A specialization puzzle, philosophy of science, and Susan Carey

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Abstract. This paper proposes a solution to a puzzle regarding when people switch from one skilled area of specialization to another, in which they have had little training. Certain analogies between the previous area and the area switched to enable this. I use Susan Carey as an example.

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Earlier today, I introduced a puzzle of specialization:

(i) If you are trained for 4 years in area of skilled research A and 1 month in area of skilled research B and no other areas of skilled research, then you are going to work in A, if you work as a skilled researcher.

(ii) You work as a skilled researcher.

(iii) You work in area B.

The puzzle is: how does that happen? (Or how did that happen?) I think there are various explanations apart from the "brute" explanation of just being really clever. One other explanation concerns when there are fruitful analogies between area A and area B. One's experience in A enables one to understand B more easily, as a consequence.

As an example, consider Susan Carey. Let us imagine that she took a course in philosophy of science as an undergraduate but specialized in child psychology. Now the child coming to understand the world is sometimes compared to Thomas Kuhn's revolutionary scientist. The analogy, which Carey herself has pursued (1988), would enable her to switch to philosophy of science and make contributions there. "I understand what is going on here; it is like in my former area of specialist research." (I don't know if this is actually an analogy, by

the way, or the child and the revolutionary scientist are simply classed as belonging to a kind. See Laurence and Margolis 1999. Also, in real life, if Susan Carey wrote a philosophy of science textbook I am not sure who would publish it, even if it is good.)

References

Carey, S. 1988. Conceptual Differences between Children and Adults. *Mind and Language* 3 (3): 167-181.

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Laurence, S. and Margolis, E. 1999. Introduction to Laurence, S. and Margolis, E. (ed.), *Concepts: Core Readings*. Cambridge, Massachusetts: MIT Press.