

Peter Godfrey Smith, "Cephalopods and the Evolution of the Mind"

Cephalopods – squid, octopus, cuttlefish – are an independent experiment in evolving large and complex nervous systems on an evolutionary path far from ours. When our minds differ, then show another way of being sentient; when our minds are similar this is because the paths converge on function even while differing in mechanism (analogy, rather than homology).

Criteria for ascription of "mind." This should be familiar by now.

What is the "tool-kit" of "mind" for, and what are its components? What accounts for different tool-kits?

*Evolution of the neuron.*

How would you connect G-S's account to Keijzer's paper?

What are the 2 branching points G-S identifies? Why does he need both of them to tell his story?

What is the general way to compare human and cephalopod nervous systems?

*How smart?*

Why is this a difficult question to pose? What do the anecdotes about escape and theft show?

*Evolution and neural complexity*

Why were big nervous systems worth the evolutionary investment for cephalopods?

*Experience, integration, and consciousness*

By now you should be able to give a reasonably good summary of Nagel.

What is the distinction between primary and higher-order consciousness? What is a global work-space? Why might a workspace evolve?

Do cephalopods have a workspace for integrating information?

They have distributed control. (By now you should know who Rodney Brooks is, and why his name comes up a lot in cog sci discussions.)

How do they put together centralized and distributed control of their arms?

What if anything is the relation between workspace integration and pains?