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LINNÉ'S NAMES – AN UNDERUSED FIELD TOOL, ESPECIALLY IN SOUTH AMERICA

Fritz Mueller

The fun for a naturalist in the field is to see and recognize the differences, the astonishing variety of life. Seeing is one thing, but we are only really satisfied if we can pin names to all that variety and know where to place a species on the tree of life. It is by naming that we try get on speaking terms with nature. That is why we collect shelves full of identification guides, way beyond reason, not just to birds, but to trees, mosses, ferns, from "*A Field Guide to Banksias*" to "*Damselflies of the Northeast*", to mushrooms, spiders, beetles, and tropical trees. Clearly, it is an obsession, and Linné made that obsession possible.

I know of no better way to honor Linné on his 300th birthday than to know and make better use of his names. Sometimes even let them roll off your lips, because with their many vowels and syllables they are often elegant and beautiful. Say *Dendroica*, or *Tringa*. My own love of scientific names began with my love of birds, when as a boy I discovered in the drab marsh bushes along the river this little bird, improbably green; only *Phylloscopus collybita* could confer the status and dignity the bird deserved in my eyes, which Chiff-chaff or "Zilp-zalp" just could not.

Recently, thanks to John Yrizarry, I had the chance to look at a copy of a mid-17th century manuscript, Leonhard Baldner's *Vögel-, Fisch- und Thierbuch* (1666). It is perhaps the first local "Fauna", astonishingly comprehensive. In it, Baldner, a fisherman by profession, depicts and describes in great detail whatever aquatic species he caught in the wetlands on the upper Rhine around Strasbourg, including birds, mammals, insects, frogs, snakes and, of course, fish. Only when I read his book did I understand what enormous problems these early naturalists faced when they wanted to not only describe, but give names to what they shot or caught in their net. A hundred years before Linné there simply were not that many good names and often even those were used for more than one species. A new gull he would simply name "a new gull" or "another large gull, with yellow feet ...", and so on.

Reading Baldner's book made me appreciate what we take for granted now – Linné's brilliant solution to naming life. One hundred years before Darwin, he came up with a practical and enduring system for naming species and relationships between them by grouping related species under one name, just as we group ourselves under our family names. When we know a bird's place in the system, we know more about it than we would by just looking at it; it is not unlike what the Periodic Table does with the elements for a chemist. The systematic hierarchy of order, family, subfamily, etc., followed as a logical extension. Scientific names are the glue that holds taxonomy together, without them there could be no "splitters" and no "lumpers". Surely, if not Linné, someone else would have come up with a standardized way of naming life sooner or later, it is that obvious. Others had used binomial names for some species, but he was the first to apply it universally. His names help experts and amateurs alike to

understand the birds – or any other life form – and their relationships; for that he choose Latin, the language all educated persons in his time, no matter what their native language was, could understand.

The Linnaean binomial system is grammatically based on Latin or Latinized Greek and other languages. Its beginnings go back to Linné's 1758 *Systema Naturae* and it eventually brought order to that exploding world of new species described from all ends of the globe. The first word, the genus, is a noun – *Podiceps, Dendroica* – and is unique; the second is a specifying adjective, but not necessarily unique – *major, coronata.* I wonder if Linné thought about the advantage of this arrangement, which allows all *Larus* gulls, for example, to be listed in sequence simply by ordering species alphabetically.

It is indeed the Latin genus name, which is the truly innovative part; it puts the bird in a context, close to its nearest relatives. The genus is like a musical theme and its species are the variations on it. Even if we don't know if it is the 5th or 15th variation, we hear the underlying theme.

With our common names we bring the birds into our local culture and many of the names for animals and plants reach back into distant history; some like kinglet, chickadee, woodcock, swallow, scaup are little antic linguistic treasures and have an old familial and warm ring to them. Such names say as much about us as they say about the bird; that is why we love them. Linné's scientific names by contrast are 100% about the bird; they say nothing at all about us, what language we speak or where we live. They feel strange and somewhat cold, often they are tongue breakers; they carry no personal or obvious folksy component. Even with some knowledge of Latin and Greek, there are some I cannot make sense of, but neither can I make sense of scaup. (You can find out about the roots and meanings of scientific names in books such as *A Dictionary of Scientific Bird Names* by James A. Jobling (1991, Oxford University Press). Yet, despite being recently made-up, Latin names too are based after all on a real language; some are the unearthed linguistic roots of common, traditional names, goose for example: Anser → gans → goose. As you use them, they will grow on you.

In the field, scientific names provide a target for identification and at the same time are a tool and guide to finding it. Without a systematic species list we would not know what to look for. That is more obvious perhaps when one studies insects or plants, where step-by-step identification by a non-specialist may start at the family level. With birds at least there is no confusing a thrush with a gull. Still, knowing the genus name reminds us that the European Blackbird, *Turdus merula*, and the American Robin, *Turdus migratorius*, are close relatives, while the Red-winged Blackbird, *Agelaius phoeniceus*, and the European Robin, *Erithacus rubecula*, are something different altogether.

It is a game I play with myself when I am out in the field, trying to remember the scientific names. Nice exercise for old brains. Too often I have to check the book.

Of course, when dealing with the birds of North America it would seem foolish to use scientific names when perfectly good and beautiful English names exist. We know the birds well enough without referring to them in Latin. In any case, birding etiquette prescribes not to use scientific names in public. At times I wonder why botanists, even of the amateur, gardening variety, are so much more comfortable using scientific names than are birders. Gardening is an even more popular and older pastime than birding, and both share a long amateur scientist tradition. As birding became ever more popular I thought the use and knowledge of scientific names would also increase, but the opposite seems to be true. The *Birding Guide to the Texas Gulf Coast*, for example, contains not one scientific – let alone Spanish – name, which makes it quite unpractical for the visiting Mexican birder.

Not using scientific names does not preclude knowing them. *Accipiter* and *Buteo*, or *Empidonax* and *Myiarchus* are now widely used in the field to call at least the genus correctly. How about *Spizella* and *Melospiza*? Did you know that Sharp-tailed Grouse, *Tympanuchus phasianellus*, is a kind of (at least for the time being) prairie-chicken, *Tympanuchus* sp.?

Some years ago a friend and I spent some days on El Triunfo in Chiapas where the very competent local ranger and guide took us around. At various times he kept calling out something we first didn't understand until we realized it was "ustulatus". I had to go to the book to confirm he meant Swainson's Thrush, *Catharus ustulatus*. I felt embarrassed. We, pretending to be serious birders, didn't know the universal, global name of Swainson's Thrush!

Years later I was traveling in Brazil with two friends, a Brazilian and a German, who used scientific names only. Annoyed, I was left chasing down the English names in the field guide. (English names of course, because those were the only ones listed; which is just as well, since German names for Brazilian birds sound even more out of place.) I caught on pretty fast and the scientific names became for me the first-learned, therefore the *de facto* "common" names. To my surprise, I found the birding became easier. If there was an *Accipiter bicolor* up the tree, I knew much more what to expect than when I would be looking for a Bicolored Hawk, especially when I had never seen one before. I overcame my resentment and in time became convinced that knowledge of scientific names is indispensable for getting efficiently acquainted with the birds in the neotropics, where most of us will be beginners forever. It is also indispensable for communication across linguistic barriers; that latter point of course does not apply if you are on an all-English speaking tour, with an English-speaking guide.

The perception that scientific names are only for the professional, serious ornithologist, not the birding tourist, is dead wrong. The exact opposite is true: it is the amateur birder, the novice, he who needs all the help he can get sorting things out, who most benefits from knowing the scientific names. When it comes to sorting things out, scientific names are vastly superior to common names and if there is one place where a nature watcher may want to have some help with putting things in order, it is South America.

Relying on English names in the neotropics makes the bird world unnecessarily more confusing, because common names, English or otherwise, are inconsistent and arbitrary. Not that they are not often nice and even charming at times; they are just not very useful. In most cases they do not highlight generic distinctions, which are usually the first step to identification. This does not apply to all tropical bird families equally, but certainly to the more difficult and species rich songbird families – the antbirds, furnarids, flycatchers, and tanagers.

For example, there are 130 plus tanagers that though similar in size, belong to many very distinct genera, which could rather easily be sorted out in the field, but are unnamed in English. Seventy-five flycatchers range from tiny "Empids" to a Blue Jay-sized Baird's Flycatcher, *Myiodynastes bairdi*. Over seventy antbirds range from rather plump, robin-sized ground dwellers to wren or warbler types busy in vine tangles. Globally, "flycatchers" even belong to completely different families; the same goes for "sparrows", "robins" or "warblers". A very few of the old world *Phylloscopus* warblers – in the Sylvidae family – are for no obvious reason called "woodland warblers" and "leaf-warblers", which is a translation of the German term laubsänger. "Leaf-warbler" would indeed be a nice term to make a distinction from the Parulidae, the "wood warblers"; but no – they are warblers all. There are nine genera of tyrannulets, thus the name Gray-capped Tyrannulet gives no clue where in the book to look for it. There are many other examples; the only consistency in English names for exotic birds – and by this I mean birds outside the English language zone – is inconsistency.

To remember scientific names seems only to add one more layer of unnecessary complexity, but it is really not a big burden. After all, the confusing English names – uncommon names for uncommon birds – have to be learned too; so why not start with what's useful? Consider how many English names are already based on the Latin genus name: *Caracara, Gallinula, Jacana, Phaleropus, Elaenia, Amazona, Topaza, Trogon, Xenops, Cinclodes, Attila, Syristes, Cotinga, Schiffornis, Donacobius, Dacnis, Hemispingus, Euphonia, Vireo, Piha, Saltator, Cardinalis, Junco, Piprites, Cacicus.* It would have made sense if the many tanagers, flycatchers, woodcreepers, tyrannulets, antbirds, and parakeets would likewise have at least some of their scientific genus adapted as their English name. Some would not sound so bad: *Ornithion, Sittasomus, Phylloscartes, Drymophila, Pyrrhura, Aratinga,* and they would carry a lot of information.

If even on our home turf we find it useful to split hawks into buteos and accipiters and flycatchers onto empidonaxes and myiarchus, think how much greater is the payoff when you can call the neotropical genera by their scientific name to begin with. There may be a bit more up-front work, but the payoff is big. On a trip to the neotropics your life becomes easier. Instead of struggling with 130 tanagers you have already organized them as *Tachyphonus, Thraupis, Tangara, Ramphocelus,* and *Piranga.* Beautiful names which do justice to the beautiful diversity of bird life. Carolus Linnaeus would approve.

MISSISSIPPI KITE ON GREAT GULL I.

Joseph DiCostanzo

On June 19, 2007, at about 3:30 pm I heard a disturbance among the Common and Roseate terns on Great Gull Island. I thought the disturbance sounded more like the terns mobbing a predator rather than the normal localized alarm calls caused by researchers working in the colony. I was in my room at the time, which is located on the south side near the center of the island and is somewhat elevated with views to the east, south and west. I could tell by the behavior of the terns they were pursuing some bird in the air to the east of me, but my view of the bird the terns were after was blocked. Suddenly the bird appeared and shot by my position being pursued by perhaps a thousand terns. The bird passed me at a distance of perhaps 15-20 yards. I did not have my binoculars at that point, but my immediate impression was it was a kite. The bird was slender and falcon-shaped with long, pointed wings and tail. The bird appeared to be between 10 and 20 percent larger in wingspan than the Common and Roseate terns pursuing it. What made me instantly think of kite as opposed to a falcon was the bird's overall gray body with a whitish head and dark wings and tail. Over the next half hour I was able to get a number of views of the bird at varying distances with ten power binoculars as it was chased back and forth by the terns from one end of the island to the other. The views were often fairly short as the bird flew rapidly by my position being pursued by the terns, but they confirmed my initial naked eye impression that it was a Mississippi Kite. Some views were as close as fifteen feet. I was able to clearly see the gray body and whitish head with large appearing eyes. The wings, though seen almost exclusively from below and often backlit by the bright sky appeared all dark with no trace of the white secondaries or rufous in the primaries of an adult Mississippi Kite. Combined with the plain gray body blending into the whitish head led me to identify the bird as a sub-adult individual. I also noticed the shorter, outer primary of a Mississippi Kite. Since the bird was always seen in fairly high-speed flight, the dark tail was always kept folded, rather than flared. Richard Young, who saw the bird while working in the tern colony, and I, both noticed the closed tail appeared very slightly notched.

The bird's shape ruled out all other hawks except falcons and kites. The bird was too large for either American Kestrel or Merlin and lacked the size and powerful build of a Peregrine Falcon. The plain gray body and white head also ruled out Merlin or Peregrine. (On a behavioral note, we have had Peregrine Falcons pass through the colony many times over the years – one took up residence on the lighthouse on nearby Little Gull Island a few years ago. Peregrines never have any trouble out flying the terns and in fact the terns nearly always avoid them; often the whole colony "dreads" to get out of the way of a passing Peregrine.) The only other possible confusion species would be other kites. Swallow-tailed Kite is so distinctive in shape and coloration it was instantly eliminated. The only remaining possibility would be an adult White-tailed Kite. This species was also easily eliminated by this bird's gray rather than white underparts and the bird's dark wings and tail. A last extreme possibility is an adult, male Northern Harrier, but this species was easily ruled out by the bird's smaller size and completely wrong shape (neither the wings nor the tail were long enough for a harrier), as well as the lack of a white rump. The bird also flew nothing like a harrier.

Michelle Silva who had just arrived on the island and Laura Marco, a visiting Argentinian researcher, also saw the kite. Neither of them had previous experience with this species, but both agreed with the identification after looking at field guides. The kite was also seen by the team working in the colony at the time, which included Helen Hays, Loretta Stillman and Richard Young.

Interestingly, this is the second record of a Mississippi Kite for Great Gull Island. Matthew Male and I observed one over the island fifteen years ago on May 25, 1991.

The above account is adapted from my report to the New York State Avian Records Committee (NYSARC).

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