Editorial

Over the past couple of years, David Wheeler and I had occasionally talked about the possibility of my guest editing a special issue on language and mathematics, as there had previously been on history – **11**(2), psychodynamics – **13**(1) and ethnomathematics – **14**(2) On looking more carefully, I found that each special issue was actually entitled '*X in mathematics education*' with each issue's editorial contained a list of articles that had appeared in the journal to that date broadly related to the topic (respectively, 36, 3 and 18).

While this is not a special issue, **18**(1) nonetheless has a broad common theme of language *in* mathematics education. But to list those previously published articles whose theme somehow impinged on language would be to list the vast majority of the FLM corpus (Incidentally, a current project for issue **20**(3) is to provide readers with an annotated bibliography of the articles in the journal.) Yet, I regularly have had said to me 'Isn't language an epiphenomenon in mathematics education?' And didn't the philosopher-mathematician Brouwer assert 'mathematics is an essentially languageless activity of the human mind'?

One of the problems with language is its ubiquity, and its frequently taken-for-granted quality, as well as being taken-as-shared. Default presumptions are ever in need of being acknowledged and recognised as such, and the monoglot mathematics classroom (one where the teacher and all pupils share and use a common first language) is one whose time seems ripe Such a classroom is not the quantitative norm, I suspect, and in a more or less explicit manner its antithesis provides the setting for four of the articles offered here (by Bill Barton, Uenuku Fairhall and Tony Trinck; Tamsin Roberts; Jill Adler; Mamokgethi Setati), though they arise from different parts of Southern hemisphere (I almost wrote 'antipodean', tacitly placing myself at the pode) and with differing social, political and mathematical justifications. In particular, Adler, in her article, talks about language as a classroom resource that needs to be both 'visible' and 'invisible', in Lave and Wenger's image

Carl Winsløw writes from the perspective of a mathematician on the 'justification problem', namely articulating what makes mathematics worth knowing, worth doing, and after putting aside some commonly offered responses comes to a linguistic answer And in the closing piece in this issue, five authors react to an initial starting question from Anna Sfard about the presumed potency of mathematical communication for learning mathematics, particularly spoken interchange

Any given language's particularities may be significant in relation to its being used for mathematical ends. Linguist Michael Halliday's characterisation of language as involving three interlocking systems (the forms, functions and meanings) highlights how any one of these systems both shapes and is shaped by any other. So for any particular language, the 'mutual interaction' question can be asked: how are the specific forms influenced by its being used for mathematical ends and how is this desired functioning influenced by the existing system of forms? (These interlocking questions are specifically discussed in the first two articles in this issue)

In his book, *Towards a Philosophy of Critical Mathematics Education*, Ole Skovsmose has written about certain ways in which mathematics can be seen to 'format' society. Language too plays this barely perceivable shaping role, selecting for us before it is apparent choices have been made. A language carries and shapes a culture: a powerful element of so much recent political turmoil involves issues of language as a marker of boundaries, of power, of the forbidden and of resistance. In Harold Pinter's play *Mountain Language*, a prison officer declaims:

> Your language is dead. It is forbidden. It is not permitted to speak your mountain language in this place. [.] You may only speak the language of the capital. [...] You will be badly punished if you attempt to speak your mountain language in this place. (p. 21)

Barton *et al.* allude to this in their article on the regrowth of the Maori mathematics register

One common feature of the English mathematics register (and maybe all registers?) is the emphasis on nominalisation, on verbs being turned into nouns. One of the striking aspects for me of moving into North American English is the number of words making that reverse grammatical journey. (A recent instance from an advertisement claims: 'a new way to office'). Why does one direction of transition seem to me such a linguistic perturbation and the other be barely visible - can it be merely a matter of familiarity? Or is it the case that, as Calvin recently remarked to Hobbes:

> I like to verb words I take nouns and adjectives and use them as verbs. Remember when "access" was a thing? Now it's something you *do*. It got verbed Verbing weirds language.

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Although there were themes both in the last issue to some extent and even more so with this one, this will not in general be editorial policy With **18**(2), FLM will reassert its eclecticism with regard to content.

When the Open University started teaching at a distance in England in 1971, its initial efforts were met by a postal strike of many weeks duration. While not of the same order, the Canadian postal strike in November and December did not help our attempts to get issue **17**(3) to you in a timely manner Regrets for any delays caused.