Social Justice and the Jazz Metaphor

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The orthodox mode of social justice in mathematics education is code-justice, and, in its disregard for the ethical realm of qualitative discrimination, it boils down to proceduralism. An alternative mode, ethics-justice, gives primacy to the ethical, and shares features in common with the jazz metaphor. From the perspective of ethics-justice, but not necessarily from the perspective of code-justice, streaming can be seen as an injustice. Recent changes in the social world, and in the self-constitution of the individual, have led to the need for ethics-justice to be given primacy. Further, humanistic mathematics has become a justice—and not just a philosophical or pedagogical—issue, and needs to be given renewed emphasis.

Background

This paper follows on from the papers I presented at MERGA2002 and 2003, and is another brick in the jazz metaphor wall. The jazz metaphor is a theoretical model that I am developing for an *ethical* approach to mathematics education. This paper is a response to a challenge posed to me during MERGA2003 by one of the leaders in the Social Justice Special Interest Group, and arose as a result of my paper on the ethics of mathematics education and the jazz metaphor (Neyland, 2003a). The challenge was stated thus: You state that the jazz metaphor is an *ethical* theory of mathematics education, but you have not made clear what theory of *social justice* goes with it.

It is important to alert the reader that I approach this challenge with trepidation. Social justice, or more pertinently, social *injustice*, is not a concept to be analysed; it is the lived experience of many—too many. Accordingly, it cannot be discussed theoretically with anything like genuine engagement. This is where academic discourse appears jumped-up and pretentious, and to be effecting a demeanour of seriousness and completeness that runs the risk of diminishing the *gravitas* of that which is written about. However, that said, this is the mode of writing that leads to dialogue at MERGA conferences, and this leads . . . You know what I mean.

My research in mathematics education has now moved from its first to its second phase. The first phase entailed a detailed critique of the orthodox consensus in mathematics education. The substance of this critique has been summarised in Neyland (2003b, 2004). Distilled to its tabloid essence, the overall problem is that there has been too much emphasis on the *mathematics of education* and not enough on the *education of mathematics*!

In the second phase I am trying to formulate a better alternative to the orthodox model for mathematics education. The movement from the first to the second phases has been hampered by my failure to find a mode of critique that did not boil down to a mere *negation* of the orthodox consensus. The problem with a negation is that, by its nature, it is defined by what it is *not*, and thus a negation of the orthodox consensus typically remains a subspecies of the orthodox consensus (Neyland, 2001). I seek a genuine alternative.

The turning point came when I approached the problem from an *ethical* point of view. I found that the orthodox consensus is tied up with what I call *code-ethics*. Code-ethics is a Kantian approach to ethics, and takes as axiomatic the proposition that the ethical realm is

irrelevant and can properly be replaced by the elevation of procedures—codes, rules, normative rules, and the like—to a status equivalent to the ethical realm. I have found it useful for communication purposes to use, as a shortcut into the abstract notions of codeethics and the orthodox consensus, the more imaginatively accessible ideas of the *forensic metaphor* and the *cult of expertise* (Neyland, 2003a, 2002). The forensic scientist, for instance, makes decisions based on the observation of, and painstaking data-gathering from, an unchanging and unchangeable (sterilised) scene. She restricts herself to a specifically naturalistic field of inquiry, and follows carefully worked-out procedures. The cult of expertise refers to the situation where a social stratum of experts decides which codes ought to rule our actions.

There is another approach to ethics with links to Aristotle. I call this *ethos-ethics*. From this perspective, prior to any *procedures*, there is a realm of *qualitative discrimination*—a realm of the 'good', or of *ideals*—to which all procedures are answerable, and from which they obtain meaning. Importantly, this horizon of qualitative distinction is a *background that cannot be made foreground*; it is never possible to fully articulate the good; but it is uniquely embodied in a life well lived. Further, the ideals that make up this realm are not *monistic* (mutually consistent and unitary); they are *pluralistic* and in 'agonising' conflict. There is a link between *ethos-ethics* and *enactivism*. Varela (1999), one of the leading proponents of the latter has this to say: "I firmly believe that an understanding of ethics in a nonmoralistic [non-codified] framework . . . is crucial for our confused and confusing what is good than to correctly adjudicating particular situations" (p. 3). "A wise (or virtuous) person is *one who knows what is good and spontaneously does it*" (p. 4, original emphasis). The last statement, in particular, suggests a concordance with improvisation, and therefore with jazz.

The Jazz Metaphor

In the second phase of my research I am attempting to give shape to an approach to mathematics education based on ethos-ethics. As a first step I have identified six necessary and interrelated characteristics: (i) complexity (not complicatedness), (ii) an optimally minimal structure, (iii) the primacy of creative and spontaneous improvisation, (iv) challenging ('playing outside') established structures, (v) pursuit of ideals, and (vi) ethical know-how. All six characteristics are also those of jazz playing. And, accordingly, since almost everyone is familiar with improvised music, I use what I call the *jazz metaphor* as a shortcut into this mode of thought (see Neyland (2003a), for an outline of the jazz metaphor). The jazz musician, for instance, operates in a constantly changing and unpredictable environment. She follows few rules. She is in dialogue with her fellow musicians, and absorbed in the flow of an improvisational process. Her attention is on the music created-in-the-playing, and on some feeling—not fully specific—for what is good jazz. Her decisions are responses within a complex interaction involving other players, the realm of the good, and the emerging music.

Introduction

Just as there are two approaches to ethics, there are two related approaches to social justice. In the interests of brevity I will refer to the theory of social justice that resonates with the forensic metaphor as *code-justice* (CJ), and the one that resonates with the jazz metaphor as *ethics-justice* (EJ). In this paper I will: (i) briefly outline the difference

between CJ and EJ; (ii) indicate how the principle of equality is riven with ambiguity and therefore insufficient as a sovereign principle of justice (in fact, there is no such sovereign principle); (iii) indicate how EJ and the jazz metaphor are linked; (iv) indicate why the contemporary social condition requires that EJ to be taken more seriously, and why Taylor's (1991) *ethic of authenticity* should be made more central in justice deliberations; (v) illustrate what I am saying by reference to the streaming of lower achieving mathematics students; and (vi) suggest why the ethic of authenticity leads to the need for mathematics teaching to emphasise a humanistic philosophy of mathematics.

The distinction between CJ and EJ is not original, although the terms and the particular way I have drawn on the literature are mine. In what follows, there are three original contributions: (i) the linking of EJ with the jazz metaphor; (ii) the argument that the ethic of authenticity should be brought into the field of vision when issues of social justice are considered; and (iii) the argument that the ethic of authenticity requires mathematics educators to give more attention to a humanistic philosophy of mathematics.

More on the Difference Between Code-Justice and Ethics-Justice

CJ reflects orthodox moral theory in finding no place for an ethical realm (Taylor, 1989). It was able to "gain a foothold in the institutional domain" of justice "only by joining with the contractualist tradition" which aimed to "separate the just from the good, by substituting the procedure" for any "prior commitment to" a "common good" (Ricoeur, 1992, p. 228). The contractualist tradition is based on the fundamental notion that individuals possess 'rights' that preceed any "intrinsic obligation" associated with "perfecting the social bond" (Ricoeur, 1992, p. 181). Society, it is believed, is made up of isolated atomistic individuals, and human relationships are based on contracts made between them. This way of thinking persists in orthodox education theory and finds expression in the scientific management theory favoured by educational planners (Neyland, 2004). CJ, then, is fundamentally individualistic and, as such, based on a complicated rather than a complex understanding of the social world (the meanings of these terms is given shortly). The primary focus of CJ is on rules that constrain my actions and on my capacity to judge whether I have properly carried out a procedure. Importantly, the inevitable ambiguities that accompany the application of CJ and which might be expected to call it into doubt lead, not to it being questioned, but, paradoxically, to redoubled efforts to obtain clarity by intensifying the process of codification.

What is this *ethical realm* that is rejected by CJ yet given primacy in EJ? It is "a limiting idea", an "horizon", "an unending work of interpretation applied to action", and a domain of reference concerning what is best for life as a whole and for my "preferential choices" regarding my actions. It is an orienting sense of what is "important, valuable, or what commands our allegiance". It is that which we aim to have emerge in our institutions (Taylor, 1989, p. 77). In addition, because I cannot separate my "basic concerns" from *who I am*, this realm "helps define my identity" (Taylor, 1989, p. 76).

What then is EJ? Importantly, EJ is like CJ in viewing normative procedures as *essential*. But, in contrast to CJ (i) the ethical has "primacy" over these normative procedures, (ii) they are instead a "limited" but "indispensable" actualisation of something more important—the "ethical intention"—and, (iii) where ambiguity occurs in the application of the norm, recourse must be made to the ethical intention. What is this 'ethical intention'? It is (i) "*aiming at the 'good life'*", (ii) "*with and for others*", (iii) "*in just institutions*" (Ricoeur, 1992, p. 170, my emphasis). These three characteristics are inseparable and together give meaning to the EJ mode. Thus, EJ can be thought of as an

institutional extension of the interpersonal notion of *friendship*, of "solicitude", or of "benevolent spontaneity". These are the ethical sense behind the level of obligation (Ricoeur, 1992, p. 190). EJ is primarily focussed on the goodness of action or procedure, and on a bond of common mores. EJ differs from CJ in its fundamental orientation because it is, in the first instance, concerned, not with rules or rights, but with the structuring of *wanting to live together*.

Ambiguities in the Nature of Equality

If the notion of equality, or of its more sophisticated offspring, equity, is relatively unitary and uncontested, then CJ could well be sufficient. But, the fact is, this notion is troubled by ambiguity, and accordingly reference to the ethical realm ought to be seen as essential. Ricoeur (1992) draws particular attention to two such ambiguities. First, there is the ambiguity between equality, on the one hand, as simple *arithmetical* division, and, on the other, as *proportional* (equitable) division. Second, there is an ambiguity between the individualistic *disinterestedness* invoked in the separation of what is yours from what is mine, and the more community focussed *mutual indebtedness and cooperation* established by such a division. Such ambiguity is not a problem. The denial that ambiguity is unavoidable, and the determined effort to eliminate ambiguity by the provision of a more prescriptive and complete code is a problem. Ambiguity, instead, requires a reference to an horizon of qualitative discrimination.

Ethics-Justice and the Six Characteristics of the Jazz Metaphor

(1) Complexity. A complicated system can be validly broken down into component parts. A complex system cannot. CJ, because it is fundamentally based on the notion of the autonomous separated individual, is based on a complicated notion of the social and ethical worlds. EJ gives primacy to both the social bond and a non-reducible ethical realm. It is therefore, like jazz, complex. (2) Minimally optimal structure. CJ aims at a complete procedural framework (structure) sufficient for the regulation of ethical behaviour. EJ denies this possibility and, like jazz, aims for an optimally minimal one. (3) Improvisation. CJ aims at the codification of behaviour and abhors improvised or spontaneous action. EJ gives primacy to such improvised action, and to "spontaneity" (Ricoeur, 1992, p. 190). (4) Challenging the structure. The procedural structure enshrined in CJ, being complete, requires no challenging as a structure. EJ takes procedural structures as incurably incomplete, and the ethical realm as pluralistic and therefore necessarily involving conflict. Therefore, like jazz, 'playing outside' structure is of fundamental importance. (5) Ideals. CJ recognises no ideals. EJ, like jazz, needs continual reference to such a realm. (6) Ethical know-how. Ethical know-how Sudnow (1978) has shown, is the foundation of jazz performance. CJ commands action in accordance with procedural rules. These may, over time, become unconscious as habits of codified behaviour, but as such they cannot be taken as equivalent to ethical know-how. This is because habits of codified behaviour are not anchored in the larger and indefinable horizon of qualitative discrimination. They are merely procedural. EJ evokes action in response to procedural injunctions, and in this respect is not dissimilar to CJ. However, in EJ these are formulated and understood as extensions of (jazz-like) ethical know-how. They are "rich in anticipations of an ethical nature" (Ricoeur, 1992, p. 170). "[Once] we sideline a sense or vision of the good . . . then our notion of practical reasoning has to be procedural" (Taylor, 1989, p. 86).

The Late-Modern Social Condition and The Ethic of Authenticity

There are risks associated with a shift from the CJ to the EJ mode. The situation is delicate, and the risks associated with even a minor adjustment ought not to be underestimated. When one is precariously balanced, as Humpty Dumpty found to his regret, even a one-millimetre movement can have radical consequences. However, it is also true that if the fulcrum of balance shifts *under us* an equally perilous situation emerges. Has the fulcrum moved? Yes. This is because both the social world and human nature have changed. But, you might reply, education ought not merely *mirror* the social world; it should *challenge* it. I accept this; however, the changes I am talking about seem to me to be both irreversible and in some respects welcome.

How have the social condition and human nature changed? First, Bauman (1992) argues that, although proceduralism may have worked in the immediate past, we must urgently return to ethics and away from mere proceduralism. This is because there have been two recent changes in the social condition. We have now a significant increase in (i) *pluralism of authority*, and (ii) the *centrality of choice in the self-constitution of the individual*.

Second, Taylor (1989, 1991) shows, in a groundbreaking study, that we late-moderns feel the force of a compelling ideal—*a new ideal* characteristic only of our late-modern times. He calls it the *ethic of authenticity*. This is, he argues, the ethical side of individualism; the worthy face, of individualism. Taylor does not condemn individualism; only its more trivialised and perverted presentation of the individual as separated and radically autonomous. He wants to orient individualism towards the constitutive ideal that gives it full meaning. Further, he argues that, because we commonly share the Kantian suspicion of the very notion of ideals, we are prone to overlook the ethic of authenticity; to fail to acknowledge the extent to which we feel the force of this ideal. For this reason we fail to acknowledge it in policy discourse, and find ourselves living with a deviant version of individualism, egoism.

Briefly, the ethic of authenticity involves a movement beyond the pre- and earlymodern notion that we find our self-identity in relation to a larger abstract hierarchical structure such as 'the order of nature'. The ethic of authenticity, he argues in Taylor (1991), has two modes: authenticity-A and authenticity-B. The former has three aspects. A₁: a felt need to be creative. A₂: a felt need to be true to ourselves in our originality. And, A₃: the challenging of established structures. The latter has two aspects. B₁: an openness to a realm of ideals. And, B₂: self-definition in dialogue with both significant others in our lives and our horizons of qualitative distinction. In contemporary society there is a tension between these two modes. Taylor warns of the danger of favouring A₁ while neglecting B₁, and of favouring A₃ while neglecting B₂. The danger, of course, is the two consequences of shallow individualism: the extremes of (i) despair, and (ii) heroic self-assertion. The reader will observe that the jazz metaphor resonates with the conclusions of Taylor's analysis. The need to be creative and original, the challenging of structures, openness to ideals, and the centrality of dialogue, link directly with jazz metaphor characteristics (iii), (iv), (v) and (i), and indirectly with (ii) and (vi).

Social Justice and the Streaming of Lower Achieving Students

The streaming of lower achieving students is widely condemned by researchers and some teachers (see, for example, Bartholomew, 2003). Yet this practice remains widely supported in schools. Why? I suggest that a part of the explanation is the dominance of CJ

in mathematics education. I should note in passing that it is EJ that comes across strongly in a paper on working with Aboriginal students (Matthews, Howard & Perry, 2003), especially on page 23. Some teachers no doubt view lower achieving students as appropriately destined for more menial jobs-'hewers of wood and drawers of water'and believe a similarly menial education in mathematics to be appropriate. I have met such people but I think they are few. Most advocates of streaming are people who want what is right. What is right is what is equal. From a CJ perspective, streaming can appear to be equal and therefore just. This is because, being merely proceduralism, CJ can lead to shallow forms of equality without this fact being noticed. If one thinks in terms of procedures such as, programmes should 'overcome barriers to learning', 'be relevant', 'befit the prior achievement or ability of the students', and 'be success oriented'-these are the sorts of things urged by education authorities and typically appear in preambles to official documents—one can be led to view, as representing an education equal to that given others, what to anti-streamers appear as segregation, negative typecasting, and trivialised mathematics. For instance, a highly sequenced and procedure dominated mathematics programme for lower achievers can be seen as equally success oriented to a more inter-connected and layered one for higher achievers. And, by these standards, it is. It is equality of procedure. But by the ethics of (i) wanting to live together, with and for others, in just institutions, and (ii) authenticity, this is an injustice. Segregation, negative typecasting, and trivialised content cannot be seen as expressions of the ethical aim of wanting to live together, with and for these students. Further, they, perhaps more than their teachers, feel the force of the ethic of authenticity. That is, they feel drawn to be creative and original, to challenge structures, to be open to ideals, and to define themselves in dialogue. All of this can occur in mathematics programmes designed with this in mind. But, for exactly the reasons that CJ has been found wanting, this cannot happen when students are more or less sedated by procedurally oriented, sequential, neo-behaviourist, outcome-driven, programmes, especially those that also exchange relatively meaningless tokens in exchange for relatively trivialised prescribed performance.

What the Ethic of Authenticity Implies for Mathematics

Bauman's (1992) research leads to the conclusion that we must move from CJ to EJ. Taylor's (1989, 1991) analysis, surprising though it may at first appear, is so thoroughly researched it cannot be ignored. What does it mean for EJ and mathematics education? Two things. First, among the ideals that ought to be given serious consideration, when justice policy is formulated, is the ethic of authenticity. This ideal ought not be given consideration above equality or equity, but it needs to be given significant weight. Second, the humanistic face of mathematics should be given much greater prominence. Mathematics has two faces. The first is the one we are most familiar with: mathematics as a highly structured, sequential, abstract and depersonalised edifice. Like CJ it is highly proceduralised and the realm of qualitative discrimination is downplayed. Associated with this the notion that mathematics is based on ideas-human ideas-is similarly downplayed. The second is the humanistic face. Here emphasis is given to the fact that mathematics is based on human ideas, and greater emphasis is given to mathematical horizons of significance. The case for humanistic mathematics has been argued in detail by a number of scholars and publications, including, White (1993), Davis and Hersh (1981, 1986), Hersh (1997), Lakoff and Nunez (2000), Bloor (1991), Papert (1980) and Lakatos (1976). Four hundred years ago Latin was supreme as a language. But it began to be overtaken by the vernacular. Mathematics has a 'Latin' face: pristine, pure and universal. It

also has a 'vernacular' and humanistic face. It is imperative that we present the latter. Papert made an argument about the relationship between mathematics and human identity this is concordant with aspects of the one I have just outlined. He urged that we abandon a "stereotypically 'disembodied' mathematics" and move to one that engages "a full range of human sensitivities" (p. 190). Our "styles of involvement" with mathematics, he wrote, are "intricately interwoven with our psychological and social identities". He urged that we change from "the 'formal' incarnation" of mathematics to one that is "ego-syntonic" and "body-syntonic" (p. 205). By these last terms he means an approach which is coherent with learners' senses of themselves and the instincts and ideas that are compatible with the demands of personal integrity (p. 63, and Footnote 2 on p. 221). Breen (1990) argues similarly.

Conclusion

Caveat emptor. I said earlier that there are risks involved in EJ, but, nonetheless, that we ought to move in this direction. I will conclude by highlighting five points that need to be borne in mind in any decision to favour EJ over CJ. (1) In one sense EJ is the antithesis of CJ. The former takes as fundamental the existence and relevance of an horizon of qualitative discrimination. The latter vociferously denies the existence, or at least the relevance, of such an horizon. Thus CJ positively excludes from discussion factors intrinsic to the making of human identity in the contemporary social world. This, it seems to me, disqualifies CJ from continued serious consideration. (2) However, in another sense CJ is a component part of EJ. How? From an EJ point of view one could choose to narrow one's focus to a single procedural good, such as equality. But this ought not to be seen as a decision to revert to CJ. It is a decision to ethically choose a proceduralism that resembles CJ. So EJ does not involve an *a priori* ruling out of proceduralism. This said, in the light of the arguments made in this paper, the case for such a uni-dimensional approach to the ethical realm would need to be considered carefully. (3) Is there a decisive test that would swing the decision one way or another? Yes. Bauman's (1992) two criteria provide the test. Is it true that in the late-modern period we are experiencing significant (i) *pluralism of* authority, and (ii) centrality of choice in the self-constitution of individual selves? If the answers are in the affirmative, it seems to me that we are compelled to shift more towards EJ. (4) If, in addition, Taylor is right in his analysis of the sources of the late-modern self, then the ethic of authenticity-one of the most compelling constituent ideals of the contemporary period—ought to be at least close to the centre of deliberations about social justice policy and practice. And, following from this, a humanistic orientation in mathematics ought to be given priority over one that is largely procedural and sequential. (5) EJ will not make social justice in mathematics education any easier. But it may make it better. Of course, it does not follow that the associated change in mathematics *teaching* will be harder. Humanistic mathematics, because it better accords with the force of the ethical ideal that is constituent of modern self-identity, and in particularly with the selfidentity of young people, might well prove to be easier to both teach and learn.

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