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VALORIZING THE RELATIONSHIPS BETWEEN PEOPLE AND BIRDS: EXPERIENCES AND LESSONS FROM HONDURAS

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Resumen. – Valorizando las relaciones entre la gente y las aves: Experiencias y lecciones de Honduras. – El articulo se basa en una década de investigación cualitativa en áreas urbanas y rurales de Honduras enfocada en los paisajes de interacción entre humanos y aves. Contornea un marco metodológico para la investigación etnoornitológica basada en el análisis sistemático de relaciones intencionales y accidentales entre la gente y los pájaros, y marcada por una serie de indicadores de tales relaciones. Discute un modelo para la interacción humano-pájaro basada en valores utilitarios, simbólicos, y empáticos, y contornea un sistema de diferenciaciones sociales y de usos de la tierra de las relaciones humano-pájaro que influencian este modelo. La utilidad de este acercamiento se aplica a una discusión del papel de la etnoornitología en la conservación, y el concepto del "diálogo conservacionista" entre la gente local y los agentes del exterior se presenta como una posible manera de seguir adelante.

Abstract. – The article is derived from a decade of qualitative investigation in urban and rural areas of Honduras focused on landscapes of human-avian interaction. It outlines a methodological framework for ethnoornithological inquiry based on the systematic analysis of both intentional and accidental relationships between people and birds, and marked by a series of indicators of such relationships. It discusses a model for human-bird interaction based on utilitarian, symbolic, and empathic values, and outlines a set of social and land-use differentiations of human-bird relationships that influence this model. The utility of this approach is applied to a discussion of ethnoornithology's role in conservation, and the concept of the conservation dialogue between local and outside actors is presented as a possible way forward. *Accepted 12 December 2007*.

Key words: Avian conservation, ethnoornithology, Honduras, human geography, local ecological knowledge.

INTRODUCTION

"Landscape" is a unifying concept for the academic sub-discipline of human geography. For the purposes of this discussion, "landscape" is defined as the networks of ways and places wherein people and other biota encounter each other in the world. Systematic analyses of landscapes allow us to unpack entangled relationships between humans and the environment, and between specific places and broader regions (see Gregory *et al.* 2005). Geographical analyses of landscape generally include a wide range of qualitative as well as quantitative variables. In this article, we consider the cases of human-modified landscapes where birds find sustenance. Conceptually, in these landscapes we always leave room both for complementary and mutually beneficial interactions between people and birds, as well

as for the inevitable antagonistic behaviors that can occur where competing populations find themselves in cohabitation.

What can be learned from human-avian relationships in the landscape, and how can this knowledge be applied? In countries such as the USA, conservation strategies are often inclusive of people and their landscapes, typically on non-wilderness public lands as well as on private lands, whereas in the countries of Latin America, we often encounter a false dichotomy between what is "virgin" or "pristine" and what is "trashed," or, to put it more politely, noticeably affected by human activity. Putting aside a lengthy discussion on the range of ideas about what is "wild," it is sufficient to show that, regardless of the reasons, most of Latin America is comprised of humanized landscapes (Denevan 1992), and all of these contain avifauna, some in high densities. Because people and birds have been encountering each other in such landscapes for millennia, it is paramount in the modern age of people-friendly conservation that such relationships be documented and analyzed, to be used as bases for better conservation models.

METHODS

We (scientists and conservationists) suffer from a paucity of knowledge about existing human-bird relationships that would fall under the rubric of "ethnoornithology." Though ethnoornithological research appears to be increasing, we have as yet few sources to draw from in the recent published literature (e.g., Armstrong 1958, Phillips 1963, Hage & Miller 1976, Hunn 1977, Majnep & Bulmer 1977, Rowland 1978, Nelson 1983, Galaty 1998, Bonta 2003, Beserra de Farias 2007). As Gilchrist & Mallory (2007) discovered, only 0.1% of 1929 articles on birds between 2001 and 2005 in 10 leading journals included local ecological knowledge, so it is fair to say that ethnoornithology is still far from the mainstream, though perhaps less so in the social sciences.

How do we do ethnoornithology in the first place? There is no orthodoxy, and so those who have contributed to this heterodox sub-field apply a grab-bag of field methods and conceptual frameworks to gather solid data, and make sense of what they find (e.g., Hunn 1977, Majnep & Bulmer 1977, Bonta 2003, Beserra de Farias 2007). Ethnoornithology, like ethnobotany, necessitates a familiarity with and respect for social science, on the part of natural scientists, and for biology, on the part of social scientists.

The author first became familiar with Honduran avifauna and human culture from 1991 to 1993, when he resided in Juticalpa, a city in the eastern Honduran province of Olancho, working in buffer zone and protected areas management, and compiling an inventory of the avifauna of the Sierra de Agalta National Park and surrounding areas. His M.Sc. thesis research focused on the relationships between people and birds in this region, and was later expanded into a book (Bonta 1997, 2003). This was followed by doctoral research on land use conflicts and local ecological knowledge in the same region (Bonta 2001).

The primary research methods employed were the ethnographic interview, generally an open-ended, unstructured or semistructured discussion about the informant's knowledge of and experience with birds, and participant observation, wherein the author participated in daily activities with local people, e.g., farming, hunting, recreation, visiting, observing and noting interactions with avifauna as they occurred. In addition, the author was led on "bird walks" by local people, and shown special places (e.g., dooryard gardens, orchards, cattle ponds, and coffee farms) noted for their concentrations of avifauna (see Bonta 2002).

The project attempted to document in detail as fine-grained as possible the sphere of human-bird interaction; therefore, no comment was disregarded, and nothing "anecdotal" considered to be unworthy of consideration. This attunement to unique data was an attempt to mirror and respect the highly individualistic and creative nature of human society in Olancho, which values the capacity and duty of each person to think and act independently of cultural strictures.

As opportunity allowed, the author was able to gather data on local people's relationships with about 450 species of birds across the complete spectrum of ecosystems present in central Olancho: thorn forest, savanna, tropical dry forest, pine-oak forest, lowland rain forest (300–700m a.s.l.), midlevel rain forest (c. 700–1500 m a.s.l.), and cloud forest (1500–2354 m a.s.l.). Additionally, substantial time was spent in urban habitats in Juticalpa.

As a long-term, non-model-driven, qualitative study, the possibility of bias was ever-present. One of the main contaminants of traditional knowledge was the recent knowledge derived from environmental education workshops, Christmas bird counts, and other training imparted by outside experts. This was often identifiable by the informants' usage of outside names (scientific, English, or non-local translations into Spanish) rather than local ones. For example, the local name for the Scarlet Macaw is "guara," but the accepted outside Spanish term is "guacamaya roja." In any case, at the time the research was undertaken, the researcher himself was cognizant of, and usually involved in nascent environmental education projects in the study area, and there had been very little previous outside influence in this sphere. The "contamination" of data on traditional knowledge and practices was slight, and was actually an indication of the progress of the "conservation dialogues" discussed below – the process of integration of local ecological knowledge and outsider approaches on the way to effective conservation.

Overall, the researcher's approach to verification of data involved listening and never judging, then following up on reports and, if there was doubt about the veracity of one person's story, "fact checking" it with a wider group of people.

What constitutes "knowledge," and that subset referred to as "local ecological knowledge" was one of the stickiest conceptual issues, with significant ramifications for research methodology. This has been discussed in detail in the literature (Freeman 1992, Berkes *et al.* 2000, Huntington 2000, Mauro & Hardison 2000), but it is worthwhile to outline the present author's social scientific approach. It was understood as structured by long-term memory, but it was crucial to differentiate the memories possessed by individual people from the collective memories that inform culture. Furthermore, "culture" can indicate the shared networks of memories that inform the practices of a family, and/or a community, and/or a municipality, on to the scale of the region, the nation, and the globe. It follows, then, that the traditions of a certain family may be at variance with that of the local community, or again be in accordance with these; the Honduran culture of human-bird interaction may have features in common with those of other countries' cultures, but be unique in some ways as well. While certain family traditions mirror those at other scales, it would be an error to automatically extrapolate from these and assume that a family's traditions comprise simply a subset of wider cultural knowledge systems, or to assume that a given individual or family necessarily holds the same ideas about birds that are commonly found in wider contexts. Concretely speaking, the author found that in the study area, it was culturally acceptable for boys to kill small birds with slingshots, and the practice was, as a result widespread. However, outsiders often

erred in assuming that all boys engaged in this practice, and that all families tolerated, or even encouraged it. Indeed, very few *a priori* assumptions about cultural values regarding birds in the author's highly heterogeneous study area could be borne out with predictability in the field.

Finally, of course, knowledge, knowledge systems, and culture are dynamic, not static. Though there are indeed knowledge systems that contain clearly archaic elements or are heavily dependent on "traditional" memories, the dominant situation encountered by this author was heterogeneity and fragmentation of local ecological knowledge along a continuum from traditional to modern, often with differentiation within the same households, villages, and so forth.

RESULTS

With the benefit of hindsight, the results below are an extraction of certain generalizations from the author's published work and unpublished notes, as a contribution to a framework for ethnoornithological inquiry that might be employed by researchers elsewhere.

The people-bird relationships in question, after being documented, can be unpacked in a systematic fashion. First, it is important to tease apart the intentional from the "accidental" relationships; both involve encounters, but the former suggest that local people have some sort of "stake" in "their" avifauna. Intentional relationships can be characterized under a set of headings along a continuum from least to greatest amount of involvement. In general, people's *awareness of* birds is the first step along this continuum, and is followed by *knowledge of* birds, then *interaction with*, *interest in*, *concern for*, *obsession with*, and *reliance upon* them.

Obviously, any one person or group of people's relationships with one individual bird, group of birds, or type of bird will be at a different place along the continuum than that of another at a give moment in time. For example, a person may be *aware of* woodcreepers but know nothing about them, or have at most minimal *knowledge*, possessing not even a name for them. However, these nameless birds may begin to carve a niche in the person's mind as they intrude into their activities, e.g., as noted for their actions or calls in a coffee plantation, and remembered. As *interaction* with them increases, *interest* in them may also increase, perhaps for their potential uses, or perhaps as characters in a story the person is telling herself. As the bird and the person become "entangled," the person may begin to become *concerned* about or for the bird, perhaps seeking to protect it, or exterminate it. With certain birds, and among certain people, feelings about birds that one is knowledgeable of can lead to an *obsession* with them; this author has termed it "ornithophilia" at one extreme, and "ornithophobia" at the other. Ornithophilia was most often encountered among elderly women who had gardens with plantings for birds (particularly in urban contexts), ranchers with cattle ponds favored by waterfowl, and hunters. Ornithophobia (toward pest birds) was more or less latent among many grain planting agriculturists, and was also found widely in Olancho as a feeling about a tiny subset of species that include several owls and vultures.

A wide range of indicators of the strengths of these relationships were found during the course of many years of investigation. The most notable include local names, stories, structures to attract (e.g., bird feeders and houses) or repel (e.g., scarecrows), hunting practices, and selectivity in planting, often in the types of flowers and fruits one would choose to have in one's yard. Each of these types of practices indicated a certain distance along the continuum of relationships: for example, the difference between having a

name and not having a name signified, at the societal level, at least some knowledge (over two hundred species were unknown to local people; these were primarily rain forest species), while the presence of structures and gardens designed with birds in mind reached all the way to obsession, in most (but certainly not all) cases.

The second set of relationships between people and birds we can term "accidental," and they should be conceptualized in terms of a landscape of human-bird encounter, mediated primarily by the characteristics of the vegetation (for food sources, shelter, perches for displaying, etc.), but also by myriad other geographic factors, some as mundane as the occurrence of the person along the bird's accustomed foraging route (or vice versa). Here, there may be intentional relationships toward some aspect of the wider landscape, on the part of the avifauna and the person, but neither are purposefully focused on the other. Nevertheless, through the very structure of the landscape itself, certain patterns of encounters are fostered, ranging along a continuum from highly beneficial to most avifauna (e.g., a rain forest plot protected for hunting large mammals), or at least to certain avifauna (e.g., a traditional shaded coffee plantation), to highly prejudicial to most or all avifauna (e.g., pesticide-intensive plantation agriculture such as pineapple plantations).

Coffee has already been the focus of intensive research over the last decade in this respect (e.g., Moguel & Toledo 1999), but as should already be obvious, all landscapes and land uses foster encounters between people and birds to one degree or another. It is up to the ethnoornithologist to recognize these and to document them, at least as background to the apparently more significant (in terms of effective conservation) intentional relationships that may be closely related to and follow accidental encounters.

The author has previously written narratives detailing many specific intentional and accidental relationships between people and birds in Olancho (Bonta 2003). The purpose of what follows is to offer a basic conceptual model that can be derived from the framework presented above, and is likely to have relevance elsewhere than Honduras, at least in Latin America.

The author's research bore out what is suggested in other studies (e.g., Armstrong 1958, Rowland 1978), i.e., that people, both as individuals and as collectives, perceive, experience, and remember birds on the one hand as utilitarian resources, and on the other as symbols. There is, of course, much overlap between the two; indeed, for some, utility and significance are inseparable. However, it is useful, particularly in ethnically heterogeneous societies such as Honduras, to separate utilitarian characteristics from other significant factors. Bird-as-resource is a highly quantifiable mode of understanding human-bird relationships, but can be reductive and too narrow if other modes of relationship are excluded from analysis in the course of trying to design and implement effective conservation strategies. Clearly, though, it is crucial to identify the scope, scale, and trends of usage of certain species for hunting, pets, feathers, ecotourism, and so forth. It is also important to recognize that many who utilize birds do so with only minimum engagement with the intentional relationship continuum presented above; it is fair to say that monetary value may be the primary factor driving the relationship. But at the same time, the second mode of relationship – birds as symbols – can always be present, even where it is least expected, for example in an idiosyncratic and/or non-indigenous context. Conversely, symbolic values are not necessarily good or bad, as these may be put aside easily for utilitarian concerns, or indeed themselves be prejudicial to the bird, as in the case of most

beliefs about the Barn Owl (*Tyto alba*) in Honduras.

Symbols – signs that intrude between the interpreting subject and the interpreted object and that stand for something other than themselves – make the bird out to be more than a flesh-and-blood being, moving it into the realm of the "supernatural." Commonly and stereotypically, the person sees or is reminded of peace when seeing or thinking of a dove, aggression with the hawk, wisdom with the owl, and so forth. The Three-wattled Bellbird (*Procnias tricarunculatum*), for example, is a prime example in Olancho of a harbinger or bellwether, indicating by its presence and voice the ripening of certain crops as well as the presence of certain animals; its name and symbolic associations vary greatly from community to community.

A rich field of symbolic interactions can be interpreted as signifying a culturally rich and more traditional society, and constitutes part of a group's ethnodiversity. This was emphatically not the case in the author's study area, but is often the case in studies of indigenous peoples. However, the presence of a third mode of relationship is posited here to bridge the gap between utilitarian and symbolic, and in a certain sense to supersede both, allowing a place for non-systematic, non-traditional experiences of avifauna. This is the category of bird-as-sentient-being.

Conservationists and natural scientists are often portrayed as being capable of empathizing with animals, whether or not this enters into their research (as it has in the case of Jane Goodall, for example). At issue here is not whether and to what extent birds themselves are "sentient," but rather how important it may be that certain local people, but not others, and certain cultures, but not others, feel birds as (possibly kindred) souls, regardless of whether they perceive them primarily or at all symbolically, or as a source of the night's meal. The issue of importance to ethnoornithology and conservation that emerged from this author's research in Honduras was that of psychological entanglement at some level, between people and birds, at least at the level of an attachment of people to avifauna. Ornithophilia, again (paying homage to the biophilia concept, Wilson 1984), could be a term for this, and it is often founded in the somewhat intangible and difficult-to-measure human appreciation for birds' nests, colors, songs and calls, other activities, and even the event of a bird making eye contact with a person.

But to make any general statements about human empathy toward birds at the scale of a region or culture, it is necessary to differentiate relationships according to the social and land use backgrounds of the persons or groups being characterized. In the author's research, the following factors emerged as significant in any commentary on a person's or group's ornithophilia, and all that follows or could follow from that attachment. The degree of human modernity or "development" was critical, but it was not easily determinable, as some of the more traditional informants were well educated, middle class urban dwellers, whereas it was often found that socioeconomically disadvantaged communities that had been the recipients of development aid possessed, or at least were willing to speak about virtually no meaningful relationships with or feelings about avifauna. Nevertheless, it was generally found that greater awareness of avifauna was found in more traditional contexts.

Social factors differentiated avian awareness to a marked extent. Age and gender of informants was important, as was social class, formal educational level, and profession. Each of these can be unpacked in myriad ways, but for the present purposes it is sufficient to comment on the example of gender as a way of indicating the importance of considering all of these factors as possibly influ-

encing patterns of human-avian relationships elsewhere. The gender of the informant greatly influenced what birds were known, because of the varying sociospatial routines practiced in Honduran society. For example, in the community of La Venta, Gualaco, women and girls were highly knowledgeable about birds of the dooryard and the riverside washing place, but knew little of the birds of the forest edge; with the men and older boys, it was the opposite—they had encountered the rare avifauna to be found when carving a plot out of the rain forest, but paid little attention to many of the common birds in the women's spaces. This was not just a matter of awareness, but a difference in the level of detail and experience; men were more likely to have witnessed the courtship of the Resplendent Quetzal (*Pharomachrus mocinno*), women that of the kingfishers.

In the context of land uses, the structures of relationships were highly variable between coffee-growing, cattle ranching, swidden farming, gathering, hunting, and the combinations that result when individuals and groups are simultaneously involved in more than one livelihood. But broad generalizations can certainly be made about attachment to birds among the practitioners of certain land uses – again an extremely complex subject, but one that is of paramount importance in ethnoornithology and that may be used to inform conservation.

DISCUSSION

The preceding set of methodological considerations and conceptual frameworks are intended to inform future studies, though what was presented was teased out of years of ethnographical research done largely without such preconceptions (indeed, in the early 1990s there was little basis in the literature for ethnoornithology *per se*). In the model-bound, scientific method-driven disciplines, such an *ex post facto* method of data gathering and assimilation might be anathema, but in human geography it is the landscape itself that informs our models of it—hence this author's insistence on waiting until extensive knowledge of the landscape of human-avian interaction in Olancho was gained before attempting to fit it into any methodological format or formula. What results are presented may be taken as suggestions, not as an attempt at building an orthodoxy. The current diversity of approaches is probably healthier.

But regardless of the approaches used, how and for whom or what is the systematic study of human-bird relationships useful? Excluded from the landscapes of human-avian interaction presented above – where people and birds encounter each other and interact, forming divers relationships – were the "outsiders": the "experts" with a certain stake in these relationships and in the social-ecological contexts in which they occur. At the risk of excluding other actors, these may be broken down into natural scientists, social scientists, and conservationists. In general, we understand that natural scientists' expertise is the local ecology, not the local people *per se*; in the case of ornithologists, it is the avifauna and, to a lesser extent, the ecological context of the avifauna. Conversely, the expertise of social scientists is either the local societies alone or (more relevant to this model, e.g., for geographers and anthropologists) those societies' relationships with their environments. In this era of advanced specialization, professional expertise in both the social and natural sciences is extremely rare to find embodied in the same person, but now common are the hyphenated conservationists, indicating that, particularly among biologists, there is an increasing emphasis placed on the application of studies of natural phenomena to the conservation or preservation of these same phenomena. More and more ornithological studies are carried out with bird con-

servation in mind, and more and more social scientists are concerned about conservation as well.

The landscape of human-bird interaction thus includes the birds themselves, local people, natural scientists, social scientists, and conservationists, all interacting within the purview of the same environment, but not necessarily communicating or collaborating effectively (as evidenced by the debate between Gilchrist & Mallory [2005, 2007] and Brooke & McLachlan [2005]). At a certain scale, productive dialogue between some of these constituents is already occurring, but always at issue are the effectiveness of these "conservation dialogues" (or "landscape dialogues" within "conservation geography," as this author has termed them [Bonta, 2003]), in helping achieve lasting results in avian conservation. This does not entail that already-overburdened scientists procure new degrees, but at least at the level of conferences and conservation projects that the single subject – bird conservation – be engaged in a more participatory manner by these divers constituencies. Central to this is the vast gulf between the qualitative and quasi-quantitative researches common to the social sciences, and the hypothetico-deductive models that follow the scientific method that are almost always the rule in the natural sciences; indeed, the differences between these may be even more insuperable than the differences between the supposedly homogeneous "outside approach to science" and the "non-Western" epistomologies that characterize local ecological knowledge systems.

CONCLUSION

The conservation dialogues useful to bird conservation and their constituencies should be based in a shared, critical appreciation of what is already known, and what is already being done, both intentionally and by accident, to protect and to harm the avifauna in the local landscape. Given the urgency of many situations, a *de facto* conservation assessment should be achieved by some sort of "rapid assessment" approach, and should be a collaborative effort of local people and outsiders. As this article has suggested, it should include more than simply lists of local names or beliefs, rather striving to categorize the richness inherent in the patterns of local relationships prior to the "contamination" by outside knowledge systems and beliefs. Neither should any ethnoornithological assessment consist solely of a static collection of data; instead, it should be paired with an analysis of social and ecological trends (of vegetation loss or regrowth, or traditional knowledge loss, for example) relevant to avian conservation concerns. By carrying out such a study for a target protected area, region, or species, the tendency to reinvent the wheel in designing "new" conservation actions is thus avoided – why spend money teaching people in a different way what they already know? Needless to say, the study should be carried out by teams of researchers combining expertise from social science, natural science, and local ecological knowledge systems.

Adhering to the model of the conservation dialogue, the step that follows naturally from the collaborative documentation and analysis of *de facto* avian conservation is a collaborative education project that supplants any attempt at "re-education" (getting rid of "bad" or incorrect knowledge) or any idea that the local human participants are *tabulae rasae* without significant relevant knowledge of their own. Overall, this involves patient listening and careful questioning, with painstaking documentation where necessary. It should also become obvious that heterogeneous knowledge systems, at least in much of Latin America, are not closed and "authoritative," but can indeed be tampered with and otherwise influenced. Even homogeneous tradi-

tional knowledge systems among indigenous people are constantly evolving and can undoubtedly benefit from outside expertise. The point is to labor in the interest of avian conservation, presumably in a way sensitive to the livelihood concerns of (rural) people but balanced with the environmental laws and political priorities of the wider nation-state, province, etc.

At a certain level, conservation education and action are the same, once it is understood by all parties what is desired. The interventions as such, particularly involving what is wholly new to the local landscape of human-bird interaction, must of course be composed of workable solutions, and at least malleable enough that the possibility for significant changes to earlier plans is built in. Though it is tempting to assert that only "small is beautiful," theoretically, through networking capacities and the multiplier effect, the eventual size of the project is not necessarily an issue. It is worthwhile, however, to stress, that individuals – as participants, as leaders, and as those who "infect" others – are as crucial to local culture as they are to scientific and conservationist culture. It is thus probably unwise to work only with groups (a *sine qua non* of many projects in the development and conservation worlds), rather than also with individuals *per se*. In general, the local landscape lends itself to personalized and localized efforts, rather than the types of large and impersonal conservation projects that attempt to spread themselves over entire regions from the start.

In additional to successful and sustainable avian conservation projects, what results from a workable conservation dialogue, if respect is invested and engendered from the start, and preconceptions avoided, may be what in Honduras is termed *confianza,* i.e., mutual trust, a cultural phenomenon far more valuable than, for example, cash flow. Conservation dialogues involving *confianza* can favor the intermingling of knowledges and cultures without one system smothering or displacing another. Until now, such intermingling, often productive of the synergies that produce the "multiplier effect" or a viral consciousness, have been difficult to achieve. We might imagine that *confianza* between and among local people and outsiders in the Latin American context could become widespread, if we could set aside never-insuperable methodological and epistemological quarrels.

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