



Konrad Lorenz's Biography

(modified, after Festetics 1983)

1903: Konrad Zacharias Lorenz (KL) was born in Altenberg /Austria on Nov. 7 as the last of three children of Emma Lorenz and Dr. Adolf Lorenz, professor for orthopedics at the Medical branch of the University of Vienna. In the same year the representative and spacious Altenberg family home was finished.

1907: KL starts keeping animals, such as spotted newts in aquaria, raises some ducklings and is not pleased by his first experiences with a dachshound.

Niko Tinbergen, his lifelong colleague and friend, is born on April 15 in Den Haag, The Netherlands.

1909: KL enters elementary school and engages in systematic studies in crustaceans.

1910: Oskar Heinroth, biologist and founder of "Vergleichende Verhaltensforschung" (comparative ethology) from Berlin and fatherlike scientific mentor of the young KL publishes his classical paper on the ethology of ducks.

1915: KL enters highschool (Schottengymnasium Wien), keeps and breeds songbirds.

1918: Wallace Craig publishes the comparative ethology of Columbidae (pigeons), a classics of late US biologist Charles O. Whitman, who was like O. Heinroth, a founding father of comparative ethology.

1921: KL excels in his final exams. Together with friend Bernhard Hellmann, he observes and experiments with aggression in a cichlid (*Herichthys cyanoguttatum*). This was the base for KL's psychohydraulic model of motivation.

1922: Father Adolf sends KL to New York to take 2 semesters of medicine courses at the ColumbiaUniversity, but mainly to interrupt the relationship of KL with longterm girlfriend Gretl Gebhart, his later wife. This paternal attempt to influence the mate choice of KL failed. Also, more time than with his official topic, KL spent at the coast studying marine organisms. KL met the eminent US biologist Thomas Hunt Morgan.

1924: KL starts a 10 years successful career as a motor cycle racer. Father Adolf Lorenz retires from the University of Vienna at the age of 70.

1926: KL raises the jackdaw "Tschok" and generates his theories on imprinting.

1927: KL and Gretl Gebhardt, both students of medicine, marry June 24.

1928: Son Thomas is born 31st of October in Vienna. KL finishes his PhD and accepts an assistant professorship at the II. Anatomical Insitute of the University of Vienna (head: Ferdinand Hochstetter). KL studies zoology, crossbreeds a German sheperd with a

Chow chow, resulting in a behaviourally most fascinating dog ("Stasi"). In the 1960ies a new breed of dogs was generated on this base, the "Eurasier".

1930: KL breaks his lower jaws in a motor cycle accident and wears his characteristic beard on his chin ever since.

1931: Meets Oskar Heinroth for the first time and initiates a 10 years long intense correspondence, mainly on bird behaviour. These letters were later published by Otto Koenig (1988).

1932: Observing a captive starling, KL discusses the possibility that behaviour may occur spontaneously and elaborates on his hotly debated psychohydraulic model of motivation.

The German Ornithological Society convenes its annual meeting in Vienna. Participants, among them the King of Romania, visit the "Ornithologische Versuchsanstalt" of KL in Altenberg. Father Adolf is amused about all this fuzz over a few birds.

Gretl Lorenz finishes her PhD in medicine.

1933: KL finishes his zoological PhD on the topic of bird flight.

1934: KL meets Julian Huxley at an Ornithological Conference in Oxford.

1935: Ferdinand Hochstetter retires and KL terminates his assistant professorship at the University of Vienna medical faculty. He associates with the University of Vienna psychologist Karl Bühler and is soon thereafter struck by the general ignorance of animal behavior, even by eminent experimental psychologists. Young KL is overwhelmed by the huge mission he suddenly feels responsible for: to produce a unified, evolutionary theory of animal and human psychology.

1936: Greylag goose "Martina" is handraised by KL. This is the start of a lifelong scientific and emotional bond with Greylags. Meets Niko Tinbergen at a symposium at Leiden University. Iwan Pawlow dies Feb. 27 in Leningrad.

1937: KL meets Erich von Holst in Berlin on Feb. 12, which was the start of a lifelong cooperation (von Holst died in 1962), mainly because both realized that they independently found the "spontaneity" (in contrast to the dependence on external stimuli according to the Pawlowian theory) of behaviour. This may be considered as the key event in getting the discipline of Ethology off ground.

In early summer, Niko Tinbergen and KL experiment with the "Instinkt Dressur Verschränkung" and investigate the features of fixed action patterns (a term coined later, one of the core concepts of classical ethology) at the example of egg retrieval ("Eirollbewegung") in Greylag geese.

Together with Otto Koehler, KL becomes editor of the "Zeitschrift für Tierpsychologie" (now: "Ethology"). First translation of KL papers are published in the US, he writes two major papers on instinct and becomes "Privatdozent" for Anatomy and Animal Psychology at the University of Vienna.

1938: The Nazis occupy Austria. As many Austrians at that time, KL at first sympathizes with the regime (he became NSDAP member), mainly because of the modernistic,

science-oriented facade of the new regime, which also included to seriously go about eugenics. Still, he always opposed racism. KL hoped that the new government would grant him a Kaiser-Wilhelm Research Institute (the forerunner of German Max Planck Institutes) in Altenberg and published a few infamous papers in Nazi-jargon towards this goal.

1940: Mentored by Erich von Holst and Eduard Baumgarten, KL becomes full professor for Psychology at the University of Königsberg (eastern Prussia, the former chair of Immanuel Kant). KL describes the "Kindchenschema", his PhD student Alfred Seitz works out the "Reizsummenregel".

1941: Daughter Dagmar is born in Vienna on Jan. 11. The family moves to Königsberg in June. At the 10th of October, KL is drafted into the German army. A major publication of KL on Kant appears.

1942: KL works as a psychiatrist in a military hospital in Posen. He continues the scientific discourse, for example with Max Planck. He once more refutes the teleological thinking of vitalist Bierens de Haan on instincts and their modifications by experience.

1944: Soldier in Russia, soon becomes prisoner of war at Witebsk/Russia.

1945: KL remains in prison camp at Erwan/Armenia until 1948. Oskar Heinroth dies in Berlin on May 31st. At home, KL is officially declared dead. KL cares for fellow prisoners and produces a manuscript on ethology in general and on the foundations of human ethology in particular on scrap paper.

1946: Feb. 16: Father Adolf Lorenz dies at the age of 92 in Altenberg.

1948: Feb. 18: KL returns to Altenberg together with his hand-raised Armenian starling "Friederich" and with the "Russian manuscript" in his backpack. This manuscript remained at first unpublished, was lost in the 1960ies and was found in the attic of the Altenberg home of KL after his death. Published by daughter Agnes von Cranach in 1992 (see below).

1949: KL remains in waiting position. He initiates a privately funded research station for comparative ethology in Altenberg, under the "Protectorat" of the Austrian Academy of Sciences. Sir Peter Scott tries to attract KL as a research scientist to Slimbridge, southern England. In response, the German Max Planck Society pays KL to stay in Altenberg.

His family persuades KL to use his talents for earning money. KL writes and publishes two popular books, which are bestsellers until today, one featuring autobiographic animal stories ("Er redete mit dem Vieh, den Vögeln und den Fischen", translated into "King Solomons ring") and another one on dogs ("So kam der Mensch auf den Hund" translated into "Man meets dog").

1950: May 5th, the first ethologists meeting after the war is convened in Wilhelmshaven/Germany.

The Max Planck Society establishes the first KL institute for behavioural physiology in Buldern, northern Germany, where KL moves Oct. 25 together with major collaborators from Vienna, such as Irenäus Eibl-Eibesfeldt, Wolfgang Schleidt and Heinz Prechtl.

KL becomes honorary member of the British Association for the Study of Animal Behaviour (ASAB).

1951: KL is elected honorary member of the German Ornithological Union as well as of the American Ornithologists Union. This is the beginning of a very long series of awards, medals, honorary memberships and honorary degrees worldwide.

1952: Niko Tinbergen publishes his "Instinktlehre" ("Theory of Instincts").

1954: Meeting on "instinct" in Paris. KL meets his scientific opponent, US psychologist Daniel Lehrman. The conflict between natureorientated, European ethologists, notably KL, and natureorientated US experimental psychologists, notably Daniel Lehrman, results in productive discussions and fuels productive research for decades.

The Max Planck Society decides to build a new institute for KL and Erich von Holst in Southern Germany.

1958: Sept. 16: Otto Hahn, who was awarded to Nobel Prize and president of the Max Planck Society opens the new MPI for Behavioural Physiology for Lorenz and von Holst in Seewiesen near Starnberg.

1960: For the first time in his life, KL SCUBA-dives coral reefs in Florida. This supports his ideas on the functions of poster colouration and fuels writing a crucial book "on aggression".

1962: Erich von Holst, his long-term congenial colleague and mentor, dies on May 26.

1963: KL publishes his hotly debated and bestselling book "Das sogenannte Böse" ("On Aggression"), which basically features the "Triebstauhypothese" (the "Psychohydraulic Model of Motivation"). This sparked a wave of psychological and biological research on aggression.

1970: His older brother Albert dies.

1971: KL publishes "Die 8 Todsünden der zivilisierten Menschheit" ("Civilised man's eight deadly sins"), a discussion of human social problems from an evolutionary perspective, as KL understood it. Even though it was quite clear at that time that the unit of selection is basically the individual and behaviour is not shaped to further the "survival of the species", KL seemed to remain a convinced group selectionist.

1973: KL retires from his directorships at the MPI in Seewiesen and returns to Austria. He establishes a flock of 100 greylag geese in the Upper Austrian Almtal, near Grünau, at the Konrad Lorenz Research Station. KL becomes head of the Behavioural Biology section of the Austrian Academy of Sciences.

KL publishes the basics of his evolutionary epistemology in his book "Die Rückseite des Spiegels" ("Behind the Mirror").

Dec. 10: KL together with Niko Tinbergen and Karl von Frisch is awarded the Nobel Price for Physiology and Medicine for their efforts in Ethology, notably for developing a unified, evolutionary theory of animal and human behaviour.

1974: KL starts planning and building his huge, 34 000 l reef tank in Altenberg. Old KL basically spent his winters writing and observing fish in Altenberg, his summers

observing geese in Grünau. His fish observations remained largely unpublished. The centerpiece of the observations of KL on Moorish idol (*Zanclus cornutus*) in his big reef tank was only published years after his death (*Evolution and Cognition*, 4: 108-135, 1998).

1978: KL publishes his textbook "Vergleichende Verhaltensforschung" ("Comparative Behavioural Biology") and dedicated it to Niko Tinbergen.

1979: KL reluctantly accepted his role as a spearhead environmentalist. He always tried to stay off politics, but took responsibility for basic environmental issues.

1981: The Konrad Lorenz Institute of the Austrian Academy of Sciences, with branches in Altenberg and Grünau was established.

1982: June 12: Karl von Frisch dies at the age of 95.

1986: KL's wife, Dr. Margarethe Lorenz dies Jan. 16. She was his lifelong best friend, his manager and even his main partner for proofreading and critically discussing his manuscripts. She also earned a living for her family before 1940, when KL was unemployed and concentrated on behavioural research.

1988: His last book, the monography on Greylag geese behaviour ("Hier bin ich, wo bist du?") is published. Despite efforts, KL is unable to finish his last project, a monography on the behaviour of perciform fishes.

1989: Feb. 27: At the age of 86, KL dies at his home in Altenberg.

1990: Three Konrad Lorenz Institutes in Austria continue with empirical and theoretical research in behavioural biology:

- The "**Konrad Lorenz Research Station for Behaviour and Cognition**" in Fischerau 11, A-4645 Grünau, which is now a Core Facility of the University of Vienna, Departments of Behavioural Biology and Cognitive Biology of the University of Vienna
- The "**Konrad Lorenz Institute of Ethology at the Wilhelminenberg**", Savoyenstraße 1a, A-1160 Wien, which is now part of the University of Veterinary Medicine Vienna
- The semi-private "**Konrad Lorenz Institute for Evolution and Cognition Research**", Martinstraße 12, A-3400 Klosterneuburg