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**From:** Joscha Bach <[REDACTED]>  
**Sent:** Saturday, May 23, 2015 3:24 PM  
**To:** jeffrey E.  
**Subject:** Thanks and finances

Dear Jeffrey,

thank you again for introducing me to Noam Chomsky; I have gotten a bunch of interesting ideas out of the last meeting (for instance, on the differences between natural languages and programming languages, and the relevance of that tangent for the conflicts between Marvin Minsky's camp and the connectionists). I looking forward to talk to him about this (could you forward me his preferred contact data, please?). Also, as far as I understand, the notion that grammatical language is a genetically determined trait that only humans possess is shared by most linguists, but the question is how much of grammar itself is genetically determined, or emergent over some more primitive principle.

We have made some progress with MicroPsi, extended the motivation model and built auto-encoders into the perceptual system. (Auto-encoders abstract the input by reducing it into a few hidden nodes, and then projecting it back onto the input. By training the network to make the input look as much as the output as possible, while sending the information through a bottleneck in the middle, the network can discover redundancies and structure in the input.)

Also, I am currently turning some of my ideas and insights into a book.

We will set up another small workshop like the one last year, between June 9 and 29. We still have enough funds in the MIT account; thanks to you!

On the other hand, I need to ask for your support to help with our living expenses again, please. I will need some money for Taiyo's school (he will enroll in the German International School), and we have to pay the tuition for the year in June. Aino will get into daycare this year. IT has increased my salary, so it covers now 2/3 of our living expenses. Your last donation kept us afloat until now; for the next year we will need about 86.000. (29K for tuition & daycare, 5K for traveling, 5K for hardware and some appliances, and about 3900\$ monthly deficit between salary and expenses for rent, food, healthcare.) Could you please help?

With kind regards (and very grateful to be here!)

— Joscha—