Record Nr. UNINA9911011653303321 Autore Raftopoulos Athanassios Titolo The Origins of Representations: Cognitive and Brain Development / / by Athanassios Raftopoulos Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-91213-6 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (319 pages) Collana Studies in Applied Philosophy, Epistemology and Rational Ethics, 2192-6263;;73 153 Disciplina Soggetti Cognition Philosophy of mind Human evolution Anthropology Philosophy of Mind **Evolutionary Anthropology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Signs and Representations -- Symbolic Representations Nota di contenuto -- Analog or Iconic Representations -- From Non-representational Indices to Representational Icons; What is Cognitively required for Representations and Icons? -- The Road to Symbols; Why Symbols? --Cognitive Capacities and Symbol Usage. This book provides an account of the origins and development of iconic Sommario/riassunto and symbolic representations in our evolutionary lineage, the hominis. and of the cognitive capacities and brain structures that support such a development. At first, it introduces the three basic types of signs, such as indices, icons, and symbols, used by most animals, including apes and hominins, for communicating and interacting with the environment, and discusses the differences among them. In turn, it explains the evolution from non-representational indices to iconic. first, and then symbolic representations in terms of the evolution of the cognitive capacities in our lineage. The main emphasis is on the cognitive capabilities that support the use of these types of signs, such

as attention, executive functions, and working memory, among others.

The discussion centers on determining these capacities, and how and why these capacities evolved in the phylogenesis of hominids. Further, evidence from psychology and neuroscience are used to shed light on the development of these capacities in hominins, together with knowledges about the basic brain structures supporting these capacities, such as the prefrontal cortex, and their development at the ontogenetic and phylogenetic scales. All in all, this book offers a theory of the development of our representational arsenal from its beginnings characterized by simple signs to its modern form made of highly abstract symbols.