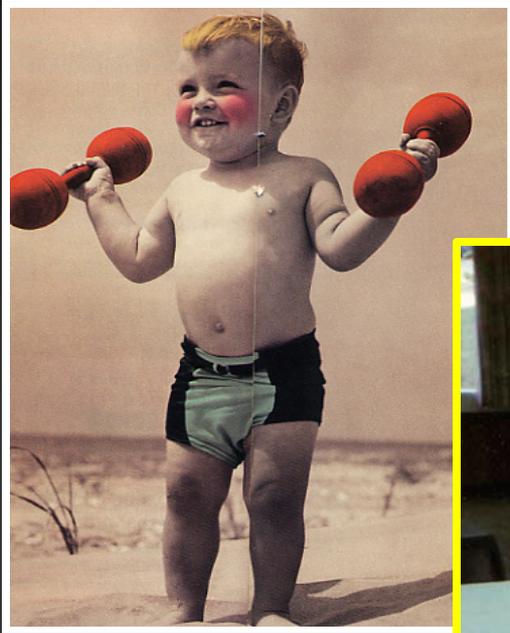


On smelling the lockers?: A reflective view of research methods and methodology in physical education and sport pedagogy

Richard Tinning

School of Human Movement & Nutrition Sciences

University of Queensland



An idiosyncratic account
across five decades

representation

Old School

generalisability

(Has) Been an active researcher
(Australian Research Council grants)

Teaching research methods

truth

Grad students

evidence

Teaching sociocultural
perspectives in HMS

objectivity

knowledge

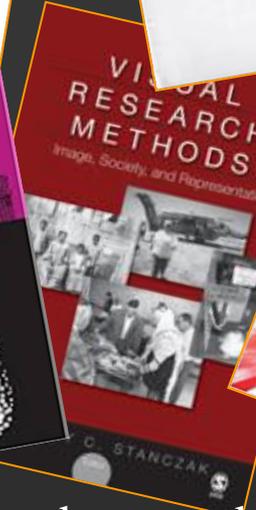
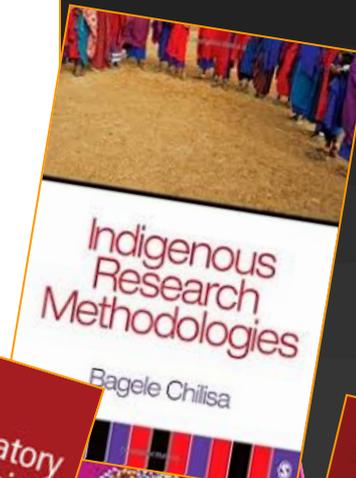
reflexivity

New Methods of Qualitative Research... How to Choose



← OLD WAY

NEW WAY →



There is a “groundswell in, and diversification of, ethnographic methods in sport and physical culture – including feminist/standpoint, visual, sensory, auto-, participatory action, performance and arts-based and mobile to name a few” (Smith & Atkinson, 2017).

“... serious conversations about practices, politics and philosophy of qualitative inquiry have never been stronger in the field of sport, exercise and health”
(Giardina, 2017, p.258).

“... methodological sophistication and experimentation ... is at an all-time high”.





Diploma of Physical Education
1965-1966
University of Melbourne



THE UNIVERSITY OF
WESTERN AUSTRALIA



1971-72
Bachelor of Education (Physical Education)

Geelong Teacher's College (1973 – 1976)
Became part of
Deakin University (1977)



Professor Fred Jevons
The first VC

Needed to adapt to a new culture: a culture
that valued research



University of Melbourne
Master of Education (1976 -1978)



Education NOT physical education

*Theory and method of educational
research (experimental)*

Computer programming (Fortran)



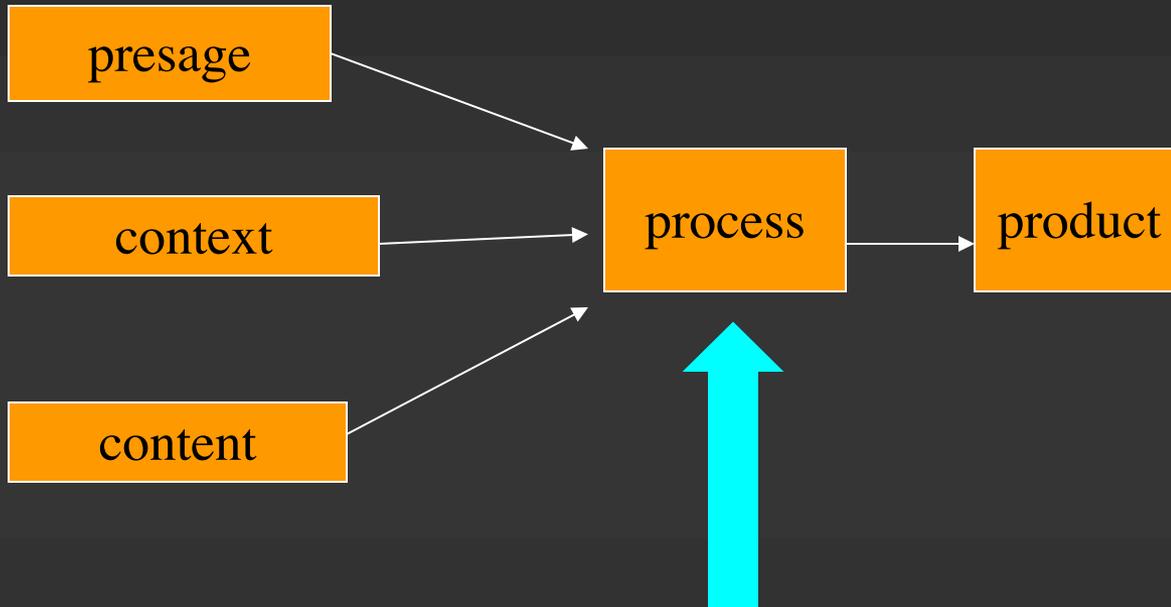


Naturalistic
Inquiry

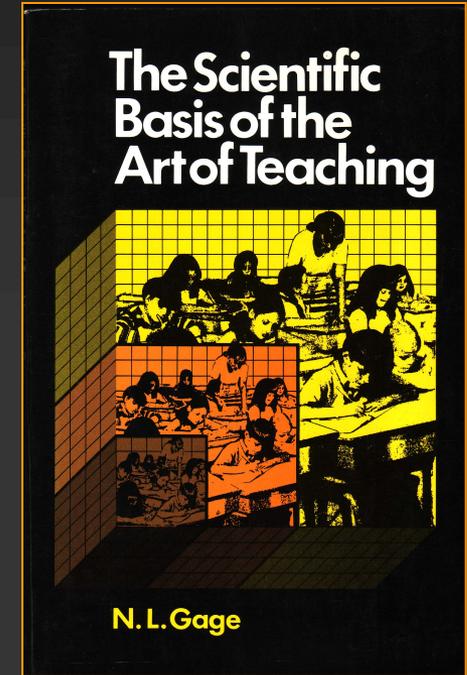
PhD 1981-83

Behaviour analysis

Dunkin & Biddle (1974) model



A black box



Cheffers, J. (1977). Observing teaching systematically. *Quest* 28: 17-28.

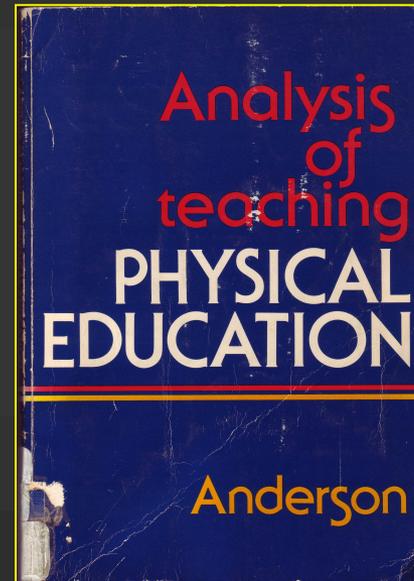
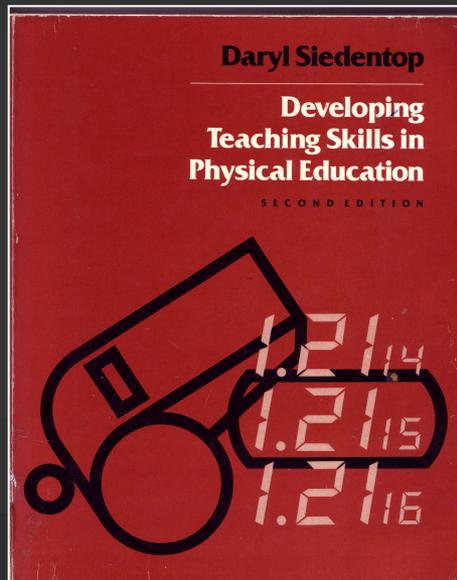
Teacher _____ School _____ Activity _____ Date _____
 Grade Level _____ Time Began _____ Finished _____ No. in Class _____ No. Participating _____

Time Analysis

Wait (W) Periods of an activity and no movement between activities.
Treatment (T) Periods of change from one activity to another (includes lining up or getting down for the next activity).
Management (M) Time related to class business unrelated to instructional activities.
Activity (A) Time related to participating in skill practice, set-plays, games, fitness, or other activities related to the lesson's objectives.
Receiving Information (I) Students are attending to teacher directions or demonstrations, or other class-related information.

	1	2	3	4	5	6
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47						
48						

Figure 16.3 Student Time Analysis Using a Time Line



Teacher: Longtin Date: 3/18 School: Saint J.S.
 Activity: Track Time started: 8:30 Time ended: 9:30
 Length of observation: 90 Observers: Custisiana

1. **Essential SKILL** Observed by: information or performance level
 2. **Essential SKILL** Observed by: information or performance level
 3. **Essential SKILL** Observed by: information or performance level
 4. **Essential SKILL** Observed by: information or performance level

Time	1	2	3	4	5	6
1						
2						
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42						
43						
44						
45						
46						
47						
48						

Figure 16.4 Teacher Observation Analysis Using a Time Line

Locke, L. F. (1974). The ecology of the gymnasium: What the tourists never see. SAPECW workshop.

Among the early qualitative research studies in PE:

Locke, L. F. (1974). The ecology of the gymnasium: What the tourists never see. SAPECW workshop.

Kollen, P. (1983). Fragmentation and integration in human movement. *Teaching in physical education*. T. Templin and J. Olsen. Champaign, Illinois, Human Kinetics: 86-93.

Griffin, P. (1983). Gymnastics is a girl's thing: Student participation and interaction patterns in a middle school gymnastics unit. *Teaching in Physical Education*. T. Templin and J. Olson. Champaign, Ill, Human Kinetics:

Placek, J. (1983). Conceptions of success in teaching: Busy happy and good? *Teaching in physical education*. T. Templin and J. Olson. Champaign, Ill, Human Kinetics

Locke, L. (1985). Qualitative research in the Gym: Research Methodology in *Teaching Physical Education and Sport*. Par'e and e. al. Quebec, University of Quebec: 35-56.

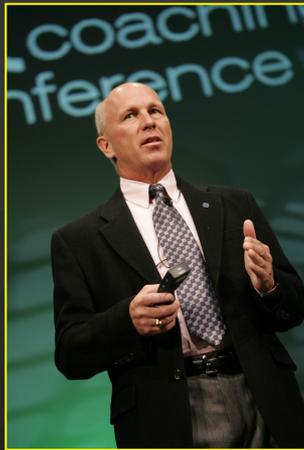


“I can describe the gym so completely you will smell the lockers and hear the thud of running feet” (Locke, 1985)

Siedentop, D. (1989). "Do the lockers really smell?" *Research Quarterly for Exercise and Sport*, **60**(1): 36-41.

Schempp, P. (1987). Research on teaching in physical education: Beyond the limits of natural science. *Journal of Teaching in Physical Education* **6**(2): 111-121.

Siedentop, D. (1987). Dialogue or exorcism? A rejoinder to Schempp. *Journal of Teaching in Physical Education* **6**(4): 373-376.

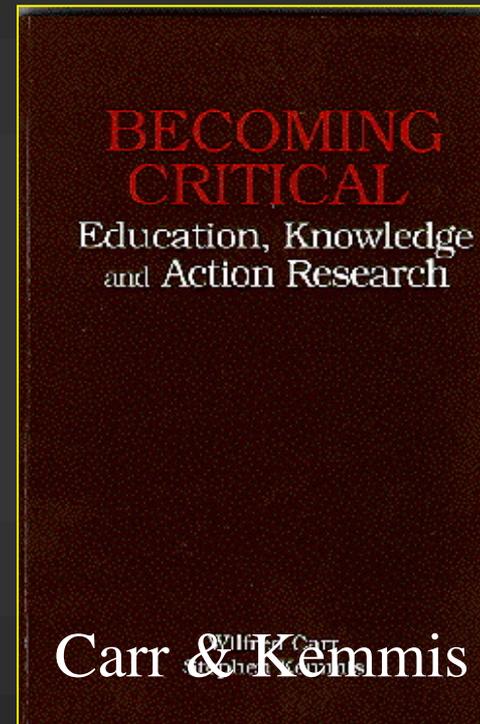


Schempp, P. (1988). Exorcist II: A reply to Siedentop. *Journal of Teaching in Physical Education* (7): 79-81.

Paradigm wars



Back to Deakin education and the rise of the 'critical' scholars

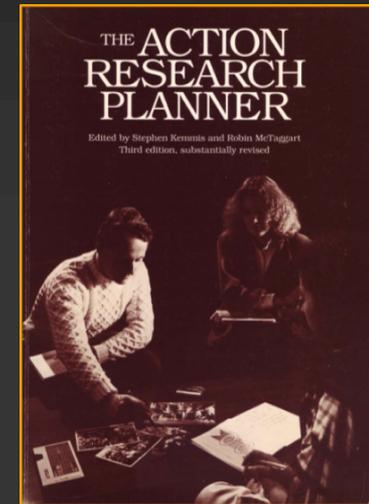


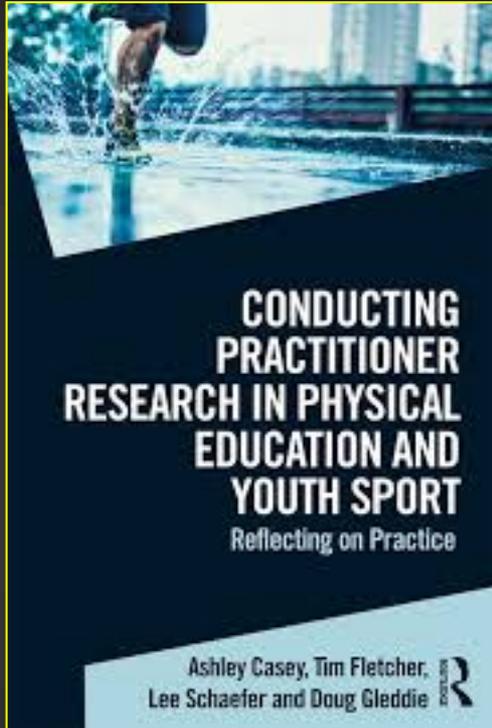
Action research

Tinning, R. (1987). *Improving Teaching in Physical Education*, Deakin University Press.

Tinning, R. (1992). Reading action research: Notes on knowledge and human interest, *Quest* ,44:1. 1-15.

Tinning, R. (1992). 'Action research as epistemology and practice: Towards transformative educational practice in physical education'. In A. Sparkes (ed) *Researching into Physical Education and Sport: Exploring Alternative Visions*, Falmer Press, London.



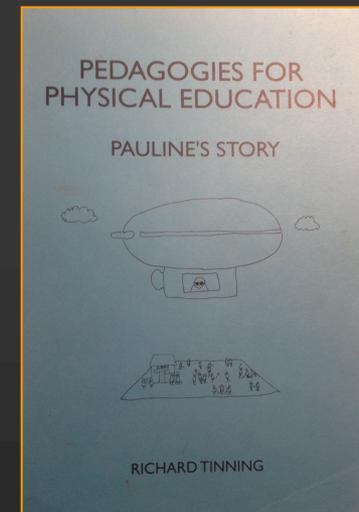


The teacher-as-researcher:
the future survival of physical education

Dr Ashley Casey
University of Bedfordshire

I encouraged my doctoral students to be playful with methods

- Peter Swan included a series of ethnographic fictional stories as part of his doctoral thesis
Between the rings and under the gym mat: A narrative .
- I also tried myself to write in narrative/postmodern form :



From Education to HMS (Human Movement Studies)

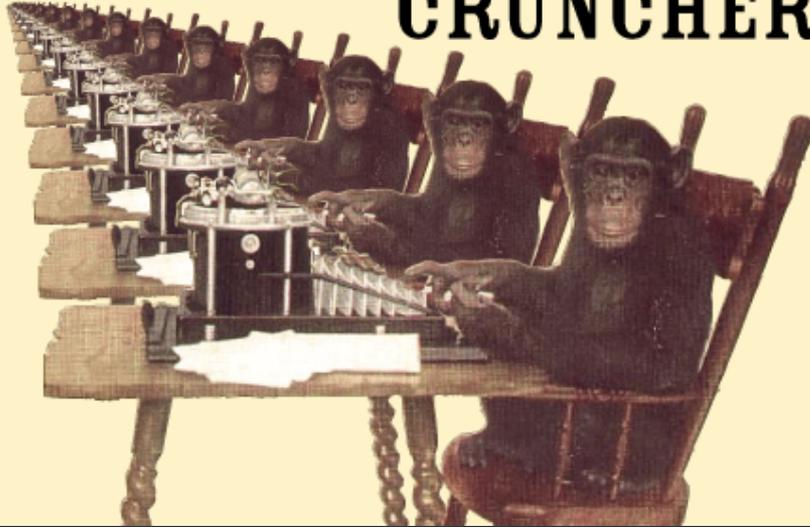
Professor of Pedagogy in the School of Human Movement Studies,
University of Queensland (UQ)



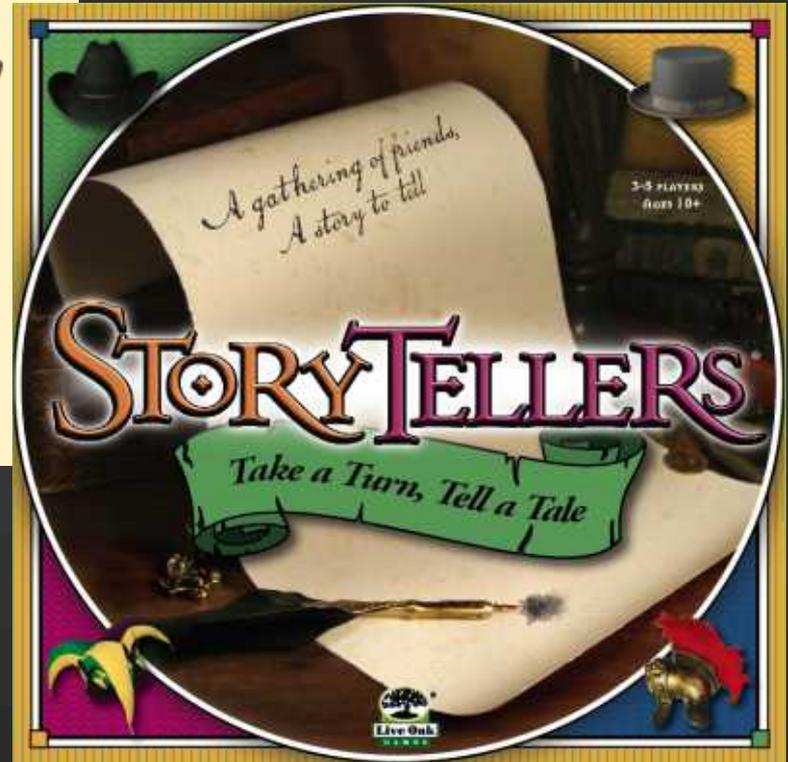
UQ Health
Science

Deakin
Education

THE NUMBER CRUNCHERS



Exercise science and health
promotion researchers



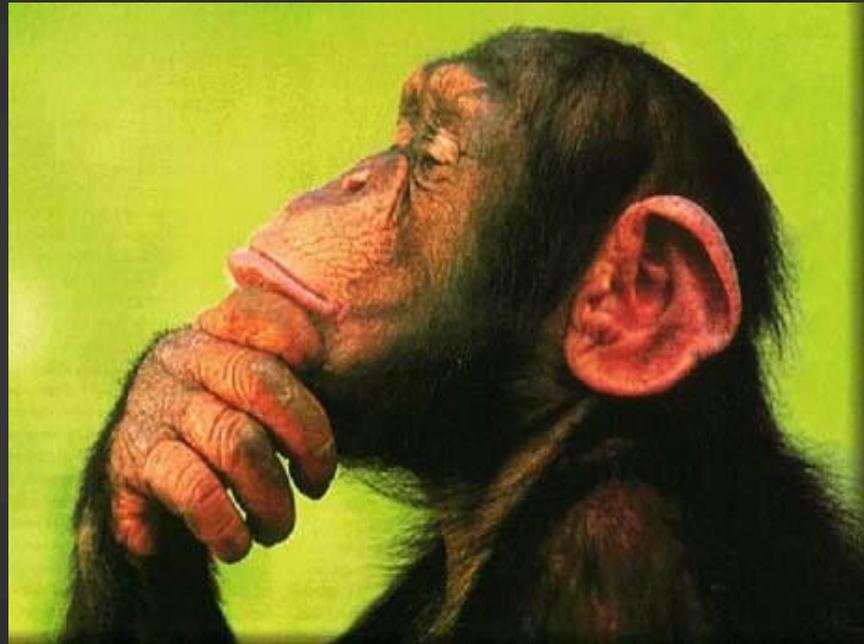
Sociocultural researchers

The trouble with knowledge

- Always invested with human interests
- Whose 'truth'?
- Competing claims to truth



How do you judge between competing claims to truth?



Can there be multiple truths?

The ontological position

Positivistic tradition

There is a real world 'out there' that exists independent of human knowledge of it.

- Objectivist oriented
- School of thought which underpins research in the natural sciences
- Concerned with prediction and control

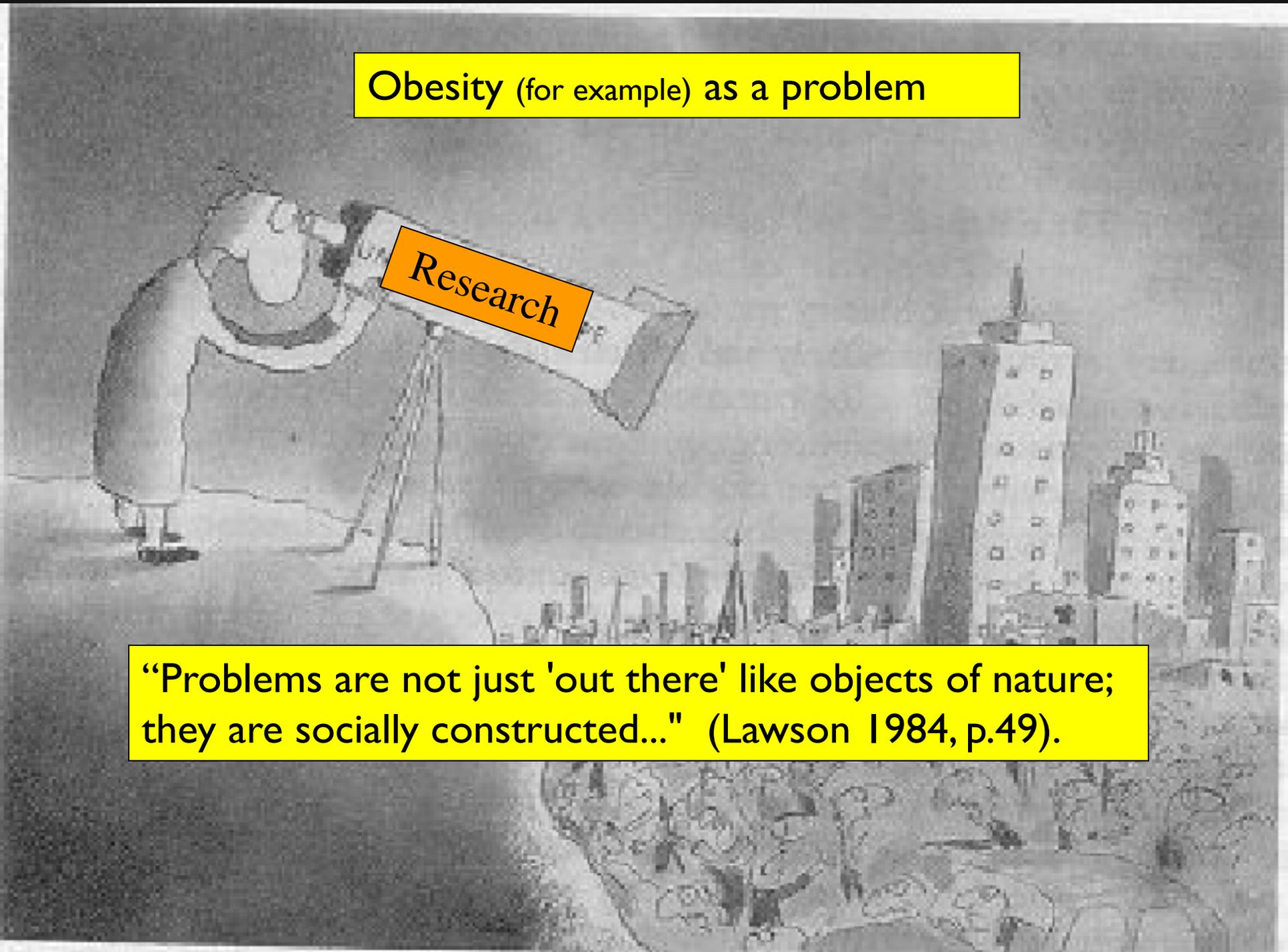


Interpretivistic tradition

The world is interpreted by humans subjectively.

- Subjectivist oriented
- School of thought which underpins much (not all) research in social sciences
- Concerned with meaning (rather than behaviour)

Obesity (for example) as a problem



Research

“Problems are not just 'out there' like objects of nature; they are socially constructed...” (Lawson 1984, p.49).

Ways of knowing about obesity & research traditions



Some evidence (some research) is considered more 'valuable' than others



Who is the expert?

An example...

Australian government has introduced new requirements for health cover rebates...

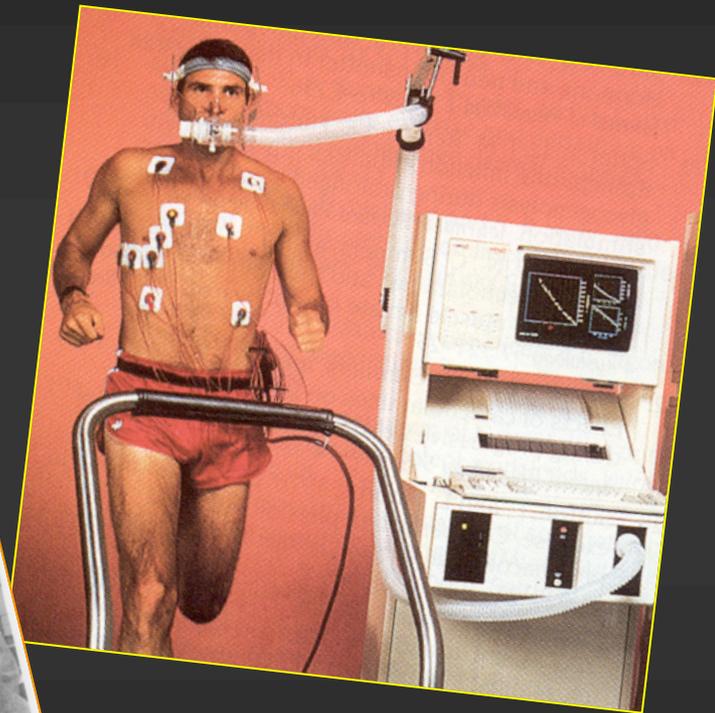
No rebates will be able to be claimed for ‘alternative therapies’ such as; Pilates, Tai Chia, Yoga, Feldenkrais, Bowen technique

....

“The is no clear evidence of their efficacy”

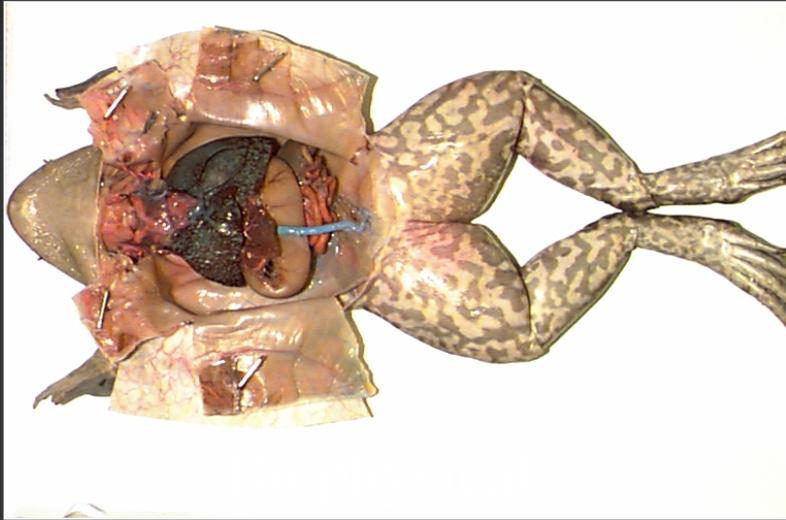
(Chief Medical Officer)

Different **questions** require different research methods



Different purposes might require different methods

Different research traditions (lenses)
provide different ways of knowing

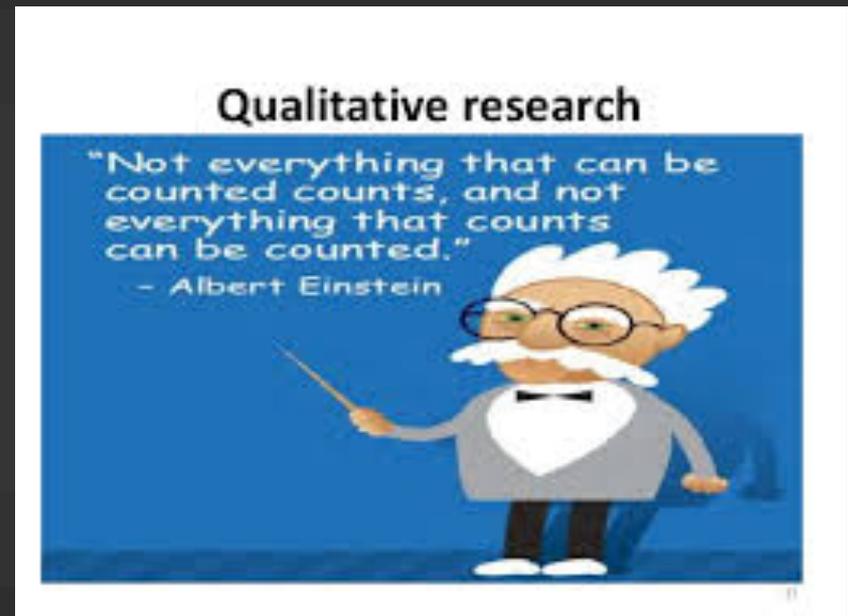


Two ways to 'know' a frog

Strengths of 'knowing' from qualitative data

At its best it

- Captures 'real' life (can portray multiple realities)
- Richness and holism
- Meaningfulness



In the spring of 1986, at the age of 15, I invited bulimia to come live with me. She never moved out. Sometimes I tuck her deep in my closet, behind forgotten dresses and old shoes. Then one day, I'll come across her—as if by accident—and experience genuine surprise that she remains with me. Other times, for a few days or perhaps a week or month, she'll emerge from that closet to sleep at my side, closer than a sister or a lover would. This is our story.

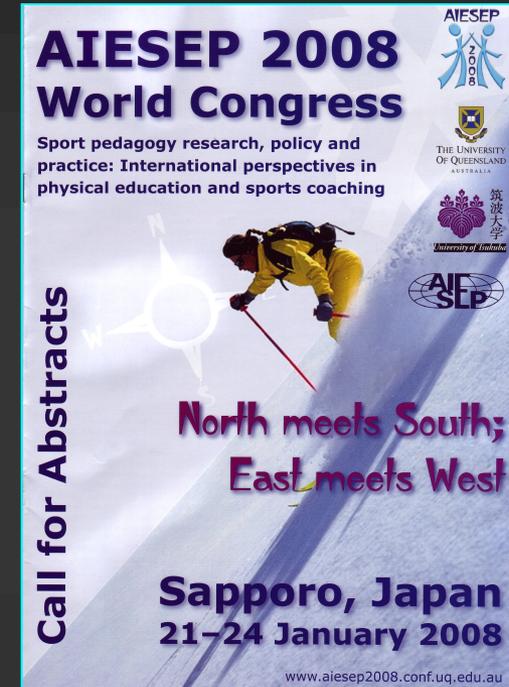
Tillmann-Healy, 1996, p. 76

Tillmann-Healy (1996) examines bulimia through systematic introspection, treating her own lived experience as the “primary data.” In contrast to the medical professionals, who seek to move toward general conclusions, Tillmann-Healy moves *through* experiential particularity. Likewise, while physicians and therapists use terms such as causes, effects, and associations to try to explain, predict, and control bulimia, Tillmann-Healy uses evocative narratives to try to understand bulimia and to help others see and *sense* it more fully:

Cited in Sparkes (2002).

AIESEP conference review process

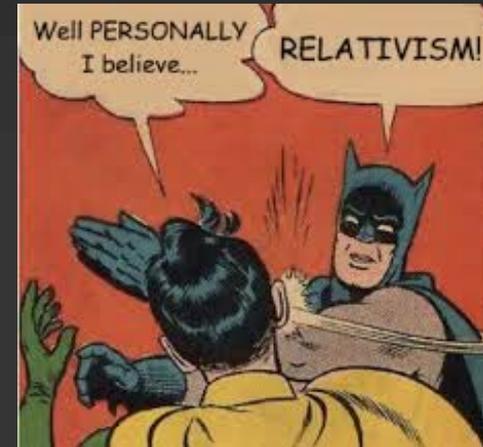
- Blind reviews
- ‘Scientific’ committee members from different countries
- Some qualitative papers were initially rejected because they were considered **non-empirical**



Empirical simply means that the conclusions drawn are based upon evidence (or data) rather than simply conjecture or speculation (Gratton & Jones, 2004:78).

What counts as evidence?

- Measurements? Statistics?
- Stories (oral histories)?
- Archival records?
- Self-report data?
 - Biographical journals?
- Feelings?
- Paintings?
- Photos?
- Etc?



Evidence (data) is all a form of **TEXT** and the job of the researcher is to make sense of (decode) the text

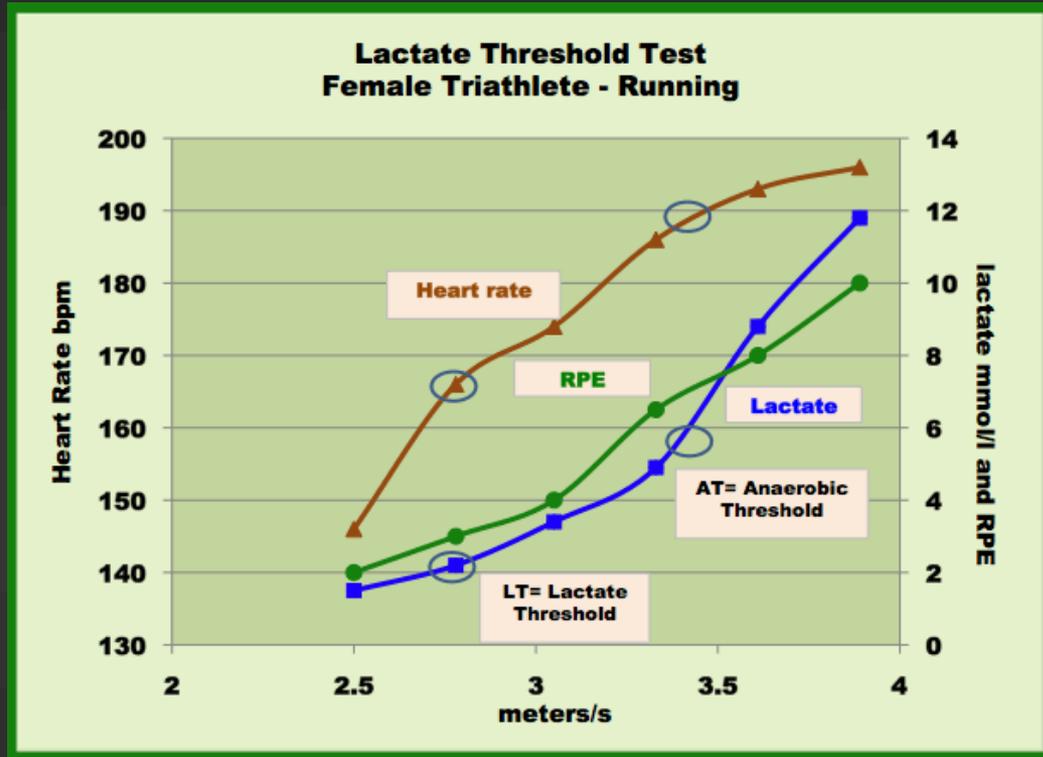
Table of numbers as text

TABLE 4. Children's physical activity levels by gender and by father's participation or not in physical exercise

Children's activity levels	Boys (<i>n</i> = 366)		Girls (<i>n</i> = 355)	
	Father exerciser (<i>n</i> = 244)	Father non-exerciser (<i>n</i> = 122)	Father exerciser (<i>n</i> = 221)	Father non-exerciser (<i>n</i> = 134)
No activity	5.7% (<i>n</i> = 14)	15.6% (<i>n</i> = 19)	11.8% (<i>n</i> = 26)	19.4% (<i>n</i> = 26)
Low activity	56.1% (<i>n</i> = 137)	45.9% (<i>n</i> = 56)	56.6% (<i>n</i> = 125)	60.4% (<i>n</i> = 81)
High activity	38.1% (<i>n</i> = 93)	38.5% (<i>n</i> = 47)	31.7% (<i>n</i> = 70)	20.1% (<i>n</i> = 27)
	$\chi^2 = 10.35, df = 2, p < 0.01$		$\chi^2 = 7.59, df = 2, p < 0.05$	

Information concerning levels of physical activity utilising: frequency, duration and intensity data, and reliable information concerning father's participation in exercise was available from 721 children (366 boys and 355 girls).

Graph as text





Meaning is attached to numbers and statistics

Interview transcript as text

- Kirsty:* I get loads of practice off my brother because we've got a proper sized goal and we just shoot in and all this and/
ER: So you play at home with your brother?
Kirsty: Yeah.
Georgina: When I go round my friends, well he was my friend I don't think he is anymore, Terry Stevens, [gasps from Rachel, Kirsty and Ceri] in the other class, he's not my boyfriend [I prompt her to go on] Well I used to practice and he like gave me er half a goal start and I had a penalty shoot out and em well I had er one penalty to have a go at and em he had one as well and I managed to get mine in the net [she laughs] coz he came forward and I shot round the edge of him and then when he comes I stayed right into the goal and he's like shooting and I'm like standing at the back of the net and I dived forward into the goal, out of the goal and I like catch the ball and chuck it into the net [laughs again]...so I scored two goals.
ER: So you don't get to practice in school?
Kirsty & Georgina: Only at games...but you have clubs as well.

* * *

- Hannah:* I play like football with my uncle sometimes down the street.
ER: Do/you?
Penelope: Holly brought her football into school on the field once but all the boys kept kicking it about/
Hannah: They don't like it when/
Penelope: Yeah they don't like it/
Hannah: When a girl/
Penelope: Yeah they don't like it when girls play on the football pitch even when it is their ball.
ER: Really?
Penelope & Hannah: Yeah.

Photos (visual images) as text



Telling Tales in Sport and Physical Activity

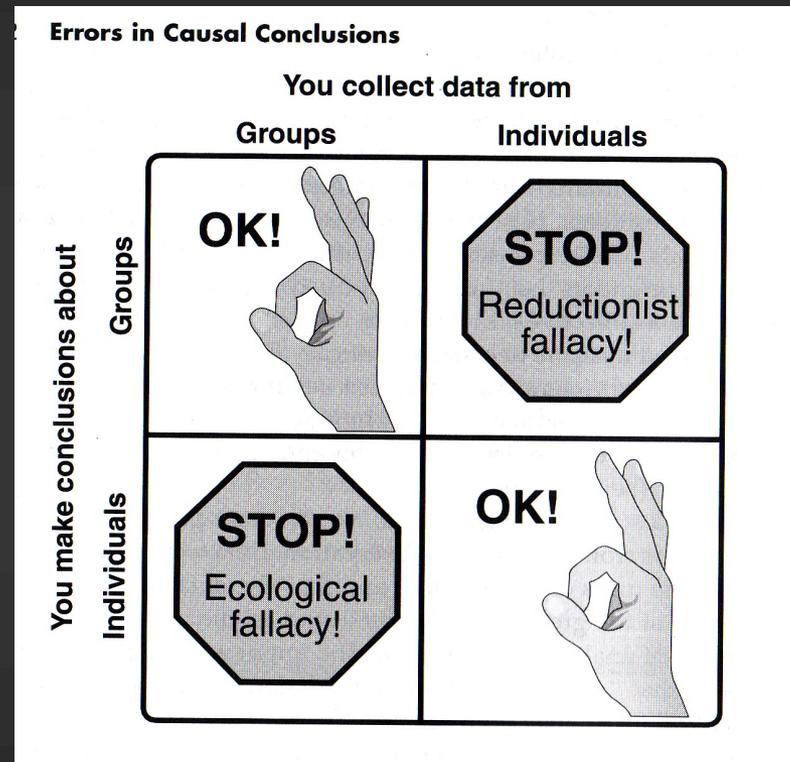
A QUALITATIVE JOURNEY

Andrew C. Sparkes

Issues of representation, legitimation, reflexivity, and voice, to name a few, now confront qualitative researchers in sport and physical activity... It is impossible to remain untouched by them, and there are no simple answers to any of the dilemmas posed by these issues (Sparkes, 2002, p.24).

In regard to legitimation the question arises about generalisability

- Should findings be generalisable?
- Not its purpose
- The reader will make the judgment



How do we tell our research story?

Plato identified three rhetorical styles which are used to tell stories

- *Logos*, the analytic voice of reason and critique associated with the truth games of science and philosophy
- *Thymos*, a voice of rage against injustice from the perspective and position of the disempowered, the disenfranchised, and the marginalised
- *Mythos*, a personal voice of story telling, cultural mythology, autobiography, and literature

Logos is clearly the dominant style for positivistic oriented research. The rhetorical style of *logos* does NOT suit *thymos* or *mythos*.

How do we tell our research story?



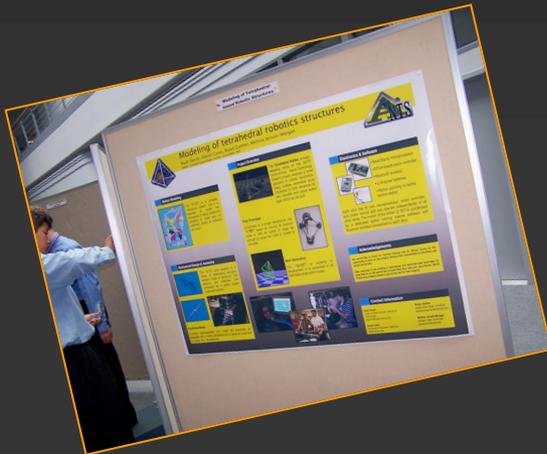
It's hard to write (and do) good qualitative research. Narrative methods require good writing craft and if you want to publish in English then its even more difficult!

How do we tell our research story?

Issues of representation, legitimation, reflexivity, and voice are all integral to who how we tell the story of our research.



Telling the story in difficult places!



Poster presentations and 15 min powerpoint presentations work better for positivistic oriented research stories than for qualitative research. They suit the *logos* rhetorical style.

Learning to do research

- Not just about learning skills to conduct research.
- Induction into *ways of thinking*, in the use of certain rhetorical forms to communicate what you know.
- Becoming a scientist, psychologist, social scientist, historian etc is not just about learning different content.
- Different disciplines have assumptions about knowledge & different research processes.
- Becoming a researcher is a process of *coming to know* about particular research traditions, skills, methods, ways of reporting etc.

The 'tool box' approach: Should students of qualitative research learn about...

- Poststructural methods?
- Phenomenology?
- Case Study?
- Feminist methods?
- Narrative methods?
- Life History?
- Action research?
- Autoethnography?
- Visual methods?
- Etc etc



Many methods courses in qualitative research are ...”oriented around the teaching of particular **methods** rather than **philosophical engagement** with questions of epistemology, ontology and axiology” (Gaidina, 2017, p.262).

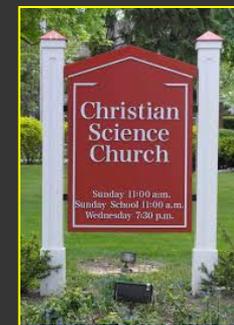
“This is both a failure of generalist research methods courses, and a practical necessity in preparing graduate students to conduct original research within their course of study”.

My experience in a qualitative methods course at Ohio State



It was called Naturalistic Inquiry. It was NOT text book driven!

We were told to choose a site and do an ethnography ...



No preliminary instruction ... just 'have a go'. We debriefed each week in class. We discussed gaining entré, taking field notes, ethics etc.

The place (or value) of theory

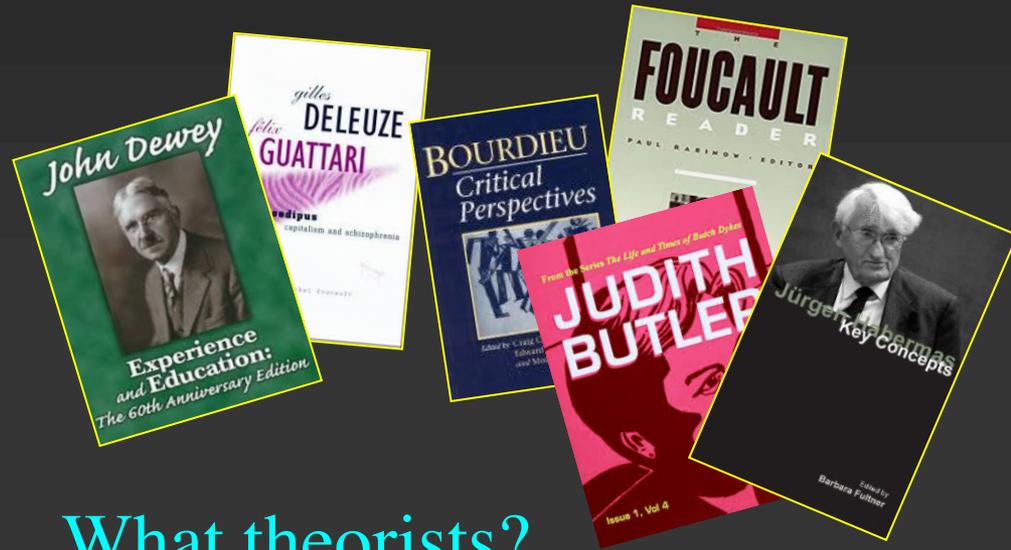


**‘There is nothing
more practical than
a good theory’.**

“Phrase attributed to Kurt Lewin, German-American psychologist, known as one of the modern pioneers of social, organizational, and applied psychology.

What sort of theoretical framework?

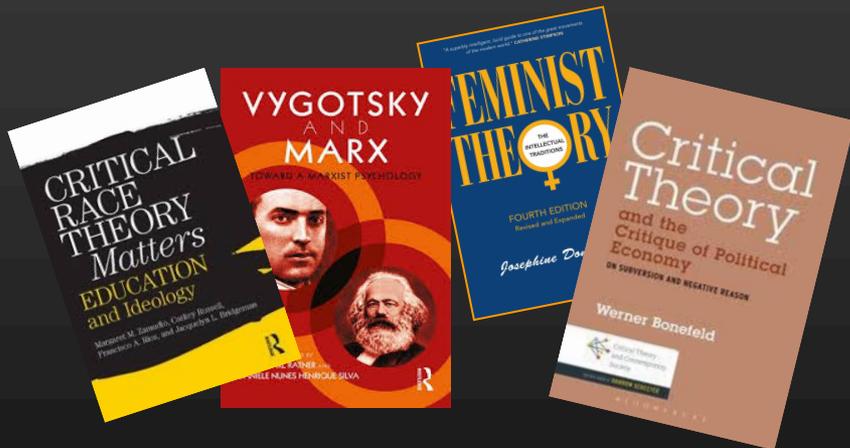
- Critical theory?
- Critical race theory?
- Feminist theory?
- Postcolonial theory?
- Queer theory?



What theorists?

- Marx?
- Foucault?
- Bourdieu?
- Bernstein?

- Butler?
- bell hooks?
- Deluze?
- Vygotsky?
- Habermas?



Alvesson, M. (2002). *Postmoderism and Social Research*. Buckingham, Open University Press

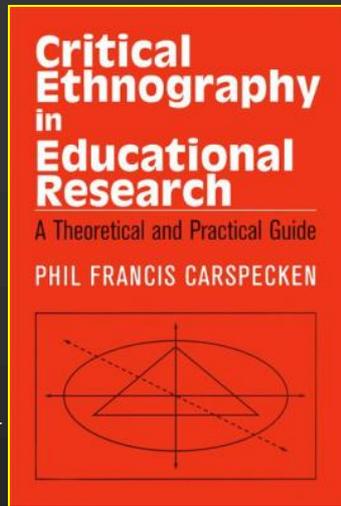
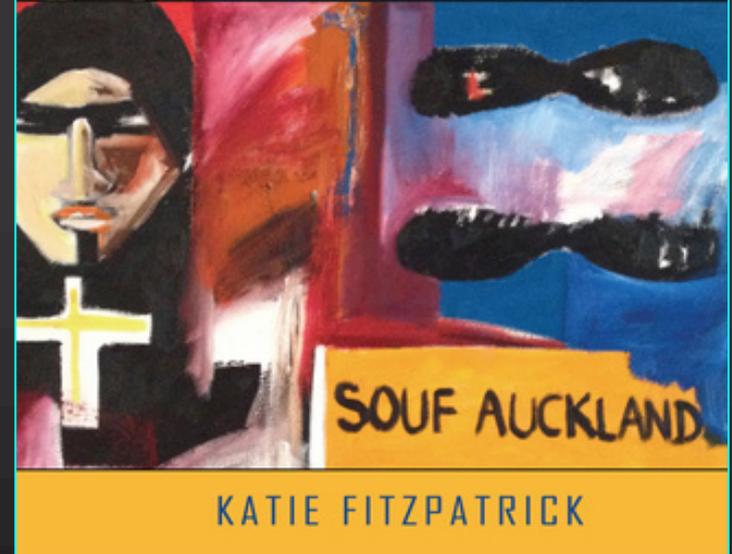
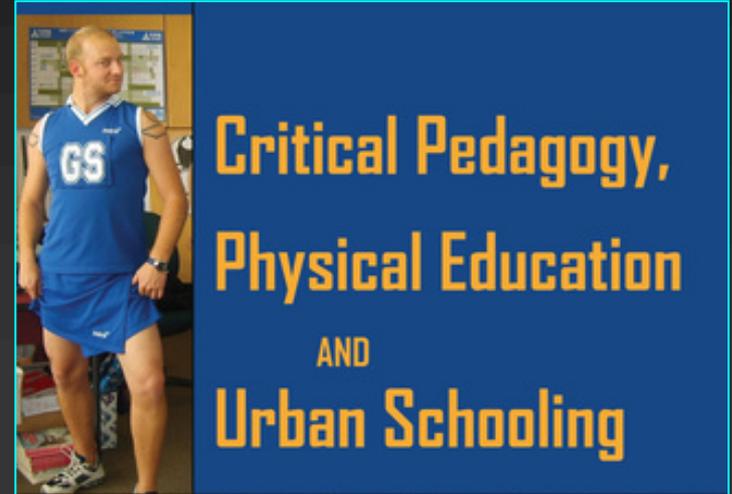
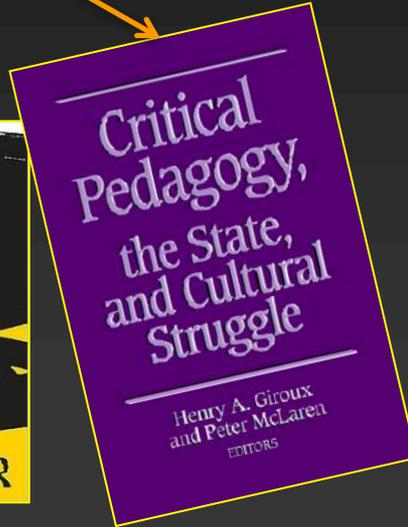
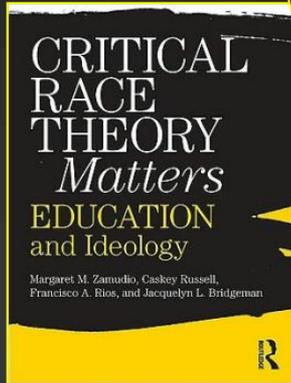
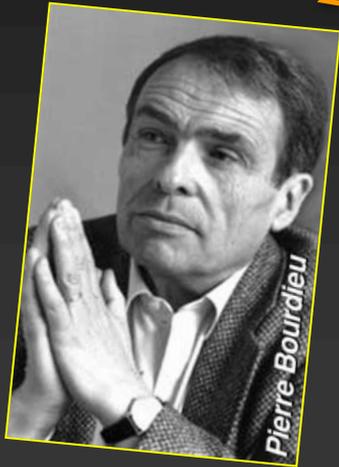
“It is important that researchers primarily use theories they grasp well and for which they feel an emotional preference” (p. 133).

“Very few researchers can successfully move between theories with different paradigmatic roots” (p. 133).

“It is my experience that it is necessary to concentrate within a particular theory, in order to be able to exploit its interpretive powers” (p. 133).

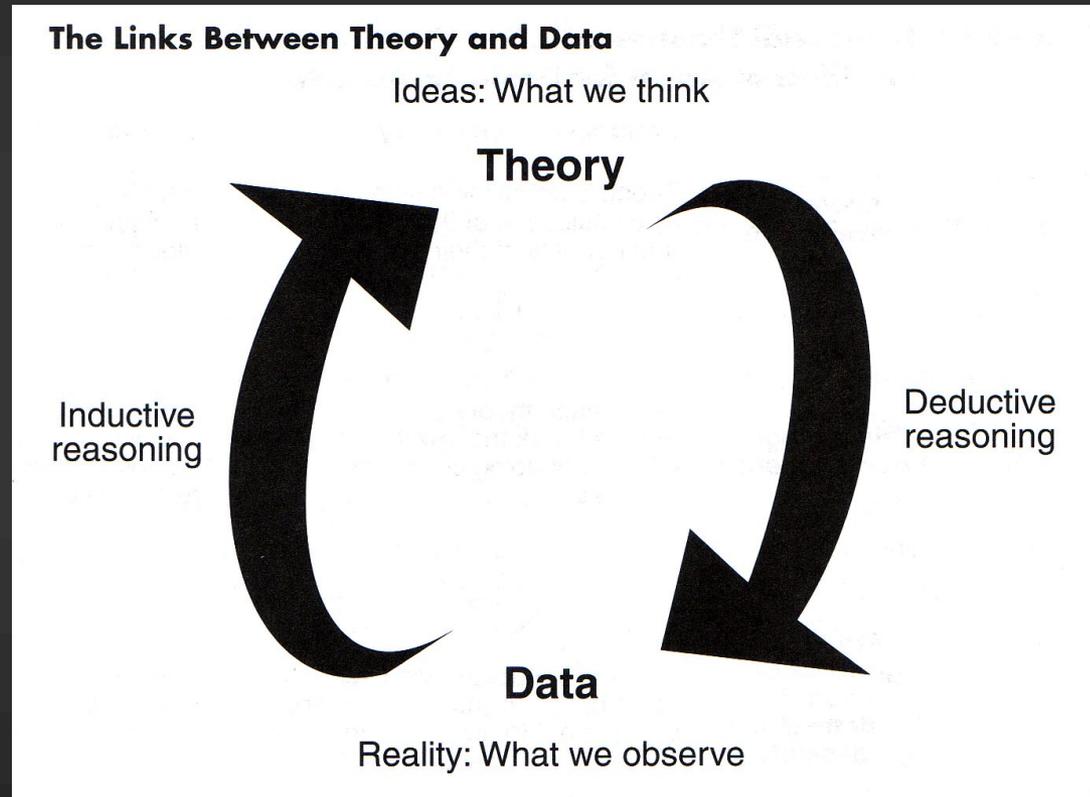
Some discourses/theories
resonate (speak to) more with
some people than others

theories



methodology

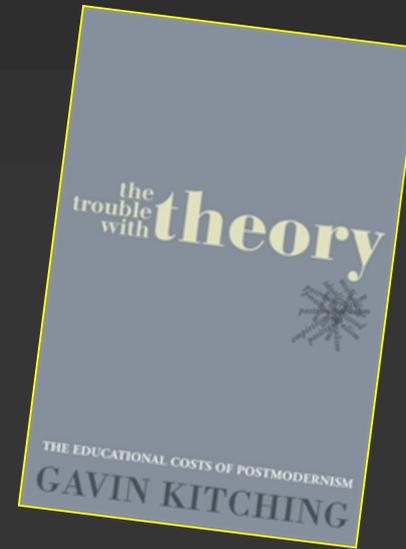
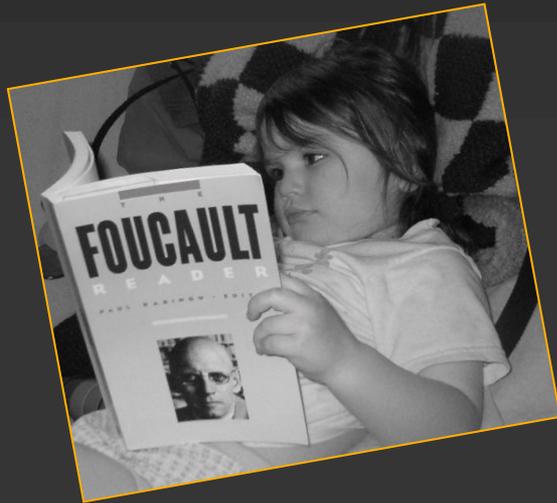
Tabla rasa?: Is grounded theory possible?



Empirical
generalisation

Hypothesis

Research training involves socialisation into certain regimes of truth



A 'truth game' is a Foucauldian concept referring to a discursive practice that establishes norms regarding who can speak, what they can speak about, and the form in which they must speak. Different truth games produce different regimes of truth.

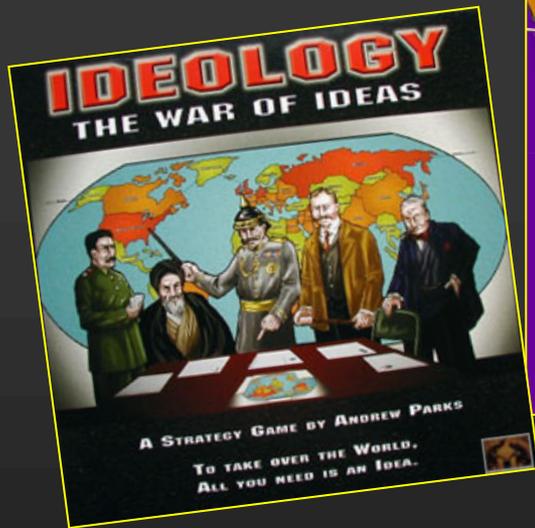
Research students learn to

... enter research environments with eyes wide shut to the possibilities that other perspectives and forms of theory and understanding might offer. Counter-theorising is weak, even regarded with suspicion (Evans & Davies, 2011, p.275).



"... rhetoric and ideology are often linked closely with academic identity; that is, young and older scholars alike were [are] inclined to ask 'who are you? A Foucauldian? A poststructuralist? A positivist? A queer theorist?'" (Gard, 2009, p.42).

Dangers of theory becoming ideology



Dogma?

The academic world is made up of many discourse communities



Positivistic researchers



Academic **discourse communities** “...embody the particular sets of values, practices and beliefs which are held by, and help define, academic disciplines” (Hyland, 2008, p.13).



Interprevistic researchers



The closed circle of the discourse community



Communication across/between discourse communities is a key issue within the academy



Tinning, R. (2013). "I don't read fiction'?: Academic discourse and the relationship between health and physical education. *Sport, Education & Society*.

Research methods can create *discourse communities*



phenomenology



narrative



Feminist methods



Case study



ethnography



Self study



Queer theory



poststructural

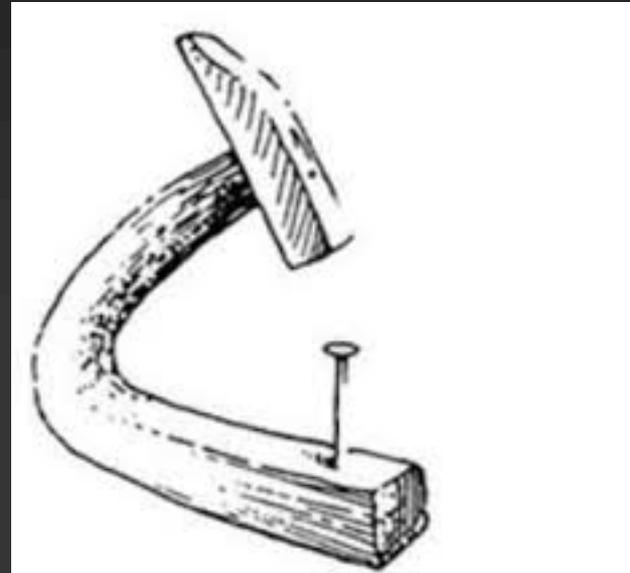
As Carlson (1998) observes, “...there are so many truth games [and discourse communities]and conversations, each talking about different things, each adhering to its own rules and rhetorical styles, each associated with it its own politics” (p.541).

So why might this be a problem?



Little cumulative validation of knowledge from different discourse communities

Reflexivity with respect to one's own practice



Carlson (1998) claims that those who argue with what he calls the ‘progressive voice’, must also be **self-reflexive**.

Such reflexivity requires an **openness** to multiple ‘truth games’, research paradigms and ways of representation.

We have an obligation to help our research students to learn to think about research in ways that are open to multiple ways of knowing, multiple ways of finding out what is known, and multiple ways of representing that knowledge.

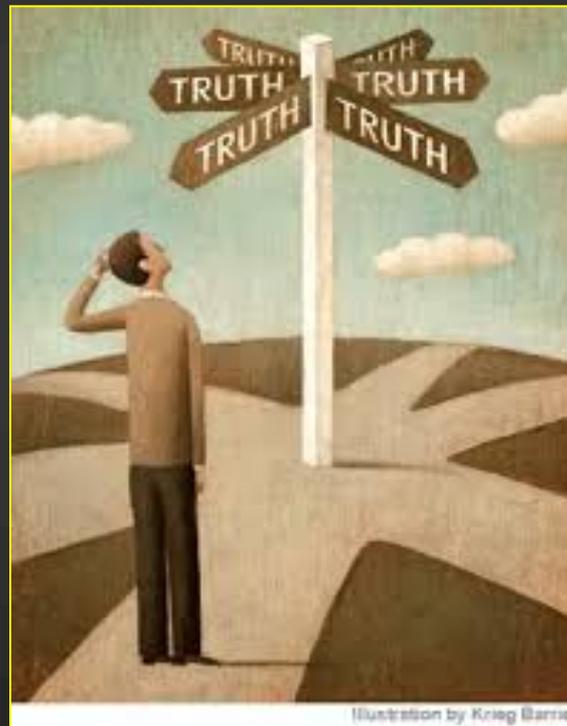
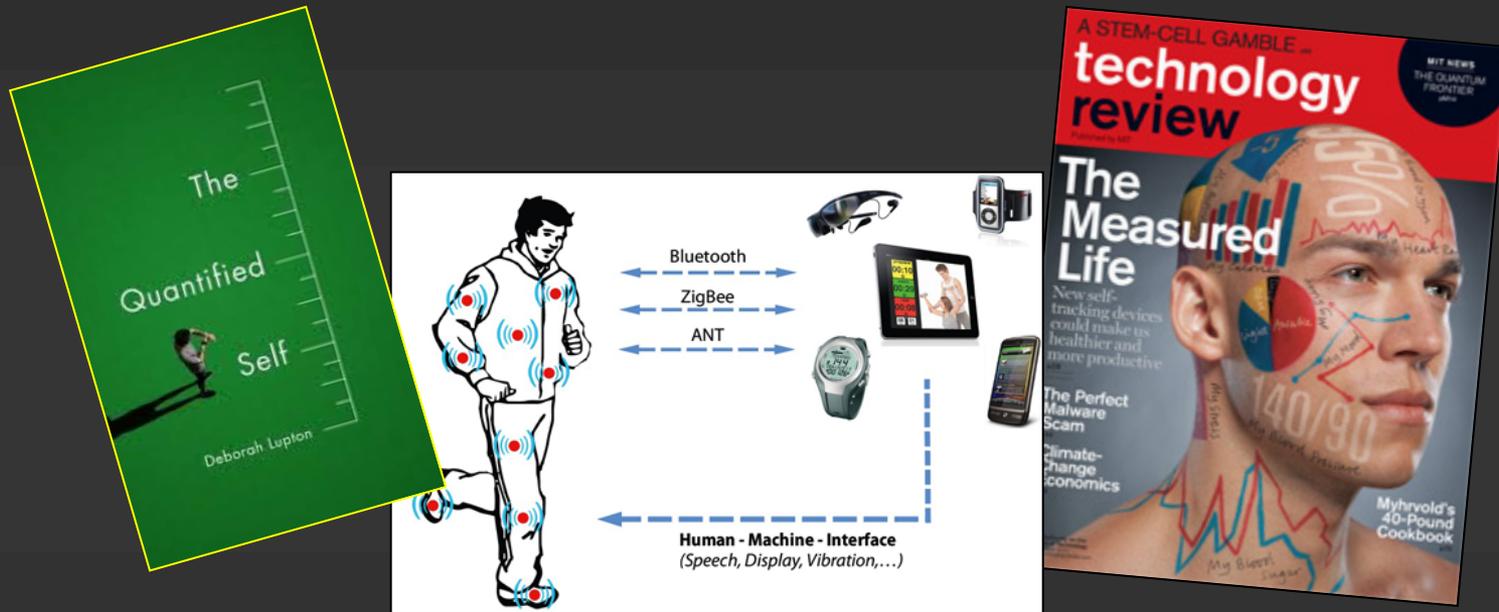


Illustration by Krieg Harrie

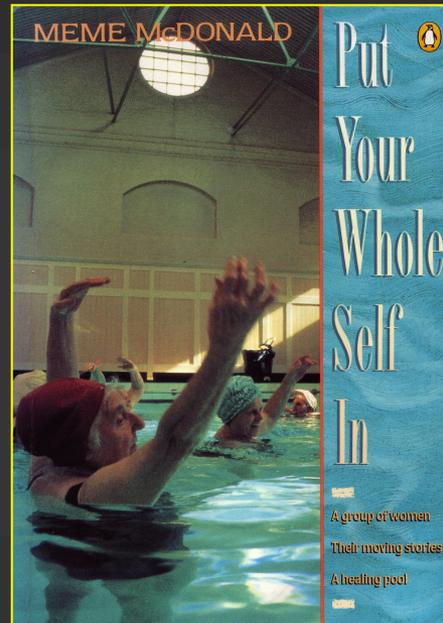
In conclusion, I think its is productive to think about how can qualitative research (including new critical methods) contribute to our understandings of new, exciting (and dangerous) spaces for ‘learning’ about physical activity, bodies and health?

How can qualitative research contribute to our understandings of embodiment and learning within digital world?



Ward, Sirna, Wareham & Cameron (2017). Embodied display: A critical examination of the biopedagogical experience of wearing health. (forthcoming).

How can qualitative research contribute to our understandings of exercise and aging?



Griffin, M. (2017). Embodied learning and new physical activity in mid-and later life. *Qualitative Research in Sport, Exercise and Health*. 9(5): 554-567.

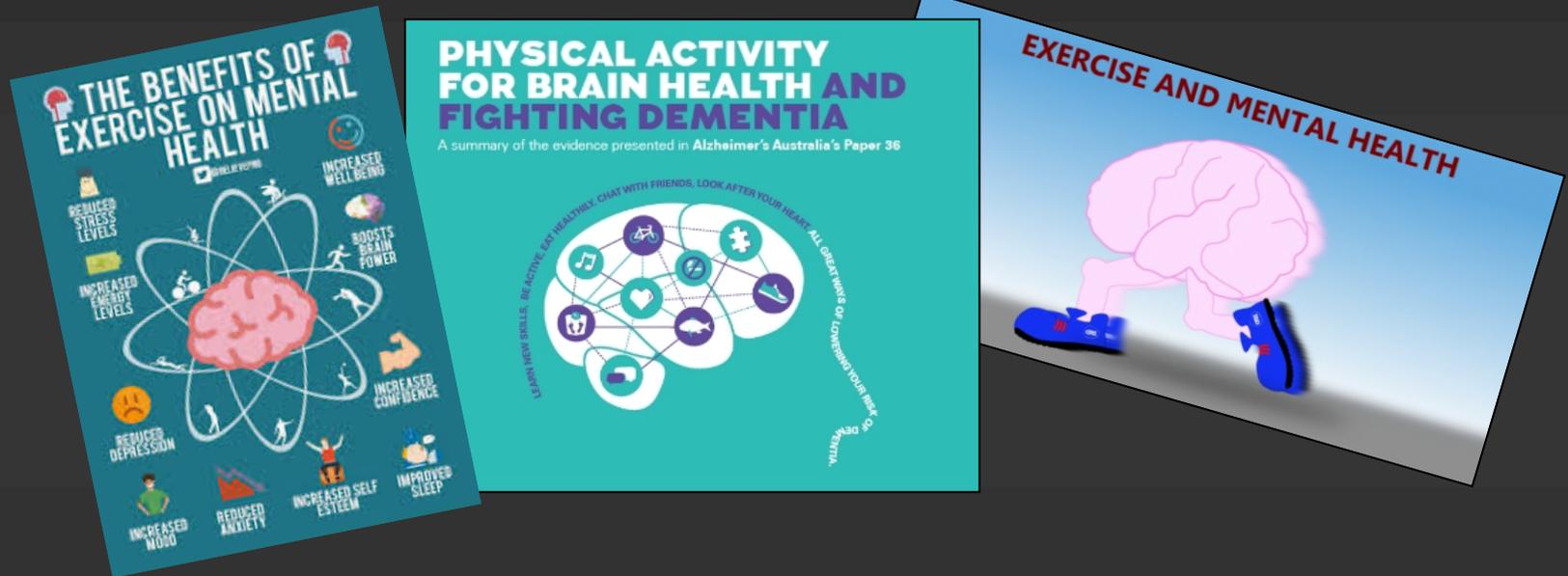
How can qualitative research contribute to our understandings of the uses and abuses of social media in regard to physical activity, bodies and health?



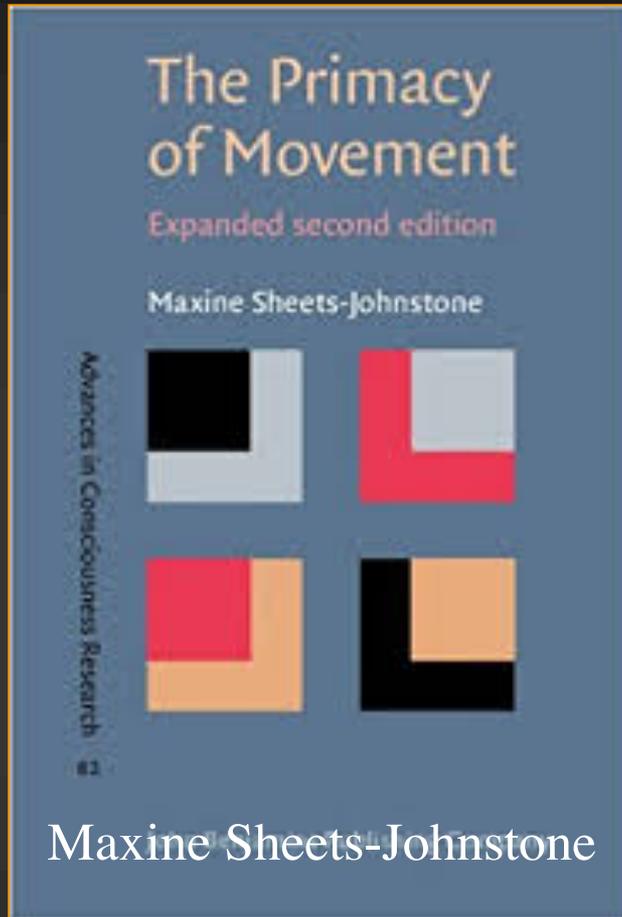
Szto, C. and S. Gray (2015). Forgive me father for I have thinned: surveilling the bio-citizen through Twitter. *Qualitative Research in Sport, Exercise and Health*. 7(3): 321-337.

Carlen, U. and N. Maivorsdotter (2017). Exploring the role of digital tools in running: the meaning-making of user-generated data in a social networking site. *Qualitative Research in Sport, Exercise and Health*. 9(1): 18-32.

How can qualitative research contribute to our understandings of mental health?

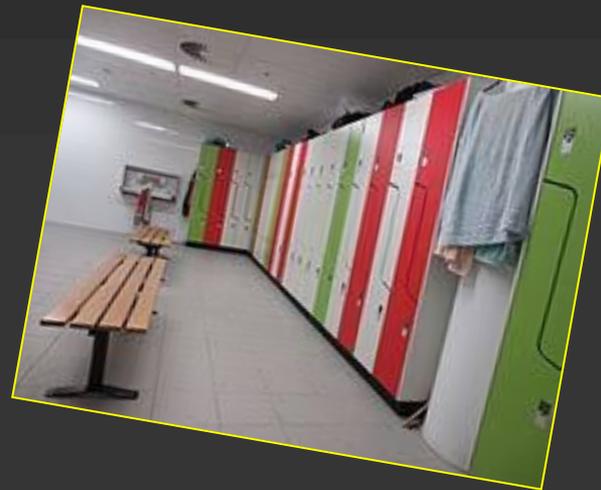


Caudwell, J. (2015). 'Feeling blue': the ordinary pleasures of mundane motion. *Qualitative Research in Sport, Exercise and Health*. 7(3): 309-320.



Chapter 14: Embodied minds or mindful bodies: A core 21st century challenge

“... methodological sophistication and experimentation ... is at an all-time high” (Giardina, 2017, p.258).



Advocates of new qualitative research methods now claim to offer **more than a smell of the lockers**.

The context of STEM (Science, Technology, Engineering & Mathematics).

New education policies

How might these policies affect available research monies for qualitative research?

Where, if anywhere, will qualitative research fit in the context of STEM?

Enjoy your qualitative journey



Tak fordi du lyttede