Paul Hagstrom '93

It's always nice to hear from the Carleton Math department. I graduated with a Math and Physics double major back in 1993, before the (still) "new" (to me) Math/CS building went up. Back then, Math was located in Goodsell, though when I visit I still frequent Goodsell, since Linguistics has moved in. Which brings me to what I've been up to since graduating: I am now an Associate Professor, teaching Linguistics at Boston University.

I am perhaps a strange model for "what to do with a Math degree," given that what I did with my Math degree is go off and do something different. But what I did do turns out to be not entirely unrelated. In my senior year, I applied to graduate programs in Math, Physics, and in Linguistics, on the theory that it never hurts to see what the options are. As it turned out, among the options was pursuing a Ph.D. in Linguistics at MIT. MIT pretty much always tops any lists of graduate Linguistics departments; I was astounded to have been accepted, and it was clear that this wasn't an opportunity I could pass up. I went, I read, I wrote, and eventually graduated, having written a dissertation on the syntax and semantics of question formation, focusing on Japanese and Sinhala (spoken in Sri Lanka). After two years as a postdoc at Johns Hopkins University, I joined the faculty at Boston University, where I have been ever since.

Although I can never know for sure, I have always believed that my Math degree played a big role in putting me where I am today. My days at Carleton predated the existence of the Linguistics major, although I took all the Linguistics courses I could manage. Formal linguistics is primarily concerned with precise characterization of the systems underlying language knowledge. Any native English speaker will agree that in "John nominated him," "him" cannot be understood as referring to "John", yet it can be so understood in "John's mother nominated him" or "John said Mary nominated him." There are formal conditions on the abstract structure of sentences that determine when you can use "him" and when you can use "himself," and the study of formal syntax seeks to characterize conditions like these concisely, in the context of understanding what the human language capacity is like (and how/why it is that way). And the way one characterizes things formally is in mathematical language. Coming out of Carleton with a Math degree gave me credentials in abstract formal thinking, which is a big part of the syntactician's day-to-day activities. I am pretty sure that this played a significant role in getting me into the prestigious program I got into, and it has certainly helped in the actual practice of being a linguist.

I can't say whether there are courses I wish I'd taken while at Carleton. I took a great many, and enjoyed them a great deal -- though, my tastes were more toward the abstract (I remember Abstract Algebra and Algebraic Geometry quite fondly, Calculus II perhaps less so). As for advice, I guess what I'd say is to remain open to possibilities beyond mathematics strictly construed; there are many areas in which mathematical training can bring both a competitive edge and a deeper understanding and facility with the tasks at hand. I'm quite pleased both with how things turned out for me, and with having had the opportunity to learn as much mathematics as I did through the Carleton math major.