



UNIVERSITEIT•STELLENBOSCH•UNIVERSITY  
jou kennisvenoot • your knowledge partner

# Doctorateness

**Jan Botha (CREST)**

**SU Research Week 2017**

- The PhD as a qualification
- Difference between the PhD and the Masters
- Components of “doctorateness” as a threshold concept
- “Theory” and “original contribution”





# Literature on the nature of the PhD



Extract from “The Higher Education Qualifications Sub-Framework (HEQSF). As revised”. *Government Gazette*, 2008 (36003)

Quality Assurance Agency 2015. Characteristics Statement

Trafford, V. & Leshem, S., 2009. Doctorateness as a threshold concept. *Innovations in Education and Teaching International*, 46(3):305–316.

Wellington, J. 2013. Searching for ‘doctorateness’. *Studies in Higher Education* 38(10):1490–1503.

Keefer, J.M. 2015. Experiencing doctoral liminality as a conceptual threshold and how supervisors can use it. *Innovations in Education and Teaching International* 52(1):17-28.

Margaret Kiley (2015) ‘I didn’t have a clue what they were talking about’: PhD candidates and theory. *Innovations in Education and Teaching International* 52(1): 52-63

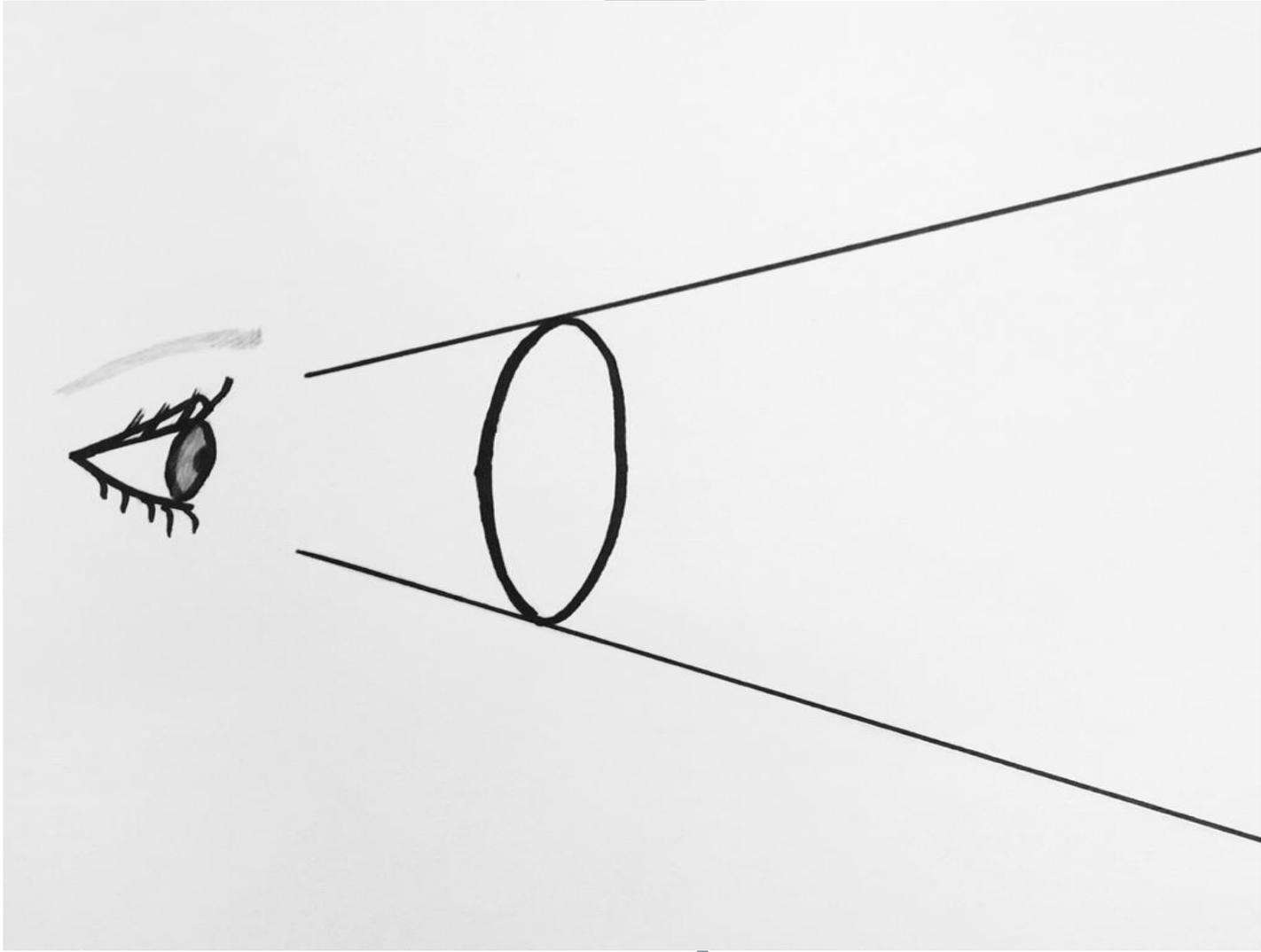


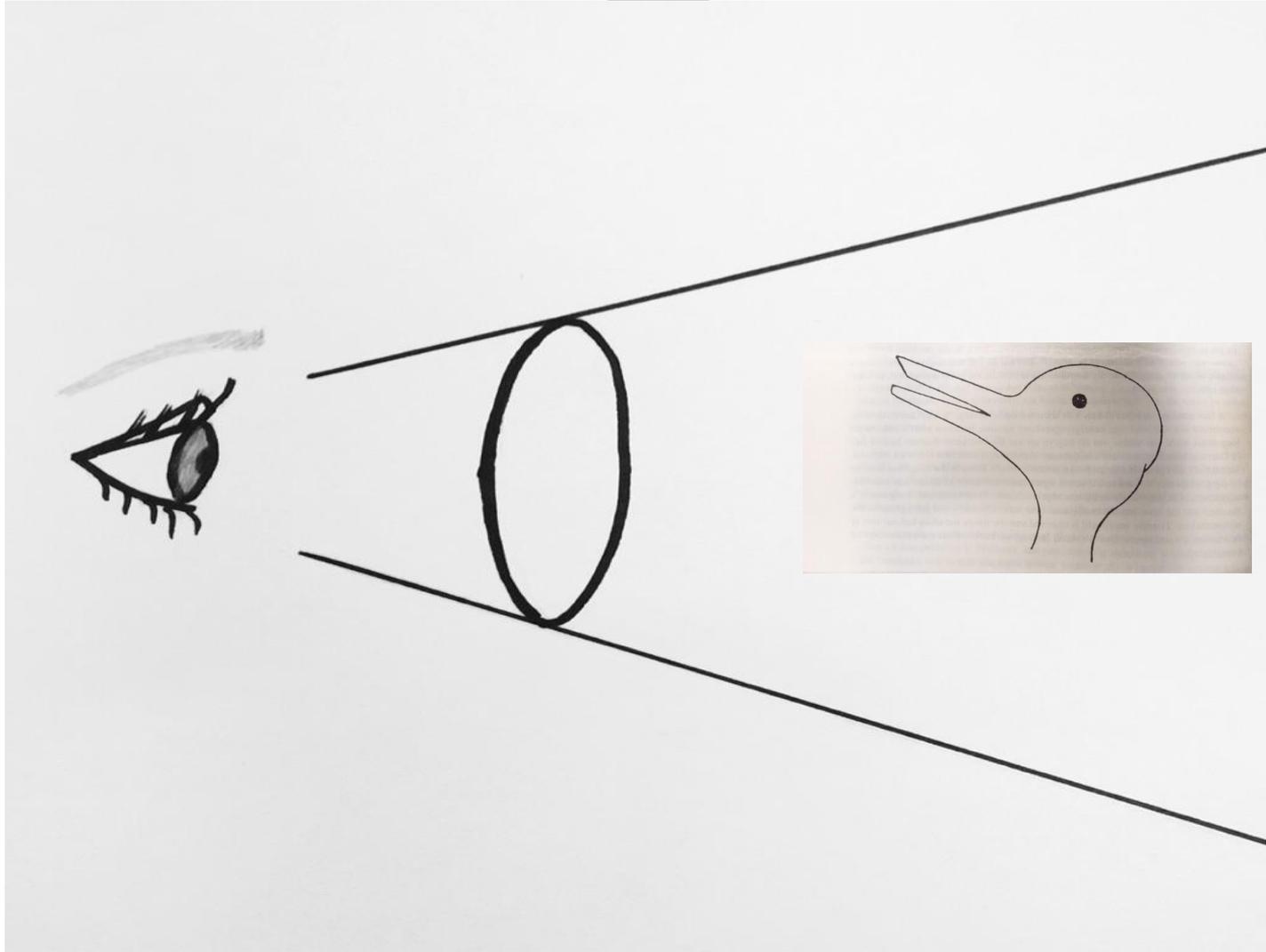
# Grand Challenges (EU)

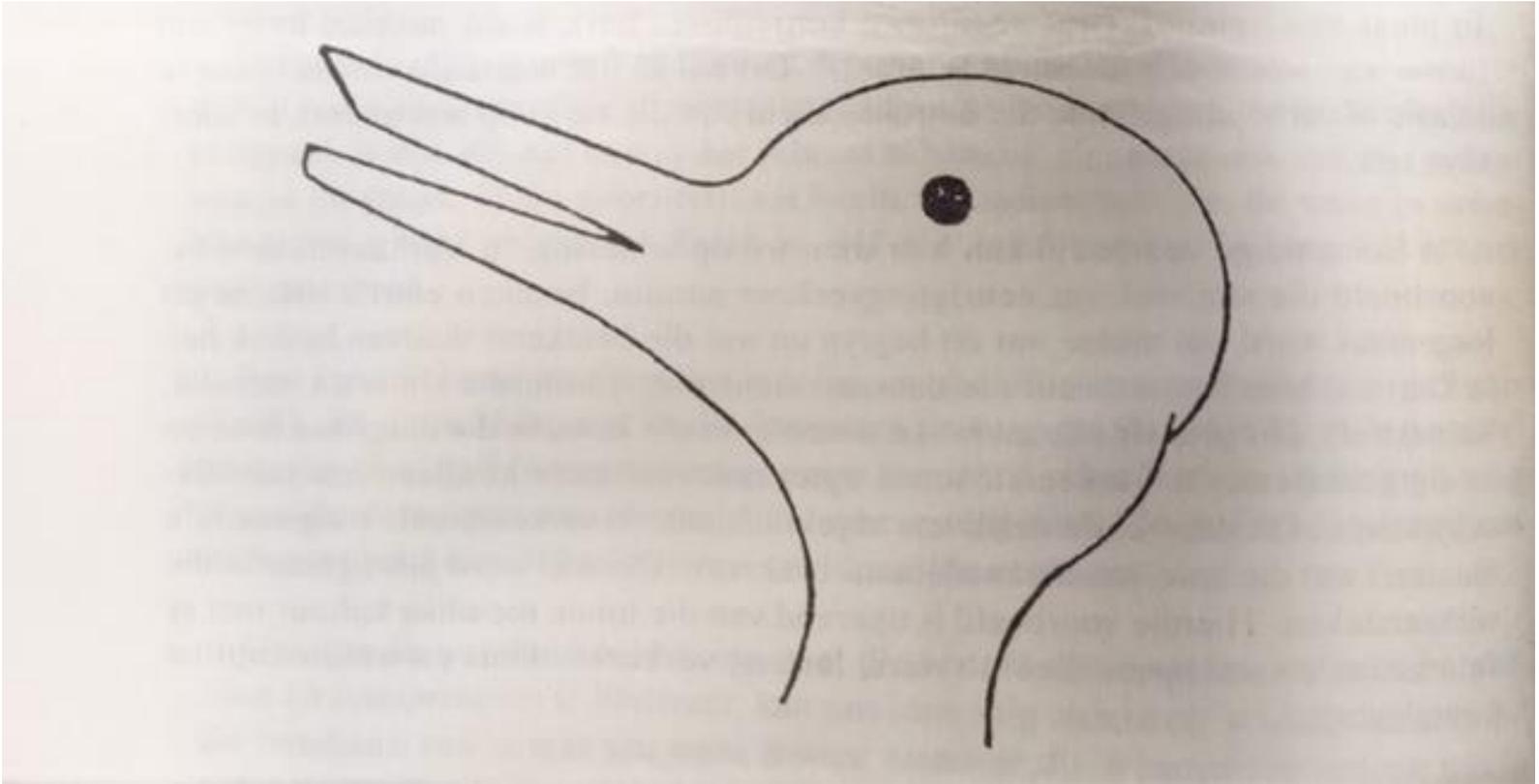
---



1. Health, demographic change and wellbeing
2. Food security, sustainable agriculture, marine and maritime research and the bio-economy
3. Secure, clean and efficient energy
4. Smart, green and integrated transport
5. Climate action, resource efficiency and raw materials
6. Inclusive, innovative and secure societies.









# Higher Education Sub-framework (HEQSF)

|                                    | PhD   | Professional PhD   | Masters   |
|------------------------------------|---|--|---|
| <b>Specifications</b>              | NQF Level 10<br>Total credits: 360<br>Credits at 10: 360  | NQF Level 10<br>Total credits: 360<br>Credits at 10: 360   | NQF Level 9<br>Total credits: 180<br>Credits at 9: 180                                    |
| <b>Designators</b>                 | “of Philosophy” or area of study or discipline  | the area of study or name of discipline  | “of <i>field</i> ”  |
| <b>Qualifiers</b>                  | “in <i>field</i> ”  | “in <i>sub-field</i> ”   | “in <i>sub-field</i> ”  |
| <b>Abbreviations</b>               | PhD, DPhil, DLitt   | DEd, DCom, DEng, etc   | MA, MCom, MSc, etc  |
| <b>Purpose and characteristics</b> | training for academic career,<br>high level research capability,<br>a significant and original academic contribution.<br>No credit for coursework | a career in the professions and/or industry,<br>research component (60%) of the degree,<br>integrate theory with practice, complex problems in prof. context | train researchers who can contribute to the development of knowledge at an advanced level |
| <b>Minimum admission</b>           | Masters (level 9)   | Masters (level 9)  | Hons or PGDip (level 8)   |
| <b>Progression</b>                 |   |  | Doctoral degree   |



# Level descriptors (SAQA)



|  | <b>Masters</b> | <b>PhD</b> |
|--|----------------|------------|
| Scope of knowledge                             |                |            |
| Knowledge literacy                             |                |            |
| Method and procedure                           |                |            |
| Problem solving                                |                |            |
| Ethics and professional practice               |                |            |
| Accessing, processing and managing information |                |            |
| Producing and communicating information        |                |            |
| Context and systems                            |                |            |
| Management of learning                         |                |            |
| Accountability                                 |                |            |



# The PhD and the Masters

---



- Masters thesis - mastering the craft of scholarship/science
- Doctoral thesis - making a contribution to the body of scholarship in a particular field

## Implications for the PhD:

- Novelty and originality
- Comprehensive (not “exhaustive”) coverage of the relevant scholarship in the literature study
- The imperative of theory (or interpretation)



## Searching for 'doctorateness' (Wellington 2013)

---



- Research question: What is a doctorate?
- Data for this paper drawn from 30 years experience in the Social Sciences at a university in the UK



# On the purpose of a doctorate

---



## The PROCESS

- Preparing for a future role or future career
  - Producing the next generation of researchers and academics
  - Licence to teach
  - Preparing for industry and other employment
- Career development
- To acquire generic skills
- To satisfy personal curiosity and intellectual interest
- To prove oneself

## The PRODUCT

- Knowledge production
- Pushing boundaries of knowledge
- To add new or original knowledge
- Generate knowledge to transfer to industry



## The impact of the doctorate

---



- Change work environment
  - Rapid promotion to senior position
  - Opening up opportunities for research
  - Research now valued by colleagues
- Enhance personal influence
  - Developed thought processes
  - How they are seen by colleagues
  - Greater confidence in own abilities (e.g. writing skills)
- Impact on discourse
  - Confidence to persuade, change, argue, challenge, listen critically



## Forms of “original contribution”

---



1. Building new knowledge, e.g. by extending previous work or ‘putting a new brick in the wall’
2. Using original processes or approaches, e.g. applying new methods or techniques to an existing area of study
3. Creating new syntheses, e.g. connecting previous studies or linking existing theories or previous thinkers
4. Exploring new implications, for either practitioners, policy makers, or theory and theorists
5. Revisiting a recurrent issue or debate, e.g. by offering new evidence, new thinking, or new theory
6. Replicating or reproducing earlier work, e.g. from a different place or time, or with a different sample
7. Presenting research in a novel way, e.g. new ways of writing, presenting, disseminating



## The notion of “doctorateness” (Trafford & Leshem, 2009)

---



- Two aspects of the doctoral journey.
  - “**doctorateness**” combines both ‘doing’ and ‘achieving’ a doctorate and so it merges the issues of research process and research techniques.
  - “**threshold concepts**” represents a gateway (a portal) to learning and understanding through which candidates have to pass but where they may encounter real difficulties of learning and understanding.



# What is “doctorateness”?



- Inherent in “doctorateness” is the notion of **synergy**.
- Doctorateness is a jigsaw puzzle that can only be fully appreciated when all the components are present and fit together. Thus, the whole may be greater than the sum of its parts.
- Doctorateness therefore results from specific critical research features being present in a doctoral thesis.
  - These features should form **a mutually interdependent network system of parts that have practical relationships within the thesis**



# The “components” of doctorateness



|                                    |  |                                     |                                  |
|------------------------------------|--|-------------------------------------|----------------------------------|
| <b>Contribution to knowledge</b>   | <b>Stated gap in knowledge</b>   | <b>Explicit research questions</b>  | <b>Conceptual framework</b>      |
| <b>Conceptual conclusions</b>      |  <p><b>SYNERGY<br/>AND THEREFORE</b></p> |                                     | <b>Explicit research design</b>  |
| <b>Research questions answered</b> |  |                                     | <b>Appropriate methodology</b>   |
| <b>Cogent argument throughout</b>  | <b>Full engagement with theory</b>   | <b>Clear / precise presentation</b> | <b>'Correct' data collection</b> |

Figure 1. Components of doctorateness.



# “Doctorateness” as a “threshold concept”



- “Doctorateness” represents a threshold concept (a portal through which candidates have to pass) that may impede progress for some candidates
- When candidates understand the nature of doctorateness they are then usually able to succeed.
- Extended collaboration between candidate and their supervisor(s) is required.
  - Approaching and passing through the threshold concept of doctorateness is a perspective hitherto underemphasised by examiners, supervisors and candidates



# Threshold





# Doctoral liminality as a conceptual threshold

## Keefe (2015)

---



- RQ: How supervisors can improve their supervision by using liminality as conceptual threshold
- Threshold concept:
  - akin to a portal, opening up a new and previously inaccessible way of thinking about something
  - a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress
  - a transformed view of subject matter, subject landscape, world view
- Period of liminality
  - Van Gennep (1908) rite of passage: wavering between 2 worlds
  - uncertainty, confusion, doubt, lack of confidence, “in between-ness”



## Doctoral identity challenges

---



- “Being stuck” in a liminal state
- Mimicry
  - Language and behaviours as perceived to be required in order to fit into the learned community
    - Making arguments as supported from literature
    - Develop research-supported theoretical models
    - Using frameworks to guide study
    - Oscillate between student and academic identities





## How liminality is experienced

---



- Sense of isolation
  - others think you can do it make you feel even more alone
  - you have to be original
  - no peers in department
- Imposter syndrome
  - feeling not being good enough, feeling he is a fraud
  - people will find out how little is really known
  - suffering in silence
  - they may recognise she does not belong in programme
  - Inventing a new identity for yourself, 'fake it till you make it'
- Research misalignment
  - supervisory, paradigmatic or methodological differences



## PhD candidates and theory (Kiley 2015)

---



- “Threshold concepts”: argument, thesis, theory, framework, analysis
  - liminality in learning describes the state where a learner has left behind her/his previous self but has not yet become the new self
  - when research students are in a liminal space with regard to not understanding a particular Threshold Concept they are likely to experience considerable intellectual challenge with feelings of ‘going round in circles’ and overall lack of progress
  - ‘being stuck’ or ‘stuckness’ is used to describe the situation of a learner who is no longer who she/he was, but has not yet crossed the conceptual threshold required for understanding and thereby gaining that elusive light bulb moment



- Wellington (2012:1496)
  - Lack of agreement of what theory actually is, yet theory is of great significance in examination of thesis
- Kiley (2015:54) proposes three definitions:
  - Theory is a unified, systematic, causal explanation of a diverse range of phenomena
  - Theories help us to predict, therefore they give us some ability to control
  - Theories don't only describe what happens, they explain why it happens



## Difficulties candidates have with theory

---



- Theories for research: transition from description to theory
  - Most common issue: understanding the importance of theory in research
  - How to make the shift from practical problem to a theoretical framework
  - Lack of the ability to think scientifically
  - Going beyond the collection of data, how to look for some pattern, some linking of the pieces
- Theorising findings
  - Generalising from specific research to theories or models
  - Transition from specific content area to being able to theorise, to argue, to present for a broader interest
  - Develop a model (can be used in other situations)



## Strategies to become “unstuck” w.r.t. theory

---



- Group discussions
- Writing
  - How can I know what I think until I see what I write?
  - How can I improve what I write until I clarify what I think?
  - Writing is the only way you can get a line of logic in your mind
  - Get them to write early and often
- Structuring reading
  - Provide guidance with reading
  - Follow up with discussion, probing theory not description

