

Some BIRDS

Listening to nature between fascination, imitation, and analysis



In the bird-shaped rattles, Ichstedt (Germany), 1300–800 BC, the sound of the rattle balls inside mimics chirping. The instruments were found in Roman-period graves. Since their shape is undoubtedly Bronze Age, they must be an antique, perhaps found by the grave owners.

Replica: André Schlauch after objects of the Landesmuseum für Vorgeschichte, Halle. ÖAW Vienna, EMAP: Archaeomusica with the Support of the Culture Programme of the EU

Humans have become pupils in the most important things of the animals: [...] of the songbirds, of the swan and the nightingale in singing, and that in the way of imitation.

Democritus after Plutarch, *De sollertia animalium*

In the paintings of the Upper Paleolithic cave of Lascaux we find the so-called Bird Man, the image of a human with a bird head lying next to a hunted bison. Across the animal lies a spear, below the man a duck on a stick. André Leroi-Gourhan suspected in this scene an incident of mythological nature. It can be assumed that the depiction represents a scene of transition (from adolescent to man, from life to death?). Mixed creatures of bird and man exist in almost all cultures, often symbolizing passages.



The *harpies* embody the storm winds. In early Greek lore still beautiful women with curly hair and bird wings, they later increasingly become demons who carry the souls of the dead into the underworld at the behest of Zeus.

Like the harpies, the *sirens* usually appear in pairs. Odysseus only describes the seductive effect of the sirens' song, to which he alone had exposed himself on Kirke's advice, while his crew was protected by wax plugs in their ears. The sirens lure Odysseus with promises of their omniscience—yet siren song, for example in Plato, becomes a symbol of sexual seduction by women. In the *Argonauts* epic by Apollonios Rhodios, the singer Orpheus protects the sailors by surpassing the sensual effect of the siren's song. The early iconography of the sirens as birds with women's heads is not considered in literary testimonies until late. The origin myth (*aition*) for the bird figure is told by Ovid in the *Metamorphoses* in connection with the abduction of Proserpina by Pluto: the daughters of the river god Achelous are said to have searched in vain for their kidnapped friend in Sicily; in order to be able to extend their search to the sea, they were given wings. Since they were not to lose their gift for singing, they retained the female head. Claudian's late antique *Proserpina* epic combines both traditions. There the transformed sirens become avengers of their kidnapped friend: with their song, they lure male sailors onto the rocks at Cape Pelorus.



The sound of the siren's song is symbolized by the auloi. The bared upper body illustrates the erotic charge of the mixed creature. Apulian ceremonial plate (c. 320–310 BC), Würzburg, Martin von Wagner Museum, H5751 (photo: C. Kiefer).

THE NIGHTINGALE—HOW TO ANALYZE BIRD SONG?

Along with the swan, the nightingale is considered the epitome of the musical animal. Frequent attempts have been made to analyze its song. In his *Musurgia Universalis* (1650), Athanasius Kircher reflected on the origins of music in nature and emphasized the nightingale's song: it „devotes no less ambition to presenting the delicacy of its song to the listeners than the peacock does to the beauty of its tail. It is not only *philomousos* (fond of music and art), but also *philodoxos* (loves brilliance, splendor, even the strange, the comical).“ In his analysis of the nightingale's song, Kircher differentiates three main types of musical figures. (The simpler songs of the chicken, the cuckoo and the quail are interestingly notated in wave form. The “language” of the parrot, on the other hand, is not translated into notes.)

Using different models, Martin Rohrmeier et al. 2015 attempted to show the difference between structures in birdsong and human speech and musical melody. Bird songs were composed of song types ranked in Markov chains, where recursions occur. The nightingale knows about 150 different song types that are permuted and varied (cf. sonograms on the left side). The combinatorics of the building blocks of human song, on the other hand, obey a superordinate hierarchy of differently weighted endings.

Ghijak (?) – SMM De 572. A bowed spit lute with a black swan neck. It displays ornamentation typical of Afghanistan.



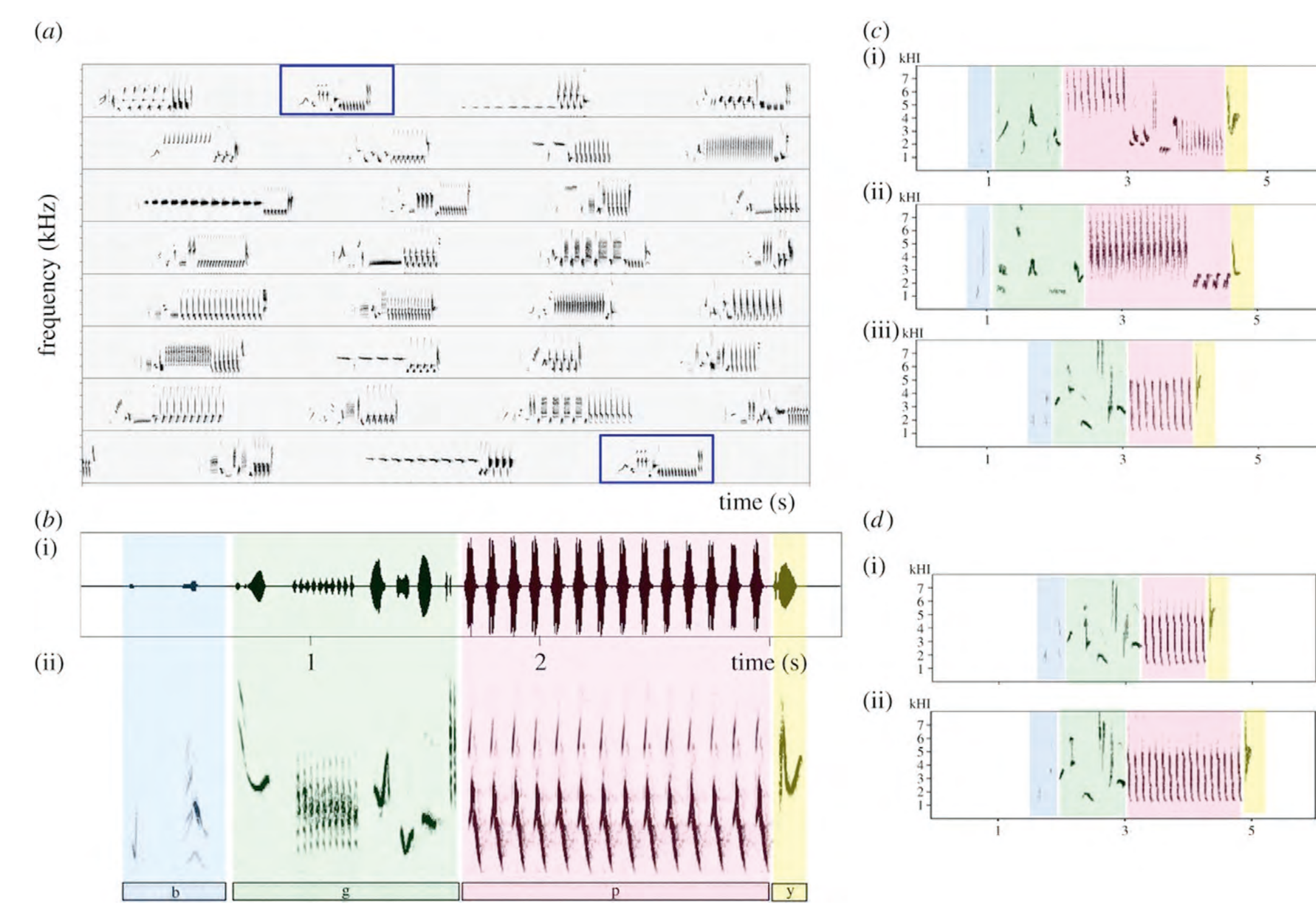
Little is known about this instrument, which is related to the Persian *kamangah* and the Anatolian *kamança*. The multi-instrumentalist Markus Wach plays a comparable one here (QR code). Wach, who has exchanged ideas about this instrument type with musicians from Afghanistan and Tajikistan, says that „these instruments seem to have been brought to Europe almost exclusively by visitors from northern Afghanistan. It's not clear if they were ever played or just made and decorated for tourists.“

THE PEACOCK'S CRY

The peacock is called *mayuri* in Sanskrit, and *taus* in Farsi and Urdu; *veena* is an ancient term for plucked or bowed lutes. *Bālasaraswati*, the South Indian name of the instrument, consists of the words *bāla* (child) and the name of the Hindu goddess of wisdom and music. The peacock is her companion animal in South Indian tradition.

The construction and playing of the *mayuri veena* are closely related to the *dilruba* and the *esraj*, which are said to be descended from the *taus*. While the *dilruba* and *esraj* are usually played in the *khyal* style (a style fused from Hindu and Muslim cultures), the *taus* is associated primarily with music played by Sikhs. In Sikhism, the invention of the instrument by the sixth guru, Har Gobind (1595–1644), is handed down. Bhai Avtar Singh (1925–2006), an exponent of the Gurmat Sangeet Sikh tradition of Kirtan (Punjab) tells the story in a 2003 interview:

“The Guru and his Sikhs were singing outdoors under a tree enjoying God and nature. As was the old tradition, they were playing some stringed instruments. After a while, the musicians took a rest and leaned their instruments up against a tree. A peacock waddled into the group and cried in the wailing sound that belongs only to the peacock. All the instruments resonated with the peacock cry, and the strings started humming. Guru Sahib liked that ethereal sound so much that he said: ‘Let us make an instrument that sounds like this—a combination of the resonation of all the string instruments and the plaintive cry of the peacock.’ And that's how the *taus* was invented under the supervision of Guru Har Gobind.”



Martin Rohrmeier et al. 2015. *Principles of structure building in music, language and animal song*. <https://doi.org/10.1098/rstb.2014.0097>. The male nightingale has about 150 song types with precisely distinguishable parts. The song types alternate in a highly variable chain, but at certain intervals they are repeated (sonogram on the left side, boxes). In case of a recurrence of a song type, its parts are varied in length (right side).

Athanasius Kircher, *Musurgia universalis*, Rome 1650, vol. I, 30. Kircher tried to analyze the song of the nightingale with three kinds of musical articulations: “with bright voice” (*pigolismus*), “with murmur” (*teretismus*), and with a kind of “staccato” in tone repetition (*glazismus*). These figures can follow each other in all possible variants, thus building a form of music based on the idea of *ars combinatoria*. Interestingly, the note examples of the other birds are notated in a sort of wave form.

