

have been termed "propaganda substances." F. E. Regnier and E. O. Wilson, "Chemical Communication and 'Propaganda' in Slave-Maker Ants," *Science*, Vol. 172 (April 16, 1971), pp. 267-269. Staphylinid beetles have been studied by C. H. Seevers, "The Systematics, Evolution and Zoogeography of Staphylinid Beetles Associated with Army Ants," *Fieldiana, Zoology*, Vol. 47 (1965), pp. 137-351; and by Bert Hölldobler. Having "broken the code" of ant communications, beetles gain acceptance in ant colonies they infest. The beetle parasites secrete "appeasement" substances that halt attacking ant workers in their tracks; later the beetles generate substances mimicking ant larvae pheromones, so that worker ants carry the beetles to the ant larvae chambers where the beetles obtain food by imitating the begging movements of worker ants. This "Trojan Horse" chemical parasitology has the characteristics of multi-channel deception. Mite parasites have been studied by Carl W. Rettenmeyer, who reports the infestation of army ants by mites that have evolved phylogenetically so as to resemble various parts of the ants' bodies, to which they become attached. See *Science*, Vol. 172 (April 23, 1971), p. 406. Also see T. C. Schneirla, *Army Ants: A Study in Social Organization*, Freeman & Co., San Francisco, 1971.

15. It was once reported that the dance of scout honey bees was invariably along the appropriate axes, signifying correct locations. Robert L. Jervis, *The Logic of Images in International Relations*, Princeton University Press, Princeton, New Jersey, 1970, relied on this earlier notion. In recent years, even the fundamentals of hymenoptera communications have been challenged. See Patrick H. Welles and Adrian M. Wenner, "Do Honey Bees Have a Language?" *Nature*, Vol. 241 (January 19, 1973), pp. 171-175. There is no evidence that bees cannot lie; there is evidence that under the influence of chemical stimulants bees can misreport direction. See James L. Gould *et al.*, "Communication of Direction by the Honey Bee," *Science*, Vol. 169 (August 7, 1970), pp. 544-554. In youth and old age some bees lack the capacity to communicate. For about the first 30 days of life *Trigona* bees cannot communicate; after about 97 days, communication periods are limited. It is premature to reach judgments about inability to deceive in the mature period. See C. da Cruz-Landim and A. Ferreira, "Mandibular Gland Development and Communication in Field Bases," *Journal of Kansas Entomological Society*, Vol. 41 (1968), pp. 47-481.
16. Wolfgang Wickler, *Mimicry in Plants and Animals*, cited in Note 12, especially ch. 16, "Intraspecific mimicry," pp. 221-227.
17. *Ibid.*, pp. 221-226.
18. Wolfgang Wickler, "Socio-sexual signals and their intraspecific imitation among primates," in Desmond Morris (ed.), *Primate Ethology* (Chicago: Aldine, 1967).
19. Hilda Simon, *Insect Masquerades*, p. 21, cited in Note 12.
20. Paul C. Lunsford, "A Study of Government Inquiries into Alleged Staged News Practices of Two Television News Documentaries," Ph.D. Dissertation, Ohio State University, 1972.