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VOCAL AND NON-VOCAL ANTI-PREDATOR BEHAVIOR OF WEST AFRICAN GREEN MONKEYS, *CHLOROCEBUS SABAEUS*, IN SENEGAL

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We investigated the alarm calls and non-vocal anti-predator responses of West African green monkeys, *Chlorocebus sabaeus*, in the Niokolo Koba National Park in Senegal. The anti-predator behavior of vervet monkeys, *C. pygerythrus*, is the textbook example of a 'functionally referential' alarm call system: in response to different predator categories individuals produce distinct alarm calls and adaptive non-vocal responses (production specificity). The alarm calls alone are sufficient to elicit these responses (perception specificity). It is assumed that vocalizations evolve slowly and that habitat influences alarm call systems. Green monkeys and their closely related vervet monkeys live in similar habitats and should therefore utilize a similar system. To test this hypothesis, we examined the first criterion of functional referentiality: production specificity. To elicit anti-predator behavior in green monkeys, models of a leopard, a snake, and a martial eagle were presented to eight males of two semi-habituated groups. The alarm calls uttered in response to the snake or leopard model (nine trials each) were significantly different. Furthermore, the monkeys responded to the snake model with mobbing behavior while they fled into trees when spotting the leopard model. Surprisingly, the model of the martial eagle did not elicit any response though martial eagles were sighted several times during the study. Specific alarm calls would allow the monkeys to select such distinct non-vocal responses even when the predator is out of sight. To confirm that green monkeys utilize a functionally referential alarm call system playback experiments will be conducted to test the second criterion: perception specificity.

Keywords: Alarm call, Functionally Referential, Vervet, Communication