

Research Project Management - Taking Control of your Doctorate

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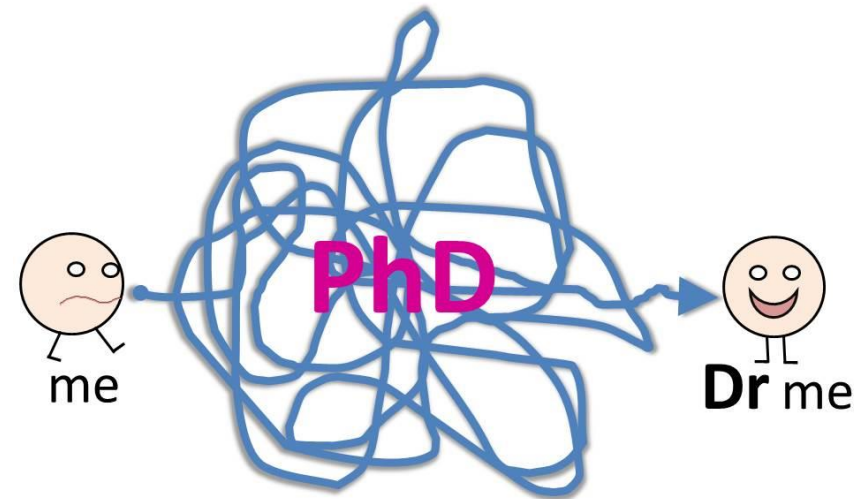
17 November 2015

Session Outline

- ▶ Visualising your doctorate to better understand it
- ▶ Planning research projects
- ▶ Managing research projects
- ▶ Closing research projects
- ▶ Research scenarios

What Does a Doctorate Look Like?

- ▶ Draw a doctorate
- ▶ An image, map or metaphor



In all aspects of life ... we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor.

Lakoff & Johnson

What Does a Doctorate Look Like?

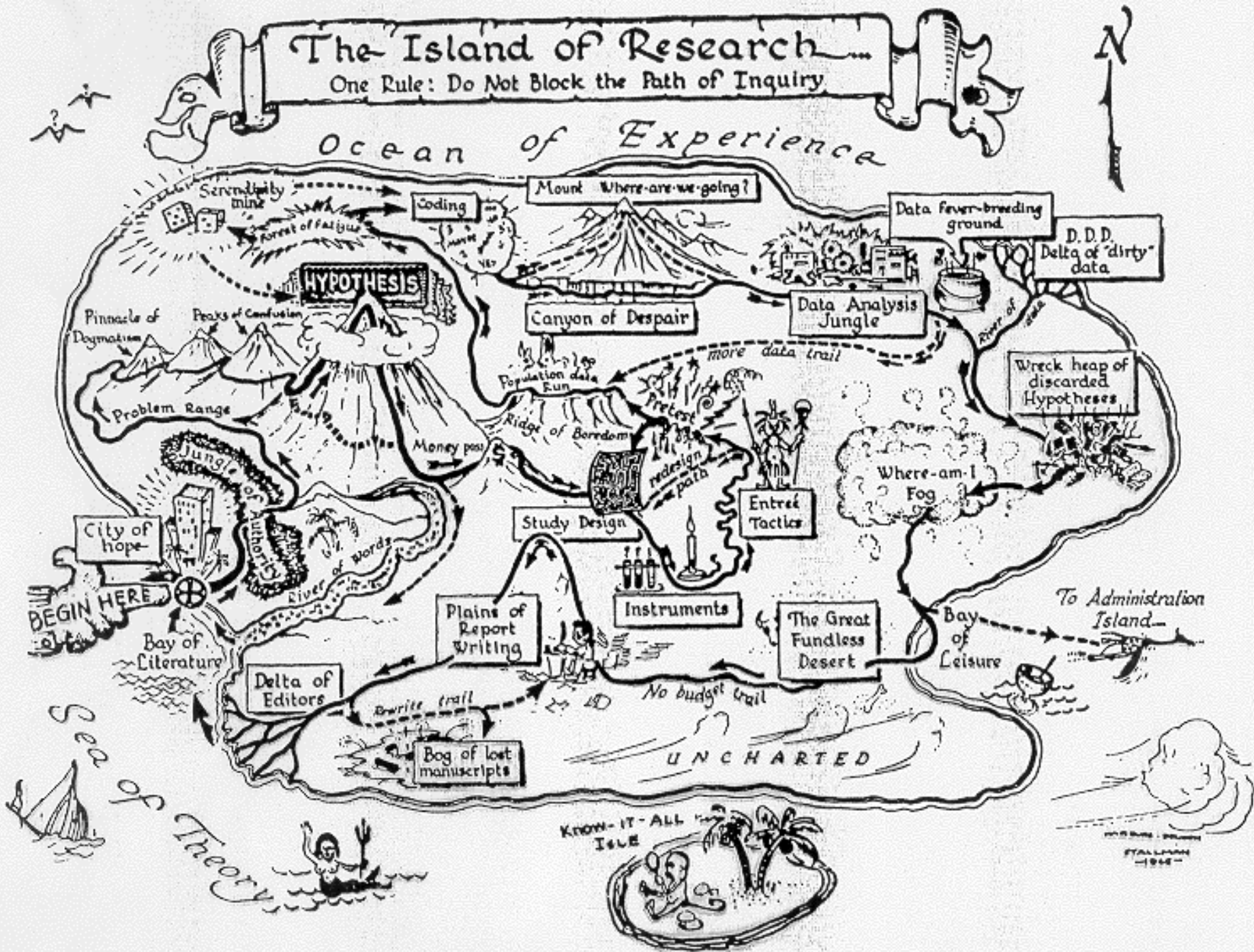


Research Project Management

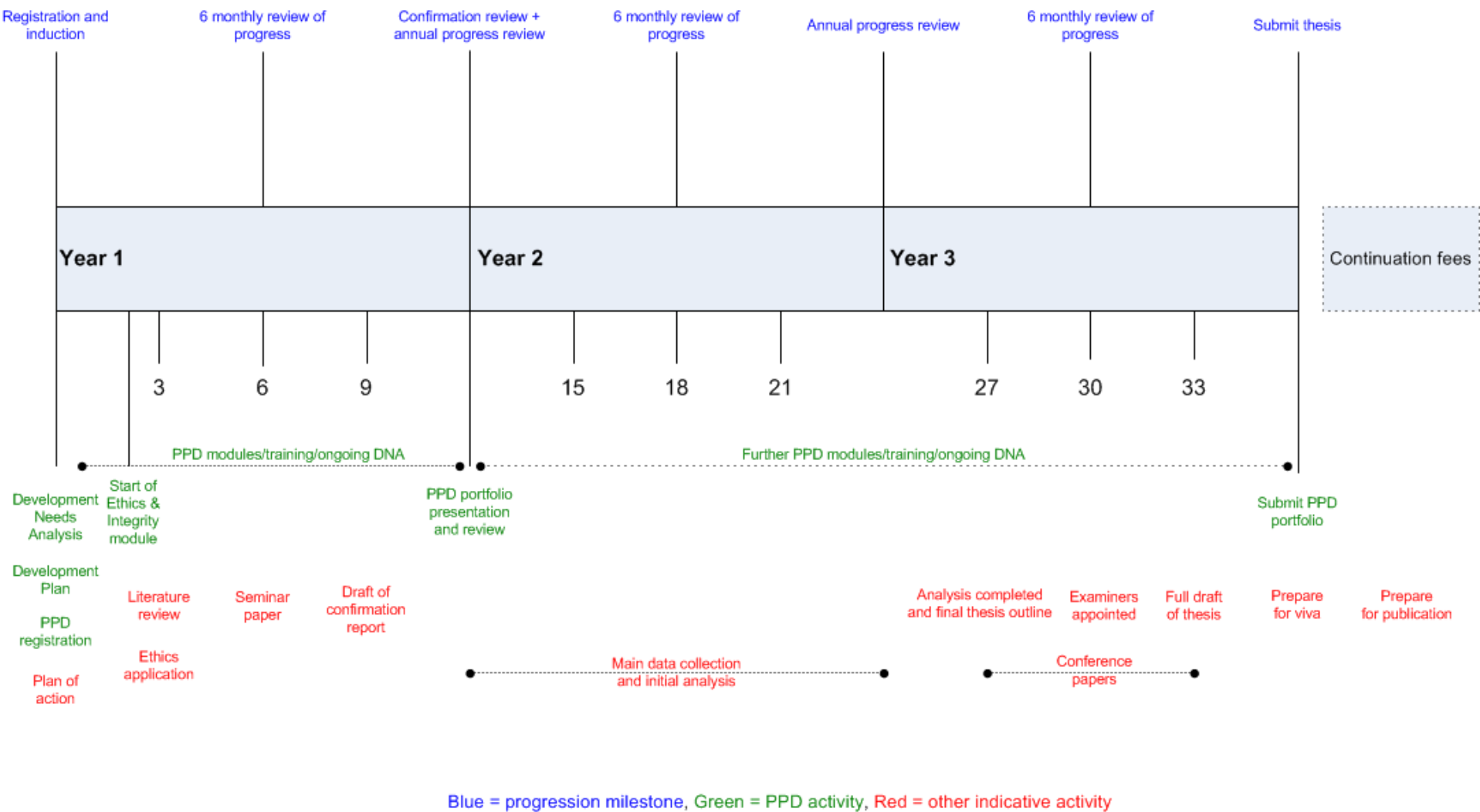
The Island of Research

One Rule: Do Not Block the Path of Inquiry

Ocean of Experience



Doctoral Timeline



Blue = progression milestone, Green = PPD activity, Red = other indicative activity

For part-time students, increase by a factor of 2

Research Project Management

Staff Research Projects

Planning
Design/Proposal
Funding
Ethics Application

Literature Review
Data Collection
Analysis
Drafting
Conference Papers
Full Draft

Publication/Dissemination

Doctorates as Projects

- ▶ A project:
 - Has start and finish points
 - Has a specified goals or outcome
 - Is non-routine, unique
 - Involves uncertainty or risk
 - Requires co-ordination
 - Brings about change

- ▶ What is project management?
 - “An endeavour in which human, material and financial resources are organised in a novel way to deliver a unique scope of work of given specification, often within constraints of cost and time, and to achieve beneficial change defined by quantitative and qualitative objectives”

RDF on Project Management

and descriptors	Phase 1	Phase 2
C2 Research management		
2. Project planning and delivery	<p>Applies effective project management through the setting of research goals, intermediate milestones and prioritisation of activities. (C1)*</p> <p>Acts on decisions agreed with supervisor/line manager and delivers results.</p>	<p>Independently defines a manageable research project.</p> <p>Understands project management cycles and is able to draw on a range of project management techniques and tools.</p> <p>Allows for wider public access to and long-term preservation of research information/findings.</p> <p>Manages problems and conflict.</p>
Phase 3	Phase 4	Phase 5
<p>Defines large research projects, draws up long-term plans for research.</p> <p>Uses range of project management strategies.</p> <p>Clarifies priorities; sets expectations, keeps project on track.</p>	<p>Effectively manages multiple research projects and both the research agenda and bureaucracy for various projects.</p> <p>Able to take unpopular but evidence-based appropriate decisions.</p>	

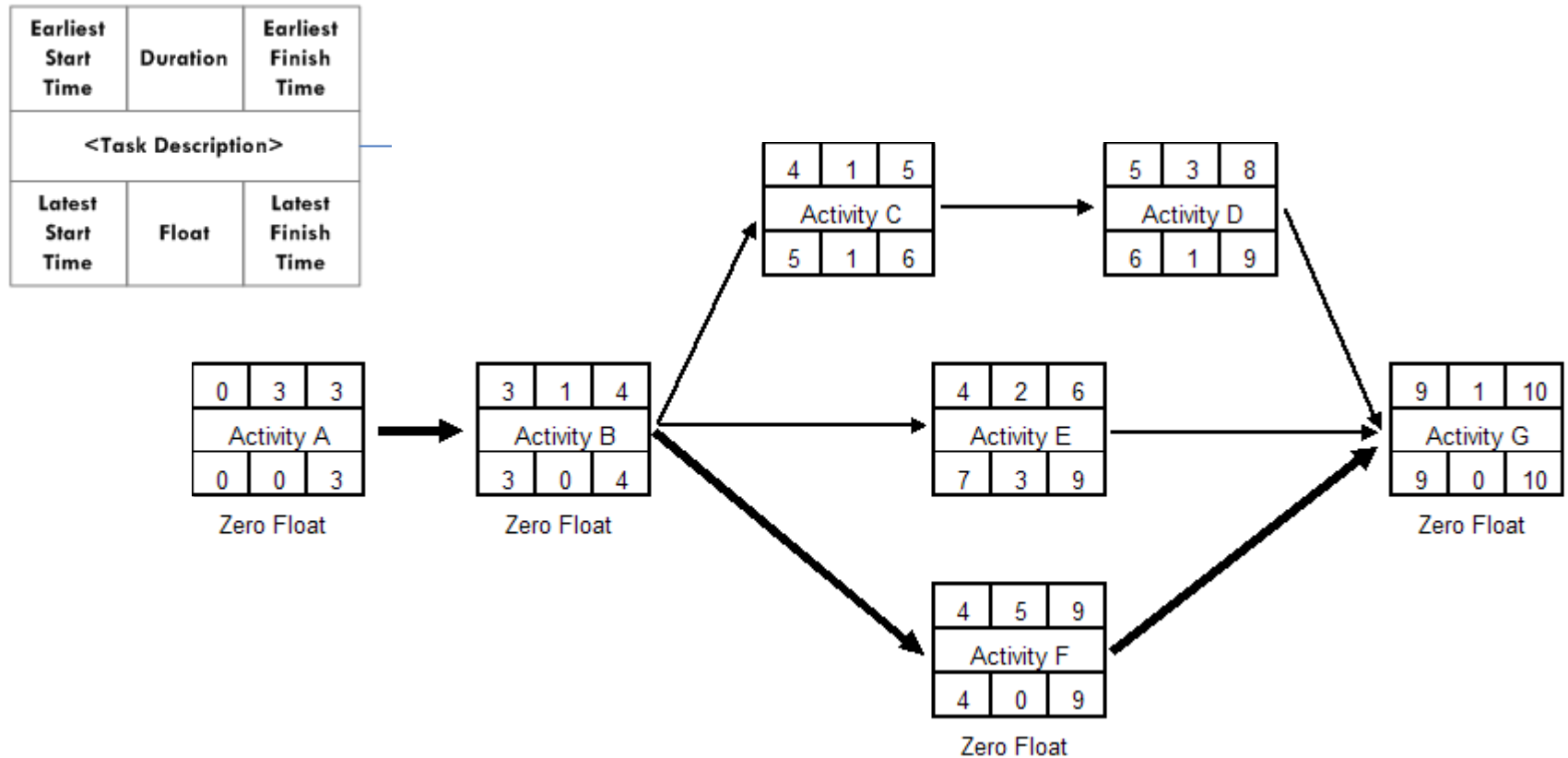
Planning

Planning Backwards

- ▶ 36 months
- ▶ Need a final draft by month 35 (September 2018)
- ▶ Know you can reasonably write 10,000 words in 1.2 months (5 weeks). 9 months to write 75,000 words. Need to start writing by month 25 (November 2017)
- ▶ Analysis is likely to take x months, need to start analysis phase by month y ...

Critical Path Analysis

- ▶ A simple algorithm for scheduling a set of project activities. Used to identify the critical activities, their sequence and when they need to be begun so as not to hold up the timely completion of the project



GANTT Charts

	June				July				Aug				Sept				
	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26
Title	█																
Acknowledgements																	█
Executive summary																	█
Contents page																	█
Introductory chapter		█	█												█	█	
Literature chapter																	
Identify literature		█	█														
Read literature			█	█	█	█	█										
Draft chapter						█	█										
Complete chapter								█	█								
Research methods chapter																	
Identify research methods		█	█														
Design research			█	█													
Identify participants		█	█														
Do research					█	█	█	█									
Chase up outstanding research								█									
Draft chapter									█	█	█	█					
Complete chapter																█	
Data collected chapter																	
Composite data									█								
Evaluate data									█	█							
Review data											█						
Draft chapter											█	█	█				
Complete chapter																█	
Conclusions																	
Evaluate literature and data collected chapters													█	█			
Draft chapter														█	█	█	
Complete chapter																█	
Recommendations																	
Identify recommendations														█			
Draft chapter															█	█	
Complete Chapter																█	
Personal Reflection																	
Write chapter																█	
Complete chapter																█	
References																	█
Appendices																	█

GANTT Charts

- ▶ **Create your own GANTT chart**
- ▶ List everything you think you've got left to do down - general tasks and then breakdown into sub-tasks - on the left-hand-side
- ▶ Try to realistically estimate the time each task will take - usually the smaller the task, the more likely you will be to estimate the time accurately. Remember you are pretty much the only resource
- ▶ Think about best-case scenario, worst-case scenario and the critical steps
- ▶ Remember regular checkpoints to evaluate your progress and schedule

Managing

Then Real Life Happens...

- ▶ *"When we first start to think of our projects, the world is our oyster. We have ideas and thoughts and everything seems fine. And then we dive in... But sometimes we haven't taken into account how long a task would take, the risks involved, the dependencies, and leaving you behind schedule. Although supervisors can be helpful at guiding you through these steps, we are left to do most of the planning and how you manage your projects is a big part of determining when you'll finish."*

Risks

Likelihood/ Impact	Nearly No	Minor	Moderate	Major	Disaster
Will Happen	Medium	High	High	Extreme	Extreme
Most likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

Top 5 Risks

- ▶ What are 5 of your risks to timely completion of your doctorate?
- ▶ E.g. data loss, running out of funding, archives aren't what you expect, supervisory relationship, motivation



Mitigating

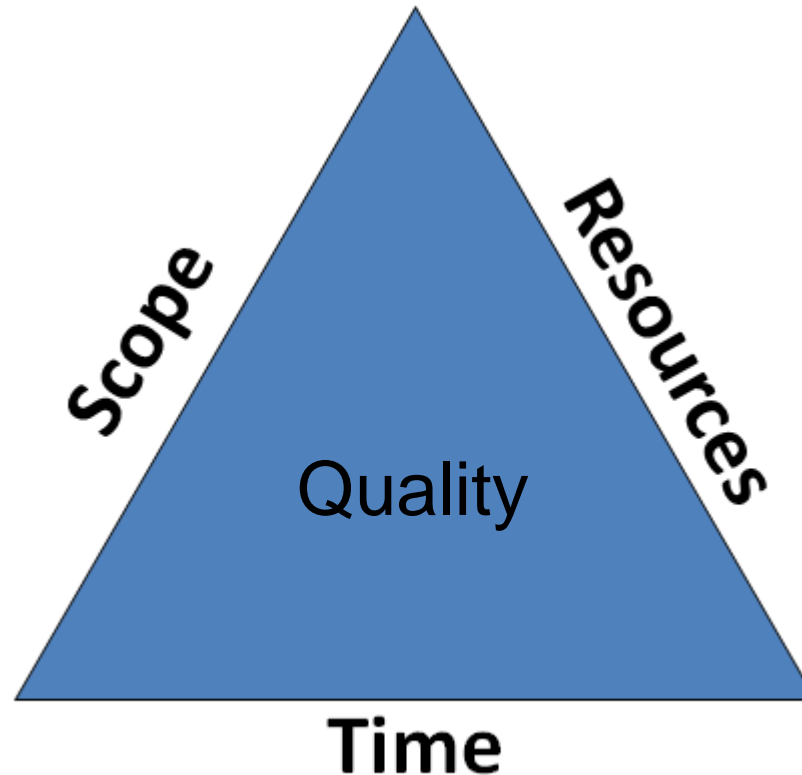
- ▶ What mitigating actions can you take to reduce the probability of the events and their consequences?
- ▶ Even things that you deem 'out of your control' are technically within your control since you can plan for and be ready to react if they occur (scenario planning)



Why Doctorates Fail

- ▶ Unrealistic expectations (perfectionism)
- ▶ Self-sabotaging behaviour (procrastination)
- ▶ Academic isolation

Adapting to Complexity



- ▶ The Project Management Triangle
- ▶ What elements/constraints are fixed, and which can be adjusted?

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Enhancing Personal Productivity



- ▶ Become more aware of your personal preferences to enhance productivity

- ▶ Research is a process. What routines work best for you?
 - Most productive times to work - morning, afternoon or evening
 - Not leaving things at natural end points
 - Bite-sized targets - 1000 words per day
 - Removing distractions - unplugging the internet and checking emails only between 4-5pm
 - Schedule off-time to create space for ideas
 - Accountability buddy

- ▶ From binge working to snack working

Enhancing Personal Productivity



- ▶ What works well for you?
- ▶ What are your tips?

Agency

- ▶ Introduce agency to every aspect of the doctorate
- ▶ What do you want to get out of every individual supervisory meeting? Who do you want to meet at a conference and how will you ensure that? What do you want to achieve today?
- ▶ Particularly after the 12-month confirmation/upgrade review, most doctoral researchers experience a 'drift' and a lack of focus in their work which, if left unchecked, can begin to jeopardise timely completion
- ▶ How will you keep focus and retain a sense of agency? How will you take (and stay in) control of your doctorate?

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Closing

Things to Remember

- ▶ Referencing, file structuring for reading and data
- ▶ Open access publishing - will become at least 'grey literature', so consider permissions for photos/maps, sensitive materials, embargos
- ▶ Publications strategy and agreements on authorship
- ▶ Curating your data - responsibilities to preserve and allow access for at least 10 years (<https://www.youtube.com/watch?v=N2zK3sAtr-4&feature=youtu.be>)
- ▶ IP
- ▶ Celebrate

Good Research Practices

▶ **Planning Research**

- An outline plan describing the project's operational process, timetable and data management
- An explicit approach to public engagement and creating public benefit

▶ **Identifying and Managing Risks**

- Potential or real conflicts of interest declared and managed
- Potential risks to reputation identified and managed
- Risks to people, animals, the environment and/or cultural objects identified and steps taken to manage and minimise them

▶ **Collaborative Research**

- Early agreement about researchers' roles and responsibilities
- Transparent criteria for apportioning authorship, acknowledgements and IP rights agreed as early as practical
- An explicit publication strategy agreed by all involved
- All the above made transparent and explicit

Research Scenarios

- ▶ Syndicate groups
- ▶ 1 research scenario/dilemma
- ▶ Discuss amongst your group
- ▶ Share with the whole group your dilemma, considerations and proposals to address, remedy or avoid in the first place
- ▶ With acknowledgements to Erasmus University Rotterdam for these scenarios (<http://www.eur.nl/fileadmin/ASSETS/ieb/integriteit/dilemmagame-mrg.pdf>)

Scenario A

- ▶ **I have just started writing my confirmation report. There is still a lot to do, but providing I have no other obligations, I should be able to meet the deadline for submission. However, my supervisor is co-chairing a conference and she wants me to assist her in preparing this. When I tell her I need time for my report she tells me that we had agreed beforehand that I should do some work of this kind. Missing the deadline could mean a serious delay as the committee does not meet frequently. What do I do?**
- ▶ **A** I do as she requests and accept the possibility of missing the deadline.
- ▶ **B** I agree with her request. In practice I do as little as I can get away with.
- ▶ **C** I tell her my deadline is more important than any verbal agreement.
- ▶ **D** I ask the departmental PGR tutor/head of doctoral studies if I should agree with the request.

Scenario B

- ▶ **In my PhD proposal I chose a research area that I have always been very passionate about. My supervisor knows of my passion but thinks that the research area is highly competitive and publications will be too difficult for me. He tells me at my confirmation/transfer that if I want to be reasonably sure of finishing in three years I will have to focus on a slightly different topic. He suggests some other areas in which he thinks it will be easier to get publications. However, I have never considered these areas before and at this point in time I don't think they are that interesting. What do I do?**
- ▶ **A** I follow my supervisor's advice and change the focus.
- ▶ **B** I start working on suggested areas but only half of my working time. In the other half, I work on my original ideas without telling my supervisor.
- ▶ **C** I thank my supervisor for his advice but tell him that I will stick with my original idea no matter the consequences.
- ▶ **D** I try to find another supervisor.

Scenario C

- ▶ **My PhD research is funded by DCMS. When discussing my findings with DCMS, it becomes clear that my conclusions are much too nuanced to make any political statements. They ask me to rewrite my conclusions so that they offer more clear-cut statements. Based on the data I think it is impossible to say things with such certainty. When I discuss the matter with my supervisor he tells me that I need to learn to write for my audience and that I should be able to make bolder statements. I might need DCMS for financing future research. What do I do??**
- ▶ **A** I rewrite my conclusions in the way the organisation asks me to.
- ▶ **B** I refrain from rewriting my conclusions.
- ▶ **C** I decide to write an executive summary in which my conclusions are more certain and clear while keeping the nuanced conclusion in my dissertation.
- ▶ **D** I ask an older researcher who is very strict on research integrity to advise on the matter.

Scenario D

- ▶ **I am in the the final stages of drafting my thesis. Many people in my department know of my research and they are not expecting any trouble during the writing process because of my ground-breaking ideas. By chance I stumble upon a tiny error in the methods section. Although barely noticeable, the minor mistake ruins my whole study and the relation I have discovered vanishes if the error is remedied. However, I am still convinced that the relation found in the data does in fact hold. What do I do?**
- ▶ **A** Since the conceptual framework is still valid and innovative, it would be unwise to let one tiny mistake undo all that work. Furthermore, the chance that it will be discovered is small anyway.
- ▶ **B** Even though remedying the error and keeping good results is probably impossible, ask for a short break anyway from my supervisor's gaze so that I can 'iron out some minor details'.
- ▶ **C** Apparently, my work is incorrect, so I have to retract the concept, even though that will cost me dearly.
- ▶ **D** I cover up the error by subtly changing the details in the method section. It would then be nearly impossible to see the problem.

Scenario E (reserve)

- ▶ **Today I had an appointment with one of the museum trustees who funded the research I participated in. While discussing the draft report, it becomes clear that some of the results are not supportive of the trust's aims. He requests me to leave out some of the results. He also tells me that by helping him I can be sure of financial support in the future. Our institute depends for more than fifty per cent on this kind of external funding. What do I do?**
- ▶ **A** I tell him that I will publish the report as it is.
- ▶ **B** I agree with the director that some results might be too negative and delete them from the report.
- ▶ **C** I do not delete the results completely but leave them out of the executive summary.
- ▶ **D** I tell him I will see what I can do. In reality I have no intention in making any real changes.

Contact



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