



Variation in ways of analysing 'enacted' phenomena

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Different kinds of phenomena

- Abstract, academic, ‘second-order’ knowledge (Laurillard, 2002):
 - eg students’ conceptions of recursion or the mole
- Enacted, directly experienced
 - eg ways of experiencing learning or professional practices



Points to note

- Whichever analytic framework is used, analysis involves iteration between data and categories, comparison between parts of the data and comparison between categories
 - different frameworks lend themselves to asking different focal questions when reading the data
- The analytic frame of act, object and indirect object can be useful for enacted phenomena described as wholes
- An alternative is to describe parts as conceptions and approaches, if you intend to show how approaches can vary according to experienced situations
- Different kinds of outcome spaces are possible - structural/referential or thematic



My PhD study: focus questions

1. How do university teachers' ways of experiencing teaching change? In particular, how do teachers become capable of experiencing teaching in student-focused rather than teacher-focused ways?
2. Why do some teachers' ways of experiencing change from teacher focused to student focused, while others remain teacher focused?



Theoretical perspective

- Variation, learning and awareness (Marton and Booth, 1997; Marton and Tsui, 2003)
 - Non-dualist perspective on awareness
 - Intentionality
 - Variation, discernment and simultaneity
 - Patterns of contrast, separation, fusion and generalisation necessary for learning
 - The experienced relevance structure for learning



Methodology overview

Longitudinal, interview-based study

- 22 teachers interviewed 3 times over 2 yrs
- 5 teachers interviewed twice over a year

Phenomenographic and related analyses:

- Variation in ways of experiencing teaching, including patterns of critical aspects
- Variation in ways of experiencing *change* in teaching, including experienced variation
- Interpretation of change over time in teachers' ways of experiencing teaching
- Relational analysis of themes relating to change over time
- Vignettes of individual teachers



Example 1

Ways of experiencing change in teaching:
first and final versions of categories and relations
between them

Analyses:

- structural and referential
- experienced patterns of variation

My intentions:

- to focus on the patterns of variation that teachers experienced in changing teaching
- to argue for a particular outcome space structure



Version 1: Provisional findings: Teachers' experiences of learning about teaching - 4 categories

- Learning to experience teaching differently - changing conceptions in a particular situation
- Developing a better understanding of teaching and learning
- Acquiring more or better teaching strategies
- Learning to select and structure content better



First version: relations between categories

- Categories are hierarchical and semi-inclusive:
 - more complex categories include components of lower categories but the focus and meaning of the aspects of these categories are different
- Categories do not appear to be developmental



Final version (for the thesis)

Ways of experiencing change in teaching

- cA: changing the content which is taught in order to improve teaching
 - cA1 changing the selection of content included or excluded in order to improve teacher interest or student motivation
 - cA2 changing the way the content is organised for and represented in teaching in order to improve teaching efficiency or teacher comfort
- cB: changing teaching strategies in order to improve teaching
- cC: relating teaching more closely to learning in order to improve students' learning
- cD: coming to experience teaching in a more student-focused way through improving understanding of teaching and students' learning



Final version: outcome space

Structural aspect



Teaching focus

Student learning focus-teaching in the background

Teacher learning and student learning focus

Referential aspect

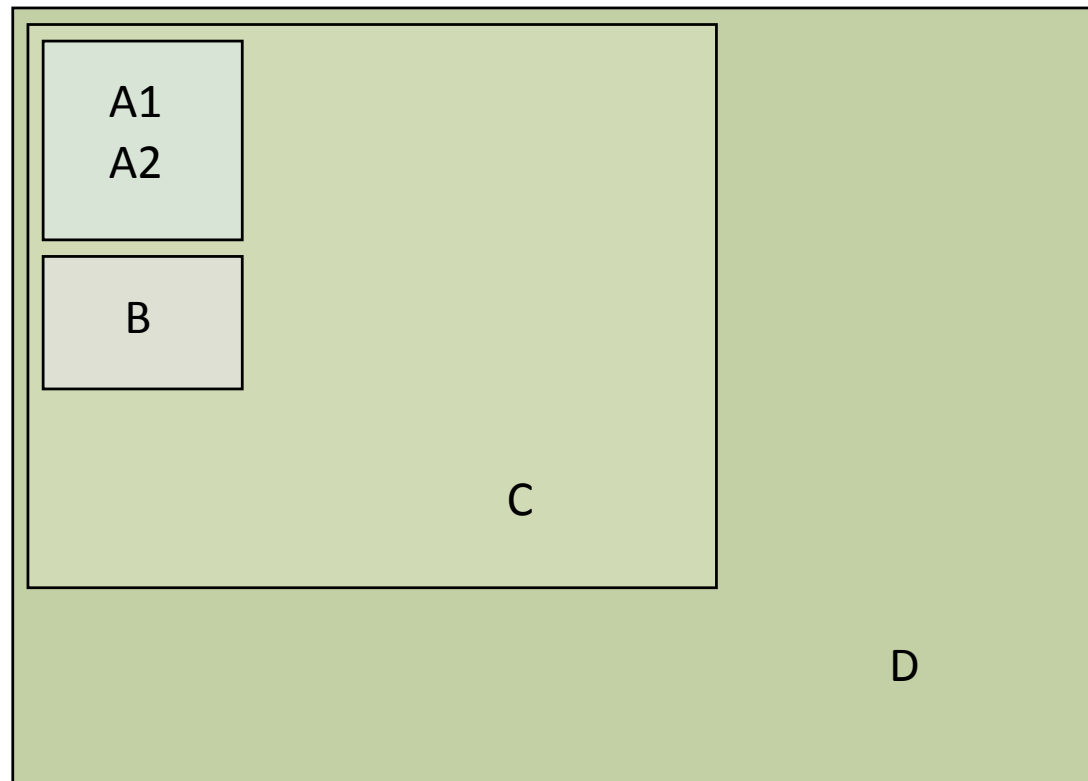


Content selection organisation

Teaching strategies

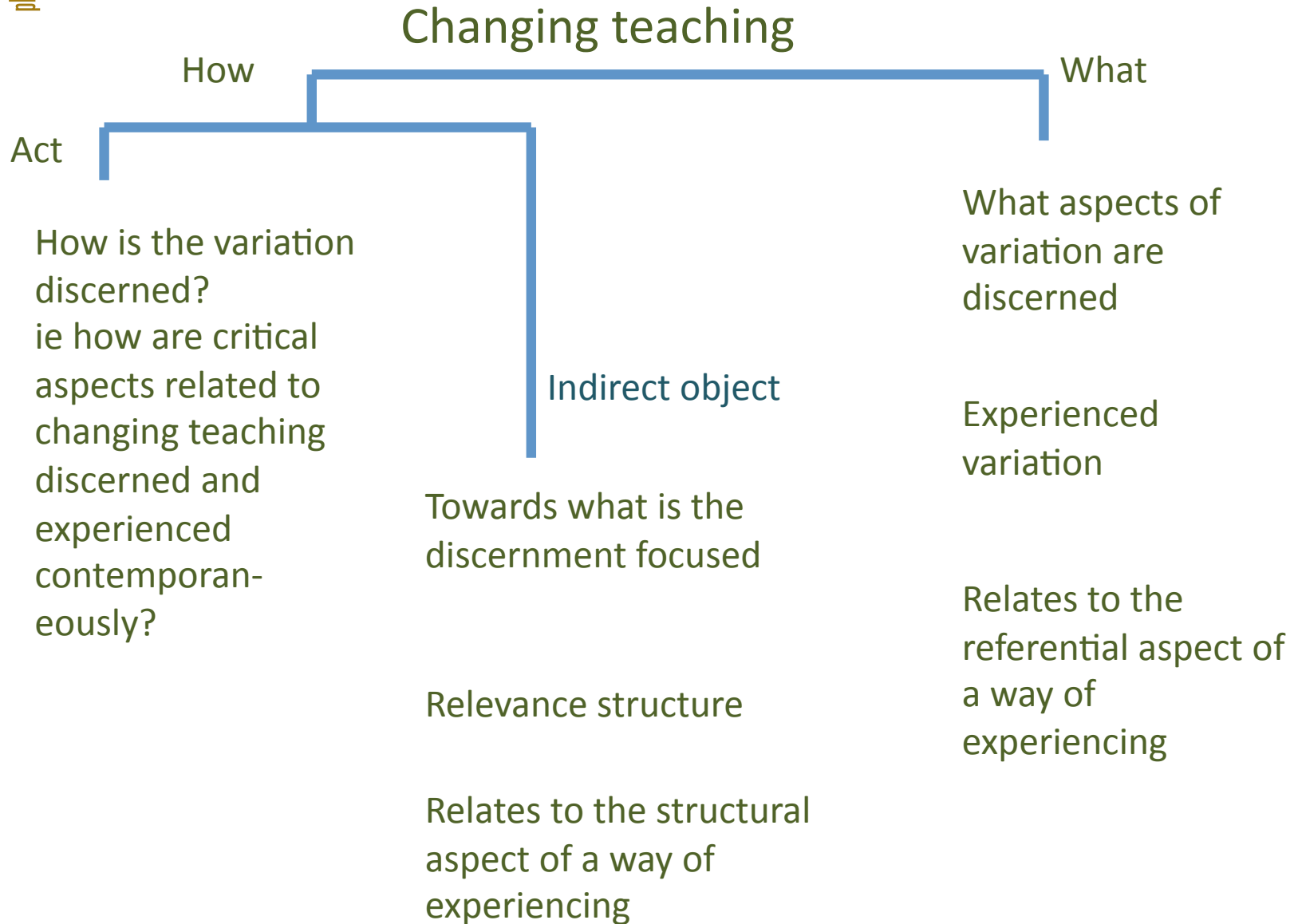
Relating teaching to learning

Experiencing teaching differently





Variation and the structure of awareness





Example of B: Changing teaching strategies

I just have never really thought much about using groups, groups for teaching purposes. ... with people like him [a colleague], I'd say, "Well how did you go with this session" where we were both tutoring in the one area "I was nearly hoarse by the end of it and the students didn't know what was going on" or "No one had read in the session". He said "Why didn't you just break them up into groups and get them to talk" and I thought, "Oh yes, I suppose" and I did try it and it worked quite well ... like, "Oh yeah, so and so doesn't talk in class, we'll put them with other people that are a bit more talkative" And the people that actually came out in group discussion were actually quite lively, whereas they wouldn't have been in a broader group. ... I think actually getting back into full time and thinking more about teaching strategies, whereas when part time it was very much rushing in off the street, I'd just got prepared and that sort of stuff.

(Chris2)



Example B analysis

- Variation brought about on teaching strategies - whether they “work” or not - and student behaviour/reaction - participating and preparing or not
- Variation discerned through acquiring and applying, and reflection on/“thinking about” teaching strategies
- Focus on teaching - what the teacher does - with the intention to solve a teaching problem



Example of D: Changing ways of experiencing

I'm a lot more focused on "what am hoping they are going to learn today". And, I focus on that a lot more and "how can I and what are ways I can get them to learn and what are ways that I know that they have learned". ... It's partly to do with more familiarity with the course and generally a greater level of confidence and experience. I am much more focused on those things which are obviously more important than more self-centred thinking "What am I going to do? How am I going to stand up in front of my students today?"

...You are much more aware of things that maybe don't work so well and you are interested in asking the question "Why?" and comparing notes with other people. I think just putting teaching into focus for a year, that very thing makes you think about it a bit more. ... having read Ramsden and few other books which explain concepts and how things work and what you are looking for, you have a different perspective on the way you look at things and are more confident because you understand the theory behind it rather than seeing what is happening on the surface. (Sarah 2)



Example D analysis

- Variation brought about on ways of experiencing teaching and depth of understanding - having a different perspective, focusing more on student learning, understanding the theory behind things
- Variation discerned through reflection, “putting teaching into focus”, explanatory literature, comparing notes with others
- Focus on teacher learning and student learning with the intention of becoming a confident student-learning focused teacher



Variation in teachers' descriptions of change in teaching

Structural aspect



Teaching focus

Student learning focus-teaching in the background

Teacher learning and student learning focus

Referential aspect



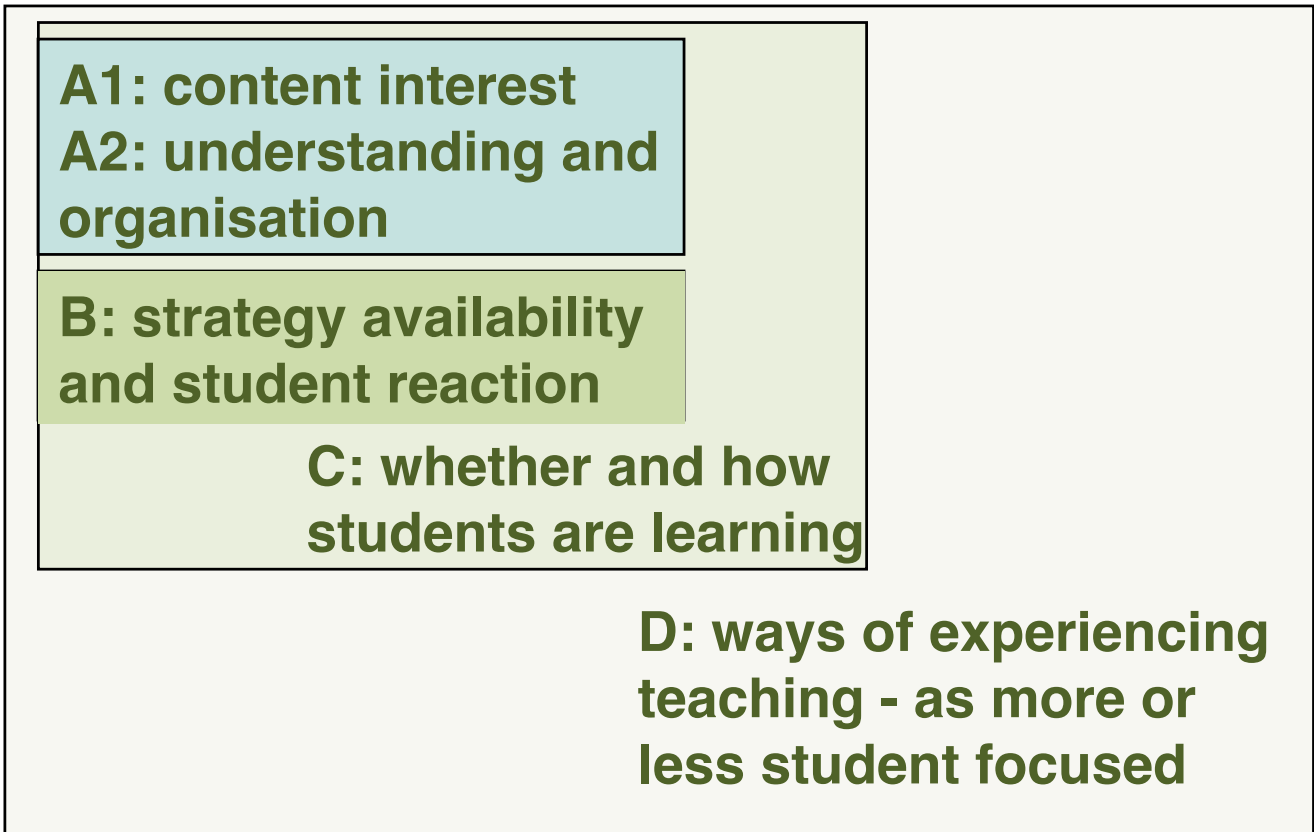
Content selection organisation

Teaching strategies

Relating teaching to learning

Experiencing teaching differently

Variation brought about on:





Example 2

Ways of experiencing teaching

Analyses:

Structural and referential

Critical aspects and experienced variation

Themes of expanding awareness (later)

My intentions:

to highlight critical aspects that needed to be experienced in order to change ways of experiencing and provide a traditional outcome spaces for examiners



Ways of experiencing teaching

- A: transmitting information so that it is passed on to students
- B: organising, explaining and demonstrating information so that students acquire disciplinary concepts and methods.
- C: teacher-focused interaction with students and student activity to help students to become capable of using the concepts and methods of the discipline or profession.
- D: a facilitative process of relating teaching to learning to help students to develop their own disciplinary or professional understanding.
- E: guiding students to explore and develop professionally and personally and become independent as learners
- F: challenging and enabling students to change the relation between themselves and the world.



Ways of experiencing teaching

Structural →	Teacher focused		Student focused		
	Teaching and content focus	Activity focus	Student understanding focus	Student development focus	Student change focus
Meaning (referential) ↓					
Transmitting	A				
Organising and explaining	B				
Helping students to acquire and apply concepts and methods		C			
Helping students develop their understanding			D		
Guiding students to explore and develop				E	
Challenging and enabling students to change					F



Critical aspects of student-focused ways of experiencing teaching

- two-way interaction with mutual learning;
- finding out about and responding to students' understandings and experiences;
- students' understandings seen as qualitatively rather than simply quantitatively different from teacher understandings;.
- students come to understand through developing their knowledge, rather than absorbing or acquiring untransformed knowledge;
- explicit awareness of variation in ways of experiencing teaching.



Categories C and D

- C *help them to use that information in applications and things like that. ... and to also ask [a] lot of questions to students to see whether, how far they get understanding about it, the topics they have to do. (Ramesh2, Sci)*
- D Helping them to understand the material, understand the concepts, understand the subject, I guess that means try to *identify where their misconceptions are and trying help them come to grips with those. ... I think another problem ...is we spoonfeed them too much, and ... whatever knowledge they do gain they don't really own. It's just something someone has given them ... so I think if you're going to facilitate the learning then it should be much more helping them sort of learn it for themselves. (Matt2, Eng/IT)*



Themes of expanding awareness in ways of experiencing teaching (using a synthesis of different studies)

	A	B	C	D	E/F/G	H
Direction and purpose of communication	One way-transmit info	Mostly one way- explain	Two way-check acquisitn	Two way-negotiate meaning	Two way-guide, challenge	Two way-guide, challenge
What is taught	Given pieces of info	Given structured info	Given concepts and skills	Relation between student & subject	Relation between student & subject/ world	Relation between student & subject/ world
Intended outcomes of teaching	Info passed on, teacher job done	Info acquired	Competence, Concepts and skills used	Student understanding	Student development, change	Student development, change Knowledge creation



Example 3

Dissemination of innovations

Analysis: themes of expanding awareness

- My intention: educate the reader/potential grant applicant about ways in which dissemination can be seen and enacted, and the potential breadth of impact of these different ways of seeing and acting



The dissemination study

- Case studies of 14 successfully disseminated projects
 - Document analysis
 - Interviews with developers, team members and ‘adopters’ (3-12 interviews per project, typically 4)
- Interviews with some dissemination ‘agents’ - eg academic developers, HEA subject centres, UniServe Science



Ways of experiencing dissemination

- A: Dissemination as **distributing** project products or information
- B: Dissemination as **telling others** about the project (so people know about it)
- C: Dissemination as providing information and supporting use so that **others use** the project outcome
- D: Dissemination as **spreading and embedding** project impact so that its impact is wider and more sustained
- E: Dissemination as an **ongoing two-way process** aimed at bringing about change in the culture of teaching and learning



Some patterns of variation in ways of experiencing dissemination

Category	A	B	C	D	E
Direction and purpose of communication	One way - distribute info or product	One way - provide info and enthuse	One way - provide info on project and use	Two way - implementation	Two way - collaboration and development
What is disseminated	Fixed product and info	Fixed product and info	Fixed product and info to assist use	Adaptable product, or processes, prototypes	Ideas in development, prototypes, processes
Intended outcome of dissemination	Awareness	Enthusiastic awareness	Use	Spreading & embedding	Change in teaching and learning culture
Intended breadth of impact	Recipients, developer	'Audience', developer	Users and their students	Disciplines, Faculties, institutions	Institutions, the HE sector, society



Some similarities between ways of experiencing dissemination and teaching

- Both show a pattern of inclusive awareness - people aware of engaged dissemination are aware of passive dissemination and those aware of student-focused teaching are aware of teacher-focused, but not vice versa.
- Similar patterns of variation from:
 - teacher-focused to student-focused ways of experiencing teaching and
 - distribution-focused/passive to engaged ways of experiencing dissemination



Similar patterns of variation between ways of experiencing dissemination and teaching

the nature of knowledge and outcomes	given, fixed, end product		personalised, adapted, collaboratively produced
direction and purpose of communication	one way transfer of info or product		two way development, with mutual learning
intended outcome	reception	acquisition and use	development and change, mutual learning
intended breadth of impact	receivers teacher/ developer		broader communities disciplinary, institutional



A point of difference

- Dissemination is seen as a research-like activity in less complex ways of experiencing and as involving both teaching and research-like activity in more complex ways:
 - Distribution by publication is seen as necessary in all ways of experiencing dissemination.
 - Publication is not intended to achieve use, embedding and change. These are the focus of ‘engaged’ dissemination activities more akin to teaching and learning/academic development.
- Teaching is more likely to have research-like qualities in more complex, student-focused ways of experiencing



Conclusions and questions

- There are some evident similarities in ways of experiencing dissemination and teaching, but also a key difference
- Why might teachers who are aware of student-focused ways of experiencing teaching experience dissemination in a passive, distribution-focused way?
 - basing teaching innovation project development and dissemination on their research experience - seeing dissemination as a research-like activity?
 - seeing dissemination as an unnecessary and unrecognised burden on top of project development?
 - lacking skills and understandings necessary to take on the change agent or academic development roles necessary for engaged dissemination?



Variation in approaches to analysis

- 'Enacted' phenomena
- Choices in analysis