

POST-EDITORIAL AND POST-RETIREMENT POSTSCRIPTS

DAVID PIMM

“The past is never where you think you left it.”
(Katherine Anne Porter, 1962, p. 146)

The event in regard to my impending retirement took place on March 3rd, 2020 at the Faculty of Education at Simon Fraser University (SFU) in the Learning Hub, with folk (all of whom I knew) coming to present talks from the UK, the US and Canada (the three countries where I have lived, studied and taught for any length of time) as well as attendees from these and other places. The delightful and delighted presenters and audience comprised near-peers, former and current colleagues, and former and current doctoral students: such a celebration, I felt! [1] Ten days later, the first COVID shutdown occurred in British Columbia (BC), on Friday March 13th, 2020, the day when my choir’s dress rehearsal in Victoria should have taken place, but could not. Haydn’s *Creation* failed to be re-created as the intention had been on the evening of March 14th, 2020 [2].

In this short piece, I start with a brief academic autobiography, and then subsequently provide cross-biography elements with each of the Festschrift presenters. I see these cross-biography interactions as having been significant to the development of my own scholarly trajectory: occasions of reciprocal intellectual exchange that shaped future projects and publications. Towards the end, I make a few comments triggered by some of the articles in this monograph.

I took an undergraduate degree in pure mathematics at the University of Warwick in England (1971–1974) and then, after a year at Cambridge University, moved to undertake graduate work in the US. It is forty-seven years since starting graduate work in mathematics education in 1975 at Cornell University (where I worked with the geometer David Henderson, who was my supervisor for a Master’s degree). After a subsequent two years at the University of Wisconsin-Madison (1977–1979), I returned to the University of Warwick to work with Richard Skemp (who had taught me in my final year as an undergraduate) for two years, then worked at the University of Nottingham with Hugh Burkhardt and Alan Bell for fifteen months, before starting at the Open University in Milton Keynes in January 1983 for the subsequent fifteen years.

I worked as a part-time academic editor virtually since joining the Open University under the significant presence of John Mason, engaging with and adjusting in various manners the writing that others produced for undergraduate and graduate students [3]. I had been managing the book reviews for the Association of Teachers of Mathematics’ *Mathematics Teaching* journal (when Dick Tahta was one of the two editors). Shortly before I moved from England to North

America at the very end of 1997, I became the second editor of *For the Learning of Mathematics*, following David Wheeler’s seventeen years (and I am delighted to be engaged with this second editor monograph, in both senses) [4]. I was not generally interested in becoming an academic journal editor; I was specifically and intensely engaged with this journal and its long-time creator.

I learned so much about this journal from David himself (as well as reading it avowedly and even succeeding in writing some pieces for it). After six years as editor, Laurinda Brown took over and I have done no more journal editing since. However, Nathalie Sinclair created the *Digital Experiences in Mathematics Education* journal in 2014. I became its academic editor in 2015, which is on-going. Still at work, in this regard at least, and I did not retire from SFU until August 31st, 2021 (and, even now, am doing some sessional teaching at SFU).

Where, when and how I met the various presenters (to the best of my knowledge)

One of the things I found intriguing at the event was hearing the voices of the participants in the present, even though some I had known for almost forty years, while the most recent person I had known for six years. Eighteen-plus months later, I thoroughly enjoyed reading the articles they had written for this monograph. Increasingly, when I know authors I am reading, I hear their voices launched through my eyes. And while both my eyes and ears are not as good as they have been, the combination through reading is significant.

The two participants I have known the longest are Laurinda Brown and Dave Hewitt, whom I met in the early 1980s and who had known each other before me, both working in the Bristol area in England. Laurinda taught at secondary school and then became a consultant working for the Resources for Learning Development Unit (RLDU) in the county of Avon, before moving to teach at the University of Bristol. We published a pair of joint conversational pieces (Pimm & Brown, 2003, 2007), one when she began and one when she ended being the third FLM editor. Dave and I cannot remember precisely where we first met, whether at a Gattegno event, at an ATM conference, at a Bristol pedagogic event or an Open University event, or at a day meeting of the British Society for Research into Learning Mathematics [5]. But whenever and wherever it was, it was nearly forty years ago [6].

Subsequently, after teaching in secondary school for an appreciable number of years, Dave moved to work at the University of Birmingham, before quite recently moving to

Loughborough University [7]. In 1991, I was involved in filming his teaching for the Open University, which, among other things, had him presenting a task on the blackboard, which subsequently led to his remarkable *Grid Algebra* software. And during the week he was in Vancouver for the 2020 Festschrift event (among other things) while staying with me, he told me about having been in a classroom and seeing something interesting—and over the subsequent fifteen COVID-covered months, we worked on a short article that appeared in FLM last year (Hewitt & Pimm, 2021). So-called hallway conversations like this can, more than once, both stimulate and instigate pieces of writing.

I also met Alf Coles in the UK, at a Dick Tahta post-death event held at Alf's house, a while before Alf started working on his doctorate with Laurinda Brown, and then joined the University of Bristol. I have not yet written a piece with Alf, but I did write a chapter in a book of which he was one of the editors (Pimm, 2017). The book is called 'What is a Mathematical Concept?' and, although I no longer (for a long time) work directly on mathematics, thinking about what a mathematical concept is was thoroughly scintillating. As mine was the final chapter and part ('Making a thing of it: some conceptual commentary'), I responded to aspects of the other chapters. A quarter of my sixteen brief elements are, 'Mathematical concepts are thought-fossils (mostly from extinct species?)', 'What is the virtue of the virtual in mathematics?', 'A mathematical concept is not a definition, but even definitions mutate (*mutatis mutandis*)' and 'Mathematical concepts are rays'. Metaphors galore!

I had my first sabbatical year at SFU (1991–1992), which is where I met and taught Susan Gerofsky, who was working on her doctorate (on which I worked with her, alongside Tom O'Shea, her main supervisor). After teaching in high school for a number of years, she subsequently joined the University of British Columbia (UBC) in Vancouver, where she has worked ever since. We have stayed in local contact on a variety of themes, including her performing of music. I first encountered Judit Moschkovich at a PME conference in Paris in 1989, and we have engaged in a variety of ideas, meetings and visits since. Her focus on multiculturalism and multilingualism (along with Mamokgethi Setati, 1998, and Jill Adler) really extended my awareness about languages and mathematics registers—as well as the fact that my first book (about the English language) should have been entitled 'Speaking Mathematically Monolingually', as there was no linguistic plurality mentioned in it whatsoever. Sue Staats, Susan Gerofsky and I all got together at PME in Vancouver in 2014, and Sue and I have stayed in touch since. It was terrific to hear her close-up presentation for the first time and her poetic involvement in mathematical discourse and transcription (in FLM issues 27(1) and 29(2)) is a delight and also her response to my and Nathalie's piece in issue 29(2).

After leaving the Open University in 1997, I worked at Michigan State University (MSU) from 1998 to 2000, where I met Beth Herbel-Eisenmann (who subsequently has worked closely with David Wagner) and supervised her dissertation and, after moving to work at three different universities over time (including OISE in Toronto), she returned to teach at MSU in January 2008 and has remained there ever since. We produced a joint piece for FLM (Herbel-Eisenmann &

Pimm, 2014), part of a series arising from a small US conference and, in conjunction with David Wagner and Jeffrey Choppin, we edited a Springer book (Herbel-Eisenmann, Choppin, Wagner & Pimm, 2012). Beth also generously had me be a project advisor on three separate projects.

I met Sandra Crespo when I was teaching at UBC (on a sabbatical visit in 1994), including her, as she was just starting her Ph.D. One aspect of her Ph.D. (Crespo, 1998) drew on elementary pre-service teachers engaging via hand-written letters with a grade 4 class of students in Vancouver and focused, in large part, on their questioning [8]. Sandra moved to work at MSU in 1999 and she, her husband Reid Abel and I shared a house for over a year until I departed for Canada. Her intensive work on differences between mathematical and pedagogical talk of elementary teachers (*e.g.*, Crespo, 2006) stimulated me appreciably. And, although it is not about technology, it pre-connects, for me, to Haspekian's (2014) notion of double instrumental genesis.

I taught at the University of Alberta (UofA), where I worked in the Department of Secondary Education from 2000–2010, after Tom Kieren had retired. This is where I spent most time with Brent Davis as a colleague (though I had first met him at UBC in 1994). His detailed involvement in metaphor (such as metaphors of and for learning) were profound: I also learnt from him a lot about enactivism. David Wagner was my first doctoral student at the UofA. David and I jointly published an essay review article (Pimm & Wagner, 2003). Martina Metz and Jérôme Proulx also worked on their doctorates while I was there, and Jérôme and I also published an article together about geometry (Proulx & Pimm, 2008), as well as engaging in a significant range of discussions. Jérôme was at SFU on sabbatical leave January to April 2020, but had to go back to Montréal in early March, just after the Festschrift event, due to COVID starting to surge in BC.

I moved home to Vancouver and, in 2011, started teaching at SFU, where I met and taught Sean Chorney, when he was a doctoral student, before he joined the Faculty of Education where he still works. Sean and I talked a couple of times in detail about him having been taught by David Wheeler, after David had retired from Concordia University in Montréal and moved to BC. We talked a lot about Wheeler's version of mathematising and we also published a metaphor article about positioning theory and PISA in the media (Chorney, Ng & Pimm, 2016).

I was Richard Barwell's external doctoral examiner (in 2002) at the University of Bristol (with Laurinda Brown as his supervisor). In 2006, he moved to the University of Ottawa, where he still works. Laurinda had previously introduced us in Montreal at CMESG in 2000. We published a chapter together (Barwell & Pimm, 2016) in a book created as a homage for Jill Adler (for whom I was also an external examiner of her doctoral dissertation, albeit a tad earlier). It was about Bakhtin (about whom I did not know a lot) and dilemmas of mathematics–language.

As for Nathalie Sinclair, she has become a very good friend and colleague since our meeting up initially in 1999 during her doctorate at Queen's University in Kingston, Ontario (my having first met Bill Higginson in England in 1979, while she was subsequently working with him, along with Peter Taylor, as her thesis supervisors). After her post-doctoral work with

Rina Zazkis at SFU, Nathalie moved to MSU for a few years, 2003–2007, before returning as a faculty member at SFU. She and I have also been close colleagues at SFU for the past decade (2011–2021), since my retirement from the University of Alberta in 2010. We have engaged in a variety of issues over the past twenty years, including aesthetics, geometry and gestures. We have published way more articles, chapters and books together than I have with anyone else (*e.g.*, Pimm & Sinclair, 2009, 2014, in press; Sinclair & Pimm, 2015a, 2015b; Sinclair, Pimm & Higginson, 2006).

As for the monograph itself and a couple of themes

I have had the significant pleasure of engaging with all the articles that have been contributed. It was interesting to see how some were closely related to what the author(s) had presented in person at the Festschrift event, while others seemed further apart. I am not going to respond to the articles, one by one; instead, I shall merely finish this piece with a few things that came up from my reading of them, starting with the title itself.

The etymology of the word “monograph” is based on “a writer of a single genus or species”, derived from *monos*, which is Greek for “single” or “alone” (an antipathetic response on my part, and decidedly opposite both from the Festschrift presentations and from this special publication of FLM), and *graphos*, Greek for “a writer”. And then there is graphic writing. While the verb *graphein* means “to write”, previously it meant “to draw”—which could put geometry before arithmetic or algebra. And that thought is linked to Laurinda Brown’s piece and her presentation, as well as me remembering her silent teaching instances, which one might think of as aural inscriptions of a kind.

The three mathematics-related themes that emerged and that are in my current focus are metaphor, register and time. I felt Richard Barwell literally wrote a literary fiction essay to some extent juxtaposing Dickens’ ‘Hard Times’ with my ‘Speaking Mathematically’. Among many other things, it reminded me of when I was the *Mathematics Teaching* review editor, and Dick Tahta received a complaint about certain non-mathematical book reviews. A literary review is not a book review. There was one instance of the latter of ‘Speaking Mathematically’ (Ormell, 1989), which I fortunately only came across for the first time late last year, as it seems to me, even now, rather dismissive.

And, once again, it was interesting to read extracts from something I had not read in a great length of time. The “diffident pupil” whom Richard quoted was, in fact, Vanessa Jamblin, a friend of my sister in the same year and class at the Haberdasher’s Aske’s School for Girls. As for ‘Speaking Mathematically’, published thirty-five years ago, the book (with both metaphor and register within) only came about due to another former school-friend of my sister (whom I had first met when I was about ten years old), Deirdre Burton. She was married to Michael Stubbs who, once I had met him through visiting Deirdre Burton, invited me to write a book for his series ‘Language, Education and Society’. Before this, I had had no idea of writing a book. And it took a long time.

Deirdre also introduced me to the possibility of a non-verbal metaphor, by telling me that, when walking past a colleague

(the novelist and academic David Lodge: they both taught in the English department at the University of Birmingham), she noticed that he was talking with someone and gently swinging his empty coffee cup back and forth behind his back. She immediately saw him as a beggar and so dropped a 10p coin in as she went past, not saying a word. This story is mentioned briefly on p. 200 of ‘Speaking Mathematically’, without explicitly linking it to the invitation for me to write the book.

Both Judit Moschkovich’s and Brent Davis/Martina Metz’s pieces are about metaphor, albeit in different ways. And this connects to Susan Gerofsky’s thoroughly engaging piece on metaphor and her connection with Jan Zwicky (my connection with Jan was initially extensively through poetry [9]), but also to Nathalie’s article about Whitehead. As Nathalie mentioned in her piece, Jan Zwicky came down to SFU from Quadra Island for an entire day to discuss these aspects—Jan is a person with profound, intense, creative and lyric engagement with poetry, with music and with philosophy.

There is also a focus on the mathematics register (*e.g.*, Beth Herbel-Eisenmann and Sandra Crespo’s article), which, indirectly, connects to my latest chapter (Pimm, 2021) in which, among many other things, I protest against O’Halloran’s (2015) attempt to extend the notion of the mathematics register. In this regard, I am decidedly old-school. As mentioned earlier, I am completely happy to explore non-verbal metaphors, but not at all prepared to accept non-language-based aspects of mathematics registers.

Of course, there is so much more I could say about the various articles/authors that comprise this monograph (and will, in person, once COVID has deteriorated). But, for now, I shall end by simply but profoundly expressing my intense gratitude for the Festschrifters (and their presentations and articles) who and that have been so stimulating and productive.

I mentioned time as the third theme up above. I did write a chapter about it, in part (Pimm, 2006) and in this piece I began with a quotation from Katherine Porter’s novel ‘Ship of Fools’. I shall head to the end with another quotation of hers, moving from past to past, this time about time, since my past, as is the case of everyone, is growing and growing. I have left several pasts, in different circumstances, but one of the things that this Festschrift brought back into one place and time are elements and aspects of my past fifty years.

Of the three dimensions of time, only the past is “real” in the absolute sense that it has occurred, the future is only a concept, and the present is that fateful split second in which all action takes place. (Porter, 1973, p. 449)

I recall having a discussion with Susan Pirie in the early 1980s, about past, present and future, with me thinking that the past is adjustable precisely because it has already occurred, while the future is not, because it has not yet happened. But one of the things that psychoanalysis and/or psychotherapy (a theme that Alf Coles also wrote about here) can potentially bring about is realigning the past, something that is perhaps never to be left alone. And that, yet again, takes me back to the past, to Dick Tahta and adjacent chapters he and I wrote on this theme arising from a group at ICME 7 in Montréal organised by Paul Ernest.

In response to the opening quotation, where did I leave the past (at least the part of my life in relation to mathematics

education) and where did it turn out to be? Even today, finishing this piece, I am writing about an event from two years ago, as well as (re-)creating stories about relationships with others, with texts and with myself.

Notes

[1] The pair of ghosts whom I had hoped to be present in some manner were David Wheeler and Dick Tahta, my two most significant mentors, as well as intense and prolonged academic and personal friends, both whom I had met in the academic year 1979–1980 (Dick in the UK when I interviewed him for a project and David at ICME 4 in Berkeley, introduced to him by Bill Higginson).

[2] It did take place some nineteen months later, on October 16th, 2021 (albeit with our choir having to wear masks).

[3] My father was taken aback by this, given that he was well aware how much I had not been great at English language in secondary school. He commented, “And you’re being paid for this?”

[4] This somewhat echoes the “topological vector space” term ambiguity, in that I was indeed the second editor of FLM, but this is also the second monograph of a former FLM editor (when retired from a professional position).

[5] It was initially called the British Society for the Psychology of Learning Mathematics, since it was a national version of PME which I believe started up in the autumn of 1978 just prior to PME 3. The latter was held at the University of Warwick, where I assisted Richard Skemp in organising it, having just returned a month before from four years of graduate study in the US to work with him. I had spent two years at Cornell University (1975–1977), where meeting, studying with and getting to know the significant geometer David Henderson (who published several articles in FLM), was a major event. I subsequently spent two years at the University of Wisconsin-Madison (1977–1979).

[6] I could have met Dave (or at least seen him) at the University of Warwick in 1973–1974 (my last undergraduate year, his first such year, both in the mathematics department), but neither of us have any recollection of this.

[7] A subsequent close friend, whom we did first meet at the University of Warwick as mathematics undergraduates, was Rita Nolder, who taught mathematics education at Loughborough University in the 1980s, but who tragically died aged 41 in 1992. She was the first person about whose death I wrote in part in an FLM piece (Pimm, 1993), though I have since written four more FLM articles in this death-mentioning manner (Pimm, 2001, 2004, 2007, 2019): David Wheeler, David Fowler, Dick Tahta and David Henderson.

[8] This grade 4 class was taught by Eileen Phillips, whom I also met that same year in her Master’s programme and we married in 1998. She and Sandra together wrote an FLM article about this interaction (Phillips & Crespo, 1996). One of the genial revision comments David Wheeler provided was, “please reduce one word in ten throughout the article”.

[9] Jan Zwicky (2010) published an article in FLM. I wrote a communication response to it in the same issue (Pimm, 2010) where I engaged once more with mathematics, metaphor and poetry and the diverse links of these significant topics in mathematics education.

References

Barwell, R. & Pimm, D. (2016) Bakhtin and some dilemmas of mathematics–language. In Phakeng, M. & Lerman, S. (Eds.), *Mathematics Education in a Context of Inequity, Poverty and Language Diversity: Giving Direction and Advancing the Field*, pp. 7–18. Springer.

Chorney, S., Ng, O.-L. & Pimm, D. (2016) A tale of two more metaphors: storylines about mathematics education in Canadian national media. *Canadian Journal of Science, Mathematics and Technology Education* 16(4), 402–418.

Crespo, S. (1998) Math penpals as a context for learning to teach: a study of preservice teachers’ learning. Unpublished doctoral dissertation. University of British Columbia.

Crespo, S. (2006) Elementary teacher talk in mathematics study groups. *Educational Studies in Mathematics* 63(1), 29–56.

Haspekian, M. (2014) Teachers’ instrumental geneses when integrating spreadsheet software. In Clark-Wilson, A., Robutti, O. & Sinclair, N. (Eds.), *The Mathematics Teacher in the Digital Era: An International Perspective on Technology-focused Professional Development*, 241–275. Springer.

Herbel-Eisenmann, B. & Pimm, D. (2014) The one and the many: transcripts and the art of interpretation. *For the Learning of Mathematics*

34(2), 38–40.

Herbel-Eisenmann, B., Choppin, J., Wagner, D. & Pimm, D. (Eds.) (2012) *Equity in Discourse for Mathematics Education: Theories, Practices, and Policies*. Springer.

Hewitt, D. & Pimm, D. (2021) Images, fractions and their intricate links: true, false or somewhere in-between. *For the Learning of Mathematics* 41(2), 14–16.

O’Halloran, K. (2015) The language of learning mathematics: a multimodal perspective. *The Journal of Mathematical Behavior* 40, 63–74.

Ormell, C. (1989) Review of *Speaking Mathematically*. *British Journal of Educational Studies* 37(1), 91–92.

Phillips, E. & Crespo, S. (1996) Developing written communication in mathematics through math penpal letters. *For the Learning of Mathematics* 16(1), 15–22.

Pimm, D. (1993) The silence of the body. *For the Learning of Mathematics* 13(1), 35–38.

Pimm, D. (2001) Editorial. *For the Learning of Mathematics* 21(2), 2.

Pimm, D. (2004) A case of you: remembering David Fowler. *For the Learning of Mathematics* 24(2), 16.

Pimm, D. (2006) Drawing on the image in mathematics and art. In Sinclair, N., Pimm, D. & Higginson, W. (Eds.) (2006) *Mathematics and the Aesthetic: New Approaches to an Ancient Affinity*, 160–189. Springer.

Pimm, D. (2007) Afterwords. *For the Learning of Mathematics* 27(3), 24.

Pimm, D. (2010) ‘The likeness of unlike things’: insight, enlightenment and the metaphoric way. *For the Learning of Mathematics* 30(1), 20–23.

Pimm, D. (2017) Making a thing of it: Some conceptual commentary. In de Freitas, E., Sinclair, N. & Coles, A. (Eds.), *What is a mathematical concept?*, pp. 269–283. Cambridge University Press.

Pimm, D. (2019) Points of contact, points of intersection: recalling David Henderson. *For the Learning of Mathematics* 39(1), 28–30.

Pimm, D. (2021) Language, paralinguistic phenomena and the (same-old) mathematics register. In Planas, N., Morgan, C. & Schütte, M. (Eds.), *Classroom Research on Mathematics and Language: Seeing Learners and Teachers Differently*, 22–40. Routledge.

Pimm, D. & Brown, L. (2003) Transforming. *For the Learning of Mathematics* 23(3), 2–4.

Pimm, D. & Brown, L. (2007) Attending. *For the Learning of Mathematics* 27(3), 42–45.

Pimm, D. & Sinclair, N. (2014) A subtle journal of sudden enlightenment. *For the Learning of Mathematics* 34(1), 4–5.

Pimm, D. & Sinclair, N. (in press) Aspects of Canadian versions of so-called “modern” mathematics and its teaching: another visit to the old “new” math(s). In De Bock, D. (Ed.), *Modern Mathematics: An International Movement?* Springer.

Pimm, D. and Wagner, D. (2003) Investigation, mathematics education and genre. *Educational Studies in Mathematics* 53(2), 159–178.

Porter, K. (1962) *Ship of fools*. Little, Brown.

Porter, K. (1973) *The collected essays and occasional writings of Katherine Anne Porter*. Dell.

Proulx, J. & Pimm, D. (2008) Algebraic formulas, geometric awareness and Cavalieri’s principle. *For the Learning of Mathematics* 28(2), 17–24.

Setati, M. (1998) Code-switching in a senior primary class of second-language mathematics learners. *For the Learning of Mathematics* 18(1), 34–40.

Sinclair, N. & Pimm, D. (2009) The many and the few: mathematics, democracy and the aesthetic. *Educational Insight* 13(1). Online at https://insights.ogpr.educ.ubc.ca/v13n01/articles/sinclair_pimm/index.html.

Sinclair, N. & Pimm, D. (2015a) Whatever be their number: counting on the visible, the audible, and the tangible. In Meletiou-Mavrotheris, M., Mavrou, K. & Paparistodemou, E. (Eds.), *Integrating Touch-enabled and Mobile Devices into Contemporary Mathematics Education*, 50–80. IGI Global.

Sinclair, N. & Pimm, D. (2015b) Mathematics using multiple sense: developing finger gnosis with three- and four-year-olds in an era of multi-touch technologies. *Asia-Pacific Journal of Research in Early Childhood Education* 9(3), 99–109.

Sinclair, N., Pimm, D. & Higginson, W. (Eds.) (2006) *Mathematics and the Aesthetic: New Approaches to an Ancient Affinity*. Springer.

Staats, S. (2008) Poetic lines in mathematics discourse: a method from linguistic anthropology. *For the Learning of Mathematics* 27(1) 26–32.

Zwicky, J. (2010) Mathematical analogy and metaphorical insight. *For the Learning of Mathematics* 30(1), 9–14.



Group photo taken in the Learning Hub at Simon Fraser University on 4 March 2020 on the occasion of a Festschrift symposium in honour of David Pimm.