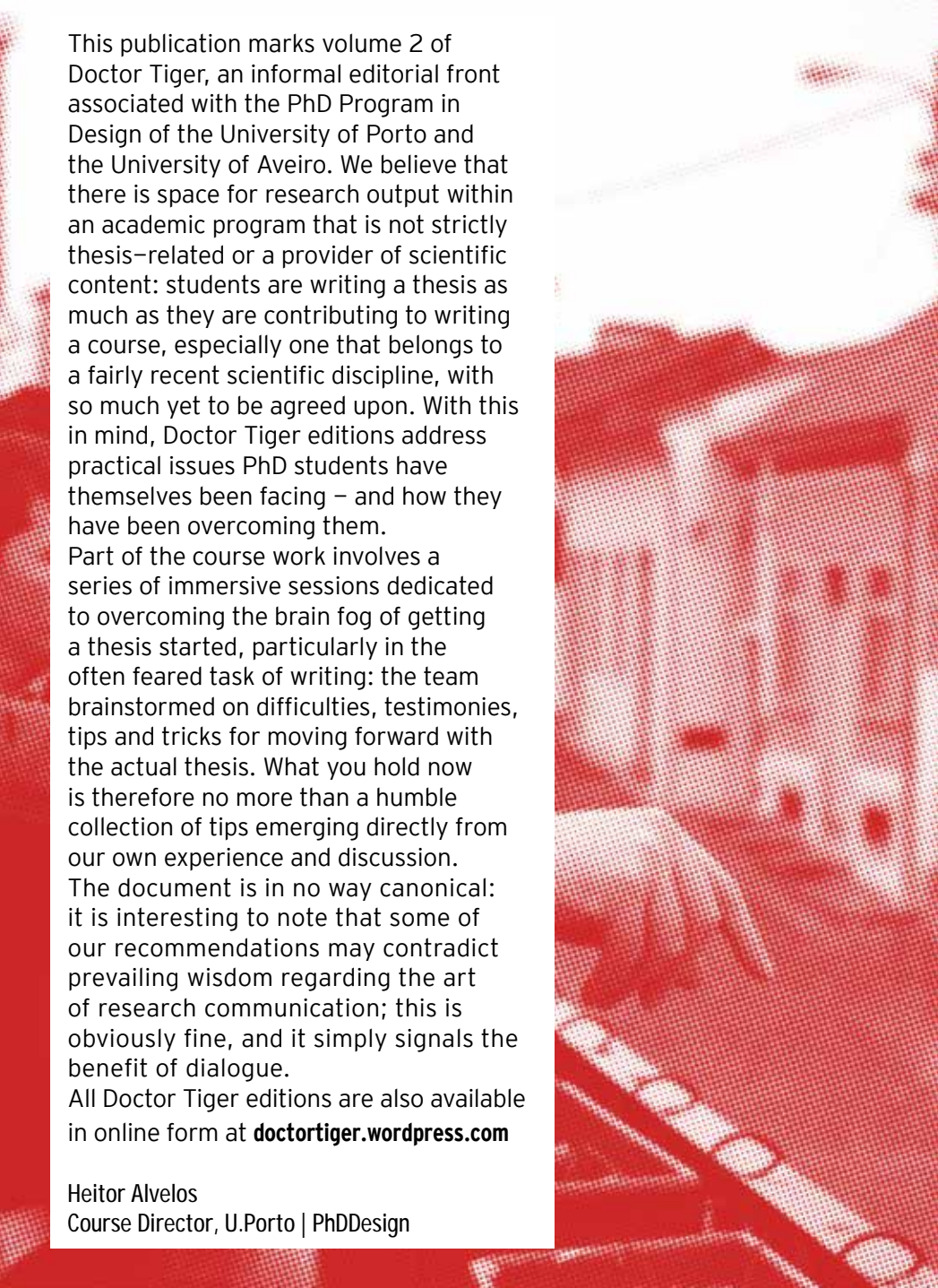


Se sabes como acaba, saberás por onde começar!

If you know the ending, you'll know where to start!

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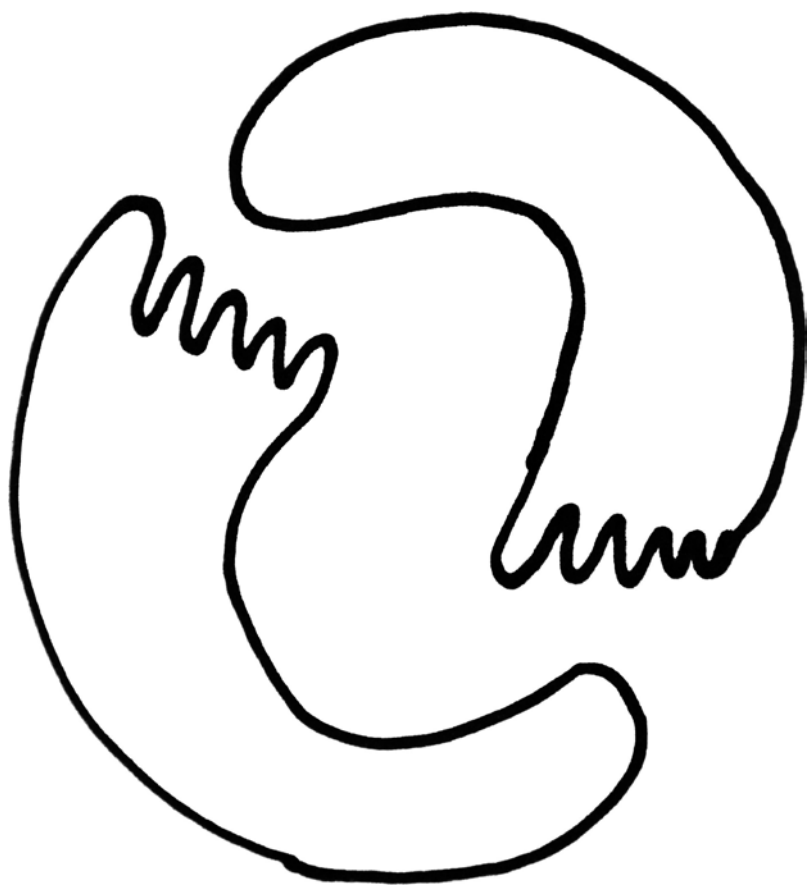
This publication marks volume 2 of Doctor Tiger, an informal editorial front associated with the PhD Program in Design of the University of Porto and the University of Aveiro. We believe that there is space for research output within an academic program that is not strictly thesis-related or a provider of scientific content: students are writing a thesis as much as they are contributing to writing a course, especially one that belongs to a fairly recent scientific discipline, with so much yet to be agreed upon. With this in mind, Doctor Tiger editions address practical issues PhD students have themselves been facing – and how they have been overcoming them.

Part of the course work involves a series of immersive sessions dedicated to overcoming the brain fog of getting a thesis started, particularly in the often feared task of writing: the team brainstormed on difficulties, testimonies, tips and tricks for moving forward with the actual thesis. What you hold now is therefore no more than a humble collection of tips emerging directly from our own experience and discussion.

The document is in no way canonical: it is interesting to note that some of our recommendations may contradict prevailing wisdom regarding the art of research communication; this is obviously fine, and it simply signals the benefit of dialogue.

All Doctor Tiger editions are also available in online form at doctortiger.wordpress.com

Heitor Alvelos
Course Director, U.Porto | PhDDesign



About

From thoughts to thesis is a testimonial-based-document written by PhD students that might help you get the job done. We're all in this together, going through the same apparently mind blowing mission of writing a thesis, and we know that the task of gathering all the research data, keeping up with all the references, running through interviews, notebooks, files, images and so on seems pretty overwhelming. We hope that this document will help you organize your material, devise a method, put your stuff together and learn from those who are going through the same experience as you.

How to find what you're looking for? Are you facing the "blank page syndrome" and don't know how to begin writing? Have you frozen somewhere in the middle and don't know how to start again? The **'Start and Re-start'** chapter will give you the boost and tips needed to write. If you feel overwhelmed by all the content you have, before getting a straitjacket, read **'From Thoughts To Text'**. You'll get it done and feel sane at the end when you

'Give Shape' to your text. Call yourself Babel if you have the **'Everything in Its Place'** chapter on the tip of your tongue.

Get a glass of wine, bang your head against a wall, meditate, sing while you bathe, do whatever it is you do... **'Writing Is Not Just About Writing'** is about finding the best inspiration, method or strategy. Here you'll find advice from veterans.

As we said before, we are not alone. Some already did it! **'How have they done it?'** Listen to them. They are the masters of the Universe.

Feeling better now? Ready to start? Go, do it, break a leg, fingers crossed, best of luck, you'll do great, blow them away!!

Start and Re-Start

The one-sentence challenge

A good way to start to put the words on paper is to begin with small, but important, sentences. Writing your main objective can help to clear the ideas in your own mind.

Think about a conversation with someone who doesn't know your work, how could you explain it in one clear phrase? Write it down!

If you assign yourself small objectives to start with, such as elaborating key sentences, this can be the easiest way to unblock the writing and start to paint that white page.

There is no “right” or “wrong”

There is no reason to fear writing, including random ideas. To erase and correct is easy. Some people think better when they write, so verbalising a brainstorming process on paper or on screen is more helpful than just being in our head.

These ideas may turn out not to be random if allocated correctly within the flow of the document. But it is necessary to have them written down in order to see 'the big picture'. “Right” emerges through persistence and rigor. A thesis is neither a class nor a test.

Procrastination is not bad as long as you know you are procrastinating

Sometimes procrastination can actually be helpful. If you need a pause, relaxing or taking a moment before starting the work doesn't have to be bad, as long as you are aware of what you are doing and accept it.

If you look closely, the procrastination can sometimes be part of your work. It is about what you like to do or watch. It is about what captures your attention. So why not make all of that a part of the subject you choose to work with?

Doable goals

If you're too scared or lost and always making excuses not to write, start with a 10-min-writing-per-day task and make sure you choose a doable task. It is essential to overcome your fears or resistance. Start to create a habit of writing and it will become natural. The subject doesn't have to be related with your work. It can be interesting to explore other kinds of writing and different subjects, the rule is just to write and also to enjoy it.

It's not about format

In the beginning it's just about writing. Write anything everyday, even if it's not about your subject. Don't assume you'll finish the day with a perfect, polished piece of text. Only worry about fulfilling your daily writing quota.

In the end you'll definitely find some interesting and useful content out of the mess: 'Today's junk, tomorrow's treasure'.

Info Shortcuts

If you are writing pages and pages of text, it will mean that every time you need to search for some specific piece of information it will be hard work. However, if you have words that summarize the document content, this work will be much easier and faster. Keywords to summarise what the text is about can also be helpful as a way of coming to understand what it is that you actually mean. Don't lose the narrative path.



You as your (only) audience

In this phase avoid worrying about technical details such as spelling or sentence structure.

Write everything that comes to mind and when you have finished your daily writing task, add some comments aside so you can start the next day from where you stopped, engaging with the questions that emerged. To communicate your project well, the first person who needs to understand it is you.

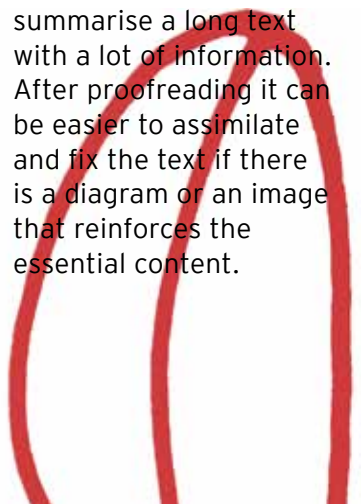
From Thoughts to Text

Some coherence out of chaos

If the subject is complex and extensive, the content can easily start to be confusing. To focus on the order in which you bring thoughts and concepts into the flow of your writing may be a clever way to combat the confusion. Experiment, start by writing your main structure and then fill it with lists of main ideas for each part. This strategy can be helpful in those moments where we are anxious and confused with our own writing.

Visible Thoughts

Sometimes the conventional paragraph is not appropriate to explain what is on your mind. Use your abilities to express ideas, conclusions and processes by making diagrams, drawings or using key images. These mechanisms may also help in starting to write about each component. This kind of structure can also be useful to summarise a long text with a lot of information. After proofreading it can be easier to assimilate and fix the text if there is a diagram or an image that reinforces the essential content.



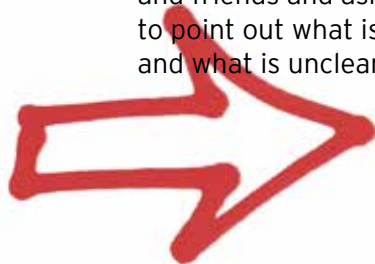
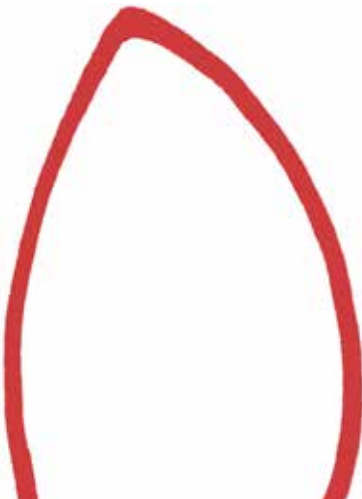
Words that fit your theme

Having grammar and concept lists can be useful to avoid stuck in writing and to build a mental map of your thesis. It's common to start repeating expressions while writing a large piece of text about one singular subject such as a thesis. A list of different ways of saying the same thing may help to diversify and to keep the flow of writing.

Something for someone else's eyes

It's imperative to share what you write with someone else. You'll have to do it at least with your supervisors but it will be better to also show it to your colleagues, family and friends.

Every time you finish a chapter, give the chapter draft to your supervisor to check. This will make their life easier as it will be quicker for them to correct it and give you feedback. Do the same thing with your colleagues, family and friends and ask them to point out what is clear and what is unclear.



Write to understand

Writing is a process of understanding content. Do you really understand what you read? Writing will reveal gaps in your understanding, so it would be very useful to write critical reviews about what you read.

First, in five minutes, skim the piece of text to gain a general idea of it. If it's possible, discuss the text with someone else to clarify your understanding and trigger some ideas. Read it again, highlight sections which seem important and take notes of important details like subject, writer's conclusions and data provided in order to reach that conclusions. Finally, draw a diagram of the text which covers the main points of each paragraph, showing the relationships between the main points in it.

Search Engine

To gather new content for your thesis may appear to be addictive, with some references conducting to others in a spiral sequence without end.

It's important to keep your searching tasks scheduled and to divide them into blocks of "Looking for New Content", "Reading the Content Found" and "Writing About Content" for example. Alternate between these tasks so that you don't end up with a huge amount of information to read and to write about. With the natural evolution of your subject some things may end up becoming useless. And don't trick yourself: just looking for new content will never get you to the finishing line!

Everything seems relevant!

Be ruthless with your readings. Go straight into the chapter that is relevant, rather than reading a reference from start to finish. Then if “that” chapter turns out to be a key reference, read the rest.

Try to engage with the content of your readings through writing about what you read in your own words. Show how the ideas in the literature inform your research and your analysis. If they don't then put them aside.

It's also important to set up a system for keeping track of what you read and to summarizing everything which appears to be relevant.

Always carry a notebook. You never know when you can find something relevant and ideas sometimes just pop up.

Aim strong claim

There are two ways to substantiate your claims: your empirical knowledge about the object of study as well as referring to authorities in your field.

The closer and more recent the sources the better. Primary sources are better than secondary ones and more recent ones are better than the old ones. It's good idea also to check the references that the authorities in your field of research quoted.

Define layers to keep the quoting path.

While you search for content you'll certainly find opposition. Consider that opposition in your thesis, arguing with references that reiterate your point or with your field work.

Give Shape

Telling a story

What do you do when you look into any thesis for the first time? You look at the title, the author, eventually the year it was produced and then, very likely, you will take a quick look through the table of contents.

These items alone should immediately provide a clear picture of what the thesis is about and where you can find the information you are looking for.

A clear structure is therefore a strong gateway to a good thesis. It's usually a deal breaker. You either grasp right away what it is that you are dealing with or you miss it entirely.

Usually good content translates into a good structure. The other way around is also true.

Building a good structure

Each one has their own unique ways of structuring thoughts and consequently, of structuring the writing itself. Nevertheless there are some general tips you can follow to ensure you develop and test a good structure.

A scientific structure generally follows a basic template sequence: problem – hypothesis – literature review – methodology – results – conclusion. You can adjust it to fit your project, but the underlying sequence of science is this! This does not mean that the chapter names should have these exact names and that is precisely the challenge. How to convey the content of your thesis through your chapter names? Here are some tips:

- Look into various completed theses within your topic area and analyse how they are structured. Look into how each chapter encapsulates different parts of the story being told. And notice how, as a whole, the chapters provide a good sequence of thoughts and this sequence becomes clear just by reading the table of contents. Aim for that – for telling a long story short just by the chapter names.
- Think about the scope of your thesis, the big title – how can this be broken down into different parts? Can these smaller parts be translated into chapters?

Everything in Its Place

Start by shopping

With this day and age comes a multitude of electronic reference managing tools. Not sure what's best for you? Read some reviews, ask friends and take the time to download and open up the possibilities. Mendeley is very popular, as is Endnote. Then there's Citavi. Zotero is open source. Some of these come with a browser plug-in which means that you can save a webpage, a journal or a even a PDF document into your reference list as well as onto your computer directly from the browser. Importantly, you can use these services to keep track of any types of resources you've accessed including web pages and blogs. Snappy!

Invest in your professional skills

If you haven't started using a proper system for organising your references then you are already too late. Most PhD thesis veterans will testify that the work put into winning an overview of their references pays back all along the route to the finishing gates. And beyond! Mind that the thesis and any associated publications will only be the first in your lengthy academic career. That's why it's important to invest the time into building solid professional practices related to organising your work and importantly, your references.

Chase down the most recent

Found a great article, a great reference? That's always good news, but make sure you are using the most recent studies. Try using Google Scholar to see who has cited the brilliant article you've stumbled upon, and you might find other relevant stories that build up on the masterpiece. Who knows, they might even be closer to your specific area? Or; they might even have already answered your tentative research question!

DOI over URL

The web is always evolving which means that a URL might become outdated. A broken link is bland. That's why They invented the DOI: The Digital Object Identifier. The publisher assigns a DOI to your article once it is published electronically and in print and it is found on the front page of your journal publication, near the copyright notice. Simply add the DOI to the end of your reference. No need to fuss about date of access.

Now where did I see that again.. ?

I repeat: save anything and everything of interest, either onto your electronic reference managing tool, better yet onto your computer. Those bits and bytes on your computer won't give you as many gray hairs as losing them in the bitverse will. Think about naming the files such that you can easily search for them on your computer.

Eg. Author-YEAR-Title.pdf



Writing Is Not Just About Writing!


Writing is not just about writing! illustrates different aspects around the act of writing but focusing on scientific texts. Writing is not just about writing! is testimonial and collaborative. Input was given anonymously by the collaborators of this edition.

Writing is about movement and breathing!

Writing is something we normally do while sitting, but sitting for long periods of time may be exhausting not only for your back muscles, but also for your brain. Move for oxygen!

Put your laptop in a higher position so that you can write standing up. A higher position could be at the window sill or over the kitchen table -kitchen tables are usually higher than normal desks. Writing standing up from time to time may improve your blood flow and your concentration. Other people actually take a small walk to get fresh air and move around in order to maintain a fresh brain full of ideas to write about!

Some people may include in their everyday routines some period for sport activities like jogging, team sport or even going to the gym. This is not only awesome for their figure but it is also awesome to reduce the tension and stress of dealing with deadlines and blockades. And finally, the good old meditation ; five minutes of yoga or simply closing your eyes in silence, breathing deeply, may do wonders for your writing mood and skills.



Writing is about getting in the mood to write!

Your mood has a lot to do with the quality of your writing. To get into the right mood you can start by reading some literature, specialized magazines, or simply other papers related to your topic. This may also help you attain that scientific tone of voice. In fact, some people read something that is not necessarily related to their topic just to warm up. Don't believe it? Well, just think about how concentrated you are every morning while reading the back of the cereal box.

Writing is about healthy online habits!

Avoid screen sucking! Yes, internet dictionaries for specific terms or for synonyms may be really useful, but you don't need to have them open all the time, do you?

On this specific matter, we may have reached a unanimous verdict: when it comes to serious writing, and especially when the deadline for that congress is getting closer and closer ; turn the internet off.

T.I.O. Yes, turn-it-off!

How? Simple, just like you turn it on but the other way around. And don't worry, once you have meet your deadline, the internet (with all it's magnificence, news, push-up notifications, little puppies, grumpy cats, baby videos, Trump memes and the like) will still be there waiting for you! If you have family members and work colleagues that may need to reach you, teach them to use the telephone. The telephone is that part of the smartphone that is not that smart but also works offline. Awesome, isn't it?

Writing is about what you listen to!

Music or no music? That is A question while writing! We don't know the exact answer to that question, but we do know that it is preferable for you to find your own answer to it as soon as possible! So far we know, samba and salsa are not really the favourite rhythms when it comes to writing, but also music with lyrics may not be the best idea either – especially if it is your favourite singer or band and you know all the choruses, in which case it may be really distracting. So far, we have noticed that ambient music, some forms of electronic music and of course instrumental and classical music may be helpful.

“Music works for me in different ways, it depends of the mood and the kind of work I am doing. Sometimes a strong beat to motivate and accelerate, sometimes a calm rhythm helps me thinking and tranquilize. But when I am correcting texts I need silence.”

A. Einstein

Finally, have you ever noticed that if you just put on your headphones without music it could help you to get concentrated? Well, some of our collaborators have told us so. Maybe it's because it keeps your ears warm, maybe because they reduce the sound and distractions from your surroundings. Give it a try.



Writing is also about timing!

Nobody writes 24 hours a day, every day!

...OK, just the desperate PhD researchers with final deadlines in less than a month, yes, they write 24/7.

If you are NOT one of those, you are still on time to save your mental health and maybe your social life - if you haven't already lost it. You can reach all this just by timing your writing periods.

For some weird reason that we can't explain, people get more creative, "**writewise**", in certain moments of the day. Among our collaborators we found three kinds of people: day people, nighthawks, and people with children and serious jobs!

Let's give a review on this writers' typology:

Day people love the singing of the birds greeting the sun every morning, and the smell of a fresh brewed coffee while opening their laptops in order to write! They want to achieve things accompanied by the sun in the high blue sky! This people make their day worth by managing non-writing related tasks in between, like sport, cooking, laundry. If you are one of those, you just won the genetic lottery! For nighthawks there is nothing like the quietness of the night in order to do their stuff. The absence of noise and distractions, the strong taste of the 5th coffee of the night, the artificial lightning opening pupils and commanding neurones to start working fast and efficiently in scientific writing. Their fingers write the most perfect arguments at 2:00 AM, while their eyes enter cat-sight mode, able to detect any spelling and grammatical mistakes by 4:00 AM. If you are one of these people, congratulations! You may be getting that particularly irresistible "crazy scientist" look very quickly! So don't feel bad about

it and go for specific days to do laundry, dish washing and shower taking, ok?

Finally we have those brave researchers, one of the real entrepreneurs of science that started a PhD while facing the responsibilities of raising children and educating bosses. For those, first our admiration, and second an advice: write whenever and wherever you can! Keep a notice book with you to write any idea that may come to you during the break at work or during the office meeting. And don't lose hope, think that if you write 1/3 of a page of your dissertation every day, in 3 years you may have a brilliant dissertation of 365 pages!

Writing is about discussing your ideas!

Even if this illustration is testimonial, we have found a quote from psychiatrist Dr. Edward Hallowel that may help you through those times of anxiety and fear: NEVER WORRY ALONE!

If you are stuck at some point with your writing, or even if you feel not secure about what you're writing, talk about it with friends. It may help to see things differently or to reinforce your standpoints.

Work or write in groups - if not every day, at least time to time. Just get together with people you can talk to about your doubts or ask them to correct or read something. This will encourage you and help your concentration.

Talk with peers or colleagues about the structure of your writing, their opinion may encourage you to keep your fingers over the keyboard.

Writing is about deadlines!

Yeah, one of the most "motivating" external factors are deadlines! Deadlines can come from two sources, external and internal, and both can be useful for your writing. The secret is to use those deadlines on your benefit: if external, mark the deadlines on your calendar and organize Tasks in order to meet them. Don't let yourself be pressured by the time, use it as a propeller. You can also set your own internal deadlines: "I prefer my internal pressure with my own deadlines and I work with them with almost the same kind of commitment as if they are external. I like to arrange things in order to start to work by myself and define what I am going to do until when."

Writing is about what you drink!

And nope, we don't mean it in the sense of in vino veritas, we mean it in the sense of keeping yourself hydrated!

Keep in mind that you are more than 90% water, and that includes your brain, so ; hydrate! And by hydrated we mean with natural water, not only coffee.

Energy drinks, caffeine and tea may be useful in order to keep you awake but don't forget that drinking juice, natural water and herbal infusions, like chamomile tea, are excellent ways to keep your organism hydrated and working efficiently.

Alcohol is not only dangerous but also doesn't help you when it comes to analysis of facts and reaching conclusions, which is fundamental for "scientificness".

Writing is about what you eat!

Food means energy, and you need that in order to keep writing!

A diet based on carbs, like bread and chips, or fat, like hamburgers and pizza, makes your organism work slowly and your brain feel sleepy! Also, forgetting to eat for long periods of time brings your levels of energy to their lowest and this doesn't help you work! So, writing is about finding a balance between what you eat and when you eat it! Be sure you have the food you enjoy and that it is healthy at the same time. A cutted apple, a peeled orange, bananas, peanuts and dry fruits may work as excellent snacks!

Writing is about prototyping!

Especially if you are a designer or an artist, you know how important sketches, prototypes and models are. All of these are iterations exercises that increase your capacity to execute the FINAL piece; well, with writing it's no different! Use writing as a prototyping method: write something one day and rewrite it the next! Review on the third day and correct it on the fourth.

Don't write a thesis in one sitting, use drafts instead!

"I write a draft, it does not matter how much I achieve; maybe I just write a title and some topics. Or maybe I start by getting some keywords and unconnected ideas on a mind-map. After that I will write some paragraphs which I will correct and clean the text until it is clearer and clearer.

I write during the week ,step by step.

In the morning I draw mental maps and review written material, in the afternoon I do other tasks or search for material (books or web) in order to keep writing. "

Other reasons for NOT writing all your thesis in a row is the way your subconscious works: it happens usually while driving, taking a shower, teaching, assisting to extra-curricular courses or take care of family matters, our head is somehow always informing our writing topics and calibrating the information.

And last but not least remember:

The BEST dissertation is the WRITTEN dissertation!

Writing is about where you write!

Which space allows you to write the best?
Here's what our collaborators had to say:

"WINDOWS! I feel more comfortable to write if I have a view or a nice light coming from a big window or a door, even at night. Feeling free to look out and think about words and ideas :)

Usually I do write at HOME, but sometimes I get too cosy and start to get distracted, in that case I go to the LIBRARY during the morning or during the afternoon, away from the sofa and the fridge!

I do need to switch among DIFFERENT SPACES during the writing period.

I do switch between HOME, COFFEE SHOP, PARK, CAFETERIA at the university and so on."

How Have They Done It?

**We want in.
We need to know.
And we believe there is much to learn from other people's experiences.
We went looking for further contributions from those Jedis undergoing early stages of thesis writing, as well as thoughts from those true Senseis who, having completed their thesis, have experience-based advice in the first person that may be useful to others.
We asked them to make it short and sweet, and we can't thank them enough!**

E.

PhD in Design completed a decade ago

- Avoid “book gluttony”. Massive reading and data collection increases entropy. Be very critical with what you choose to read and write about;
- the answer to many questions lies within your research territory, not necessarily books. Go for primary sources;
- go for sources that are geographically near or are accessible. It significantly eases the process.

J.

PhD in Design recently completed

- Defining an initial structure allows for a general perspective on the subject and on what to write;
- systemizing and visualizing data (charts, graphics) may help to grasp the theme and organize the writing process;
- correct and rigorous formatting from the very beginning is key, both with EndNote (references and quotes) and document styles (that allow a painless migration from MsWord to Indesign). Don't neglect, you'll regret;
- always backup. Use the Cloud or Drive;
- never update the software you're using during the writing process. Avoid unnecessary risks;
- discuss your work with other people. Fresh perspectives can be very insightful and helpful.



M.J.

**PhD in Design
completed two
years ago**

- Clearly define the research subject and the research question;
- read and write simultaneously. The process is layered, not linear;
- seek validation in conferences. Two per year, minimum;
- don't whine about negative aspects
- write as if you're going to publish for a wide audience;
- keep in mind that it is as much about arguments as about structure and montage;
- find strategies to maintain critical distance and emotional balance.

PhD in Arts recently completed

- During reading and researching, find a personal method for #tagging. Filling reading cards or placing post-its in relevant parts of books, for instance coloured post-its organized according to the order of the chapters, is a good idea;
- start organizing bibliographic references from day one, according to the selected/adopted norm (I started doing it halfway through and doubled the trouble);
- be “spare” or succinct with the writing: if you can say it with five words why use eight?
- read what you’re writing. OUTLOUD. It helps spot errors and adjust phrases;
- always have a dictionary nearby, for synonyms.

Tools

Try **LaTeX**! It will be of great help in writing your thesis, manage chapters, references, and mathematical formulas. Deal with content and let formatting tedious work to the machine. Also it's a great tool for converting your thesis into articles according to different templates. And also has lots of free info on the web! It's free.

latex-project.org

For managing quotations...**EndNote**. Period. ...or **Citavi**, in any case take the time to see the tutorials, it will save you tons of.. well, weeks of time! Check out:

The Thesis Whisperer

thesiswhisperer.com

Diagrams

www.draw.io

Tools directory

connectedresearchers.com/online-tools-for-researchers

Browse through these updated suggestions, from organization, to bibliography management, to writing, and see what works for you.

phdstudies.com/article/five-top-thesis-writing-tools

You need to make a time plan?

Take a look in these:

ganttpro.com and ganttproject.biz

Scrivener is a writing studio focus on content used to create fiction and non-fiction books. It's a paid software but with educational discounts. Free trial.

literatureandlatte.com

...and it can join forces with **BibTex** that is a tool to describe and process lists of references. Also free.

bibtex.org

...also there is a graphical interface for LaTeX and BibTex. **Lyx** is a writing processor that encourages an approach to writing based on structure of documents and not simply their appearance.

lyx.org

And last but not least IdeaPuzzle a online software to design and defend your thesis:

ideapuzzle.com

How About You?

As we approach thesis writing, we would like to ask for the contribution of doctoral candidates or graduates with advice–tips–experiences regarding the writing process, especially, but not exclusively, in its early stages. A short statement with YOUR quintessential guidelines would be perfect. For that purpose we've created a Facebook group that aims at collecting testimonies. Please join and let us know about you!

<https://www.facebook.com/groups/1305627232863388/>

Contributions

Heitor Alvelos
Susana Barreto
Ana Clara Roberti
César Lugo–Elías
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doctortiger.wordpress.com | endlessend.up.pt/design | endlessend.up.pt/ud17