The Instinct Concept of the Early Konrad Lorenz*

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Abstract. Peculiar to Konrad Lorenz's view of instinctive behavior is his strong innate-learned dichotomy. He claimed that there are neither ontogenetic nor phylogenetic transitions between instinctive and experience-based behavior components, thus contradicting all former accounts of instinct. The present study discusses how Lorenz came to hold this controversial position by examining the history of Lorenz's early theoretical development in the crucial period from 1931 to 1937, taking relevant influences into account. Lorenz's intellectual development is viewed as being guided by four theoretical and practical commitments as to how to study and explain behavior. These four factors, which were part of the general approach of Lorenz but not of other animal psychologists, were crucial in bringing about his specific position on instinctive behavior.

Keywords: Konrad Lorenz, ethology, instinct, innateness

Konrad Lorenz was undoubtedly one of the main founders of ethology as a biological discipline. In fact, the conceptual and theoretical framework of classical ethology was developed to a large extent by him. Crucial for Lorenz's view was that behavioral patterns have to be analyzed into sequences of innate and learned behavior components. Only the innate components qualify as instinctive behavior. Peculiar to Lorenz's position from early on is the strong dichotomy between the innate and the learned: there are neither ontogenetic nor phylogenetic transitions between innate and learned components of behavior.

* Note on archival sources The correspondence between Konrad Lorenz and Erwin Stresemann is stored at the Staatsbibliothek zu Berlin, Preußischer Kulturbesitz (Germany) as ‘Nachlaß 150 (E. Stresemann), Kasten 40.’ Any letter from Lorenz that is part of this source is referred to in the paper as ‘Lorenz, letter to Stresemann.’ Some of Lorenz's correspondence is in the possession of his daughter Agnes von Cranach and is referred to in the notes as the ‘Konrad Lorenz Family Papers.’ Annotations by Lorenz referred to in the paper are from the books in Lorenz's library, which is preserved in the library of the Konrad Lorenz Institute for Evolution and Cognition Research, Altenberg (Austria).
Instinctive behavior patterns are rigid and do not get modified or become more flexible due to experience in the course of ontogeny. In addition, flexible or intelligent behavior does not evolve from instinctive behavior – a tenet that might sound un-Darwinian and might be initially surprising given Lorenz’s commitment to largely gradual evolution by natural selection. When formulating this position Lorenz contradicted virtually all former and contemporary assumptions about instinctive behavior. His innate-learned distinction became subject to vigorous criticism by psychologists in the 50s and 60s (most prominently Daniel Lehrman),\(^1\) who argued that this approach was conceptually problematic and fruitless as a means to understanding behavior and its development. Despite this critique Lorenz never abandoned his strong innate-learned dichotomy.\(^2\)

The aim of the present paper is to discuss how Lorenz came to hold this view of instinct. I view Lorenz’s early theoretical development as being guided by four theoretical and practical commitments. These are views as to how to study and explain behavior that emerged very early on in Lorenz’s career. Taken together, these four factors guided Lorenz’s further development. The four commitments are (1) Lorenz’s focus on innate, rather than learned, behavior, (2) the idea that behavior has to be explained by physiological rather than psychological means, (3) the comparative and taxonomic approach to behavior, and (4) the use of ideas from embryology to account for the development of instincts. These four aspects of Lorenz’s general approach to behavior emerged very early and were stable features of his perspective. The four commitments constrained and drove his intellectual development, and they make intelligible why he ended up with his strong tenet that instinct and experience are exclusive and that instinctive behavior does not evolve into more flexible behavior. Other approaches in animal psychology did not endorse these four components, and this difference in perspective explains why it came for instance to a clash between the Lorenzian ethologists and the Dutch purposivists tradition in animal psychology. Even though Lorenz developed his theory until 1935 on his own, I will suggest that there are important influences on Lorenz. As I will explain later in more detail, several of the intellectual influences on Lorenz are best viewed not as providing direct theoretical contributions to Lorenz’s novel ideas but as supporting his general approach as embodied in the four aspects of his framework.

\(^{1}\) Lehrman, 1953.