Figure 1. Two monkeys of the New World in the Piri Re'is' *Carte de L'Atlantique* 1513. One is to the right of a *cynocephalus* (on the left of the map) and the other to the right of an *acephalu*s (on the right of the map) (La Ronciere *et al.*, 1984: plate 28).

Mediterranean Sea around 1501. In fact, Piri Re'is' map may reflect the earlier Columbus map of 1498 (La Ronciere *et al.*, 1984: 218), which coincidentally is the year that Columbus, in his travels, first reported on monkeys in America (Urbani, 1999). In the highly detailed map of Piri Re'is, baboon-like monkeys in the New World were drawn for the first time (Fig. 1). It is possible to infer that these illustrations were made with African primate referents, as were the reports by other travelers in the New World such as Amerigo Vespucci (who referred to Neotropical primates as baboons and macaques; Urbani, 1999) and Arabic chroniclers (Kruk, 1995). On the other hand, Piri Re'is might have obtained another original source on New World monkeys directly from the Europeans. Two primates are represented and associated with mythical animals, one "dancing" with a *cynocephalus* (dog-head) and another with a fruit in its hand together with an *acephalu*s (headless) (Fig. 1). These monkeys were illustrated as inhabiting the area that is currently Colombia, Brazil, and Venezuela.

In February 1595, the English pirate captain Sir Robert Dudley (1574–1649), voyaging in the West Indies, entered the Gulf of Paria (Venezuela) from the southwest at Serpent's Mouth, leaving it by the Dragon's Mouth in order to arrive at the Isle of Trinidad. Of this island, he said, "the country is fertile, and ful of fruits, strange beasts and foules, where of munkeis[(3)], babions and parats were in great abundance [sic]" (Dudley, 1899: 71). He also indicated that the local name for primates in Trinidad was "howa" (Dudley, 1899: 78). Of interest is that the editor, G. F. Warner, wrote a footnote citing Charles Kingsley (1819–1875): "[(3)]His 'munkeys' were, of course, the little Sapajous; his 'babions' no true Baboons, for America disdains that degraded and dog-like form, but the great red Howlers (Kingsley, *At last*, p.69)." In principle, it is the first reference that we know of for monkeys from a Caribbean island, and specifically Trinidad. Considering the two primates of this island (Phillips, 1998), the "munkeis" are most likely *Cebus albifrons trinitatis*, whereas the "babions" refer to *Alouatta seniculus insulanus*, both endemic subspecies.

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The Meanings of *Cacajao* and Uacari: Folk Etymology in Neotropical Primate Taxonomy

Adrian A. Barnett

Introduction

The majority of primate genus names are derived from Latin or Greek roots, typically referring to some aspect of their biology. Among the pitheciines, for example, *Chiropotes* is derived from the Greek "kheír" (hand) and Latin "potare" (to drink). This is a reference to the bearded saki's habit, originally reported by Humboldt (1811: see Hershkovitz,

Table 1. Meanings of the generic names of non-pitheciine Neotropical primates. Fr. = French, Gr. = Greek, L. = Latin.

Name	Derivation
Alouatta	alouette, Fr. 'lark' (i.e., harbinger of dawn)
Aotus	a, Gr. 'not', otus, Gr. 'of the ear' (i.e., 'hidden-eared')
Ateles	a, Gr. 'not' teleios, Gr. 'complete' (referring to thumbless hand)
Brachyteles	brachy, Gr. 'short' teleios, Gr. 'complete' (referring to nearly-thumbless hand, i.e., short thumb)
Callicebus	kalos, Gr. 'beautiful' kébos, Gr. 'a monkey'
Callithrix	kalos, Gr. 'beautiful' thrix, Gr. 'hair'
Cebuella	kébos, Gr. 'a monkey' -ellus, L. diminutive suffix
Cebus	kébos, Gr. 'a monkey'
Lagothrix	lagos, Gr. 'a hare' trikos, Gr. 'hair' (refers to pelage woolliness)
Leontopithecus	leon, L. 'lion' to, L. diminutive pithékos, Gr. 'ape'
Saimiri	"a Brazilian Portuguese name for a small monkey"*
Saguinus	sagouin, Fr. 'a squirrel monkey'* -inus, L. 'like'

* from Gotch (1979)

1985), of drinking by dipping a hand into a bromeliad or water-filled tree hole and then licking the wet fur. The genus *Pithecia* comes from the Greek names for "ape" ("pithékos": see Table 1 for further examples). However, this direct derivation is not the source for the third pitheciine genus, *Cacajao*, a name with no classical roots.

Like the classical derivations of most generic names, common English names for Neotropical primates generally note some obvious feature of the animal that—as is common in folk taxonomies—provides a simple description of the animal (Brown, 1985; Morren, 1989; Cormier, 2000; Mourão *et al.*, 2002). This is seen with "howler," "spider," and "squirrel" monkeys, the common names of *Alouatta*, *Ateles* and *Saimiri*, respectively. *Uacari* does not fit this pattern, for its origins are independent of any European language. This paper, then, seeks to answer the following questions: How did the name *Cacajao* come into use when it has no classical roots, what is the origin of "*uacari,*" and what are the actual meanings of these names? Likewise I discuss what this may tell us about the inclusion of local names into a taxonomic system based on the terminology of classical languages.

Uacaris are medium-sized Amazonian primates (3–5 kg) with short tails and a dentition adapted for a diet of hard fruits (Barnett and Brandon-Jones, 1997). Endemic to the Amazon basin, there are seven recognized forms (Hershkovitz, 1987) in two species: the bald uacari, *Cacajao calvus* (five subspecies), and the black-headed uacari, *C. melanocephalus* (two subspecies). Sousa e Silva Júnior and Martins (1999) recorded the existence of a sixth bald uacari, which might or might not be a new subspecies. Unusual in appearance, uacaris have been described as "one of the most grotesque of all primates" (C. A. Hill, 1965, p.140), and a monkey of "melancholy aspect… emaciated… bedraggled" (W. C. O. Hill, 1960, pp.236-237). Humboldt (1811, p.316; 1812, p.359) provided the first description of a uacari and named it *Simia melanocephala* (in keeping with the time's highly inclusive sense of genus [see Defler and Hernández-Camacho, 2002]), recording the common name of "Le Cacajao." By 1823 the all-embracing category *Simia* was no longer employed, and Johann Baptist von Spix (1823, p.12) named the animal he collected *Brachyurus ouakary*. This genus stood until 1840, when Lesson recognized its preoccupation by *Brachyurus* Fisher 1813 (a genus of rodent, itself later synonymized with *Lemmus*). Deprived of this quite appropriate term (*brachyurus* means "short-tailed"), Lesson proposed—though without explaining why—that the genus be renamed *Cacajao*. Isidore Geoffroy Saint-Hilaire (1847), apparently unaware of Lesson's change, continued the use of *Brachyurus* when describing (as *Brachyurus calvus*) what is now *C. calvus calvus*, and did so again when describing what is now *C. c. rubicundus* (I. Geoffroy Saint-Hilaire and Deville, 1848).

The names *cacajao* and *uacari* are evidently derived from native Amazonian languages: both Humboldt and Spix specifically noted that the names they used for their specimens were those given by the local people at each collection locality. These terms, then, originated from native languages that were once spoken within the geographic range of *Cacajao melanocephalus*. This range covers a large area of northwestern Amazonia (see Hershkovitz, 1987; Barnett and Brandon-Jones, 1997) and overlaps with an area of considerable linguistic diversity (see maps in Dixon and Aikhenvald, 1999). Uacaris occur in large groups, spend much of the year being highly visible in riverside forests, are hunted (Barnett and Brandon-Jones, 1997), and frequently appear in folk taxonomies (e.g., Defler, 2003). The Yanomami name for *C. m. melanocephalus*, for instance, is *hishô-hôshími* (Boubli, 1999). Given that "*hôshími*" means "bad, unpleasant, worthless" and "*hishô*" refers to the area between the nose and upper lip (Gail Goodwin Gomez, pers. comm.), a loose translation could be "ugly snout", a phrase that would certainly be in-line with the slightly pejorative nature of many other local names for members of the genus. However, Gail Goodwin Gomez (pers. comm.) has cautioned that while this is a grammatically possible phrase, it is unknown whether it would be acceptable to a native speaker. Indeed, in his dictionary of the Venezuelan dialect of Yãnomãmi, Lizot (2004, p.10) says "ɬõsõmi Zool., mono chucuto; *Cacajao melanocephalus* (Cebidae). Es poco frecuente en la región habitada por los Yãnomãmi centrales." Gomez points out that the s/sh alternation is found elsewhere in the Yanomami languages, and that it is "linguistically quite normal to find a 'reduplicated' form, [such as] ɬõsõmi ɬõsõmi," or the variant transcribed by

Boubli as *honsho-honshome* (where "on" refers to the nasalized "o" vowel). So, Boubli's term is a reduplicated variant of the term identified by Lizot (2004) in his dictionary of Yãnomãmɨ. Thus, the name may not be pejorative after all, but simply monomorphemic, which cautions against hasty interpretations of felicitous word combinations under such circumstances.

Hershkovitz (1987) established the type locality for Humboldt's specimen as a Salesian mission on the Río Casiquiare, and the indigenous inhabitants of the mission were said to use *cauiri* for *C. m. melanocephalus* (Humboldt, 1811). The Spanish missionaries called it *chacuto, mono feo* or *mono rabon*; the second literally means "ugly monkey" and so echoes the rather pejorative Yanomami name. The third term refers to its short tail, and parallels *rabicó*, used in Brazilian Amazonia (da Cunha and Barnett, 1989) as does *macaco mal-acabado* ("unfinished monkey") reported by Hershkovitz (1987). "Short tail" is also the direct meaning of several indigenous names for *C. melanocephalus,* including *tschitschi* in the language of the Tariana, who occupy the upper Río Vaupés in Colombia (Alexandra Aikhenvald, pers. comm; Koch-Grunberg, 1911), and *tchitchi* of Baniwa, a language spoken mainly on the Rio Içana and its tributaries on the Brazilian/Colombian frontier and on the upper Río Guainía, Venezuela (Robin Wright, pers. comm.). *Piconturo* or *pitiontouro* is a regional name for the golden-backed uacari, *Cacajao melanocephalus ouakary* and is often heard among settler (*caboclo*) communities on the upper Rio Negro and its tributaries, including the Uapés/Vaupés and the Curicuriarí; it is also used in the town of São Gabriel do Cachoeira (da Cunha and Barnett, 1989). This name appears to be a Europeanized (Spanish or Portuguese colonizers) rendition of *pîko-tuúru*, the name for the animal in Tucano (Ramirez, 1997; Alexandra Aikhenvald, pers. comm.). Ramirez (1997) gives *p(*nasalized i*)ko* as a root for "tail" (p.145), and *turu* (p.198) as "short." These varied names, however, are not often used outside Amazonia and shed no light on the provenance of *cacajao* and *uacari*.

The Origins of *Cacajao* and *Uacari*

Cacajao

According to Humboldt, *cacajao* or *cacahao* is a "Marabitanas" Amerindian name for this monkey. "Marabitanas," however, is not recognized as a linguistic entity today, nor did it exist at the time of Humboldt's visit to northwestern Amazonia (Loukotka, 1968; Tovar and Tovar, 1984; Victor Golla, pers. comm.). More likely, this was the name of a village that was mistaken for an ethnic identity (but see below). In Humboldt's time the Río Casiquare region was probably peopled by speakers of Baré, once the most widespread of Maipurean (or Arawak) languages, originally spoken from the Rio Branco to the upper Orinoco (Alexandra Aikhenvald, pers. comm; Victor Golla, pers. comm.) but now nearly extinct (Aikhenvald, 1995). In Baré, the term *kakáhau* (stressed on the second syllable) has been recorded to stand for the uacari (Alexandra Aikhenvald, pers. comm.). This name does not appear to "mean" anything in the descriptive sense, following the general pattern of North Amazonian languages, in which descriptive names for animals are generally rare (Alexandra Aikhenvald, pers. comm.). Auricchio and Grantsau (1995) believe *cacajao* is onomatopoeic for the uacaris' high-pitched "kah-kah" contact calls. This might have been the origin of the name in Baré, especially since elsewhere in the range of *Cacajao melanocephalus* the common name for the uacari is *bicó*, which almost certainly derives from their plosive "bee-koh!" alarm call (A. Barnett, pers. obs.). The native names of many primate species are often close mimics of their various calls (see Table 2 for Southeast Asian examples).

By the time of von Humboldt's visit, the Marabitanas did not exist as a people, apparently having been exterminated by intertribal warfare in the late 1760s (Robin Wright, unpubl. ms.). The word "Marabitanas" as recorded by Humboldt may have been a place name derived from the people's name or ethnic group (ethnonym) (Alexandra Aikhenvald, pers. comm.), or it may have come from the name of a Baré leader, as a number of prominent individuals seem to have used it. Little is known about the Marabitanas (Robin Wright, unpublished ms.), although one document (Missões Salesianas do Amazonas, 1933, p.25) reports that they were "aliados dos Arihini" or "allies of the Arihini," a subgroup of the Baré. (*Contra* Nimuendajú [1932], they were a cultural rather than a linguistic subgroup: see Aikhenvald [1995]). This reputed alliance implies that the two groups, Baré and Marabitanas, were linked by trade or by language (Wright, 1991; Ramirez, 1997).

While traveling in the region, Karl Martius (1863) recorded *kakayau* as the name used for *C. melanocephalus* in the area of the Braso Casiquiare/upper Rio Negro. However, the word *kakáhau* does not fit the pronunciation patterns of Baré. Alexandra Aikhenvald (pers. comm.) notes: "I am quite confident that *kakáhau* in Baré is a loan. One reason is

Table 2. Examples of onomatopoeic local names for Asian primates. (Taxonomy follows Groves, 2001).

Local name and language	Latin and English names	Source
Wow-wow (Malay)	*Hylobates lar*	Pocock (1939)
Pio (Bhotia)	*Macaca assamensis pelops*	Pocock (1939), Prater (1965)
Kra (Malay)	*Macaca fascicularis*	Wood (1885), Finn (1929), Payne *et al.* (1985)
Sahu (Lepcha)	*Semnopithecus schistaceus*	Pocock (1939)[1], Brandon-Jones (1999)
Wanga (Marachi)	*Semnopithecus dussumieri*	Pocock (1939) [2], Brandon-Jones (1999)

[1]As *Semnopithecus entellus achilles.* [2]As *Semnopithecus entellus achates.*

that such long roots (three syllables) are atypical for the language. The other reason is that the sound "h" in Baré is very restricted. It is never found in the middle of a morpheme (for example, a root)." The shape and sound of the word also stand out as highly unusual in the language, especially the glottal fricative *h*, which is rarely found in that place in a word and in that juxtaposition to other sounds (see Aikhenvald, 1995).

There are two alternatives for the origin of this word in Baré. First, it may be a very recent loan; the source person for Aikhenvald's dictionary of Baré, the last fluent speaker of the language, was old and used a number of Spanish loan words, such as *playa* for "beach." So *kakáhau* may have entered his vocabulary *via* regional Spanish speakers. Alternatively, it may be a loan from much longer ago, reflecting the status of Baré-speaking people of the upper Rio Negro as comparatively recent arrivals in the Casiquiare/upper Rio Negro area (Derbyshire and Pullman, 1998). When they first entered the region, the Baré may have borrowed names from other tribal groups for the fauna that were new to them, as is often the case (see Pike, 1959; Hunn, 1997; Atran, 1990; Brown, 1984; Berlin, 1992; Cotton, 1996; Minnis, 2000 for other examples). One source of loan words may well have been the Marabitanas, and one of those loaned words may well have referred to a short-tailed primate with a singular vocalization. Before European contact, the upper Rio Negro probably had over a hundred distinct languages, an estimated 70% of which are now extinct (Ramirez, 1997; Aikhenvald and Dixon, 1999; Aikhenvald, pers. comm.). Given this ongoing cultural attrition, what we present there cannot be firmly proven. What appears clear, however, is that the word is not descriptive; it is merely reflective—an onomatopoeic derivative.

Uacari

This word (pronounced wah-KAR-ee) is now the accepted English common name for all monkeys in the genus *Cacajao*. It seems we owe this word to Spix, who wrote of the "ouakary" monkey in his *Simiarum et Vespertilionum Brasiliensium species novae* of 1823, noting it to be the local name where he collected his type specimen. Latinized to *Ouakaria*, this name was briefly used for the genus proper by Gray in 1849, after Lesson (1840) replaced it with *Cacajao*.

While Humboldt´s collection locality is quite precise (San Francisco Solano Mission, Rio Casiquiare, Venezuela), that of Spix is not. "Habitat in sylvis fluminibus Solimöens et Içа interjectis" (Spix, 1823, p.13), the only geographical reference in the original description of the species, does not provide a collection point. Therefore, although Spix acknowledges that "uacary" is a local name ("l´espéce de singe, á quelle le nome Ouakary est applicé par les habitans" [Spix, 1823, p.13]), the linguistic group from which this name originated cannot be determined. Spix's reference to the Rio Içá is a mystery in that the black-headed uacari he illustrates is not known to occur there (restricted to left bank of the Rio Japurá). It may be merely a reference to show the habitat type occupied (riparian forest), rather than an actual locality. The forests of the Rio Içá (the Brazilian stretch of the Río Putumayo) are occupied, at least on the right bank, by *Cacajao calvus rubicundus* (see Hershkovitz, 1987).

Acari is used for *C. m. ouakary* in Língua Geral, a trans-Amazonian trading language (Stradelli, 1929). Língua Geral is based on a creole version of Tupinambá, from the Tupí-Guaraní branch of the Tupí language family, from what is now Maranhão and Pará (Jensen, 1999; Alexandra Aikhenvald, pers. comm.). However, despite the widespread use of *acari* in Língua Geral to refer to uacaris (e.g., Tatevin, 1910; Stradelli, 1929), what the word actually *means* is unknown (Victor Golla, pers. comm.). It may be monomorphemic (i.e., like "cat," but unlike "green woodpecker," it does not *mean* anything *per se* [Denny Moore, pers. comm.]).

Thus, it seems that members of the pitheciine genus *Cacajao* owe both their common and scientific names to words deeply rooted in unrelated Amazonian languages, attached to specimens independently collected and named by two different 19th-century explorers working in widely separated areas of the Rio Negro basin.

Conclusion

So, we have an explanation for the provenance of the names and some understanding of their meanings in the original languages. But why were these strange, non-European names retained? Despite the uacari's obvious and unusual physical characters—such as their odd facial appearance and a tail one-third their body length (unique among Neotropical primates)—it would seem that no European common name for uacaris has ever been widely used. Given that the common name for *Chiropotes*, the bearded saki, helps distinguish it from the genus *Pithecia*, then "brush-tailed saki" or "bob-tailed saki" might be sensible alternatives to uacari; yet old wildlife encyclopedias (e.g., Broderip, 1857; Wood, 1885; Vogt and Specht, 1888; Miles, 1897; Boulenger, 1936) used no common name other than variants of the word *uacari*.

Common names will often describe a new taxon by combining two familiar animals, often unrelated, which seem to encompass elements of the new form—for example, shrew opossums (Caenolestidae), otter shrews (Potamogalidae), and kangaroo rats (*Dipodomys* spp.). But some animals resist all efforts to be described by amalgamation, and so we have common names such as aye-aye (*Daubentonia madagascariensis*), binturong (*Arctictis binturong*), cacomistle (*Bassaricus* spp.), goral (*Naemorhedus* spp.), kangaroo (*Macropus* spp.), kinkajou (*Potus flavus*), llama (*Lama glama*), okapi (*Okapia johnstoni*), peccary (*Tayassu pecari*), serow (*Capricornis* spp.), and tamaraw (*Bubalus mindorensis*). Likewise, a local name for *Cacajao* was adopted as the common name for want of any suitable European term. Such borrowing of words from existing native folk taxonomies in circumstances of zoological uncertainty must have been very common in the 18th and 19th centuries when new mammal species were being described in numbers never seen before or since.

(Baratay and Hardouin-Fugier [2002] note that only 10% of the mammal species known in 1993 were recognized in 1800; by 1890 that figure had risen to 50%.)

In effect, the formal adoption of a native name acknowledges that what has been named is so far outside the standard frame of reference that the entity defines itself; the local name emphasizes the exotic nature of the animal and becomes its own definition. This process is nicely demonstrated by the uncertainty over what to call the recently discovered Asian bovine *Pseudoryx nghetinhensis*. After several unsatisfactory (and less than euphonious) attempts — "Loatian Ox-Antelope," "Vu Quang Ox" — it was a regional name, "Sao La," that was finally adopted (see Nowak, 1999; Macdonald, 2001). For the third genus of pitheciines we must conclude that Europeans, unable to elaborate on a previous common name, defaulted to the local version, implicitly accepting the incomparability of these highly specialized primates. *Uacari* and *cacajao*, above all, seem to be a subliminal codex that conveys the meaning "strange".

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