

carnation. There is no necessary opposition between reason and faith. Reason cannot be neutral with respect to the incarnation. God might reveal to us that the incarnation *is* possible by becoming incarnate. The creature-creator relation makes God and humans “akin.” The incarnation is an example of love that is pure and unselfish. A person must respond to the incarnation either in faith or in offense. The consciousness of sin must be revealed to the individual by the incarnate god. Human existence is an attempted synthesis of the infinite and the finite, the eternal and the temporal. (Evans) As Climacus’ puts it, Christianity is an existence-communication. *The categories of Christianity must be derived from the paradox of eternity’s entry into temporal existence*. God’s entry into time is “an absolute fact” which cannot be reduced to the purely historical. Faith is not an inferior form of knowledge which needs to be transcended. The untruth of the individual is something for which he or she must take responsibility. Sin is an *existence*-category. (Law)

This is a wonderful collection of papers on the influential thought of Kierkegaard. The importance of the contributors along with the high quality of their pieces make this a volume worth reading.

Cultural Evolution

Kate Distin (Independent Scholar)

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Distin develops a theory of information and its inheritance, which *enables us to understand how cultural evolution has taken off in humans as a process independent from biological evolution*. Information must be transmitted to a receiver *that can interpret it and respond appropriately*. Information does not exist without a receiver to link input to output, depends on a receiver that can discretely represent it (it depends on a receiver that can detect and react to variations in the source), and can only be transmitted to a receiver that knows how to make sense of it (information is any variation that a receiver can discretely represent). Money is an artefactual language in which information about value is represented and exchanged, whereas writing is an artefactual language for the representation of cultural information. The inheritance of information is dependent on the representational capacities of each generation of receivers. The receiver’s *discrete representational knowledge* enables it to react appropriately to a source of information. For information to be shared between multiple receivers, they need to play a cooperative game in which they all obey the same linguistic rules. There are multiple ways in which a receiver can interpret information. Human culture is the product of evolving information, *is the product of interactions between human agents and cultural information*, and is built by human agents on the basis of cultural information. Patterns of cultural taxonomy are the product

of interactions between cultural information and its inheritance mechanisms. Cultural evolution is the product of heritable variations in cultural information. Culture is the product of evolved information. Evolution is the product of heritable information. Humans have the cognitive capacity to support the hierarchical transmission of complex information. The structure of any method of representing information is determined by the nature of its medium. Narrative is a good way of organizing, retaining and communicating information. Human cognition must discretize information in order to receive it.

As Distin puts it, artefactual languages have evolved under a representational selective pressure, and may isolate informational content from social context, and facilitate functional links between groups of otherwise-unrelated individuals. Artefactual language use demands that we prioritize interpretation and representation. The shared use of an artefactual language depends on the human instinct for cooperation. Humans have an innate capacity for both social and functional cooperation, which is supported by the acquisition and shared use of natural and artefactual languages. The origin of culture can be explained by means of natural and artefactual languages. Natural languages are cultural artefacts that coevolved with the human brain. The acquisition and repeated use of artefactual languages can make individuals more highly metarepresentational. Much of cultural information relies on the inheritance mechanisms of artefactual languages for its preservation and replication. Linguistic inheritance mechanisms ensure that certain resources are transmitted from one generation to the next, can give rise to evolution in languages, and cannot directly give rise to biological evolution (linguistic structures discretize the media in which they are realized and the information that they carry). Languages are transmitted across linguistic generations and are not restricted to genetic routes. Language-learning behavior can act as a mechanism for language evolution. Language learning moulds our cognitive structures, the process of learning a second language increases our meta-linguistic awareness, and human language learning is a nongenetic inheritance mechanism. The roots of natural language lie in a uniquely human instinct for cooperation. Natural language shapes the ways in which we think about the culture that it enables us to acquire, and *has structural features which indicate that it evolved primarily as a method of communication*. Natural languages are important markers of social identity. Languages facilitate communication and representation, shape the cognition of those who learn them, and *rely for its transmission on receivers who are able to acquire its structures from hearing it spoken*. The spoken language is a cooperative game played according to socially determined rules. Language acquisition provides the substrate for cultural evolution. Encounters with novel languages can have an impact on the cultural frameworks. Each language shapes the ways in which we interpret and respond to its content. The human language faculty

is both enabled and constrained by our biological endowment. *The biological advantages of enhanced communication are dependent on the cooperative tendencies of the communicating species.* Our instinct for cooperation is given direction by the ways in which we learn to communicate. *The human tendency for cooperation has been crucial for cultural evolution.* Speech provides and strengthens the social links between members of a community.

Distin asserts that culture takes the form of identifiable units *which are assembled under the guidance of ecological and representational pressures into recognizable cultural clusters,* is the product of interactions between human receivers and cultural information (it is the product of interactions between cultural information and its varying human receivers), and is the product of gradual changes in heritable cultural information. Human culture is best explained as the product of evolutionary processes in culture itself. Cultural barriers are largely language based. Innate ability, creativity and motivation are part of the genetic landscape onto which culture falls, meta-representation makes it possible for information to be combined from more than one cultural lineage, and patterns of cultural taxonomy are shaped by the ways in which cultural information is transmitted. *Mental constructs are accessible to the extent that they have been activated by recent use.*

Cultural Evolution is a book of admirable breadth and complexity. I find it to be tremendously interesting and thought-provoking.

Wittgenstein's *Philosophical Investigations*: A Critical Guide

Arif Ahmed (University of Cambridge) (ed.)

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In the *Tractatus* the only admissible sort of meaning is the meaning of atomic propositions (the atomic propositions all have sense). For Wittgenstein in the *Philosophical Investigations*, meaningful language is the characteristic kind of human action (meaningful words *are* deeds). For a great many cases in which we employ the word "meaning," the meaning of any part of a language is its use in that language (the meaning of a word is almost always its use). (Hanna) Activity is central to Wittgenstein's account of meaning. (Luntley) According to *Tractatus*, objects cannot be meaningfully enumerated or said to exist. Wittgenstein holds in the *Investigations* that it makes no sense either to attribute or deny existence of anything as elementary as simple objects. (Jacquette) Wittgenstein *equates* meanings or concepts with rules governing the use of language. Family resemblance *is* compatible with rule-following. (Forster) Wittgenstein identifies having a concept with the possession of an ability, capacity or disposition. (Glock)

All essays in the book are written with admirable clarity, and are rich in examples. I recommend it to anyone who is interested in Wittgenstein's work.