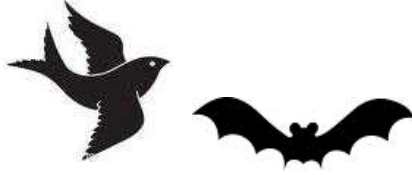


SYMBOLIC BIRDS AND IRONIC BATS: VARIETIES OF CLASSIFICATION IN NAGE FOLK ORNITHOLOGY¹



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Ethnobiologists and anthropologists have long recognized a distinction between “general purpose” ethnotaxonomies and specialized ways of classifying plants and animals, such as “symbolic classification.” This article on the folk ornithology of an eastern Indonesian society distinguishes between ethnotaxonomy and symbolic classification in order to consider the conceptual position of bats. Contrary to the predictions of Douglas and others, Chiropterans are shown to be peripheral to both forms of classification in a way that contrasts with values attached to both nocturnal and diurnal birds of prey. (Ethnotaxonomy, symbolic classification, folk ornithology, Nage)

That a single culture can classify natural objects or conceptually associate categories of animals and plants within a number of different schemes is well known. A major distinction concerns “general purpose” and “special purpose” classifications (Berlin 1992). Ethnotaxonomy (or folk taxonomy) refers to a society’s general purpose classification, while one variety of special purpose classification is symbolic classification. The contrast is by no means new. While Durkheim and Mauss (1963) distinguished “primitive classification” and “technological classification” as contrasting schemes in non-Western societies, Needham (1963) later identified their “primitive classification” as a form of symbolic classification. More comparable to Berlin’s (1992) distinction is Worsley’s (1967) opposition of “ethnobiological taxonomy” and “totemic ordering” (understood as a particular instance of symbolic classification). Similarly, Morris (1979) uses “symbolic classification” to denote a cross-culturally unusual way of ordering natural objects in ritual contexts that coexists and yet contrasts with “folk biological taxonomy.”

Although often associated with Durkheim and Mauss, the term “symbolic classification” was actually coined by Needham who applied it to a narrow range of cultural phenomena (Forth in press). In this analysis I use symbolic classification in a broader sense, and show how the symbolic classification of birds among the Nage people of eastern Indonesia, a population of agriculturalists and occasional hunters who inhabit the central part of the island of Flores and speak a Central-Malayo-Polynesian language, contrasts with Nage ethno-ornithological taxonomy. More specifically, Nage symbolic usage brings certain bird categories into association with other categories in a way quite distinct from what obtains

in their ethnotaxonomic practice. Employing a further contrast of classificatory centrality and peripherality, it can be shown how bird categories that are central to Nage bird ethnotaxonomy may or may not be central to Nage symbolism. By the same token, categories that are symbolically prominent may be either central or peripheral ethnotaxonomically. In this connection, the analysis challenges a long-standing anthropological tendency, traceable to Douglas (1966) and Leach (1964), which attributes special symbolic significance to ethnotaxonomically peripheral animal categories interpreted as anomalous.

METHODOLOGICAL ISSUES

Several terms require more precise definitions. As general purpose classifications, ethnotaxonomies typically correspond in broad outline to scientific taxonomy in regard to both structure and content. Employing the same named categories that constitute a folk taxonomy, a symbolic classification of animals and plants, by contrast, refers to the way folk biological categories are associated or dissociated in symbolic usage: for example, in spiritual belief, myth, metaphor, and poetic idioms. In the Nage case (and more generally as well), this symbolic ordering can be quite different from the ordering of the same categories in ethnotaxonomy. Yet, symbolic classification can involve conceptually connecting ethnobiological categories—in the present instance, categories of birds—to produce more inclusive symbolic classes which, in this formal respect, are comparable to the categories (or taxa) of a folk taxonomy.

These aspects of symbolic classification are best demonstrated with an example of a symbolic class. As has been previously shown (Forth 2004a), Nage identify Falconiformes (eagles, hawks, and falcons), Strigiformes (owls), and several kinds of dark-colored, nocturnal, or scavenging birds (crows, drongos) as members of a symbolic category of “witch birds.” As the name suggests, the category is defined by the several ways each of these birds is connected in Nage cosmology with “witches” (*polo*). In fact, in their own language, Nage designate the birds simply as *polo*, although they also call them *burung suanggi*, an Indonesian expression meaning “witch birds.” “Witch birds” is not, however, an ethnotaxon. Largely on the basis of morphology, Nage ethnotaxonomy disaggregates the witch birds, dividing them into cognitively separate groupings, some of which comprise intermediate taxa (*sensu* Berlin 1992). What is more, witch birds compose a symbolic class on the basis of shared metaphorical connections to non-birds, including of course malevolent spiritual beings called witches. By contrast, in an ethnotaxonomy, birds are directly associated with or dissociated from other birds on the basis of shared perceptual features. Symbolic associations of natural kinds are also grounded in morphological and behavioral features. But in this case the criteria invoked are more selective and mediated by entities other

than natural kinds; hence the resulting association of birds as members of a symbolic class is both more complex and less direct.

As already stated, a symbolic classification of birds employs the same named ethno-ornithological categories as a folk taxonomy of birds. That is, birds are typically not called by different names according to whether or not their representation is symbolic. Considered as taxa, all named animal and plant categories by definition participate in an ethnotaxonomy. In fact, a folk taxonomy can include more than these, particularly if one accepts, as do most ethnobiologists (Forth 2004b), the existence of “covert,” or unnamed taxa. On the other hand, only some of a culture’s named biological categories will have a recognized symbolic value (Morris 1979). Of those that do, only a few will be symbolically linked with others, or will form significant semantic contrasts with others, and in this way compose more inclusive symbolic classes. But it is not the case that an entity either has symbolic value or does not. In a given society, animal categories, for example, may be either symbolically prominent, “dominant” in Turner’s (1967) usage, appearing in a variety of expressive contexts, or they may be limited to a relatively few contexts.

This last distinction relates to the contrast of centrality and peripherality with respect to both ethnotaxonomic and symbolic classification. With birds, as with other life forms, ethnotaxonomic centrality is evidenced by the extent to which a particular category, or “folk generic” (*sensu* Berlin 1992), is known among culture members. The ethnotaxonomically most central birds therefore include those that are known to virtually everyone. Related to this is precedence in recall lists. That is, whether informants, when listing birds they know, name a particular ethno-ornithological category at the beginning or the end of their lists, or not at all.² Expressed another way, ethnotaxonomic centrality is evidenced by whether a category is regarded as a good example of the life-form, or the extent to which it is prototypical (Lakoff 1987). By these criteria, diurnal raptors (Falconiformes) are unequivocally central to Nage bird ethnotaxonomy; so too are Columbiformes and various kinds of smaller birds (Forth 2004a). On the other hand, nocturnal raptors are peripheral to Nage folk taxonomy. Peripheral taxa tend to occur relatively late in recall lists or comprise birds commonly spoken of as “odd,” by exhibiting physical features or behaviors of non-birds (e.g., ground-dwelling or inability to fly). Albeit less decisive, other factors indicative of ethnotaxonomic centrality are the inclusion of a folk generic in higher order categories (named or unnamed) and the further use of the generic category name to designate a higher order or intermediate category. Conversely, centrality may be associated with elaboration of the category or its division into named “folk species” (*sensu* Berlin 1992). At the same time, centrality in one respect can be countered by peripherality in other respects. Thus, for example, Nage divide large bats, *méte*, into two named kinds, *méte ha* and *méte wula* (or *méte uwa*). In

some contexts, moreover, *méte* is the bat category most closely associated with an intermediate class of bats (Forth 2004a:46). Yet, as will be shown, all bats are peripheral to the life-form category of “bird.”

As this suggests, ethnotaxonomic centrality is equivalent to focality in relation to higher order generic categories. Among the most prominent or central of Nage birds, Brahminy kites (*Haliastur indus*; Nage *jata*) and eagles (*kua*) are thus focal to an intermediate taxon of diurnal raptors (Falconiformes), which is designated by the compound name, *kua jata*. Given their common precedence in recall lists, birds of prey are also focal to the life-form category “bird,” as are small passerines whose collective name, *ana peti*, can refer to birds in general (Forth 2006).

A major indication of symbolic centrality is inclusion of a bird category in a society’s symbolic classification: that is, its combination with other categories to compose a symbolic class. A category may be symbolically prominent in other ways. For example, birds may possess additional symbolic value as omens or calendrical signs, or as manifestations of spiritual beings (including witches, free spirits, and human souls). Symbolically important birds also appear in Nage myth and folktale (Forth 2004a, 2007a, 2009) as well as in parallelistic idioms of ritual speech, song, and oratory. Since all these genres entail an ordering of bird categories into canonical pairs in opposition to other pairs (see Forth 2004a Appendix 1), they can themselves be understood as manifestations of a dual symbolic classification. Finally, symbolic centrality may reside in an animal’s importance as a general cultural symbol, such as cattle among the Nuer or the pangolin among the Lele (Douglas 1957, 1990:30; Willis 1974). In Nage symbolism, the water buffalo occupies such a status (Forth 1998). The only bird that does so is the Helmeted friarbird (*Philemon buceroides*; *koka*) (Forth 2007a:507), a category also prominent in the symbolic classification evidenced in Nage parallelistic speech (Forth 2004a:181–84).

Combining the contrast of ethnotaxonomy and symbolic classification with the distinction of centrality and peripherality produces a four-fold scheme, as illustrated in the Figure. As this demonstrates, bird categories can be distinguished as “ethnotaxonomically central” (EC), “symbolically central” (SC), “ethnotaxonomically peripheral” (EP), or “symbolically peripheral” (SP). In addition, certain categories combine centrality in one respect with peripherality in the other (see Quadrants 2 and 4 in the Figure). Or they may be central to both ethnotaxonomic and symbolic classification (Quadrant 1) or peripheral in both classificatory contexts (Quadrant 3).

Figure
Ethnotaxonomic and Symbolic Centrality and Peripherality

	Ethnotaxonomically central (EC)	Ethnotaxonomically peripheral (EP)
Symbolically central (SC)	1 Diurnal raptors (witch birds) EC/SC	2 Nocturnal raptors (witch birds) EP/SC
Symbolically peripheral (SP)	4 Various folk generics (e.g., <i>ana peti</i>) EC/SP	3 Bats EP/SP

PERIPHERALITY, AMBIGUITY, AND SYMBOLIC VALUE

The third quadrant of the Figure is exemplified by bats. The relative absence of bat symbolism among Nage, and more particularly the exclusion of bats from their symbolic classification, is, I argue, ironic. As a category that is peripheral both symbolically and ethnotaxonomically, bats are diametrically opposed to diurnal raptors, which in Nage ornithology are central in both regards. Nocturnal raptors (owls), on the other hand, are symbolically central but ethnotaxonomically peripheral, a combination that seems to support Douglas (1966) and others who ascribe particular symbolic value to classificatory ambiguity. For Douglas this ambiguity is the source of mystical danger, the response to which is taboo. But while such an interpretation fits quite well with Nage representations of nocturnal birds of prey, it is contradicted by their ideas about diurnal raptors, which are ethnotaxonomically central but are conceived symbolically in the same way as owls and are subject to the same taboos (Forth 2004a:103–04).

Douglas’s (1966) approach is equally challenged by Nage ideas about bats. Despite their peripheral status in Nage ethno-ornithological taxonomy, and their marginality in the bird folk taxon, bats are symbolically undervalued. Based on her analysis of Leviticus and Deuteronomy, Douglas (1966) construes the “unclean” and therefore tabooed animal categories (e.g., pigs, rabbits, camels) of the ancient Hebrews as ambiguous or anomalous in relation to more inclusive folk zoological categories. In the terminology of ethnozoology, these comprise

life-form taxa like bird, fish, and beast. The unclean kinds specified in the Old Testament can also be described as marginal or peripheral to their respective classes. For, although the pig may be an anomalous beast, it is, according to Leviticus and Deuteronomy, still a beast, and Douglas herself (1966:70) speaks of the unclean creatures of the Bible as being “imperfect members of their class.”³

The point to be stressed is that the animals tabooed in the Old Testament appear peripheral only in the context of a particular ethnotaxonomy. Douglas makes no distinction of kinds of animal classification, and Needham (1979) is therefore wrong when he interprets her as arguing that tabooed animals are “avoided because they are anomalous and do not fit neatly into a *symbolic classification*” (Needham 1979:46, emphasis supplied). Whether or not classificatory anomaly is the reason for their taboo status, the classification into which such animals do not fit neatly is, by all indications, an ethnotaxonomic scheme based expressly on morphological and behavioral criteria. If there is a symbolic class to be discerned in Leviticus and Deuteronomy, it can only be the various series of tabooed creatures themselves.

With these several methodological issues clarified, we may now proceed to the particulars of Nage representations of bats. Although there are dozens of species of Chiropter on Flores Island, Nage divide bats into only three named generic categories: *méte*, *gébu*, and *‘ighu*. *Méte* are the largest and comprise several genera of fruit bats, or flying foxes. *Méte* is also the most focal category in an unnamed intermediate bat taxon which further comprises the other two named generics. *‘Ighu* designates several species of Microchiroptera, while Nage employ *gébu* for bats they describe as intermediate in size between *méte* and *‘ighu*.

For Nage, as for many folk ornithologists (including the authors of the Old Testament), all bats are kinds of birds. Yet Nage do not consider bats as good examples of birds (Forth 2004a:40). In itself, this circumstance shows bats to be ethnotaxonomically peripheral to the life-form category “bird” (*ana wa ta’a co*, flying animals). Not surprisingly, none of the three bat categories figures prominently in recall lists of birds; when asked to name all the birds they know, Nage will either not mention bats or mention them late in the list. At the same time, when bats are listed, *méte*, denoting the largest bats, is mentioned more often than other bat categories, a circumstance that accords with the focal position of this category within the covert intermediate bat taxon. Further attesting to their ethnotaxonomic peripherality, Nage also describe bats as differing markedly from other birds in regard to the shape of their heads and faces (which, for flying foxes, they compare to dogs), their pelage, the fact that they give birth live and do not lay eggs, and the difference between their vocalizations and those of true birds. In spite of all this, Nage still include bats in the category of birds, and do

so mostly because they fly. Yet, far from their peripheral character conferring any special symbolic value on bats, Chiropterans play very little part in Nage symbolic representations. Bats are not identified with any category of spiritual beings; nor are they prominent in myth.⁴ More importantly, bats are not included in the symbolic class of witch birds.

Contrary to what Douglas (1966) might lead us to expect, bats for Nage are therefore both symbolically and ethnotaxonomically peripheral. In Leviticus the bat is an abomination and hence taboo because, according to Douglas, it is an imperfect bird. By contrast, Nage do not taboo (*pie*) the consumption of bat flesh. At the same time, the flesh of raptors (and in fact all witch birds) is indeed taboo for Nage. And this is so despite the fact that diurnal raptors and some other witch birds are ethnotaxonomically central and, as this should imply, are quite unambiguously birds (cf. Hunn 1979).

The symbolic insignificance of bats is largely a function of the fact that Nage do not count them among the witch birds, the psychologically most salient symbolic group recognized by Nage. Witch birds are those believed to manifest witches, malevolent spiritual beings whose normal form is a human being. In contrast to ordinary humans, witches go about at night and sleep during the day, and are also characterized by several sorts of spatial inversions (Forth 1998:56–63). Nage further represent witches as ambiguous beings, not least because they combine features of humans, animals, and malevolent spirits.

Bats resemble witches in being active nocturnally, and like witches they sleep during the day and assume an inverted (upside-down) position while doing so. In addition, many bats are dark-colored like some of the polythetically constituted symbolic class of witch birds. It is therefore reasonable to expect that Nage would identify bats with witches and hence count them as an instance of witch birds. Yet they explicitly do not do so. In this connection, the Nage evaluation of bats provides a cogent illustration of Sperber's (1975) point that motivation in symbolism is not true motivation since it is not predictive. Nage bats can further be said to exemplify what has been called "anti-motivation" or irony in visual symbolism (Barley 1983; Fernandez 1991; Fernandez and Huber 2001), using "irony" to refer to an absence of meaning where, with regard to the larger cultural context, one would expect it. This interpretation does not distinguish irony from other forms of symbolism, since for Sperber (1975) all symbolism is devoid of meaning (a property he attributes exclusively to non-figurative language). Even so, given the resemblances between bats and witches manifest in Nage discourse, one would expect the Nage to identify the ethnozoological taxon and the spiritual category, and include bats in the symbolic class of witch birds. So why do they not do so?

Before attempting an answer, it should be noted that Nage are not the only people who attach little or no negative symbolism or spiritual significance to

Chiropterans. The neighboring Ngadha make little symbolic use of bats, nor do the nearby Sumbanese, although the Sumbanese regard small bats as manifestations of beneficent spirits (Forth 1981:80). In contrast to their negative evaluation in European lore, bats in China are associated with happiness and good fortune. Some Pacific peoples identify bats with mythical heroes (Lawrence 1993:332, 333), and the Cora of Mexico have a culture hero who takes the form of a bat (Cordry 1980:185–86). On the other hand, several Malayo-Polynesian-speaking societies, thus linguistic congeners of Florenese and Sumbanese peoples, hold a more negative view of Chiropterans than do the Nage. For example, the Mandailing Batak of northern Sumatra regard flying foxes as embodying malevolent spirits (Thiessen 1914:6, 9–10), and the Nuaulu of Seram identify bats with people who died a violent death (Valeri 2000:233). In the Trobriands, a flying fox is considered a witch's double (Malinowski 1922:238), while the Nidula of Goodenough Island similarly regard bats as the messengers of sorcerers (Young 1991:382).

Regardless of how far the Nage dissociation of bats from witches or other malevolent beings may or may not be exceptional cross-culturally, its curiosity lies mainly in the several features of the Nage representation of witches (e.g., inversion, nocturnal activity) that they equally attribute to bats. Nevertheless, bats differ in two major respects from ornithological kinds that Nage do identify with witches, and both are features that connect witches with diurnal and nocturnal birds of prey. Occupying Quadrants 1 and 2 in the Figure, the two sorts of raptors are unequivocally focal to the symbolic class of witch birds, although nocturnal kinds are somewhat more so than diurnal categories (Forth 2004a). For the Nage, the most distinctive feature of witches is their consumption of human flesh. Accordingly, Nage recognize all witch birds as flesh-eaters, either hunters or scavengers, and in their most focal instances as consumers of other birds. Contrariwise, all eaters of flesh (that is, meat as opposed to fish) are classified as witch birds. At the same time, Nage know that local bats are not carnivorous, and that flying foxes, the largest of the Chiropterans on Flores island, eat only fruit. The smallest bats, subsumed in the category 'ighu, are for the most part insectivorous; yet Nage describe these too as consuming fruit.⁵

Bat voices also distinguish them from witch birds. Nage identify witch birds, or most members of this symbolic class, by their distinctive vocalizations. The most definitive of these are nocturnal sounds Nage associate with owls and diurnal raptors and interpret as manifestations of predatory witches. Designated as *po*, a term which also denotes the ethnotaxon of owls, the sounds appear to be produced exclusively by Strigiformes. Still, Nage further attribute them to diurnal birds of prey; hence the symbolic class of witch birds is largely constituted by aural percepts. Nage recognize that some Chiropterans produce sounds, yet they describe these as very different from the vocalizations of all other birds.

More particularly, they compare the vocalizations of flying foxes to the metallic swishing sound produced when curtains suspended from a metal rod are drawn.

This last observation invites comparison with Feld's (1982) remarks on Kalulu evaluations of bats. Like the Nage, this New Guinean people classify bats with birds in some contexts, while in others they distinguish them; and they do so explicitly in reference to bat voices. What is more, Kaluli imitate bat vocalizations instrumentally (thus recalling the metal curtain rod analogy) rather than orally, as they do with bird sounds. Feld (1982:84) argues that Kaluli distinguish Chiropterans from Aviformes with regard to vocal and not on the basis of "observable morphological or behavioral criteria." The Nage, by contrast, do invoke morphology and reproductive behavior in contrasting bats with birds, and it is mostly in symbolic contexts that distinctive vocal qualities of bats are important for the Nage—as they appear also to be for the Kaluli.⁶

As mentioned earlier, vocalizations also inform the ethnotaxonomic peripherality of bats among Nage. Yet vocalizations are of less significance for ethnotaxonomy than they are in regard to symbolic classification, and especially in the constitution of the symbolic class of witch birds. The exclusion of bats from this symbolic class does not reflect Nage lack of awareness of the empirical features that bats share with witches. On the contrary, vocal and dietary differences, and implicit morphological differences linked with carnivorous versus non-carnivorous diets (particularly the possession of sharp talons and bills in the case of raptorial birds), may be enough to tip the scales in favor of conceptually distancing Chiropterans from witches and excluding them from the witch birds. But this ignores the element of irony in their symbolic (or, rather, non-symbolic) evaluation, for vocal characteristics and non-carnivorousness are not sufficient to exclude bats from the symbolic category of witch birds, or are only barely so. What is more, by virtue of this irony (being like witches but not being included among the witch birds) bats are rendered ambiguous and symbolically peripheral in a way that parallels their ethnotaxonomic peripherality. But this symbolic peripherality is not founded on the same factors that inform the ethnotaxonomic peripherality of bats. Bats are ethnotaxonomically marginal to the Nage taxon of birds mostly in regard to features which associate them with non-birds (such as head shape, fur, and giving birth live). On the other hand, bats are symbolically marginal and excluded from the symbolic class of witch birds because they lack features possessed by certain true birds, and especially raptors and other flesh-eaters. Expressed another way, bats are excluded from the symbolic class of witch birds not because of ways in which they differ from the scientific class Aves, even though it is precisely these features that render bats peripheral to the entire bird ethnotaxon.

An incidental value of this analysis and the entailed distinction of ethnotaxonomic and symbolic classification is the way it confirms the importance of

cannibalistic death-dealing and flesh-eating in Nage representations of witches. It also corroborates the significance of these features for the constitution of the symbolic class of witch birds, and by the same token indicates the lesser importance of nocturnal behavior and inversion (Forth 1993:101–02). That inversion is not the most distinctive feature of witches is borne out by the fact that several other sorts of spiritual beings that are similarly not associated with individual humans are represented as inverted beings to an extent equal to witches (Forth 1998).

The Nage treatment of bats is comparable to another instance of irony in their classification of animals. Nage ethnotaxonomy admits an unnamed, or covert, taxon of mammals, a category largely reflected in a yet distinct form of classification consisting in the application of sex differentiable terms to different animal kinds (like the English “bull” and “cow” and “buck” and “doe”). Not surprisingly, Nage include the Crested porcupine, *Hystrix javanica*, in their covert mammal taxon. Features Nage mention as relevant to this categorization are all ones porcupines share with other mammals (live-births, “hair,” method of copulation); these are also features which make bats peripheral to the category “bird.” Yet, in their application of sex differentiable terms, Nage designate male and female porcupines as *lalu* and *susu* (approximately translatable as “cock” and “hen”), thus using the same terms they apply to all non-mammals, including birds, reptiles, amphibians, fish, and invertebrates (Forth 2004b). Consistent with their general classification of bats as birds, male and female bats are also distinguished as *lalu* and *susu*.

To appreciate this peculiarity, it is crucial to note that Nage too expressly consider the application of the non-mammalian sex terms to porcupines as decidedly curious. In a previous analysis (Forth 2004b:432–33), I was inclined to consider this contextual association of porcupines with non-mammals as mostly reflecting their bird-like crests and quills, a body covering quite unlike the pelage of any other local mammal. I would not now retract this interpretation; however, more recent discussions with Nage have revealed an additional view. As informants pointed out, Crested porcupines differ from other similarly sized hoofless wild mammals (e.g. other rodents, Palm civets, feral cats, and monkeys), the animals with which they might otherwise be most closely identified, in that local porcupines (like other Old World members of the Hystricidae) do not climb or nest in trees. In the same respect, of course, porcupines are distinguished from birds. But what is more important for the assignment of sex differentiable terms, I was told, is the Crested porcupine’s habit of nesting in underground holes, as do many reptiles, insects, and other creatures to which the sex terms, *lalu* and *susu*, are also applied. In this context, then, porcupines are apparently classified with birds in spite of the way they differ from birds, and owing instead to behaviors these mammals share with other non-mammals.

Distinguishing male and female porcupines with the non-mammalian sex terms is best understood as an aesthetically appealing poetic usage (Forth 2004b), an irony that is not only “good to think” but also “fun to think.” As with the Nage representation of bats, and particularly their exclusion from the symbolic class of witch birds, the representation of porcupines as non-mammals is ironic insofar as it is contrary to what other components of the representation would suggest. The two cases are of course different in certain formal particulars. Thus, whereas the sex differentiable terms applied to bats accord with their inclusion in the bird ethnotaxon, those applied to porcupines are inconsistent with their inclusion in an ethnotaxon of mammals. In addition, while Nage are aware of the peculiarity of identifying porcupines, in one respect, with non-mammals, they are less conscious of the curiosity of excluding bats from the witch birds. Nevertheless, another comparison with bats is discernible in suggestions that quills and nesting habits are ultimately insufficient to remove porcupines from the ethnotaxon of mammals. In a similar way, peculiar faces, fur, and live births are insufficient to exclude bats from the Nage taxon of birds.

Diurnal Raptors, Nocturnal Raptors, and other True Birds

The ethnotaxonomic and symbolic peripherality of bats, and hence their placement in Quadrant 3 of the Figure, is now sufficiently demonstrated. Occupying Quadrant 1, the ethnotaxonomically central diurnal raptors are equally central symbolically because of their status as major instances of witch birds and also because of their prominence in numerous mythical and metaphorical contexts (Forth 2004a:154–71, 188–89; Forth 2009). Even more focal to the symbolic class of witch birds than diurnal birds of prey, however, are nocturnal raptors, whose status in this respect is affirmed by the previously mentioned circumstance that the term for owl (po) also denotes nocturnal sounds that Nage interpret as manifestations of witches. But while they are as central to the symbolic classification as their diurnal counterparts, nocturnal birds of prey are peripheral to the Nage ethnotaxonomy of birds; hence they clearly belong in Quadrant 2. Like nocturnal kinds in general, Nage do not consider owls as good examples of birds and, by contrast to diurnal raptors, owls tend not to occur early in recall lists. By the same token, Nage frequently remark on the distinctive and unbird-like faces of owls, especially their resemblance to faces of cats and humans. Further distinguishing owls from other birds is their ability to rotate their heads 180 degrees, a contortion Nage also ascribe to human witches.

Also belonging to Quadrant 2 is the *leba* (Savannah nightjar, *Caprimulgus affinis*), another nocturnal bird that is as ethnotaxonomically peripheral as the nocturnal raptors. An exclusive insectivore, the nightjar is not a raptor, and apparently for this reason and because of morphological features that are the

opposite of raptorial birds, Nage do not consider it a witch bird either. Nage commonly describe the nightjar as a bird “without legs,” and it is in this feature and in its extremely small bill that the bird’s symbolic value lies. Also owing in part to the resemblance between its general form and plumage and those of a falcon, the bird more specifically possesses symbolic value as a hunting omen. Thus, if nocturnal human hunters should hear the cry of a nightjar, it betokens failure in the hunt. In all this, and particularly in the combination of raptorial form and feathers with an egregious lack of talons, powerful legs, and a sharp bill, there is a certain irony in the Nage representation of the “legless” nightjar (Forth 2004a:100–01, 130–33) comparable to what is found in their representation of bats. Indeed, since the nightjar’s symbolic centrality is equivocal, as its value as a symbol consists entirely in its augural use, the bird might alternatively be assigned, with the Chiropterans, to Quadrant 3. On the other hand, the nightjar’s representation as legless is itself a symbolic idea, and one that many Nage recognize as founded not in literal fact but in hyperbole.

Quadrant 4 is reserved for birds that are taxonomically central but symbolically peripheral. Various categories can be assigned to this quadrant, including kingfishers (*fega*), parrots (*feni*), and possibly cockatoos (*kea*). Other possible inclusions are herons and egrets (*gako tasi, o ae*), the Scrubfowl (*wodo*), some Columbiformes (*muke* and *bopo*), the Hill mynah (*ie wea*), and the Black-naped oriole (*leo*). All are well known birds, yet none can be called symbolically prominent, and some appear to have no symbolic value of any sort. Probably the clearest case of a bird category belonging to Quadrant 4 is the *ana peti*. Although its most specific reference is Estrildine finches, the term can designate a larger group of small passerine birds and in some contexts approaches the sense of birds in general. To the extent that *ana peti* have any symbolic value, it is limited and diffuse. In rituals concerning spiritually powerful trees, *ana peti* refers to any bird contextually identified as the spirit of the tree. Thus, in a procedure aimed at retaining the “master spirit” inside a *hebu* tree (*Cassia fistula*) from which a sacrificial post is to be carved, people wait until a bird of any sort has alighted in the branches before sticking a spear in the trunk. Similarly, when performing a rite before removing a Banyan tree in order to clear a site for cultivation, a bird flying from its branches or a snake moving away from the roots or trunk can be taken as a sign that the spirit is agreeably leaving the tree. In both instances, however, *ana peti* refers to any bird that is incidentally contiguous with a tree. It does not, therefore, denote any specific ethno-ornithological category, and in rites performed at Banyans the spiritual manifestation need not be a bird at all.

One context where *ana peti* may denote a bird with a particular symbolic value concerns the Pale-headed munia (*Lonchura pallida*). Specified as *ana peti jata*, this is one of several birds which some Nage say can make the *po* sounds that manifest witches (Forth 2004a:67). Yet others deny this claim, and Nage

normally do not classify *Lonchura pallida* among the witch birds. Since its name means “Brahminy kite munia,” the notion that this tiny bird manifests its sounds appears to derive solely from its resemblance to the kite (*jata*), a large diurnal bird of prey, for both birds possess a generally reddish plumage and white heads.

Just as several categories can be assigned to Quadrant 4, so are there others besides those already mentioned that belong to Quadrants 1, 2, and 3. To Quadrant 1, for example, belong the Friarbird (*koka*) and Imperial pigeon (*zawa*). Both are well known species and Nage are likely to mention them early in recall lists. And both are equally prominent in Nage myth and metaphor (Forth 2007a). Although symbolically less central, other ethnotaxonomically central birds assignable to Quadrant 1 include doves (*kolo*), the Asian paradise-flycatcher (*lawi luja*), the Brown quail (*piko*), the Channel-billed cuckoo (*cuckoo*), and the Pied bush-chat (*tute péla*). On the other hand, in addition to owls and possibly the nightjar, symbolically central birds that are not central ethnotaxonomically include the Bare-throated whistler (*kete dhéngi*), Russet-capped tesia (*bama cea*), and a small unidentified bird called *deza kela* (Forth 2004a:87–89, 97–98, 150–52; 2009).

Besides bats, Quadrant 3 should also include several mostly small birds which are not well known to Nage, and whose names are consequently rare in recall lists. Their rarity would seem to account for their peripheral status in both ethnotaxonomy and symbolic classification. Creatures which are relatively unfamiliar and rarely encountered are less likely to be symbolically represented than those more familiar and common (Forth 2008:146). But ethnotaxomic peripherality does not reduce simply to a category of not being well known. Thus, Nage are very familiar with bats but they do not consider them good examples of birds. The same applies to domestic fowls. Although ubiquitous in Nage villages, fowls are not ethnotaxonomically prominent, and owing to their domestic character, some Nage are even reluctant to classify them as birds at all (Forth 2004a:39–40). Nevertheless, domestic fowls are symbolically prominent. They are used as sacrifices (including in rituals in which their entrails are used as auguries and their blood as a magical agent), and in several idioms they are metaphorically identified with human souls (Forth 2004a:89–90). Hence they are appropriately placed with owls in Quadrant 2.

Back to Bats

As should be obvious, centrality or peripherality in relation to any type of classification is a matter of degree. While diurnal raptors are highly central to both Nage ethnotaxonomy and symbolism, other bird categories assignable to Quadrant 1 are less central in both respects and yet cannot be accommodated in any other quadrant. To represent such relative contrast, different categories could

be placed in different parts of each quadrant. For example, while diurnal raptors could then be positioned in the top left-hand corner of Quadrant 1, other categories that are less central ethnotaxonomically and symbolically could be situated in or towards the lower right-hand region of the quadrant. (The Pied bushchat and Asian paradise-flycatcher are two possible examples.) By the same token, although bats are peripheral to Nage bird classification both symbolically and ethnotaxonomically (and so belong in Quadrant 3), this does not mean that they have no symbolic value whatsoever. Indeed, if irony is a form of symbolism, then bats might be deemed symbolic on this ground alone.

Regarding the symbolic peripherality of bats, two Nage representations deserve attention. First, according to a widespread idea, Chiropterans undergo a series of metamorphoses. Very small bats (classified as 'ighu) are said to derive from bamboo grubs, and to later transform into larger bats (gébu) and eventually into flying foxes. When they grow old, flying foxes then lose their wings, and change into Palm civets. Such ideas obviously find no support in scientific zoology. Yet it is equally doubtful whether they implicate bats in any particular symbolism, or symbolic knowledge (Sperber 1975). As demonstrated elsewhere (Forth 1998b), Nage ideas about bat transformation do not constitute a definite belief or a firm conviction—unlike the connection Nage maintain, for example, between witches and raptorial birds. Indeed, rather than an artifact of some cultural symbolism, the transformation idea is more comparable to a scientific hypothesis, founded on morphological and behavioral resemblances and ecological contiguities among the several species involved. Accordingly, despite the several binary associations in which they participate, grubs, bats, and Palm civets do not compose a single grouping in any Nage classification—symbolic, ethnotaxonomic, or otherwise.

Another idea concerning bats can more definitely be construed as symbolic, for it involves a notion of mystical danger and the concept of *pie*, a word often translatable as “taboo.” Nage consider it *pie* if a tiny bat flies and alights inside a house, as this can lead to the extinction of the human residents. This idea cannot reflect an identification of bats with spiritual beings, since Nage regard no kind of bat as a spirit embodiment. As might be expected, Nage regularly voice concern about malevolent spirits invading dwellings, and especially about witches doing so in the form of animals. Yet the fact that Chiropterans are not one such animal form is consistent with the ironical dissociation of bats from witches encountered elsewhere in Nage symbolic thought. While a bat's alighting in a dwelling resembles a witch's intrusion, it is both more and less than this. For the bat to be dangerous, it must come to rest inside a house rather than simply entering, which would be sufficient for a witch bird or any other manifestation of a witch to cause harm. On the other hand, bats are not embodiments of witches since the Nage do not count them among the witch birds.

So why should alighting bats cause consternation among Nage? As a general principle, Nage consider it inauspicious when any wild creature enters a house, for an important conceptual boundary would be breached were any to do so. Of course, certain wild creatures, like rodents, small lizards, and insects, are impossible to keep out, thus their appearance in human spaces cannot be an object for mystical interpretation. But a small bat entering and alighting in a house is sufficiently unusual that it acquires a negative significance. Doves flying into houses are similarly interpreted as inauspicious (Forth 2007b:219), as is the equally unusual entry of goats and poisonous snakes.⁸ In contrast to bats, none of these is ethnotaxonomically peripheral or ambiguous. Nor are other animals whose behaviors Nage interpret contextually as inauspicious (for example, quails, particular kinds of bees and wasps, and horses); and with the notable exception of snakes, none is particularly identified with spiritual beings. Contrary to what Douglas's approach might suggest, therefore, these Nage "animal taboos" (as I have elsewhere called them) cannot as a class be attributed to the anomalous or marginal character of the particular animals concerned. And while bats are indeed peripheral in terms of Nage ethnotaxonomy, this peripherality cannot account for the Nage interpretation of intrusive bats as "taboo."

Two further points should be made about intrusive bats. First, the representation entails a distinction between the three Nage bat categories, since it is only 'ighu, very small bats, which are its object. Larger bats, those named gébu and méte, are said never to enter buildings. Yet it is primarily these, and especially méte (the most focal bat category), which with their dog-like faces, live-births, and distinctive vocalizations are, for Nage, ambiguous birds.⁷ Being as small or smaller than most birds, and even being thought to lay eggs (Forth 2004a:40), 'ighu bats by contrast are less peripheral to the life-form category of bird than are the larger méte. The second point places the tiny bats in a somewhat different light. With regard to the notion that 'ighu supposedly derive from grubs and eventually transform into larger bats and ultimately into Palm civets, 'ighu can be understood as metonymically connected not only with other "birds" (méte and gébu) but with two sorts of non-birds. In this view, they might be understood as the epitome of ominously intrusive creatures—not because they are peripheral birds, but because they implicate several life-forms of wild animals (Forth 2007b:219).

SOME FINAL REMARKS

Witch birds are not the only instance of a symbolic class. Quite separate from this is an equally non-taxonomic special purpose class comprised of birds which Nage believe manifest human souls (*mae*), while another includes non-spiritual omen birds (Forth 2004a:80–92, 97–103). Symbolic classes of a sort are also an

entailment of the parallelistic idioms of ritual speech and song, which regularly pair categories of birds, as they do categories of other things. In this speech genre, the Channel-billed cuckoo and the Common koel, for example, two large dark-colored members of the Cuculidae, are conventionally named as a pair, as are the Yellow-crested cockatoo and the Large-billed crow. So too, in several idioms, are the Helmeted friarbird and the Imperial pigeon.

On the other hand, only “witch birds” (that is, the local terms “*polo*” or “*burung suanggi*”) actually labels a symbolic category recognized by the Nage. In some measure, the “soul” birds, and even more so the non-spiritual omen birds, are products of analysis, or etic categories. Yet in spite of this difference, witch birds as much as the other two classes, all considered as groupings of symbolically associated birds, can be understood as subclasses of more inclusive symbolic classes which further comprise non-birds, and even non-animals. This follows since it is not only birds that Nage regard as manifesting witches, just as it is not only birds that manifest human souls. Some might therefore want to question whether symbolic classification is really a classification at all, or more particularly whether one can really speak of a symbolic classification of birds. As I hope to have shown, one can do so, and to a useful analytical effect. This is not the same issue as that raised by Needham (1980) when he questioned whether symbolic classification actually involved classes. In contrast to the use proposed here, Needham, who coined “symbolic classification,” employed the term in a very restricted way to refer mostly to associations between pairs of binary contrasts (Forth, in press). Thus, in Needham’s usage, two contrasting birds, for example, might be linked symbolically with such non-zoological contrasts as “sunrise” and “sunset,” or “male” and “female.” But by themselves, the birds, being related as opposites, do not form a single class; nor do one of the bird pair, “sunrise,” and “male” (see Needham 1980:41ff). These observations, however, are hardly germane to a use of “symbolic class” as a reference to animal categories subsumed on symbolic grounds as members of a more inclusive (even if covert) category, and to claim that symbolic classification in this sense is not classification is to confuse classification with taxonomy.

As Nage usage clearly reveals, both symbolic classification and ethnotaxonomy are grounded in empirical features of natural kinds, and if the boundary between ethnotaxonomy and symbolic classification is sometimes permeable, it is so precisely for this reason. But in these two equally universal forms of conceptualization, experience of natural kinds is deployed in quite different ways. Symbolic classification incorporates morphological and behavioral traits more selectively, producing less generalizable modes of association and contrast. Thus, the cockatoo and crow, the whitest and blackest of Nage birds, compose a pair in several idioms of Nage parallelistic speech (Forth 2004a:180), and yet in these contexts they are symbolically associated solely on the basis of their common

consumption of ripening maize and similar flocking habits. In addition, symbolic classification can implicate resemblances other than empirical ones. For example, when the ability to produce nocturnal po sounds is ascribed not just to owls but to all witch birds (and even, as noted, to the tiny Pale-headed munia). Still, owing to their common perceptual sources, the composition of more inclusive symbolic and ethnotaxonomic categories will often be conterminous, or nearly so. Among Nage, for example, Falconiformes are brought together in both forms of classification, as in a sense are the three named categories of Chiropterans.

Durkheim and Mauss (1963) interpreted “primitive classification,” later interpreted by Needham as an instance of symbolic classification (Forth, in press), as a precursor or prototype of scientific classification. However, not only was the analysis these authors proposed egregiously flawed, but the relationship between the two forms of classification could more plausibly be viewed the other way around. That is, ethnotaxonomy, now generally recognized as a human universal, comprises discrete categories grounded in perceptual criteria that can be seen to acquire particular symbolic values (or interpretations) a posteriori, and then only in part since not all the categories of an ethnotaxonomy will actually possess such value. Expressed another way, animal categories must be established as ethnotaxa before they can facilitate and articulate symbolic thought. This does not mean that the application of percepts in defining ethnotaxonomic categories need be entirely unaffected by emotional or other non-rational factors; only that the symbolic association of categories, where emotion is more palpably involved (Lévi-Strauss 1963), and particularly their combination to form symbolic classes, is secondary to their empirically grounded emergence as (typically named) ethnotaxa. As shown by Nage bird nomenclature, it is consistent with this position that bird names tend to refer to morphological and behavioral percepts (including vocalizations, in the case of onomatopoeic names) rather than to distinctly metaphorical qualities of the natural kinds they label. In fact, such qualities hardly figure at all in Nage bird names (Forth 2004a:61–62).

Although one of many heirs to the Durkheimian tradition, Douglas may not entirely have disagreed with this. In a thorough revision of her previous theories, she later modified her claims about anomaly as the source of animal symbolism, pointing out that many people may not notice anomaly, and if they do may not act upon it symbolically (Douglas 1990:25). Essentially, this is a lesson of the present essay. At the same time, Douglas retained a relativist and constructivist position, according to which classifications (including ethnotaxonomies) and classificatory anomalies deriving from these are socially determined. By the same token, she continued to construe ideas about particular animals as reflecting ideas about human beings, and especially culturally specific social relations (Douglas 1990:33–34, 36). Given the variety of human social forms, the findings of ethnobiology in regard to cross-cultural regularities in animal taxonomy (e.g.,

Atran 1990:5–7; Berlin 1992) challenge this position. As for features of human categories being attributed to animals, the Nage ascription to witches of nocturnal habits, killing and cannibalistic consumption, eerie vocalizations, flight, and the ability to rotate their heads would appear, in most if not quite all respects, to reflect empirically observable physical features of owls rather than of human beings.

Contrary to what the term symbolic classification might suggest, spiritual and symbolic representations like witches and spirits do not simply pre-exist natural categories (like owls and other birds) which are subsequently adopted as their symbols. Rather, it is experience of natural kinds that significantly informs, and possibly in combination with social experience even generates, the spiritual beings of which birds and other animals are described as manifestations (Forth 2004a:110–11). Stating that the existence of general purpose, ethnotaxonomic categories is a precondition of symbolic classification and of natural symbolism generally is not to claim that symbolic classes are completely determined by ethnotaxonomy. As demonstrated, the symbolic class of witch birds brings together several categories that are disaggregated in Nage ethnotaxonomy. Rather, the point is that ethnotaxonomy and symbolic classification operate with the same percepts, even though they can give rise to quite different configurations of the same ethnotaxonomic or, more specifically, folk generic categories. Which categories are incorporated into symbolic classes is not simply a function of features of ethnotaxonomy. It is more likely a function of what Douglas (1990:25) called “cultural idiosyncrasy” and “cultural bias.” However, to arrive at this conclusion, it is surely necessary to begin with an analytical separation of ethnotaxonomy and symbolic classification, which Douglas never did.

NOTES

1. This article is based on 25 years of ethnographic fieldwork among the Nage funded at various times by the British Academy, the Social Sciences and Humanities Research Council of Canada, and the University of Alberta. Research visits to Indonesia were sponsored by the Indonesian Institute of Sciences, Nusa Cendana University and Artha Wacana University in Kupang, and St. Paul’s Major Seminary in Ledalero, Flores. I thank them all for their support. I am also grateful to Dr. Raymond Corbey for supplying portions of Thiessen (1914) and to several anonymous reviewers who have helped clarify the argument. An earlier version of this paper was presented at the 30th Annual Conference of the Society of Ethnobiology, held at the University of California, Berkeley, in March 2007.

2. While information on Nage bird classification was provided by a much larger number of people, 24 individuals of various ages and both genders provided recall lists, naming birds they knew, beginning with any kind they chose, and proceeding in any order. Individuals gave between 15 and 61 names without prompting; the mean total was 25.44, and the median 26. The combined total recorded is 79 names (three of which denote bats). Five names, however, are synonyms, while another three are partial synonyms, and yet another three appear to refer to mythical entities; thus the total of distinct bird categories (or folk generic bird taxa) is less than 70. Further

information on methods, features of the recall lists, and generalizations drawn from these is in Forth 2004a, pp. 1–16 and 24–26.

3. Douglas does not use “marginal” or “marginality” in her discussion of the abominations of Leviticus (1966:54–72), but elsewhere she mentions “persons in a marginal state” being “placeless” and “left out of the patterning of society” and therefore dangerous and subject to restriction (Douglas 1966:115).

4. I have yet to find any Nage myth that addresses the physical features of bats. In fact, stories concerning how animals obtained their present morphology or habits are generally rare in Nage narrative (Forth 2004a:150).

5. Carnivorous bats belonging to the family Megadermatidae occur in Indonesia, but none is found on Flores (Monk et al. 1997).

6. Also common to Nage and New Guineans is the idea that bats, though specifically large bats (*méte* and possibly *gébu*) in the case of Nage, lack anuses and therefore defecate through their mouths (Forth 2004a:123).

7. In view of the ethnotaxonomic focality of *méte* in relation to bats generally, it is interesting that only this category appears as a standard simile for human behavior. The simile refers to the idea that the anusless bats (see note 6) must vomit food waste (Forth 2004a:202). In this context, then, we again encounter a coincidence of relative centrality in regard to both ethnotaxonomy (the category of bats in general) and symbolic usage.

8. The designation of poisonous snakes entering houses as *pie* is a usage I first encountered in 2008, thus after publication of Forth 2007b.

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