

Human perception of prosody in domestic cat meows

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This study examined human listeners' ability to classify domestic cat vocalisations (meows) recorded in two different contexts; during feeding time (food related meows) and while waiting to visit a veterinarian (vet related meows). A pitch analysis showed a tendency for food related meows to have rising F_0 contours, while vet related meows tended to have more falling F_0 contours. 30 listeners judged twelve meows (six of each context) in a perception test. Classification accuracy was significantly above chance, and listeners who had reported previous experience with cats performed significantly better than inexperienced listeners. Moreover, the two food related meows with the highest classification accuracy showed clear rising F_0 contours, while clear falling F_0 contours characterised the two vet related meows that received the highest classification accuracy. Listeners also reported that some meows were very easy to classify, while others were more difficult. Taken together, these results suggest that cats may use different intonation patterns in their vocal interaction with humans, and that humans are able to identify the vocalisations based on intonation.