
Vincent Ziswiler

[Vincent Ziswiler, Prof. em. and former director of the Zoological Museum and
Institute of Systematic Zoology at the University of Zürich, is chairman of the
Wissenschaftshistorisches Kolloquium of the University of Zürich and the ETH
Zürich.]

Roel Sterckx’s book treats the perception of animals as a signifying exponent of
the world of thought in Warring States and early imperial China with the aim to
investigate early Chinese views of the world, as well as to explore the ways in
which the early Chinese sought to explain the human-animal relationship. It
intends to link the perception of animals with enquiries into human self percep-
tion, relating the discourse on animals to the creation of human forms of social,
political, and intellectual authority. The book pivots on three key themes:
- It explores the status of the biological animal in early China, where both the
  human and animal worlds were conflated within a larger continuum in which
  natural and moral categories converged. Consequently animals were less likely
to be singled out as natural subjects, but, instead, were subjected to predomi-
nantly cultural or social classifications.
- The relative absence of fixed taxonomic categories, especially the lack of
defined animal species implies that in early China, compared with the contempo-
raneous Greek and Roman cultures, very different preconditions were formative
in the interpretation of the animal world. The notions of change and transforma-
tion were pivotal to the perception of animals and the conception of human-
animal relationships.
- By exploring the contexts associated with the observation, interpretation and
  mastering of the animal world, the author tries to identify the ways in which the
  continuous correlation and interchange between human society and the natural
  world were mediated.

The first chapter *Defining Animals* deals with an analysis of the use of animal
material in texts such as the *Chunqiu fanlu*, the *Lunyu*, the *Shijing* as well as the
eminent lexicographic work *Erya*, the dialectal lexicon *Fangyan*, China’s oldest
comprehensive character dictionary *Shuowen* and a very small number of texts
dealing with true or applied zoology. Comparing the perception of animals in
early China and the contemporaneous Greco-Roman world the differences
couldn’t be greater. While the Mediterranean counterpart saw the natural world
and especially the enormous diversity of animals as a realm *per se* which they
put to analytical scrutiny, in early China the notion of the animal was not a self-
evident category and did not find its way into a collective body of analytical
writings. The low share of theoretical discourse on animals becomes evident in
the absence of a basic terminology referring to animals as a generic category or a collective of distinct species. The classical Chinese language lacks even a proper linguistic term for “animal”. In early Chinese writings most of the zoological names are polysemantic, and there is no one single denotative definition that summarizes the essential properties and characters of such a being. The biological animal did not provide a topic for intellectual debate nor did it inspire the development of a textual canon that took the zoological being as its main subject of discussion. It seems that the eminent scholars and sages of the époque were not interested at all in exploring the animal world with either empirical or inductive methods. According to Confucius, knowledge about animals was to be acquired through the exegesis of their names in literary texts, especially the Shijing. Naming and formalistic mastery of nomenclature were central elements in the early Chinese perception and understanding of the world. Texts that filtered animal lore out of their literary context were lexicographic in nature and neither discursive nor argumentative. The main emphasis of the early lexicons was the recognition of an animal and the association of the right name (graph) with the appropriate creature. This was an enormous challenge considering the extremely polysemantic meaning of some Chinese terms, as well as the multitude of names attributed to the same animal species, either caused by distinct dialectic differences or different uses of animals, e.g. as a sacrificial victim. The increasing lexicographic elaboration of animals in early China seems to be connected with political unification in the Han period. Growing realization of the immense diversity of fauna and flora of the greatly expanded empire prompted the compartmentalization of the new world in dictionaries and poetry with the aim to establish symbolical and intellectual control over the living world.

Chapter two Animals and Officers concerns the social and ritual use of animals as another basis to establish order in the animal realm. Central to the Warring States and Han view of the natural world was the notion of its internal order, which was deeply affected by the course of human affairs. Thus the predominance of human categories over laws of nature influenced the classification of animals. In the Zhouli, a model description of the ideal royal state, the identification, management and ranking of animals were subsumed to offices that were part of the all-encompassing human polity. On the other hand, knowledge about the appearance and behavior of animals was paired with information about the human agent who dealt with them. Even wild animals were subsumed within the human realm, and minute details pertaining to the habitats and activities of non-domestic species were brought under the aegis of human administrative control. To assert the ruler’s dominance over the natural world, a human office was to be assigned to each aspect of the animal world. The Zhouli mentions an enormous number of animal-officers of different ranks, such as fatteners of sacrificial animals, herdsmen, stable and park attendants, keepers of sacrificial meats, followed by functionaries commissioned with duties, such as decorating oxen for sacrifices, gathering exotic species, breeding, herding and training domestic animals, taming wild animals, veterinary treatment, management of animal trib-
utes, care of stables, preparation of animals for rituals, the tax collections for horns and feathers, the expulsion of venomous species, organization of hunt and fishing seasons, the expulsion of demonic and prodigious animals, etc. This illustrates the Zhouli’s concept of the ideal state as a replica of the entire cosmos in which the natural world became subject to bureaucratic control.

In the third chapter Categorizing Animals the author tries to distinguish three contexts of classification, a physical, functional, and moral model, and to discuss how these classificatory schemes sought to distinguish, or relate to, the living species. The chapter takes as its main subject the elaboration of the different attempts to place the category man within the animal realm. A common criterion to distinguish animate beings from the inanimate world was based on the compound term xueqi (blood and qi), an agency in which qi represents the active component and xue the structive one. The difference between humans and animals depends on the degree of fineness of their qi, as is made clear by the Huainanzi, which states that “coarse qi forms animals, and refined qi forms humans.” This demonstrates that for the early Chinese the difference between human and animals was a matter of gradation and not fundamental. The association of xueqi with mental functions, such as heart-mind and spiritual awareness, suggests that xueqi is more than a biological or physical property, since it attributes faculties similar to human emotions to nonhuman beings. This in turn enhanced the idea of a moral contingency between men and beasts. Other important of correlative taxonomic groups were the yin-yang and the Five Phases, which show how yin-yang and correlative thinking related the animal world to the cosmos at large. According to their physical appearance, living things were arranged into the five taxonomies of scaly, feathered, naked (humans!), hairy, and armored creatures, corresponding with the Five Phases (wood, fire, earth, metal, water), Five Seasons, Five Directions and Five Colors. This five phase model located human beings as central creatures in a circular universe. The assignment of the Five Phases to the five basic groups of animate beings was in agreement with the yin-yang models of the era. The moral model of classification had its basis in the idea that faculties such as emotions and feelings of piety toward one’s kin were shared by animals and humans alike. So the identification of an innate sense of morality became a prominent element in determining the status of animals in relation to humans. A maxim in the Mengzi claims that “what differentiates man from birds and beasts is but trifle. Ordinary people cast it aside, only the gentleman preserves it.” In other words, to maintain moral supremacy over beasts a human individual is impelled towards exemplary moral conduct. The most articulate distinction between humans and animals in moral terms occurs in Xunzi’s “ladder of souls”. Here humans distinguish themselves from the biological and cognitive status of the nonhuman world by a moral sense of righteousness. This indicates a world of difference to the Aristotelian attribution of a rational soul as the most exclusive quality of man. Other important differences between men and animals in early China concern the human capacity to organize. The adoption of a clan name as well as the acceptance of social
distinctions based on gender and marriage were attributes that separated humans from a state of primordial bestiality.

The fourth chapter *The Animal and Territory* deals with correlations between animals, humans and territorial habitats. Early references underline the important role of animal life and soil characteristics as an identifying feature of territorial locality. Such an attribution of distinct animals to a territory can be shown in various documents, such as tallies or seals for passage into different territories or military banners used by territorial troops. There was also a common belief that different regions are subject to different “airs” as a physiological basis for the emotions and temperament of living creatures. The *Huaninanzi* postulates that “each category of land generates according to its kind.” So mountainous “air” will mainly produce males, while the “air” of swamps will produce mostly females. But the soil not only influenced the shape and natural instincts but also the moral qualities. Linking animals with the local soil and its climate emphasized the premise that animals didn’t transcend the boundaries of their natural habitat. This perception of a territorial unity of humans, animals and soil possibly led to the early Chinese world view, dividing the earth into static unities each marked by their specific human and animal inhabitants. Numerous stories underscored the strong bonds between habitat and habitants, for example passages asserting that particular animals can only be consumed without risk by people who share the same habitat. A contrast to this concept of sociobiological order was the transcendence of territorial boundaries and the movement of living creatures by rulers as a gesture of sociopolitical and religious authority. Together with the ruler’s processions to the outskirts of the empire, a whole range of goods, including animals, traveled along with him. These functioned as objects of exchange or targets of hunts during such missions. At the same time, animals from different regions were gathered as memorabilia and tokens of power in the animal parks constituting a microcosm celebrating the ruler’s encompassing power over all living creatures.

*Transforming the Beasts*, the fifth chapter, elaborates a central notion of early Chinese philosophy, namely, the transformatory influence of music and human virtue on animals. Music changed the instinctive disposition of wild animals and transformed them into moral beings who would abandon their bestial behavior to become acolytes of a virtual ruler. Some animals, such as the phoenix, were linked with the tuning of musical instruments and the originator of wind instruments. The twelve pitch standards were distinguished according to the cries of the phoenix - six tones were derived from the calls of the male, and six tones were based on the sounds of the female. The legendary emperor Zhuan Xu commissioned Flying Dragon to give form to the sounds of the eight winds and then ordered the salamander to conduct by drumming with its tail on its belly. The treatises on music in the *Liji* and *Shiji* comment on the relationship of animals with both the production of sound and their susceptibility to melody. Animals have a knowledge of sound but lack a knowledge of tones and within the humans sound patterns can only be cultivated and systematized into
music by the gentleman or sage. The sage observes sound and rhythm in the animal world, transforms these into music and dance, which, in turn, exert a transformatory influence on animals. This transformation was based on the premise that animals were receptive to similar emotions as human beings and spirits. Several texts try to document this capability for, e.g., susceptibility to mournful sounds or the sound of instruments, such as the chimes and the lute, which caused birds and beasts to dance. Music not only transformed the predatory instincts of wild animals, it ultimately served to transform the bestial mores of society as a whole. As a composition of continuously changing modulations, music aimed to modulate the disposition of all living creatures. The identification of music as a force of moral transformation was based on the notion that animals and the natural world were susceptible to moral laws and human virtues. Several passages in proto-Daoist texts maintain that humans and animals shared an original state of naturalness. They present the ability of humans to merge with the world of beasts as their highest moral accomplishment. This initial pattern of harmony flourished through the moral authority of the ruler. That implies that a lack of moral authority from a ruler leads to disharmony. In the Huainanzi a comparison of the good government of the Yellow Emperor with the tyrannous regime of Jie (Xia dynasty) describes in detail the drastic change of animal behavior as a result of the moral qualities of the ruler.

The idea that virtuous leadership has a positive effect on the moral disposition of animals comes out of several instructions dealing with animals, especially in Wu Qi’s instructions for the marquis of Wu about handling and educating horses. Eventually the skilful treatment of animals, for example in chariotereering, was compared with ruling a state, and keeping animals became a model for social organization and the subordination of people. Descriptions of organized hunts, hunting techniques and hunting taboos, as well as the methods to domesticate and train wild animals, shared the assumption that both humans and animals functioned according to the same moral biology. The latter was further exemplified by the idea that a sage-ruler gained authority over animals through the medium of hybridized sacred chimeras, such as the beast lou of which one part eats while the other keeps watch. These creatures were credited with the similar transformatory powers as the human sage. Transformatory power also plays a part in the promotion of the imperial (Chinese) claim to power. Since barbarians were portrayed as the next of kin to animals, the same arguments that sought to justify human moral dominance over the wilds through transformation were also used to justify central (Han) control over peripheral barbarian tribes. However there was also an equally strong countercurrent insisting on animalizing and demonizing animals as well as foreigners by deeming them unworthy to be considered part of humanity.

The next chapter Changing Animals treats various forms of animal metamorphosis documented in early China, ranging from demonic human-to-animal transformations to animals changing their morphological habits according to the cycle of the seasons or changes in their habitat. As a standard example of such
animal metamorphoses, the author mentions those that would occur synchronous with the alternations of the seasons - mid spring as the time when the hawk would transform into a pigeon, field mice transforming into quails in the late spring; small birds entered waters to transform into frogs in the late autumn, and fowl entered the waters to change into mollusks at the beginning of winter, etc.

Other changes included animals as subjects of spontaneous mutations, chimeras incorporating bodily parts of different species. The list of creatures with an extremely composite composure is headed by the four sacred animals, such as the phoenix, which was a swan at the front and a unicorn at the rear, with the neck of a snake and the tail of a fish. The section Symbolic Metamorphosis deals with humans who identified themselves with animals through the symbolic enactment of animal behavior and the use of animal masks and hides. Such symbolic identification with animals was perceived of as a source of numinous power, used, for example, in connection with shamanic or exorcistic practices. Animals that underwent transformations were often perceived of as portents of social or political changes. Such metamorphic animal imagery played, for example, an important role in the dynastic transition from the Qin to the Han dynasty.

The final chapter Strange Animals begins with a discourse about the perception and interpretation of anomalies in the animal world, and examines the semantics behind the interpretation of strange animals. Since the early Chinese understanding of the animal world was not based on the analysis of an objective biological reality, abnormalities that affected specific animal behavior or morphological characteristics did not necessarily require explanation within a framework of zoological reality. In spite of the lack of concise definitions of what constituted normal conditions, unnatural animal behavior as well as freaks were registered in detail, and many of these occurrences were believed to be pregnant with social significance. In the same way that the sage was cast as the source of moral transformation of the natural world, he was also made the unspoken expert in the explanation of strange creatures.

The perception and interpretation of animals within a civilization furnishes key indications about its understanding of the world. In this context, the explanation of the transitional boundary between animal and human plays an important role, either as a categorical unbridgeable gap (nature/spirit) or as a continuously changing world. Whereas within the occidental civilizations the strict dualistic model (matter/mind) was unchallenged until the rise of theories of evolution in the nineteenth century, the sages in Warring States and early Imperial China shared a holistic view of a dynamic all-encompassing cosmos. They didn’t recognize fundamental differences between animals and humans, and they held beasts as well as barbarians and uneducated people in general as equally amenable to moral tuition. In addition, that one animal could spontaneously change into another, or into a man or vice versa, was a common belief. Roel Sterckx’s book centers on such aspects of the Early Chinese perception of the living world. With his enormous knowledge (shown by about 700 references) and meticulous
arguing (1050 notes!), he provides us with a unique work that will remain the standard in the field for many years, an immense source of information full of stimulating new insights and interpretations dealing with the subject of the mutual relations between man and animal. As a non-professional in sinology I have read this book with enormous profit and great pleasure, getting an idea of the modes of thinking and conception of the world of the early Chinese sages. Beneath the non-committal title *The Animal and the Daemon* a prominent landmark in the history of science is hidden, a must for the specialist and a stimulating read for everyone.