'To die when a ship sails by unscathed', Pressure on the sirens

Combining the portrayal of the classical sirens' seductive voices in literature with empirical experiments on female vocal attractiveness, and with research on the evolutionary purpose behind singing as a means of surviving ¹

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¹ Empirical experiments referenced: Ratings of voice attractiveness predict sexual behaviour and body configuration (2004), The role of femininity and averagenss of voice pitch in aesthetic judgements of women's voices (2005), Women's voice attractiveness varies across the menstrual cycle (2007), Intrasexual competition among women: vocal femininity affects perceptions of attractiveness and flirtatiousness (2010), and Female voice frequency in the context of dominance and attractiveness perception (2011). For detailed references, see Works cited.

Abstract

Siren? Which siren?

The power of the sirens' sung voices in the *Odyssey* offers a template for capturing and constructing a model for a powerful "ideal" female singing voice. Subsequent portrayals in literature of encounters with the sirens' song extend the list of descriptions attributed to the most desired vocal traits in the female singing voice. To describe 'magically alluring voices' (Settle, p. 115) Homer rather economically uses 'honey-sweet' (187), meligêrun, suggestive of melos – melody – a melody, that musicologist Judith Peraino indicates is implied but never described in the text except in the 'clear-sounding or shrill song' (p. 439). The siren in this paper lies in these sparingly used adjectives, which have served as a foremother to the sound of the female singing voice in siren encounters.

The paper links these adjectives with empirical tests conducted on female vocal attractiveness in order to explore the correlation between the attractive female voice as depicted in myth and as assessed in real life. Drawing further on the possible interchange between myth and reality, the paper offers a view on how the role of singing as a means of surviving (as explained in our 'primate heritage' (Hagen & Hammerstein, p. 8)) can be applicable to the siren myth.

What is at stake in the sirens' so-called 'song of seduction'?

For the sake of this essay's focus on attraction arising purely from sound, I will concentrate on Homer's literary epic the *Odyssey* (trans. Lattimore), which depicts the sirens in Book XII (two in number) as 'hauntingly distant, alluringly acoustic unseen - never seen' (Pollock, p. 19). These sirens manifest in the aural and the fact that their existence relies on 'the sound of their singing' (198) distillates their power to the singing voice. Indeed, the word existence should be stressed as the sirens' existence balances on 'the fate decreed to them by an oracle: 'to die when a ship sailed by unscathed' (Holford-Strevens, p. 19), making their sole hope of surviving to attract by use of their sung voices.

According to literary sources, among them Lycophron's *Alexandra*, the Orphic Argonautica, and 'some post-Homeric interpretations of the Odyssey' (Salecl, p. 2), if the mythological sirens fail to seduce their prey by song they 'fling themselves into the sea' (Holford-Strevens, p. 42). On the other hand, if the sirens succeed in seducing their prey they survive. The stakes in the sirens' song are clear: the idealised sung voice of the siren is her only means to survive.

Frequently, the sirens' song has been presented as a trial, as a coming of age for the 'male social critic/auditor' (Dunn, p. 9), for the sailor whose homecoming journey is interrupted by having to master the 'threat to the social order' (Pollock, p. 25), 'the knowledge of the real' (Salecl, p. 3) - whatever the sirens represent in the moment of encounter. Meanwhile, less has been said on the trial facing the sirens (excluding Salecl, p. 2, 5, 13) who risk death every time a ship/auditor approaches. Setting the challenge for the sailor aside, the sirens' song is an arena of struggle for the siren/singer, who is burdened by the pressure of having to attract in order to survive.

Singing for survival

The siren myth's depiction of the struggle for survival is described in the fight/flight response between siren and sailor. For the sirens, flight is to be

understood as the sirens' flinging themselves into the sea, committing suicide as a consequence of having been humiliated in their 'failure to seduce Odysseus' (Holford-Strevens, p. 19). The sirens are never killed; they end their own lives. Admittedly, in so doing, they are following a fate decreed to them by an oracle, which forces one to question - who is this oracle? Why is it that the sirens must end their lives rather than confront their failure to seduce?

Perhaps this can best be addressed through analysis of vocal tactics used in evolutionary history. In life the closest depiction to the singing siren manifests in the 'scene of a woman singing' (Dunn, p. 9), where an auditor experiences a pull – an attraction – as Robert Hichens romantically describes on listening to Christine Nilsson: a 'feeling of wanting to stay there' (Gillett, p. 186). Delving further, in the animal kingdom singing is employed as complex coordinated vocalisations whose function varies from mating signals to territorial advertisement (Hagen & Hammerstein, 2009). Male birds famously use singing as a mating strategy to attract female birds (note sirens are often portrayed as 'human-headed birds' (Pollard, p. 137)). Hagen and Hammerstein suggest that early humans may have evolved proto-music for similar purposes of territorial advertisement, as well as for courting. In Immortal Tones: Woman as Public Singer, Paula Gillett discusses the public's dual response to the female singer in late 18th century to early 19th century England, with most of this uneasiness centred on the belief that singing exposes a 'singer's sexuality' (p. 167) thus, linking singing with attracting. Indeed, voice being a 'direct emanation of a [sounder's] sexual nature' is proven in Susan Hughes, Franco Dispenza and Gordon G. Gallup's 2004 study, which empirically implicates the existence of a relationship between voice and sexual behaviour (p. 302). Therefore, while singing offers a space for a woman to taint her social standing, it is also a prime space for courting and eliciting attraction.

Courting, like sexual selection, functions by a process of exclusion, of singling out. Hence, one can hypothesise that like in the siren myth, singing poses a risk of failing to attract and thus a risk of elimination. However, in contrast to the siren myth, the fight for survival has moved from being a competition between singer and auditor, to being a fight *within* each party, that is, a fight between singers to attract auditors and a fight between auditors to

attract singers.² Recent research in female vocality has demonstrated that females alter their voices to stand out in 'intrasexual competition' (Puts, p. 111).

What voice qualities have human females evolved to attract mates, and how do these vocal qualities relate to the siren's voice as described in mythology?

i) Competition in femininity

Studies have shown that averageness is an important component of attractiveness with the exception of exaggerated feminine features, which are considered more attractive (Feinberg, p. 615). This applies to visual as well as to vocal features, which are directly related through sex hormones (Feinberg 2008 & Hughes 2004). The higher the oestrogen levels in the body, the higher the fecundity of the subject (Borowska, p. 56). Tests demonstrate that oestrogen has a direct effect on the morphology of the larynx, and thus voice can advertise the sounder's fertility, with the most prominent effect of high levels of oestrogen on the female voice being a high vocal pitch (Pipitone). In a study on the role of femininity in aesthetic judgements of voice pitch, heterosexual male raters preferred a 'raised pitch to average pitch' (Feinberg). Borowska notes that 'sexual dimorphism in voice pitch was moulded by sexual selection in human evolution' (p. 56), and thus the equation reads as follows: the higher the pitch, the more female, the more fertile, the more feminine, and as a result, the more attractive.

Findings suggest that throughout human evolutionary history voice has indeed been 'an important parameter of mate choice', particularly at night, where vision is compromised (Hughes, p. 303). In order to attract through vocality the female has to first signal that she is female, and on top of this, she has to signal that she is extremely feminine. Consider the effect of these findings and their impact on the competition between females in their efforts to project femininity in order to attract males. Indeed, in the interest of surviving, females have been noticed to adapt by raising voice pitch and timbre, achieving a "feminised pitch", for obtainment of 'male investment' (Puts, p. 114).

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² With exception, literature has depicted scenes of competitions in singing such as in Hera's instigation of the singing contest between the Sirens of the Odyssey with the Muses, and in the Sirens' competition with Orpheus' lyre.

Interestingly, one study contested that 'higher pitched voices were assessed as more attractive up to an optimal pitch', with a female voice exceeding 280 Hz rated as 'less attractive', 'too high', 'babyish' and associated with 'sexual immaturity' (Borowska, p. 55).

ii) The high-pitched siren

When looking at the principal terms used to describe the song of the sirens: 'shrill, high-pitched' (Nugent, p. 47), it is obvious that the focus is on the upper extreme of the vocal compass. It is interesting to note that in the Greek colonies of southern Italy; among the names assigned to the sirens is 'Ligeia' meaning 'soprano' (Holford-Strevens, p. 20). Gillett writes of the high soprano as a voice that is 'unambiguously feminine' (p. 185), Mary Ann Smart remarks how sopranos are often given the 'most compelling and pyrotechnically impressive music' (p. 6), and Suzanne Cusick mentions the connection between soprano and 'sovarno' meaning sovereign (p. 86); all being associations which point to the power of a shrill, high-pitched sound - which makes its failure to seduce all the more noticeable, and by theory thus "humiliating" for the siren.

Furthermore, Borowska's report suggests a threshold: after an optimal pitch attractive becomes less attractive. The description of the sirens' song as shrill – shrill being synonymous with piercing and penetrating – suggests that it exceeds Borowska's optimal high-pitch, which would turn the sirens' famously attractive song into something too high and therefore less attractive. Although not acoustically attractive, in its extremity it is nonetheless a transfixing sound, and may thus equally function as a means to attract by fixing its prey such that the prey 'forgets to live' (Walsh, p. 15) and 'wastes away from lack of nourishment' (Gresseth, p. 207), induced by a trance-like paralysis grounded on fear rather than pleasure.

In the psychoanalytic study *The Angel's Cry*, Michel Poizat reasons that the fascination with high-pitched singing lies in the 'unintelligible articulation of vowel sounds', which become 'indistinguishable when they are sung above 660 Hz', and transform language into a 'pure cry' (p. 42). The precedence of sound over language resonates with the memory of the maternal voice as the 'first voice heard without comprehending the words' (Pollock, p. 20). Indeed, from her 'matrice sonore' (Rosolato, p. 81) the mother serves as the 'primal

figure of female vocality' (Dunn, p. 11), her 'prosody' being something her child has perceptually learnt to follow in real life (Lehmann, p. 207).

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Works cited

- Borowska, B., Boguslaw, P. 2011. Female voice frequency in the context of dominance and attractiveness perception. *Animal Behaviour*, 82, 55-59.
- Cusick, S. G. 2001. A Soprano Subjectivity: Vocality, Power, and the Compositional Voice of Francesca Caccini. *In:* ed. J. Donawerth & A. Seeff. *Crossing Boundaries: Attending to Early Modern Women,* (pp. 80-98). Newark, Del.: University of Delaware Press.
- Dunn, L. C. & Jones. N. A. 1994. *Embodied Voices: Representing female vocality in western culture*. Cambridge: Cambridge University Press.
- Feinberg, D. R., DeBruine, L.M., Jones, B. C., & Perret, D. 2008. The role of femininity and averageness of voice pitch in aesthetic judgements of women's voices. *Perception*, *37*, 615-623.
- Gillett, P. 2000. Immortal Tones: Woman as Public Singer. *In:* P. Gillett. *Musical Women in England, 1870-1914* (pp. 141-187). London: Palgrave Macmillan.
- Gresseth, G. 1970. The Homeric Sirens. *Transactions and Proceedings of the American Philological Association*, 101, 203-218.
- Hagen, E. H. & Hammerstein, P. 2009. Did Neanderthals and other early humans sing? Seeking the biological roots of music in the territorial advertisements of primates, lions, hyenas, and wolves. *Musicae Scientiae*, 1-11.
- Holford-Strevens, L. 2006. Sirens in Antiquity and the Middle Ages. *In* Austern, L. P. & Naroditskaya, I. *Music of the Sirens* (pp. 16-52). Indiana: Indiana University Press.
- Hughes, S. M., Dispenza, F., & Gallup Jr., G. 2004. Ratings of voice attractiveness predict sexual behaviour and body configuration. *Evolution and Human Behaviour*, 25, 295-304.
- Lehmann, A. Sloboda, J. & Woody, R. 2007. The Listener. *In:* Lehmann, Sloboda & Woody. *Psychology for Musicians* (pp. 205-223). Oxford: Oxford University Press.
- Nugent, P. 2008. The Sounds of Sirens; "Odyssey" 12. College Literature, 35, Homer: Analysis & Influence, 184-191.
- Odyssey, trans. R. Lattimore. 2007. New York: Harper & Row.

- Peraino, J. 2003. Listening to the Sirens: Music as Queer Ethical Practice. *GLQ: A Journal of Lesbian and Gay Studies*, 9, 433-470.
- Pipitone, R. & Gallup, G. Jr. 2008. Women's voice attractiveness varies across the menstrual cycle. *Evolution and Human Behaviour*, 20, 141-150.
- Poizat, M. 1992. *The Angel's Cry*. trans. A. Denner. Cornell University: Cornell University Press.
- Pollard, J. 1965. Sirens. *In J. P. Pollard Seers, Shrines and Sirens: The Greek Religious Revolution in the Sixth Century B.C.* (pp. 137-145). London: Allen and Unwin. (curious birds
- Pollock, G. 2010. Ecoutez la *Femme*: Hear/Here Difference. *In*: H. Hanson, ed. 2010. *The Femme Fatale*: *Images, Histories, Contexts* (pp. 9-32). London: Palgrave Macmillan.
- Puts, D. A., Brandt, J., Welling, L., Dawood, K., Burriss, R. 2010. Intrasexual competition among women: vocal femininity affects perceptions of attractiveness and flirtatiousness. *Personality and Individual Differences*, 50, 111-115.
- Rosolato, Guy. 1974. La Voix: entre corps et langage. Revue française de psychanalyse, 37, 75-94.
- Salecl, R. 1997. "The Sirens and Feminine Jouissance." differences: A Journal of Feminist Cultural Studies, 9, 1-16.
- Settle, G. 1985. Fitzgerald's Daisy: The Siren Voice. *American Literature*, 57, 115-124.
- Smart, M. A. 2000. Siren Songs: Representations of Gender and Sexuality in Opera. Princeton: Princeton University Press.
- Walsh, G. B. 1984. The Varieties of Enchantment: Early Greek Views of the Nature and Function of Poetry. Chapel Hill: University of North Carolina Press.

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