

WITH ME IN MIND

Evolving Imagining Through Self-Involving Thinking

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Book project

A terminological point first: why imagining and not imagination? Because 'imagining' refers more clearly to a mental competence and its exercise, whereas 'imagination' has more liberal and inclusive meanings, such as the quality or range of the competence and its versatile uses (a person may be more imaginative than another, more in one domain rather than another) or even a dominant or preferred style of thinking (A likes to imagine things more than B does). The normal, universal competence is what matters here, why it evolved and how, not those ulterior and derived aspects.

The central claims of the proposed analysis are that (a) advanced human thinking is primarily offline imagining, which (b) evolved out through self-involving thinking practices in the service of self-promotion and management of self-interest, such as autobiographical thinking, self-regulation and self-strategizing. These are with-me-in-mind thinking practices employed by most people, most of the time, with most motivation, more than any other form of thinking, which explains their evolutionary success and universality.

There are deep and widespread pessimisms about the evolution of advanced human thinking, and they concern both the reality of that evolution and the plausibility of theories about it. Darwin himself did not have much to say about mind evolution and his rival and co-discoverer of evolution by natural selection, Alfred Russel Wallace, did not think that natural selection could do the required explanatory job, roughly for the same reasons that a distinguished evolutionary linguist, Derek Bickerton, evoked a century later:

“If evolution was a gradual process, and natural selection responded only to the demands placed on animals by their environment, then humans should have had a brain little superior to that of an ape. A brain slightly better than an ape’s would have enabled them to outsmart anything else on two legs or four, to reach the top of the food chain. Early humans didn’t need to do math, build boats, compose music, or have ideas about the nature of the universe in order to do all the things early humans did ... The cognitive gap between humans and nonhumans is evolution’s Achilles’ heel (Bickerton 2014, 2, 5; also Bjorklund 2007, 60).

The cognitive gap is most visible in the evolution of language and thinking software. Notoriously, Noam Chomsky, the pioneer theorist of the language's recursive grammar, has for decades avoided if not even resisted an evolutionary account of the human

grammatical software, for reasons probably not that much different from those of Wallace and Bickerton.

Such pessimisms suggest the need for a rethink, which I would summarize as follows: when it comes to surprising, rare and complex evolutionary acquisitions, particularly mental but not only, it pays to look first for their simpler platforms as formative premises, independently, robustly and universally evolved under distinct, obvious and solid selection pressures. Those platforms in turn are later, more variably and less universally recruited and orchestrated under new pressures and tasks into new abilities, newly beneficial or adaptive. In short, the standard, uniform evolution by some form of selection is of the platforms themselves, not of their ulterior refinements and enrichments for various new uses. This platform-first pattern will be shown below to be at work both in the case of the imagining competence and of the human hand, both the most versatile, explorative and innovative components of the mind and body, respectively.

Interestingly, when later in his career, stimulated by collaborators, Chomsky took a more positive view of the evolution of grammar, simplified to a capacity for hierarchical phrase structure, he did so with a platform-first pattern in mind, where the formative platform was found to be the older, evolved by natural selection and more basic capacity for spatial navigation (Hauser, Chomsky, Fitch 2002).

Self-involving thinking, in the service of self-promotion and management of self-interest, will be argued here to be the formative platform for the imagining competence, orchestrating the latter out of several prior and independently evolved capacities. To prepare the ground for the argument, chapter 1 recalls a standard distinction between two sorts of minds, one operating fast, unreflectively, often unconsciously, often on automatic pilot, in guiding action as well as reflex or habitual mental responses, and the other sort operating in a slow, deliberate manner, often linguistically, mostly consciously, and equally often thoughtfully and reflectively. This second sort is the mind that deliberates, decides, plans, reasons, imagines, and communicates through language. These two sorts of minds are in turn distinguished here from a third sort, the imagining mind, which is exclusively a human competence defined by several parameters, such as offline projections, a fully offline and interiorized mental operation, a massive and flexible interactivity of mental faculties and their input and stored databases, and more.

There have been a few attempts to explain the evolution of the imagining mind, mostly centered on its massive, flexible, and widely distributed interactivity of mental faculties and their information sources and storage bases. The main explanations have invoked a grammar-based language, playful pretending and metarepresenting mental states. They all fail to pass what may be called the ontogenetic test: children

younger than or around four to five possess and use a basic grammatical language, pretend imaginatively and can metarepresent simple mental states, yet need several more years to develop and fully use an imagining competence. Even later older children's and adults' use of imagining is variable and uneven, unlike their use of other basic mental faculties. Another line of explanation is in order.

To this end, chapter 2 proposes a rethinking of mental evolution. It takes as a comparative and suggestive model the evolution of the human hand. In key respects, the hand is to the body what the imagining is to the mind. In their domains, each is anticipatively and deliberately guided mentally, and is also creative, versatile and flexible in applications. Hand and imagining also evolve in somewhat analogous patterns, as both chapters 2 and 3 document.

Their beginnings are modest and unrelated to the end results. Hands became possible because of a change in bodily posture - bipedalism. Nothing about bipedalism would anticipate or shape the later hand design or uses. The same is true of the premature birth of the human fetus and its exposure to intense language-learning and sociocultural shaping by adults. In the case of hands, among activities requiring flexibility and creativity of fingers, tool use (under a generous definition of tools) stands out as best positioned to recruit, assemble, integrate and harmonize earlier acquisitions in hand use, such as throwing, grabbing, hitting, arboreal locomotion and

more. This is why tool use can be regarded as a formative platform and specifically as an evolutionary orchestrator of the eventual design and modus operandi of modern human hands.

The parallel question then would be what could play the role of evolutionary orchestrator of the imagining mind. To begin to answer this question, chapter 2 proposes moving the territory of evolution from phylogeny to ontogeny. Unlike the hand, evolved phylogenetically over millions of years, the imagining mind seems to have evolved speedily only in modern humans, perhaps a quarter million years ago and probably even more recently, very likely thanks to a uniquely evolved mental ontogeny.

Ontogeny in general is a genuine, fertile and consequential territory of evolution. Human mental ontogeny is unique in the challenges and selection pressures it faces at different stages and the ways in which it handles them adaptively. Some of these largely independent ontogenetic adaptations become a sort of staircase to the imagining mind, assembled, integrated and orchestrated by mental practices, emerging in late childhood, for self-promotion and management of self-interest. These are autobiographical thinking, self-regulation and self-strategizing. Their story, told in chapter 3, can be informally and rather colorfully summarized in terms that reflect the title of the book.

We evolved an imagining mind because daily, often hourly, all our lives, we think egoistically, with-me-in-mind, how to pursue and satisfy our desires and

interests among mostly nonkin and often unfamiliar strangers, against a dynamically interactive background of rules, conventions, customs, widely shared practices, and also reactions and opinions of other people. Implementing one's self-interested mentation in such a sociocultural environment, autobiographical thinking, self-regulation and self-strategizing are the chief evolutionary orchestrators of the imagining mind. In and during this orchestration process, a new form of conscious awareness also emerges to accompany the uses of the imagining mind.

In sum, the foregoing may be as coherent and plausible evolutionary story as any on the academic market about the historical and ontogenetic emergence of the imagining mind, in terms of selection pressures and incremental adaptive responses to them. Critics and skeptics notwithstanding, the evolution of the human imagining mind need not be more mysterious and puzzling than the evolution of the human hand.

In a partial review mode, the book concludes in chapter 4 with a reflective look back at some central themes and arguments developed in earlier chapters, answering some predictable questions and objections, and adding some clarifications or additional details. To help the reader's memory, the final Glossary recapitulates definitions and stipulations of some key notions used in the text.