

# Threshold concepts and transformational learning in the clinical setting

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### Threshold concepts

- Are described as 'conceptual gateways or portals' that lead to previous inaccessible ways of thinking of something
- a new way for the learner to experience, perceive, interpret and understand a phenomenon
- changing the internal view of a subject matter, subject landscape or even world view

(Meyer and Land 2005)

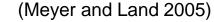




### Threshold concepts

- Traditionally, threshold concepts are abstract constructions about knowledge and cognition in relation to a theoretical content
- The "jewels" in the curriculum
- Qualitatively separated from key concepts





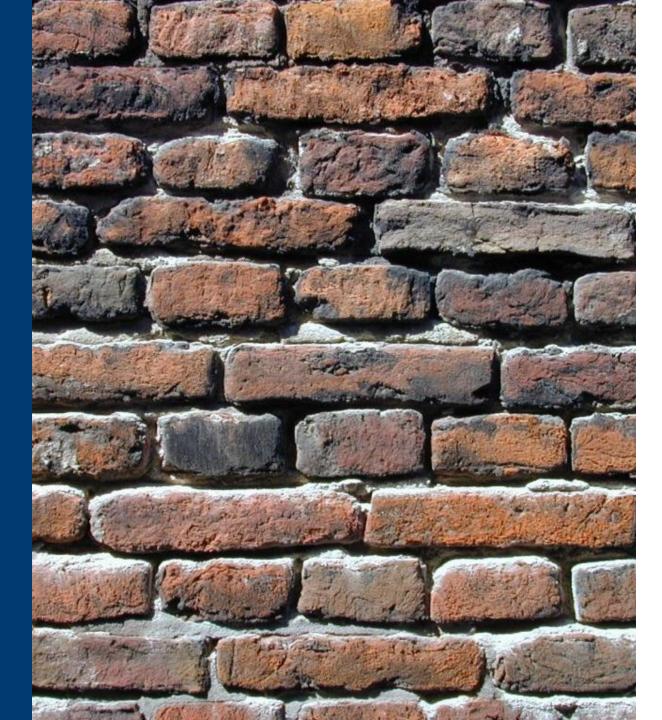


# Threshold concepts are transformative

- A previously inaccessible way of thinking of something
- An epistemic shift







### Threshold concepts are irreversible

- Once understood the concept can not be "ununderstood"
- Like bricks building a wall concepts build up our understanding...



### Threshold concepts are integrative



- Previously "hidden" relationships between different aspects of the subject landscape are revealed
- Can take time or accur sudden like "a click"



### Threshold concepts are bounded

 Are bounded to a specific disciplinary setting and are viewed and understood through "the glasses" of that setting





### Threshold concepts are troublesome



- Challenging, difficult
- Counter-intuitive
- Does not "fit" with your conceptual "map", view of knowledge, the subject landscape or even world-view



### Threshold concepts are discursive

 Crossing of a threshold will encorporate a new and extended use of language that charcterises particular disciplinary discourses







### **Disjunctions**

 Disjunctions are "spaces" or "positions" experienced through the realization that knowledge is troublesome, for instance after encountering a threshold concept, moving the learner into a liminal space that can be transitional and transformational.





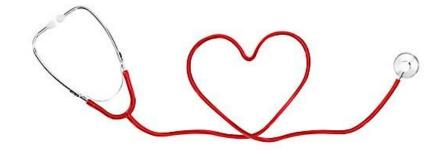
# In connection to variation

- In connection to variation theory and discernment, it can be interpreted that a threshold is a variation perceived by a student as so extensive that it changes the way the learner can view an 'old concept'.
- The old view is thus so challenged that it creates a disjunction that cannot be ignored by the learner.
- This disjunction can be perceived as a threshold.



#### **Theoretical? Practical?**

- Threshold concepts have thus far mostly been acknowledged to elucidate learning processes mainly connected to theoretical concepts.
- However, the focus on professional development and learning in practice in studies makes it interesting to expand on the recent reasoning concerning threshold concepts into threshold conceptions or "practical thresholds".





#### Practical dimension of thresholds



 The idea of a practical dimension to thresholds is supported by Land and Meyer (2011) who in relation to the ontological transformations, i.e. changes in being, identity or awareness, claim that thresholds might not be strictly conceptual but also connected to procedural knowledge.



### Thresholds to professional learning



- Later work (Baillie, Bowden, and Meyer 2013) describe threshold capabilities in relation to professional learning
- Several capabilities combined will contribute to the development of overall knowledge capability, i.e. the ability to deal with previous unseen situations and by working out key aspects, relating to previous knowledge, determining the problem, designing a solution, and having the ability to follow through
- Rather than know a lot about nursing 'think like a nurse'



### **Transdisciplinary thresholds**



 Theoretical thresholds that are common in various different disciplines



# Critique of the Threshold concepts framework

- No generic threshold concepts
- Different for every student
- Concepts or abilities?
- Not possible to test empirically





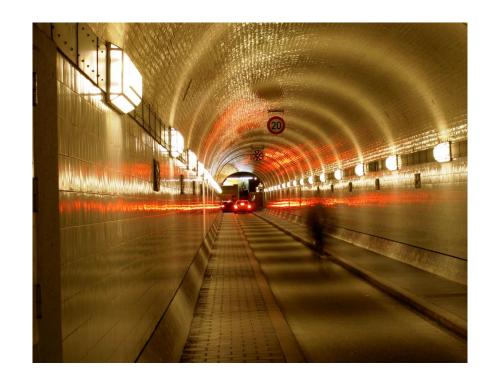
#### DISKUSSION

- Teoretiska tröskelbegrepp i era ämnen el. utbildningar?
- Praktiska?
- Transdisciplinary thresholds?
- Andra kommentarer? Frågor?



## The tunnel metaphor – moving into the tunnel

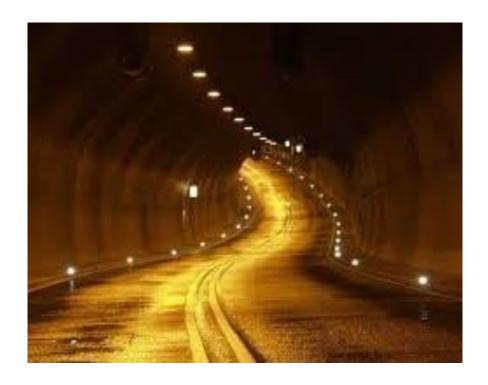
 Land et al (2014) depict this transformation as a cognitive tunnel where the liminal space within the tunnel is entered when triggered by a disjunction.





### Moving into and through the tunnel

- Land et al (2014) describes the process of moving into the cognitive tunnel via a "portal or gateway" as triggered by the threshold concept
- experiencing disjunction and moving through the liminal tunnel
- and coming out with a shift in learner subjectivity, a discursive shift, or a shift of a conceptual, ontological or epistemological nature.







# Learning in the liminal space

- Learning in the liminal space often entails oscillation between different states and emotions.
- The liminal space is characterized by a stripping away of old identities, oscillation between states and personal transformation (Savin-Baden, 2008).
- To tolerate uncertainty...



### Suspended dimension



- There can also be a suspended dimension in the liminal state
- Mimicry or lack of authenticity
- To act "as if you understand"





# Professional identity transformation

- Transformation of identity or professional identity is closely linked to thinking and language. When students acquire threshold concepts they also extend their use of language, natural, formal or symbolic, in relation to these concepts – thus setting the stage for a shift in learner subjectivity, a 'repositioning' of the self.
- The findings of this study indicate that similar transformational learning processes can be triggered by practical experience that thus can have a powerful impact on thought processes, identity and professional identity development.
- (Meyer and Land 2005)





# Which form transforms?

- Professional identity
- View of a subject matter
- A transformed way of understanding



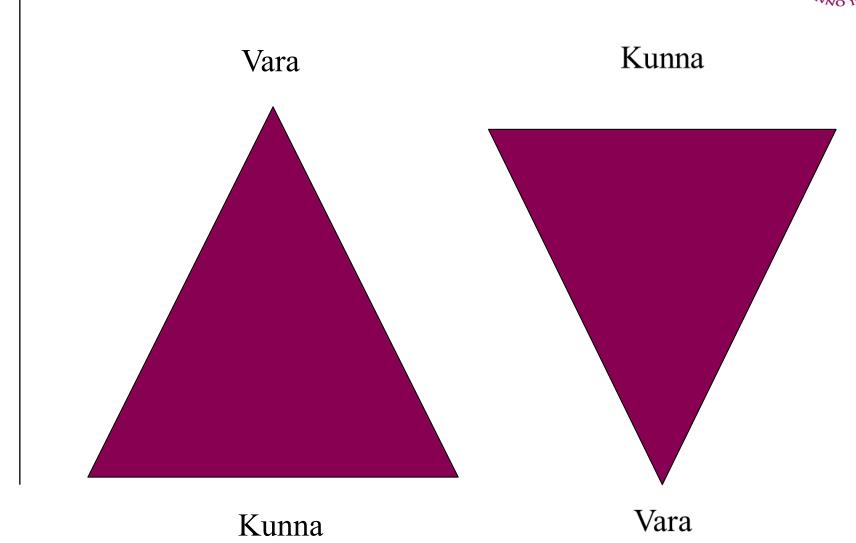
### **Professional identity**

- To BE or to KNOW?
- The development of an professional identity is a change in subjectivity or ontology – in the sense of how to be a professional









#### Thresholds and communities of practice



- To sustain engagement in a community of practice you need the ability to interpret and use the repertoire of that practice.
- In the history of a community of practice lies embedded the artefacts, actions and language of this community, and the shaping of a professional identity lies in becoming a part of that history (Wenger 1998).





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#### UNDERSTANDING THE MEANING OF AUTONOMY

Creating a learning space for professional becoming in clinical education

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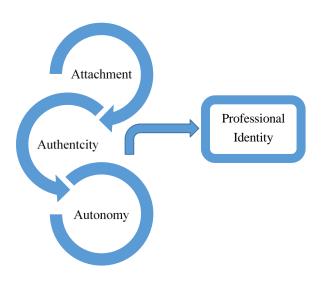


Figure 4 – The interrelatedness of findings: Attachment as a condition for experiencing Authenticity and Authenticity as a prerequisite for Autonomy and as leading to a Change in professional identity.



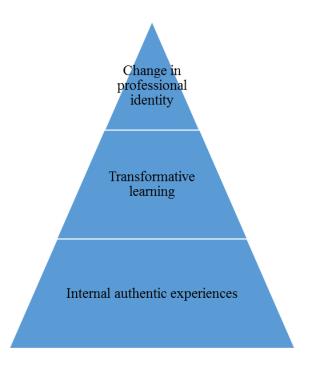


Figure 3 – Internal authentic experiences leading to transformative learning and a subsequent change in professional identity.



#### Study III

The practice of thresholds: autonomy in clinical education explored through variation theory and the threshold concepts framework

Fredholm, A., Henningsohn, L., Savin-Baden, M., Silén, C. (2019). Teaching in Higher Education. https://doi.org/10.1080/13562517.2019.1567486





## Practical thresholds

- Students' narratives all entailed information about the disjunction, of the liminal space and of the resulting shift. This was all related to a practical experience functioning as a trigger for moving into the tunnel, learning in the tunnel and coming out 'on the other side' of the tunnel with a changed view.
- The driving force for movement through the tunnel was the students' inner motivation for learning originating from the perceived meaning of the practical experience.
- The self-evident nature of the authentic practical experience, and the need to master these situations created movement and transformational learning.



