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Complexity in research: the risky business of including it.

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Abstract

This paper is a result of the research funded by the Norwegian Research Council and titled 'Gender, complexity and diversity in pedagogical institutions for children aged 0-10: theoretical and empirical investigations' As such it presents the third part of the project: complexity. Earlier papers regarded diversity (AARE 2002) and gender (BERA 2003). Complexity may be seen not only methodologically but theoretically, textually and ontologically.

To include complexity in a research project, as the ways that the research functions and as the matters it takes up, is not a simple business. Nor is it easy to get published, to win funding or to explain what is 'meant'. Deciding then to include complexity becomes a matter of ethics, of positioning regarding cultural shifts and of the generic competence or the writing and reading researcher. When these are not matched by the research audience of examiners, referees and others, the researcher must re-write, re-think and reconceptualize. All of this constructs a process more like the writing of a play or a novel than the traditional texts of research in modernity.

The complexities of the project described in this paper include languages, cultures, generations, non-fixed locations and the complex realities of children and adults. Instead of trying to make these readily understandable the project seeks to show and to theorize something else. This puts the researcher in a risky place. For an Australian funded by a research council in Scandinavia the complexities of doing such research are both challenging and possible.

Introduction

The American Educational Research Association has a Special Interest Group (a SIG) called 'Chaos and Complexity Theory'. Not having joined this I am not sure what it involves. The linking of complexity to chaos however, is not what I am wanting to do. I see complexity as a non-normalized aspect of modernist research but a normal part of everyday learning, loving and living. If we are going to research what is happening all the time, with whoever is constantly confronted by the non-simple and non-singular, then we simply cannot use a linear chain of events or even a diagrammable map. Nor can we ever be finished with what we decide to say. It is not that understandings, knowledges and theories cannot be arrived at. Rather the problem as I see it lies with the people who want research to be able to be easily reported in newspapers, easily made the basis of government decisions, turned into a couple of PowerPoint frames or said clearly in ten pages or half an hour. Unfortunately these people include those making the decisions about what research will get funded, who will begin or finish a Doctorate and what the gatekeepers will let

through as publications. This is why it is important for people successful in non-traditional research to take up administrative positions of responsibility in academia and not just get on with their own writing and teaching.

You could say that the above regards the postmodern. And yes it does, but practice has always been a complex case, even if teachers and researchers have refused to act as if it were. You could also say that arguing for complexity is just another way of getting rid of the quantitative. Yes to this also, but there is no reason why the quantitative cannot deal with the complex: unless the complexity requires complex wordings, insinuations, analogy or poetics. This you could argue would not be social science at all, it might be literature or art. And this is not what research councils are funding. The question is why not. I suspect the answer is that a complex reading is beyond the ability of many of the individuals in power; and outside the agendas of governing institutions.

So when Elizabeth Adams St. Pierre (St. Pierre, 2002, p. 25) argues in the *American Educational Researcher*, that the American Research Council 'narrowly defines science as positivism and methodology as qualitative', you could say that this is because it fails to take in the complex as this is dealt with by the complex language of the literary arts. St Pierre warns us to beware of 'those who would reject diverse epistemologies and methodologies in educational research'. I would prefer to talk about complex epistemologies and methodologies. The diverse, while it is always complex, because it is multiple and different, is simply not enough. A diversity of epistemologies and methodologies, it could be argued by positivists and research quantifiers, can actually be contained by them. Complexity they cannot contain, because complexity is not just an opposite of the simple: it works against triviality, against naivety, against singularity, against control.

St. Pierre says the (American) National Research Council (2002) 'should scare us all to death' (St. Pierre 2002, p. 27). I hope to not be one of those lying down and dying. Having survived the Australian Universities' horrors of the mid-nineties where entire campuses were eradicated because they happened to be in the wrong place, (the urban gobbled up the rural for example, with unspeakable anguish to the redounded individuals), I find Norway a useful place to be. Here one can still have a research project funded when it aims to develop a research culture, to investigate theory and explore some newer methodologies, along with focusing thematically on what is interesting. Ours project is aimed at targeting gender patterns and practices, although it is the only funded project to gain some 'gender money' for an Education Faculty. As such its approval did not have to go through the usual processes of Education Faculty ranking, before the (Norwegian) National Research Council sent it out to its anonymous Scandinavian referees. By having bypassed the system of Education Faculty ranking, my collaborative researchers and I managed to get some national research money not especially tagged for Education (Rhedding-Jones, 2004 forthcoming). This was lucky as the Education Faculty ranking could be following a similar path to the American position critiqued by St. Pierre. How our named research theme of 'complexity' would have been dealt with therefore did not have to be put to the test. Fortunately for us the national research program (*Norges Forskingsråd* 2001, p.1) which approved our research project had as its objectives the following:

- * contribute to the further development of gender research as a separate field of knowledge;
- * strengthen and renew fundamental gender research;
- * improve knowledge and critical reflection about gender;
- * encourage and strengthen interdisciplinary and multidisciplinary gender research;
- * contribute to the long/term creation of expertise through recruitment and through the development of good research communities;

* promote internationalization of Norwegian gender research.

So I suspect that my international publication record regarding gender was what got the funding; and this would probably not have been recognized by an Education committee, especially by one bent on following more positivist methodologies and less wanting to produce new theory, as a complex business. I am not sure how the adding of complexity and diversity to gender was viewed by the anonymous committee of Gender Program reviewers. Further, our understanding of institutions of pedagogy for young children includes the institutions of related higher education, so we are researching not only the complexities of gendered and diverse practices for and with the young, but also for and with those who work and play with them. Being limited by time, as well as posed within the postmodern, our ethnographically gathered and constructed research data can never then claim to be fully comprehensive. What we want to do is change the fields of practice. We are trying to do so by making gender, complexity and diversity visible, audible and ripe for theoretical reconstructions.

What we have also been doing about the complexities, as researching academics, includes working towards publications. Here the textual works in process follow and are parallel with our ethnographic play with children, our acting as day care centre and classroom assistants, our roles as friends, carers, conversationalists, visitors, teachers and colleagues. As well we bring to our research our own life experiences of being a man and three women, parents and grandparents or childless, writers and readers of words and more than words. To do the research we are as these embodied persons, based in preschools and classrooms of early schooling, in staff and parent meetings, in university lecture rooms and discussions for early childhood education, in international (English speaking) and in local (Norwegian speaking) contexts (Rhedding-Jones, 2002a). We are listening to children, minorities and people of difference. We are also hearing and seeing what goes on as normalised practice in a range of institutions and organizations. What is recorded, as images, words and sound, is therefore highly selective and subjectively gathered. As four researchers, our own gendered, diverse and complex positionings matter as part of the research. We think that as teachers ourselves our research affects whoever we are with, not only the people who might read what we publish or present at a conference or seminar.

'Science' and complexity

Following the notion of complexity, and publishing in USA against the National Research Council (2002) publication regarding what is 'scientific' research in education, Metz and Page (2002, p. 27) say the following:

Developing diverse genres of educational inquiry, including practitioner inquiry, may be critically useful in a time when the complexity of schools is not well understood by outside decision makers who are increasingly making the decisions.

Here the complexity regards the institutions of schooling and the inferred lack of understanding of them by the powerful 'outsiders' wanting quickly made categories and value judgments. Metz and Page are critical of research coming not from the people most engaged in the practices of schooling, and say that 'university' research and 'practitioner' research serve different agendas and different audiences. Whether or not the practitioners, in their research, can 'capture' the complexity is not the point. The points are that (1) people like me who do not now work with young children as a paid teacher-carer are only marginalizing the research of the people who do; (2) justifying policy decisions should not be the aim of research, even if this is unsaid; (3) research cannot contain all knowledge, as human understanding goes beyond research; (4) de-legitimising educational research

by redefining what is scientific is a political act requiring the resistance of qualitative researchers working differently.

The term 'complexity', following the adjectival and nominal forms of 'complex' means composite, complicated, consisting of parts. In buildings a complex is an integrated building with various functions (Oxford, 1982, p. 208). In mathematics a complex is a mix of the real and the imaginary. This then is close to a poststructuralist deconstruction practice, where various discourses affect what may be read out of research data, and who at particular moments in particular places alters their understanding and knowledge. In other words, writing for various meanings to be made out of one transcript, for example, requires a particular writing art of a researcher. Instead of spelling out clearly what these 'meanings' may be, an artful writer builds the semantic complexity into the text, knowing what an audience might know or understand already, and thus what they will need to take and semantically construct from the text as they go. This then is not only a postmodern complexity, it also involves the researcher in pedagogy through the crafting of the text.

Following this, if we are to do complex research then what do we make of the following? I was asked these questions by children in their everyday settings of pedagogy, play and learning. The questioners are girls. The first is aged seven. Here I'm calling her Melody. The second is four. I'm calling her Amanda. The questions came to me not because I was asking them questions. (I have tried not to ask children questions, not to probe, not to believe in the containment of language.) The girls were in Australia, in two different States and in two very different pedagogical institutions: a classroom in a school and outside in a preschool playground. The questions are typical of the questions I get when I am quiet and with children. If I wait, they ask something. Is there something in this, of research interest, regarding the research theme?

Melody (to me): Are you happy?

Amanda (to me) What are you doing?

And in Norway a five year old (girl) says in Norwegian to me as we sit with the building blocks: Ingebjørg (to me): You have quite long hair. Why is that? (*Du har ganske langt hår. Hvorfor har du det?*)

One answer to my question above is that the girls' questions are outside my agenda. They give the agency to the girls and not to me. The girls establish a feminine 'you' relationship with me as a visiting stranger, possibly as a kind of grandmother. When I look for this kind of researching in publications I'm drawn to Hollway and Jefferson (2000, p. 47). They say they 'want to show how the data are co-produced out of some subtle and largely unconscious dynamics'. This follows their narrative about 'after the tape-recorder was turned off'. What happened then was that the woman interviewed asked the researcher what she did 'for her job.' This desire for the personal, combined with a reaction to an unusual kind of research practice (research is not really a job, it must be something else), is also apparent in the questions of the three young girls I have quoted above. Hollway and Jefferson, whose interview data followed same sex duos, found that the women related like this to Wendy (Hollway) and the men related to Tony (Jefferson). As a theorization from such data, Hollway and Jefferson take up, as I have done earlier with another research project (Rhedding-Jones, 2000), some psychoanalytics.

Here the concepts of transference and countertransference of the unconscious create particular intersubjective qualities. This is doing more than proving the research relationship to be like a mother-(grand)daughter relationship. It may be pointing to the importance of including complexity within the data and within the ways of getting it, and then in how this is turned into publishable

writing. By ignoring the complexity of unsolicited questions from those researched, the possibility of not only psychoanalytic theory but maybe other similarly complex and risky theorizations is lost.

In following this up, reading Hollway and Jefferson, I found the term 'complexity' not to be in their index. It is however everywhere within their text. And on pages 3, 24, 86, 90, 105, 107 and 109 it is named specifically as such. So not yet a theme of academic interest (unless linked to chaos theory as by AERA) and not yet an established index focus, complexity remains a word in everyday use. For that reason I like it. Collins' thesaurus (1987, p. 78) presents four metaphors as its meaning: the complex is a knot, a labyrinth, a tangle and a circuit. Each of these may be navigated or undone. Rope knots and unknots; labyrinths may be walked to their resolution and back; hair may be tangled and untangled; tracks go may go constantly in circles clockwise and anti-clockwise. Collins gives us no need to select the metaphor we want most: all apply. Similarly I see no reason why the doing and the undoing, the to-ing and the fro-ing, must happen as binary exclusions.

For research this requests some readings of complexity, should such matters be written into text. But if you can only read what is non-complicated, not intricate, not mingled and mixed, not tortuous (Collins, 1987, p. 78) then you will not cope with a complex hermeneutics. Such, following the critiques of Metz and Page (2002) and St. Pierre (2002), is the reading of the writers of the National (American) Research Council's statement on scientific research in education. So wanting to develop from this I look next at what exactly is said about complexity by Hollway and Jefferson, in an effort to make use of complexity and not just berate simple reading. After each quotation I select a sample from the research data, and then give brief comments and questions linking the sample to Hollway and Jefferson quotation. In this way I am attempting at the same time to deal with the themes of our research (gender, complexity and diversity), the methodology we are adopting (ethnography and the postmodern) and the theories we are developing (here, psychoanalytic theory, but also theories of construction regarding childhood, gender and institutions). The extracts from my research data come from time spent in Australia recently, with children in the classrooms of early schooling and the playrooms of preschooling. I introduce each data extract from my research journal with a quotation from Hollway and Jefferson (2000). To keep this paper short enough I shall not here be analysing for theoretical and empirical investigations. This though is what needs to be done next.

Quotes, research data, questions and comments

Following the above, this section of the paper consists of a series of simple juxtapositions of a quote, an extract from the ethnographic research data, and a few questions and comments. There are six sets of quotes, research data and questions/comments. This will be followed in the next section (following the advice of the two anonymous reviewers of this paper) by 'a little more analysis/material to explain some terms'; and then by my attempt to 'be more strongly theoretical' regarding complexity. Here I am trying to point to how postmodern research methodologies apply to research on gender. I can not in this paper clarify how such work applies to the concept of gender: nor even say in this short paper what my working concept of gender is. My paper presented in Scotland last month was a first attempt to do these things, but it is not yet ready for publication beyond being just a conference paper (Rhedding-Jones, 2003). Here then are my simple juxtapositions regarding complexity.

Quote 1 'Research is only a more formalised and systematic way of knowing about people, but in the process it seems to have lost much of the subtlety and complexity that we use, often as a matter of course, in everyday knowing. ... If we wish to do justice to the

complexity of our subjects an interpretative approach is unavoidable.' (Hollway and Jefferson, 2000, p. 3)

Research data 1

In the playroom four year old girls are dressed up, with floating white drapes and white head veils. 'We need a boy to have a wedding', says one. Woman teacher-carer: 'No you don't. Nowadays you can have two women together or two men together.' 'Or you can decide not to get married at all', says another woman nearby. Girl: 'Oh'. She dances off to happily play man-less brides with the other girls.

Questions and comments 1

Now how else could you research what happens with discourses of hetero and homo sexuality? Send out a questionnaire to the parents and teachers? Analyze the children's picture books? Their own drawings? But how long would you have to wait for naturalistic dialogue like this? And how do you know I didn't just make it up? Here my interpretation is implicit by my research journal notes and the inclusion of this event. But the complex subjects here are the girls. How do I interpret the 'Oh' in relation to the dancing off? And who put the brides' clothes in the dress-up box? What are the boys supposed to do?

Quote 2 'complex responses to events and people in the social world' (Hollway and Jefferson, 2000, p. 24)

Research data 2

The place for the children with disabilities is led by a psychologist. When I tell her I'm in early childhood education she says there is some resistance to disability studies and practices by the early childhood education people who want a child-centered approach that is more open and free for the children. I listen. The disabled children I'm told need special training in cognitive things so they can learn to do things. I see three children aged about three to five sitting on mats, each with their own assistant. It's group time which means the three children and the three women assistants are all facing the fourth woman who is holding up flash cards and telling the children what's in them. They're trying to get the children to repeat the words. The children are quiet and facing the front. Two look 'Asian' and one looks 'Caucasian'.

Questions and comments 2

What am I to make of the psychologist's unsolicited comment that this is not 'child-centered'? What of her disquiet about the resistance of early childhood education people to special education? Should I be trying to judge? What do I professionally know of Down syndrome children and their social world? Will I account for the complexity of my own situation or will I leave it out? Am I a traitor by just being in this place? Where is hypocrisy in relation to poststructuralism?

Quote 3 'consistent with a theorisation of a defended subject, it is important for summaries not to iron out inconsistencies, contradictions and puzzles' (Hollway and Jefferson, 2000, p. 70)

Research data 3

The young woman teacher is taking photos of the children. This is her first year 'out'. She is wearing shorts and pigtails. I am playing the game the seven year old girls have invited me to play. With plastic sticks and marbles. You have to see how many marbles you can get down by moving

the sticks. It's maths. One of the girls says unexpectedly to me, 'My Dad's the PTA President' [the Parent Teacher Association president, obviously an important sign of social status.] The other girls and I ignore what she says. Then I wish I hadn't. Later the teacher tells me this girls' father is also a truck driver. ... After lunch they're all doing a Christmas crossword. Confused discourses here. Girls ask me if Santa is real. They have been told by their teacher that I live at the North Pole, which I have not denied. Then they ask me if Jesus is real. Instead of answering I ask them what happens here to the kids who are Muslim or Hindu. 'They go to sleep until after Christmas', says one of the seven year olds.

Questions and comments 3

On whose inconsistencies, contradictions and puzzles shall I as the researcher focus? Having long ago left objectivity, unless in the strong sense meant by Sandra Harding, should I now leave the subjectivity that is mine? And only look at other people? How can I do this with a research methodology of non-distance, where the children constantly bring me in? Isn't it only ever your own subjectivity you know about? If I am researching gendered and diverse complexities then is it enough to simply show these, through transparent scribbling such as this? Is a 'novel' academic text enough?

Quote 4 'as biographical methods become more commonplace in social research, questions about anonymity, about the feasibility of concealing a person's identity in published research, take on a new complexity' (Hollway and Jefferson, 2000, p. 90)

Research data 4

The senior teacher is not here. She has been called to the office of the male principal. A huge to-do about what she posted publicly as critique on the internet about this school's new project (which I will not name). Highly distressed, she's afterwards phoning her husband about it.

Questions and comments 4

A fine line here between critique, ethics and the new professionalism. Why has the male principal summoned the female senior teacher to his office? To his place, his territory, his place of power, at his named time. The gendered dimensions of power leave her sick with worry, frantically mobile phoning her husband. In my researched writing, her professional biography as a senior woman teacher, is presumably secure enough, because I work not only outside her State but even outside her nation. Yet for a researcher who data-gathers and publishes locally such information could be taboo, because of the ethics of it. This eaves-dropping research role then is not without its risk. M Yet meanwhile, at this school at this moment, another research project is constantly under the surveillance of a complex videoing practice regarding mathematics. My research however has a different focus. I'm not researching the learning of a curriculum discipline, I'm researching gender, complexity and diversity. I won't be endlessly interpreting from voyeuristic sound-images and I am not bringing into the classroom obtrusive objects of technology. But such a research practice may be seen as more 'scientific' and hence more normatively acceptable than is mine.

Quote 5 'In our particular cases, our wide-ranging inquiries into the complex realities of people's lives were not pursued for their own sakes; rather this route was undertaken in order to understand, as comprehensively as possible, the relations among the aspects of reality (or variables) of ultimate interest to us.' (Hollway and Jefferson, 2000, p. 105)

Research data 5

'The colour of mothering is pink', says the day care center leader to me, as if I might not know. Here the walls and the curtains are all pink, and I actually feel happy. Is this why? The light outside comes through the curtains as pink, though outside all is the green of grass and the blue of an Australian sky. I think of the dichotomy of Native American Mother Earth and Father Sky. Where is the pink there?

Questions and comments 5

Whose reality is this? Can gender be coloured? Can teaching and research? Is this research data or not? This centre leader believes the pink is about aspects of a shared reality, and useful for what happens emotionally with these three to five year olds. What of the complex reality introduced by the un-dyed blues and greens? What and who has made the pink of the dye the signifier of the maternal and of love?

Quote 6 'the dominance of a quantitative tradition which has little compunction about reducing complexity to single scores' (Hollway and Jefferson, 2000, p. 109)

Research data 6

Seven year old Tyson is shouting out obscenities and running round the classroom, sometimes over the tops of the tables, miraculously without knocking over any paint. 'Fat dick' he shouts to no-one in particular, 'Bloody hell you'. The teacher says if he is not sitting down by the time she counts to ten he must go outside the room. He's still running when she gets to ten but she can't catch him and I'm not going to try. The children appear to be not looking at what is happening, they just sit beside their paints waiting for the teacher's instructions.

Questions and comments 6

A relevant complexity for educational research on gender? Certainly a researcher without an ethnographic and qualitative research agenda would never be dealing with this. Score the level of linguistic obscenity maybe? Rate the teacher's power and compare it to my impotence? Leaving this out would certainly be easier.

Further explanations and theorizations regarding complexity

In having all of the quotes in the last sub-section from Hollway and Jefferson I am pointing to the fact that this paper is a methodology paper. But in presenting complexity as a methodology matter for qualitativists I am also saying that what matters as research methodology must be linked closely to theories, to texts and to the metaphysics of the nature of being (ontology). Presenting my own recently gathered/constructed research data, from early schooling and preschooling, is thus a risky practice. I put my self, literally, on the line. And I also put on the line some new ways of doing research. Whilst ethnography is not new, presenting your 'findings' in obscure and textually convoluted ways, is for many readers, at the very least a challenging read. I would maintain that in trying to get at what is not yet understood well enough we need this risky or daredevil kind of research (Paley and Jipson, 1997). Certainly we don't know enough about gender and how it is constructed or reconceptualized. Nor do we know enough about diversity, and what different diversities there are. When the two are inter-leaved with each other, to use a textual metaphor, the complexities are indeed difficult to untangle. I am trying to show that perhaps we need not do the untangling. If readers are able, then a knot or a tangle or an integrated building may be a better way to go. This is not only about theory but also about the practices of the everyday, in this case in day care centres and in classrooms of early schooling. Avoiding the simple then, by embracing the

complex, is not only a naturalist practice. It is also an ethical one. This is because research in education is seen as capable of transforming the practices of pedagogical and caring adults. This then is its big difference from the 'science' I am indirectly critiquing.

I shall now try to unpack some of this so that the six sets of juxtapositions are made a little clearer. To do so I also consider complexity as theory and as ontology. In now striving for clarification I am to some extent fixing my 'meanings', and this itself is a reduction of possibilities.

In juxtaposition 1 (quote, data and questions/comments about the bride scenario in preschool) the theory is that gendered subjects are complex/subtle. It is this that traditional research not only fails to deal with but quite often ignores. For gender research such ignoring reduces the chances of doing justice to how a child and an adult are positioned as girls and boys, men and women. Being subtle is matter of both language and body. Researching both together is what seems to be called for.

In juxtaposition 2 (quote, data and questions/comments about the children with disabilities in the special education centre) the theory is that the researcher is positioned as always subjectively within a complex research practice. Such positioning involves more than one position at a time, sometimes with the researcher not knowing which hat she wears. Although gender may appear to be a minor discourse here, it could be gender that constructs what happens as pedagogy for the disabled.

In juxtaposition 3 (quote, data and questions/comments about the seven year old girls at school) the theory is that the complex must include inconsistencies, contradictions and puzzles. A complex research practice and a complex theory of gender will write these in instead of rubbing them out. Hence research data will be messy, as is life and especially the life in classrooms and playgrounds.

In juxtaposition 4 (quote, data and questions/comments about the woman senior teacher and the man principal) the theory is that accountability also is coloured by a gendered complexity. Further the complexity of concealing the identity of the people depicted in the research must be dealt with by the researcher as a new aspect of ethics. Working within the postmodern, where the unexpected sometimes yields useful data for theorizing, and hence for the changing of practices because of who will later read the research publications, requires particular care.

In juxtaposition 5 (quote, data and questions/comments about colours and perceptions of gender) the theory is that the complexities of signs, semiotics and non-verbal representations matter, even for gendering. 'Reality' is thus a complex of many matters, perceived differently in different places at different times. Gendered 'reality' would appear to also alter according to context and discourse. What signifies for one does not signify for another.

In juxtaposition 6 (quote, data and questions/comments about the boy who shouted 'fat dick') the theory is that reduction to quantities, as the denying of complexity, is quite inappropriate for everyday events. When what happens is shocking, and much of everyday life is, then complex research lets the shocking be there, for the reading of the reader. In the case of this particular research what I did was then leave the room, but I know some researchers who will never, for example, film children crying. But then filming and just being there and writing afterwards are two different things.

Well I could bullet point these 'findings' about complexity and gender, and some readers like this, but for me it is too compartmentalizing to even do what I have. As a conclusion for this paper then I bring in some additional theorists to help with some further theoretical and definitive directions

regarding complexity. As can be seen, the complexities I am wanting to not omit regard not only research methodologies but also texts, related generic practices and ontology (the metaphysical aspects of being). I see gender as closely relating to each of these. This means that even if research is not currently focusing directly on gender, it is there all the time, because of who the researcher is. Now this of course brings up the problems of gendered essentialism which I can not here take up. Writing for myself, I will only say here that what I do as a researcher, as a writer, a teacher and as a theorist can not be separated from who I am. And who I am, at all times, is gendered. This gendering comes from lived experiences, from which texts I lean towards, from what I'd like to have happen. And this is why I have written and then selected the research data extracts I have. Beyond myself I cannot speak. But with myself I hope to.

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As I have also been writing about diversity (Rhedding-Jones, 2002b), I am reading the definition of complexity given by Bill Cope and Mary Kalantzis (Cope and Kalantzis, 1997). This is not what I have been writing about in this paper. I shall explain this a bit, to show how any term may be slippery, and how all terms may be taken up and used in varying ways. In describing a 'productive diversity' Cope and Kalantzis take up a discourse of management. (But then isn't management what education both needs and is threatened by?)

In the simple culture-as-sameness metaphor of post-Fordism, say Cope and Kalantzis, complexity regards the division of labour. This compares to the division of labour as minimalism, following the machine metaphor of Fordism. The division of labour in Cope and Kalantzis' own 'Productive Diversity Model' is not about this but about what they see as a newer 'multiplicity' (Cope and Kalantzis, 1997, p. 19). In other words, in their terms complexity is superseded by multiplicity, as complexity, in their terms, is not enough. I see this as an oversimplification of what complexity it, based on the desire for achieving 'a new organisational paradigm' (p. 19). To say that complexity is a redundant term because multiplicity has now taken it over, reveals (as I see it) a compartmentalism mentality and an ignoring of Foucault's use of the term. I prefer to follow Michel Foucault, who said when interviewed:

'My role is to raise questions in an effective, genuine way, and to raise them with the greatest possible rigour, with the maximum complexity and difficulty so that a solution doesn't spring from the head of some reformist intellectual or suddenly appear in the head of a party's political bureau. The problems I try to pose ... that concern everyday life - cannot easily be resolved. ... I take care not to dictate how things should be. I try instead to pose problems, to make them active, to display them in such a complexity that they can silence the prophets and the lawgivers, all those who speak for others or to others. In this way it will be possible for the complexity of the problem to appear in its connections with people's lives ...' (Foucault, 2000, p. 288)

My argument then, and my reason for bringing in Foucault, is to show that a structuralist approach, such as Cope and Kalantzis', is very different from a poststructuralist approach, to complexity and also to much more. Hence Cope and Kalantzis, as structuralists writing for 'work and management' people and institutions, say (1997, p. 58) 'this recognition and valuing of complexity reverses the Fordist tendency to reduce everything ... to the minimal. Just as there are many roles in a village community, the metaphor of culture recognises the complexity of human relationships that make up work and management.' My point is not that I am against complexity being meant like this, but with what Cope and Kalantzis say next: 'Complexity: resorting to minimalism again' (1997, p. 92). Now maybe they mean that management has interpreted complexity as just another minimalism, and it is

this that could be resisted. At any rate I have been using the term 'complexity' as if multiplicity and more than multiplicity is included in it. I think Foucault is doing this also.

So what I have been trying to do with this paper is unmask some of the Foucault complexities that we as a profession have not addressed. Doing so may produce 'risky' research in education, where researchers look at their own or other people's crises as pedagogues, their disorientations, their incompetence. It may also produce research where what it pointed to is silence rather than words, and stillness rather than action. Further, complexity as I am using the term is also about multiplicities, simultaneity, puzzlement, uncertainty, bafflement. Dealing with these may then, for researchers who by virtue of their work must always write, become a matter more of writing the complex, attempting the production of a multiplex, and maybe 'multiplex' is a better term because of its lack of conflicting semantic traces. Thus the multiplex would become a linguistic and semiotic matter of many readings or deconstructions or analyses being possible from the writing of one event, one snippet of a conversation, one tiny part of a document. The multiplex could make complexity a matter of overlayings of these and a constant shifting of emphasis. Or am I like Cope and Kalantzis just looking for a new term to claim as 'mine'?

So the risk here is who will read the writing. I am not only alluding to a structuralist/poststructuralist split, or a modernist/postmodernist split, a split between gender theorists and researchers reconceptualizing research methodology, a split between what is 'science' and what is socio-cultural 'science', a split between what is everyday and what is academic language, a split between what is coming from literary texts (of metaphor, representation and verbal arts) and the texts of exposition or argument. The risk is that the 'wrong' readers get hold of the writing and 'misunderstand' this as non-research. So at stake is the status of knowledge-making, a new validity in what counts. As I am no Doctoral student and this is not at the moment being reviewed as a possibly cutting-edge publication, I can risk writing what I like, knowing from experience that there will be some readers out there who will take it up. But if what you are struggling with must get past stricter gatekeepers than I now have, then write with an eye for these.

References

- Collins (1987) *Gem Thesaurus*, London and Glasgow.
- Cope, B. and Kalantzis, M. (1997) *Productive Diversity: A new Australian model for work and management*. Annandale, NSW Australia: Pluto Press.
- Foucault, M. (2000) *Power. Volume 3 of the Essential Works of Foucault 1954-1984*. (Ed.) J. Faubion (trans. R. Hurley and others) New York: The New Press.
- Hollway, W. and Jefferson, T. (2000) *Doing Qualitative Research Differently: free association, narrative and interview method*, London, Thousand Oaks and New Delhi: Sage.
- Metz, M.H. and Page, R. N. (2002) The uses of practitioner research and status issues in educational research: reply to Gary Anderson. *Educational Research*, 31(7): 26-27.
- National Research Council (2002) *Scientific Research in Education*, R. J. Shavelson and L. Towne (Eds) Committee on Scientific Principles for Education Research. Washington, DC: National Academy Press USA.
- Norges Forskningsråd (2001) *Gender Research: knowledge, boundaries, change* (Kjønnsforskning: kunnskap, grenser, endring) English information on Norwegian Research Council website www.program.forskningsradet.no/kjonnforskning
- Oxford, (1982) *The Australian Concise Oxford Dictionary*, South Melbourne Australia: Oxford University Press.

- Paley, N. and Jipson, J. (1997) *Daredevil Research: re-creating analytic practice*, New York: Peter Lang.
- St. Pierre, E. A. (2002) "Science" rejects postmodernism. *Educational Researcher*, 31(8): 25-27.
- Rhedding-Jones, J. (2000) The other girls: culture, psychoanalytic theory and writing, *Qualitative Studies in Education*, 13(3): 263-280.
- Rhedding-Jones, J. (2002a) English elsewhere: glocalization, assessment and ethics, *International Journal of Curriculum Studies*, 34(4): 383-404.
- Rhedding-Jones, J. (2002b) Questioning diversity: practices, discourses and the early childhood profession. Paper presented at Australian Association for research in Education annual conference, Brisbane QLD, Australia, December 1-5. Publication on www.aare.edu.au
- Rhedding-Jones, J. (2003) Reconceptualizing gender: new theorizations from early childhood education data. Paper presented at British Education Research Association annual conference, Edinburgh, Scotland, 10-13 September. In symposium, 'Reconceptualizing Gender' with Dr Carrie Paechter and Dr Christina Hughes.
- Rhedding-Jones, J. (2004 forthcoming) Guest Editorial, *Australian Research in Early Childhood Education*. Themed edition on 'Gender, Complexity and Diversity', with approximately 11 articles from Norway.