



The Development of Phenomenography and
Variation Theory...

From a research methodology to a
theory of learning

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Developments over time

Key developments:

- Phenomenography is born
- Methodological developments
- Theoretical developments
- Pedagogical developments

Key publications, eg:

- Marton 1981
- Bowden & Walsh 1994
- Marton & Booth 1997
- Marton & Tsui 2004

Shifting research questions accompanying the developments

- **Methodological developments**
 - What are the different ways of experiencing a phenomenon? (original focus)
- **Theoretical developments**
 - What features of the phenomenon are discerned (not discerned) within those ways of experiencing?
- **Pedagogical developments**
 - How design instructional activities to increase potential for discernment of these different aspects?

Key concepts associated with each focus

- **Ways of experiencing -- Outcome space**
 - Categories of description
 - Inclusive relationships; nested hierarchies
- **Critical features -- Dimensions of variation**
 - Theory of awareness/learning
 - Variation ~ Discernment ~ Simultaneity
- **Variation Theory -- Learning Studies**
 - Space of learning
 - Patterns of variance/invariance

Methodological foci

- Meaning/Awareness
- Intentionality
- Variation/Range
- **Structure/Relationships**
- Holistic/Collective
- Second-order perspective

Theoretical foci

- Non-dualistic epistemology
- Variation ~ Discernment ~ Simultaneity
- **Dimensions of variation**
- Relevance structure
- Internal/External horizons of awareness
- Direct/indirect object & act of learning
- Learning as expanding awareness

Pedagogical foci

- Space of learning
- Patterns of variation
- **Variant/Invariant Dimensions**
- Objects of Learning
- Intended ~ Enacted ~ Experienced Objects
- Contrast ~ Generalisation ~ Separation ~ Fusion

Example: Ways of experiencing

Categories of description for conceptions of teaching:

- Transmitting information to students
- Developing good relations with students
- Engaging students with the subject
- Facilitating students' learning & development

Example: Critical features

Dimensions of variation associated with the different ways of experiencing:

- Role of students
- Learning outcomes for students
- Benefits to teachers

Example: Space of Learning

Patterns of variation required to help discern the critical features:

- Opportunities to experience variation in each critical feature separately via patterns of variance/invariance:
 - Discuss quotes from different students in same situation
 - Discuss quotes from same students in different situations
 - Discuss quotes from different teachers using same methods
- Opportunities to experience variation in all critical features simultaneously via combined variation
 - Revise description of approach to teaching

The pedagogical potential of Phenomenography & Variation Theory

To maximise pedagogical potential, need to integrate all 3 stages of development:

1. A Phenomenographic investigation of variation in understanding of a key concept – ways of experiencing
2. Use of Variation Theory to identify what is discerned and not discerned in different experiences of that concept -- dimensions of variation
3. Use of Variation Theory to inform teaching practice – design of the space of learning