Beyond Bourdieu and Bernstein: Legitimation Code Theory

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Plan

1. Why do we need to see knowledge practices?

2. How can we see knowledge practices?

3. What do we gain from seeing knowledge practices?
   1. greater explanatory power
   2. practical impacts
   3. meta-language for understanding research
   4. building cumulative knowledge
Plan

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The knowledge paradox

Two features of accounts of contemporary social change:

1. claim knowledge is central to economy, politics, culture and personal life; e.g.:
   - many theorists in the past: Bell, Touraine, Masuda, Beniger, Machlup, Porat, Lyotard, Harvey, Drucker, etc.

2. lack a theory of knowledge
   - e.g. ‘a set of organized statements of facts or ideas’ (Castells 2000a, p.17, n25)
Knowing

‘scientific understanding of learning includes understanding about learning processes, learning environments, teaching, socio-cultural processes, and the many other factors that contribute to learning. Research on all of these topics, both in the field and in laboratories, provides the fundamental knowledge base for understanding and implementing changes in education’

(Bransford, Brown & Cocking, 2000, How People Learn, p. 233)
Constructivism

- dominant approach to education in many countries, including Australia
- a theory of learning that is often seen as a theory of teaching, of curriculum and of research
- based on belief that ‘the more basic phenomenon is learning’ (Lave and Wenger 1991: 92)
- what people are learning is obscured

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‘Epistemological dilemma’

Either / or choice between:

• positivist absolutism
  – knowledge as decontextualised, ‘objective’ and value-free

• constructivist relativism
  – knowledge as socially constructed and entwined with power and interests

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False choices

• *intellectual fields*
  – either formal properties of knowledge or play of power among actors
  – either ‘relations within’ or ‘relations to’ only

• *educational fields*
  – either transmission of knowledge or valorising experiences of knowers
  – e.g. teacher-centred versus student-centred

• *either* epistemic relation *or* social relation (LCT)
Knowers

• ‘new sociology of education’ of 1970s, standpoint theories, ‘critical’ theories, various ‘constructivisms’

• key moves:
  – Knowledge is socially constructed
  – …rather than related to something real.
  – So, reality is socially constructed,
  – and knowledge is only relative to a standpoint.
  – Thus knowledge is arbitrary and only reflects dominant social interests.
  – Main aim should be to unmask all claims of knowledge as merely somebody’s knowledge
Knowledge-blindness

• ‘space of possibles’ is subjective knowledge only:
  – inside our minds (knowing)
  – someone’s perspective (knowers)

• studies of knowledge as an object are seen as essentialist, asociological and ahistorical

• knowledge equated with contents
Socrates in Plato’s *Theaetetus*

- You are over-generous, my friend. I asked for one, and you are offering many; I asked for something simple, and you respond with complexity.

- But the question was not “What are the objects of knowledge?”, nor ‘How many branches of knowledge are there?’. We didn’t ask the question because we wanted a catalogue, but because we wanted to know what knowledge is.

- Doesn’t it strike you as dishonourable for us to assert what knowing is like, when we are ignorant about knowledge? … getting clear about knowledge is altogether one of the highest achievements.
Plan

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Social realism: a coalition of minds

• coalesced from late 1990s onwards; focus:
  – ‘For knowledge’ (Moore 2000)
  – ‘Recovering pedagogic discourse’ (Maton 2000)
  – *Reclaiming Knowledge* (Muller 2000)

• ‘second wave’ of scholars

• draws from:
  – sociology, e.g. Bernstein, Bourdieu, Collins
  – philosophy, e.g. Bhaskar, Gellner, Williams
  – systemic functional linguistics - ‘Sydney school’
Power and knowledge

• knowledge of the powerful
  – traditional focus of sociology of education
  – reveal whose position lies underneath supposedly ‘neutral’ or ‘objective’ knowledge

• powerful knowledge
  – neglected by most educational research
  – some forms of knowledge are more powerful than others
  – some forms are better for building knowledge over time, for helping students learn, etc
Legitimation Code Theory (‘LCT’)

• relational and realist sociological framework, created from and for empirical research

Integrates and subsumes:
• Bourdieu – practices are strategies of actors who are positioned in fields of struggle over status and resources
• Bernstein – analyse organising principles of those practices in terms of ‘codes’ and ‘devices’
• critical realist ontology and epistemology
• other influences including Karl Popper, Mary Douglas, Ernest Gellner, Michel Foucault, etc.

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Basic ideas

• Education as a ‘field of struggles’ where actors compete for legitimacy

• Practices and beliefs as *languages of legitimation*: measures of achievement

• *Legitimation device* - ruler of the field

• *Legitimation codes* – organising principles of practices
<table>
<thead>
<tr>
<th>Legitimation Device</th>
<th>Principles</th>
<th>Modalities</th>
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<tbody>
<tr>
<td></td>
<td>Autonomy</td>
<td>PA+/-, RA+/-</td>
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<td></td>
<td>Density</td>
<td>MaD+/-, MoD+/-</td>
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<td></td>
<td>Specialisation</td>
<td>ER+/-, SR+/-</td>
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<td></td>
<td>Semantics</td>
<td>SG+/-, SD+/-</td>
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<td></td>
<td>Temporality</td>
<td>TP+/-, TO+/-</td>
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<table>
<thead>
<tr>
<th>Principle</th>
<th>Referent relations</th>
<th>Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>external</td>
<td>positional autonomy, relational autonomy</td>
</tr>
<tr>
<td>Density</td>
<td>internal</td>
<td>material density, moral density</td>
</tr>
<tr>
<td>Specialisation</td>
<td>social- symbolic</td>
<td>epistemic relation, social relation</td>
</tr>
<tr>
<td>Semantics</td>
<td>meaning</td>
<td>semantic gravity, semantic density</td>
</tr>
<tr>
<td>Temporality</td>
<td>time</td>
<td>temporal position, temporal orientation</td>
</tr>
</tbody>
</table>
LCT(Specialisation)

ER and SR can each be stronger (+) or weaker (-)

Two strengths give code for Specialisation

ER and SR can each be stronger (+) or weaker (-)

Two strengths give code for Specialisation
Specialisation codes of legitimation

knowledge code

elite code

relativist code

knower code

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Plan

1. Why do we need to see knowledge practices?

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Gains from seeing knowledge using LCT*

1. accounts of greater explanatory power
2. practical implications for education policy
3. meta-language for objectifying fields
4. capacity for building cumulative knowledge

* proclamations of seeing knowledge are insufficient; gains require relational concepts analysing organising principles; ideal types and metaphors will only help partially. If in doubt, consult an independent theoretical advisor with realist credentials.

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(1) Greater explanatory power

Example: Chinese students learning online in Australia
– Rainbow Chen, Sue Bennett & Karl Maton

• Context
  – growing internationalisation of student body
  – growth of educational technologies
  – dominance of constructivism

• Data:
  – in-depth series of interviews with students
  – interviews with teaching staff
  – analysis of teaching materials

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Analysis

1. code ‘heritage culture’
   - educational dispositions brought by Chinese students to Australian higher education

2. code ‘host culture’
   - educational contexts they encounter in Australian university

3. relations between 1 and 2:
   - experiences of these students within these contexts

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• heritage educational culture
  – content knowledge, explicit instructions and criteria,
    strong boundary between everyday and academic
    knowledge, expertise based on knowledge
  – downplay personal opinions and experiences
  – knowledge code (ER+, SR-)

• host educational culture
  – little explicit instruction, content is arbitrary, teacher
    as ‘facilitator’ or ‘co-learner’
  – student as already legitimate knower of personal
    experiences and opinions
  – knower code (ER-, SR+)
• students’ experiences:
  – did not understand ‘rules of the game’
  – did not see themselves or fellow students as legitimate knowers: personal experience of little value
  – did not view pedagogy as teaching anything
  – experienced vacuum of legitimacy

  – relativist code (ER-, SR-)
‘I feel that teachers do not teach in online classes. They raise a lot of questions for us to discuss. What do they teach us? They teach us nothing. They ask us to think, but what if I can’t think of anything? I can sit there thinking all day, not sleeping at all, but I still can’t think of anything. So I don’t think they are teaching me.’

(Vivian, Interview 3)
• students’ experiences:
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  – did not view pedagogy as teaching anything
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  – relativist code (ER-, SR-)
• students’ responses:
  – treat assignments as traditional essays
  – read only teacher contributions
  – write to criteria as much as possible
  – assemble ‘personal’ opinions from literature
  – i.e. continue using past educational practices (knowledge code)

  – led to feelings of inferiority, anxiety, insecurity, frustration, guilt, helplessness and depression
Code clash

• knowledge code students (ER+, SR-) in knower code environments (ER-, SR+):
• did not see SR+ (e.g. personal experiences) as legitimate basis
• so experience knower code as vacuum

= relativist code experience (ER-, SR-) with negative psychological and educational effects

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(2) Policy implications

- **Digital Education Revolution in New South Wales (DER-NSW)**
  - one-to-one laptop program for all Year 9 students (ages 14-15) and teachers
  - evaluation led by Dr Sarah Howard, University of Wollongong

- **Research focus:**
  - influence on pedagogy
  - influence on students’ understanding, skills, and attitudes
  - consequences for students’ educational outcomes

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Mixed-methods evaluation

- Online questionnaires
  - student: access to and knowledge of technologies
  - student: beliefs about technologies, learning and integration
  - teacher: use of, and beliefs about, technologies in teaching and learning

- Case studies of schools: interviews and focus groups

- Document analysis, e.g. curriculum, school policy, government policy, etc.
Context

- existing research shows differential integration across subject areas
- different forms of knowledge practices are largely absent from research
Technological Pedagogical Content Knowledge (TPACK)

Technological Knowledge (TK)

Pedagogical Knowledge (PK)

Content Knowledge (CK)

Pedagogical Content Knowledge
Context

• existing research shows differential integration across subject areas
• different forms of knowledge practices are largely absent from research

=> does form taken by knowledge practices in different subjects play a role in shaping use of technology?
Analysis

a) coding policy goals: practices desired by DER-NSW in use of technology

b) coding existing knowledge practices in different subjects areas

c) analyse relations between these codes to help explain differential integration of technology across the curriculum
• Aims of DER-NSW:
  – shift from ‘teacher-centred’ to ‘student-centred learning’
  – no mention of specialist knowledge or subject content
  – emphasise personal attributes of teachers and learners
  \[= knower code (ER-, SR+)\]

• Subjects:

9. How important are the following things for being good at Maths?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Not very important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having natural talent at Maths.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning knowledge and skills in Maths.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting experience or a ‘Feel’ for Maths.</td>
<td></td>
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</table>

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Code clash and match

• DER-NSW = knower code

• Mathematics = knowledge code
  – lower use of new technologies

• English = knower code
  – higher use of new technologies
Mathematics (interviews)

• ‘Maths is about practice, practice, practice’

• use new technologies for learning mathematical skills – e.g. graphing

• but not for student-centred practices: ‘Oh! You mean the long way around!’

• use less technology and, where used, it is for knowledge code goals

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English

• ‘a love of words, of language itself’
• new technologies used to enable students to express themselves, show their already legitimate insight
• but not for technical skills – e.g. essay structure and grammar

• use more technology for knower code goals but not for knowledge code goals
(3) Meta-language to objectify fields

Informal learning about design
Lucila Carvalho, Andy Dong & Karl Maton

• Context
  – growing emphasis on informal learning
  – growth of new information and communication technologies
  – design as ‘laboratory’ of code clashes and code shifts

• 3 stages of research:

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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</thead>
<tbody>
<tr>
<td>Interviews (N=10)</td>
<td>Online survey (N=139)</td>
<td>PHM design experience (N=13)</td>
</tr>
<tr>
<td>2 engineers</td>
<td>Designers, academic students and staff</td>
<td>Development, implementation of e-learning environment</td>
</tr>
<tr>
<td>2 architects</td>
<td>Engineering (28)</td>
<td>Evaluation with High School Students</td>
</tr>
<tr>
<td>2 digital media</td>
<td>Architecture (65)</td>
<td></td>
</tr>
<tr>
<td>2 fashion</td>
<td>Digital Media (30)</td>
<td></td>
</tr>
<tr>
<td>2 museum of design staff</td>
<td>Fashion (16)</td>
<td></td>
</tr>
</tbody>
</table>
skills, techniques, specialist knowledge
personality, background
both
neither

Scientific
Technical
Methodical
Systematic
Objective
Procedural
Skillful
Driven by knowledge

Social
Empathetic
Driven by taste
Fancy
Glamorous
Individual
Influential
Elegant

Clever
Difficult
Stimulating
Forward thinking
Innovative
Interesting

Average
Old-fashioned
Boring
Phase 2 - survey

- Perceptions of design disciplines
  Task 1 - Use three words to describe design disciplines
  Task 2 - How important are skills, taste & talent?

- Perceptions of designers
  Task 1 - Use three words to describe designers
  Task 2 - Fictitious profiles

- Strategies to identify genuine design
  Task 1 - How often designers in your discipline do X
  Task 2 - Open question - other strategies
Four design disciplines

ENGINEERING

ARCHITECTURE

DIGITAL

MEDIA

FASHION

knowledge code

elite code

relativist code

knower code

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CHOOSE AN OBJECT

Choose from the selection the type of object you would like to design.
Methodic, practical, go direct to the point. Likes: puzzles, manuals. Dislikes: talking about Feelings (Knowledge Code).

Combination of refined “eye” and technical knowledge. Likes: scientific programs about the universe, art. Dislikes: common place (Elite Code).

Average, common person. Likes: beach, BBQ. Dislikes: Philosophy, nerds or sensitive people (Relativist Code).

Feelings, how one experiences object, people’s person. Likes: creative things, art. Dislikes: following rules, Methodical people (Knower Code).

Have advisor assigned according to your choice object.
Knowledge structures

Horizontal

‘a series of specialised languages, each with its own specialised modes of interrogation and specialised criteria ... with non-comparable principles of description based on different, often opposed, assumptions’

Hierarchical

‘an explicit, coherent, systematically principled and hierarchical organisation of knowledge’ which develops through integrating ‘knowledge at lower levels, and across an expanding range of phenomena’
(4) Building cumulative knowledge

• substantive topics
  – educational technology, music, nursing, physics, etc

• educational contexts
  – school, university, everyday ‘informal learning’ contexts

• intellectual and educational practices
  – knowledge production, curriculum construction, classroom teaching and learning

• levels
  – single text, classroom, school, university, discipline, national educational system, etc

• methods
  – surveys, interviews, documentary analysis, etc.

• theories
  – e.g. systemic functional linguistics, critical realism, interaction analysis

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LCT in practice

- nursing
- mathematics
- music
- physics
- biology
- design studies
- neoliberalism
- informal learning in museums
- curriculum and assessment in higher education
- forms of writing in different disciplines
- regionalisation of higher education degrees
- cumulative learning in classrooms
- online internationalised education
- Chinese students learning online
- educational technology
- young people’s knowledge practices with technology
- Freemasonry apprenticeship
- Indigenous Native Title claims

… and many others, available at:

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