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To: jb40@cunixf.cc.columbia.edu  
Subject: braidings  
Dear Joan,

You are the one who taught me how to turn a knot into a braid. In fact I did all those braidings in the year when Ian was one year old. He was a very difficult baby (though now he's a delight) and basically during that year I was incapable of doing anything beyond a fairly routine kind of intellectual task. I did enjoy it and got awfully good at drawing knots. The braid indices all followed from the Morton-Franks Williams inequality (which as you see in my paper is almost trivial to prove), except for 5 knots where the M-FW inequality worked well enough on the 2-cable. A problem I didn't tackle seriously was the minimum word-length of a representing braid. Most of my words are probably minimal and I'm sure the polynomials provide tools to prove it but I haven't tried hard to do it. Perhaps your work with Bill could provide some techniques.

Best Vaughan.