

Let It Snow: Considerations of Words for “Snow” and “Ice” in the Arhuacan (Chibchan) Languages of the Sierra Nevada de Santa Marta, Colombia¹

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Abstract: *This article considers relationships between various words for “snow” and “ice” in the Arhuacan languages of the Sierra Nevada de Santa Marta, Colombia, South America—both in still living modern languages and reconstructed proto-forms—in an effort to clarify and amplify the efforts of previous scholars. Particular emphasis is given to Frank’s (1993) comparison of three forms for “snow”, Ika dzɔN, Kogi nu’wabi, and Damana ðim, on the basis of which he proposes a Proto-Arhuacan *dub, and to three forms for “ice” in Huber and Reed (1992): Ika dzwábu, Kogi nǎbbu-gǎldǎ, Damana ðimi-ngina. Although the evidence for any forms in these languages is generally poor and inconsistent, the analysis of the noted forms presented in the current study suggest that we must regard the Kogi nab’gala and Damana ðimngina (both “ice”) as suffixed forms of a proto-word for “snow” that survives directly in Damana ðim and Ika dzɔN (perhaps, in contrast with Frank’s suggested form *dub, from a form like *dǎb-). Additionally, the Kogi word for “snow”, nu’abi, seems likely to be directly cognate with Ika dzwábu “ice”, perhaps from a proto-form like *duab-, evidently distinct from (but not necessarily unrelated to) Ika dzɔN and Da ðim (both “snow”) as well as the Kogi element nab- in nab’gala (“ice”).*

Chibchan Languages: An Introduction

Languages of the Chibchan family are spoken throughout southern Central America and northern Colombia.² In the past, different scholars have applied the label

¹ This is a working paper, intended for publication in due course. Accordingly, the author would appreciate any comments you may have about it in advance of (eventual, possible) publication. If this paper, or some future version of it, is at some point accepted for publication, this text will be replaced with a preprint at the same URL and elsewhere. In such an event, complete publication details will be found (when available) via <http://unisabana.academia.edu/CarlAnderson/>.

² With regards to cultural (archaeological and historical) aspects of this region, Hoopes notes: “Scholars now recognize strong linguistic, genetic, and cultural connections among populations of the southern isthmus and northwestern South America. The label ‘southern Central America and northwestern South America’ is unwieldy. Several alternative terms have been offered, including ‘Area of Chibchoid Tradition’, ‘Chibchoid Historical Region’, and the ‘Isthmo-Colombian area’. None has yet come into common use. They have been formulated, however, to emphasize that the traditional Central/South American boundary between Panama and Colombia divides populations that were related through language, biology, and material culture. A ‘Chibchan world’ was divided in two. The circumstantial link between Chibchan languages and populations would be tenuous if not for the strong correlations between linguistic and genetic data and significant population continuity since Paleoindian times. Although ‘Central America’ ends in eastern Panama, the ancient inhabitants of the region surely did not consider themselves to have occupied two different continents. It is likely that they perceived their world as a single landmass bounded by the Caribbean and the Pacific, most of which was occupied by people with a common biological heritage, speaking languages in the Chibchan family. However, the boundaries between this world and neighboring language families, especially Misumalpan to the north and Chocoan to the south, were fluid.” See John W. Hoopes, “The Emergence of Social Complexity in the ChibchanWorld of Southern Central America and Northern Colombia, AD 300–600”, *Journal of Archaeological Research* 13.1 (2005), pp. 1–47 (pp. 10–11) and further references there.

Chibchan (or labels including that term) to different aggrupations of more or less obviously related languages.³ However, since Constenla Umaña’s rigorous investigation of comparative phonology through likely cognates in 1981 (continued in several of his subsequent studies), the Chibchan family proper has been understood as consisting of a number of languages and groups of languages that are (at present) thought to be fairly certainly related in relatively well understood ways.⁴

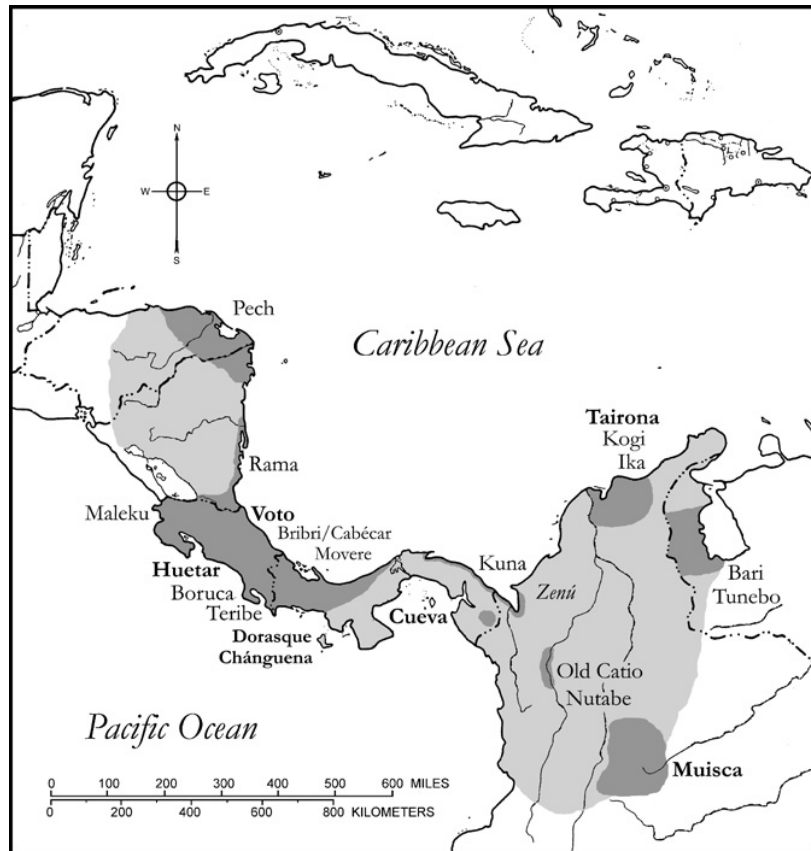
Although it is probably still premature to speak of either widespread certainty or agreement about the precise structure of the Chibchan family, according to Constenla Umaña’s most recent classificatory study, the family contains two main branches: the Paya (or *Pech*) language of northeastern Honduras, and everything else. The “everything else” is identified by Constenla Umaña as consisting of three sub-branches:

- Votic Chibchan
(Rama in Nicaragua, and Guatuso in Costa Rica)
- Isthmic Chibchan
(various language spoken in Panama and/or Costa Rica)
- Magdalenic Chibchan
(various languages whose historical ranges are east of the Magdalena River, mostly in northern Colombia, with some extension into Venezuela).⁵

³ Although not the first to attempt to place core Chibchan languages in the context of a wider family, Greenberg’s proposals for “Macro-Chibchan” family, later modified to a “Chibchan-Paezan” family are well known; see particularly Joseph H. Greenberg, “General classification of Central and South American languages”, in *Men and Cultures: Selected Papers of the Fifth International Congress of Anthropological and Ethnological Sciences, Philadelphia, September 1-9, 1956*, ed. by Anthony F.C. Wallace (Philadelphia: University of Pennsylvania Press, 1960), pp. 791-794; and Joseph H. Greenberg, *Language in the Americas* (Stanford: Stanford University Press, 1987), p. 382. See also Terrence Kaufman, “Language History in South America: What We Know and How to Know More”, in *Amazonian Linguistics: Studies in Lowland South American Languages*, ed. by Doris Payne (Austin: University of Texas Press, 1990), pp. 13-73 (p. 39, 51). Holt has proposed relationships between Chibchan and the Uto-Aztec and Pano-Takanan language families; Dennis Holt, *The Development of the Paya Sound-System* (unpublished Ph.D. dissertation, Department of Linguistics, University of California, Los Angeles, 1986). However, these and similar efforts have so far met with little acceptance; see Willem F.H. Adelaar & Pieter C. Muysken, *The Languages of the Andes* (Cambridge: Cambridge University Press, 2004), pp. 36-38, 41-45; and Lyle Campbell, *American Indian Languages: The Historical Linguistics of Native America*, Oxford Studies in Anthropological Linguistics, 4 (Oxford: Oxford University Press, 1997), pp. 174-176.

⁴ On what are now usually considered the limits of the Chibchan family and its subgroupings, see Adolfo Constenla Umaña, “Sobre el estudio diacrónico de las lenguas chibchenses y su contribución al conocimiento del pasado de sus hablantes”, *Boletín Museo del Oro* 38-39 (1995), pp. 13-56; Adolfo Constenla Umaña, *Comparative Chibchan Phonology*, Ph.D. dissertation (Philadelphia: Department of Linguistics, University of Pennsylvania, 1981). Constenla Umaña has discussed possible genetic relationships between what he identifies as Chibchan languages and other Native American language groups—particularly with the Misumalpan and Chocoan languages—though the probably considerable antiquity of any common proto-language as well as the scanty and fragmentary state of modern language attestation remain serious complications for any efforts to examine the issue in greater depth. Of course, apparent relationships between these languages could also be areal features resulting from their speakers’ participation in a common sphere of interaction. See generally Adolfo Constenla Umaña, *Las lenguas del área intermedia: Introducción a su estudio areal* (San José: Editorial de la Universidad de Costa Rica, 1991); and John W. Hoopes & Oscar M. Fonseca Z., “Goldwork and Chibchan Identity: Endogenous Change and Diffuse Unity in the Isthmo-Colombian Area” in *Gold and Power in Ancient Costa Rica, Panama, and Colombia*, ed. by Jeffrey Quilter and John W. Hoopes (Washington: Dumbarton Oaks, 2003), pp. 49-89 (p. 54).

⁵ For a general overviews on the Chibchan languages of Colombia, see Adelaar & Muysken, pp. 42-56, 61-112; and Nicholas Ostler, “The Development of Transitivity in the Chibchan Languages of Colombia”, in *Historical Linguistics 1995: Volume 1: General issues and non-Germanic Languages, Selected papers*



Map 1. The "Chibchan world", after Hoopes.⁶ Darker shading indicates areas in which Chibchan languages are currently or historically known to have been spoken; lighter shading indicates possible Chibchan-speaking (or partly Chibchan-speaking) regions in the prehistoric period. **Bold-face** indicates extinct languages; the *Zenu* language is of uncertain affiliation, as for that matter is Old Catio/Nutabe. The darker-shaded area at center-right, identified with the labels "Tairona, Kogi, Ika", includes both the Arhuacan-speaking region of the Sierra Nevada de Santa Marta and (in its western portions) the Chimila-speaking region east of the lower Magdalena valley.

Of the languages in the Magdalenic family, two—Bari and Chimila—form complete subgroups in and of themselves. A third Magdalenic subgroup (labeled *Cundiarhuacico* by Constenla Umaña) contains the rest of the Magdalenic languages in two further branches:

- Cundiboyacan
(including the extinct Muisca language of Bogotá and environs, the closely related but also extinct Duit language of Duitama and the living Uw Cuwa, or Tunebo, language of the Sierra Nevada de Cocuy)
- Arhuacan
(the closely related languages of the Sierra Nevada de Santa Marta: Ika, Kogi, Damana, and the extinct—or nearly extinct—Kankui).

Despite the uncertainties that have surrounded the rest of the Chibchan family, the essential relationship between the Cundiboyacan and Arhuacan languages has long

from the *12th International Conference on Historical Linguistics, Manchester, August 1995*, ed. by John Charles Smith and Delia Bentley, *Current Issues in Linguistic Theory* 161 (Amsterdam: John Benjamins, 1995), pp. 279-294.

⁶ Hoopes, "The Emergence of Social Complexity in the Chibchan World", p. 4.

been recognized. Max Uhle, the first scholar to propose the existence of a Chibchan family, noted a statement by the chronicler Lucas Fernández de Piedrahita, writing in 1676 about Gonzalo Jimenez de Quesada's 1537 expedition from Santa Marta to Bogota, to the effect that the people in the expedition who best understood the speech of the Musica people of Bogotá were natives from the Santa Marta region.⁷ Admittedly, as Nicholas Ostler has observed, the considerable differences between recorded forms Musica language and the known Arhuacan languages suggest that there can have been little question of mutual intelligibility.⁸ Nevertheless, it may not be unreasonable to suppose that speakers of mutually unintelligible but ultimately related Chibchan languages might find their way to communication, perhaps aided by similarities in grammatical structure and base vocabulary, with greater ease than a Spanish speaker might engage with any Chibchan speaker.



Map 2. Distribution of Arhuacan-speaking groups in the Sierra Nevada de Santa Marta.⁹ In this map, the Ika are identified as *Arhuaco*, a term of unknown (but possibly toponymic) origin that is commonly misapplied as an ethnonym for the Ika and that is popularly used (in Colombia) to refer to any Arhuacan speaker (probably due to Ika representing the largest Arhuacan speech community).

Presently, the Arhuacan subgroup of Magdalenic is comprised of three principal languages.¹⁰ The Ika language boasts the largest number of speakers (approximately

⁷ Max Uhle, "Verwandschaften und Wanderungen der Tschibtscha", in *Congrès International des Américanistes: Compte-rendu de la Septième Session, Berlin 1888* (Berlin: Librairie W.H. Kühl, 1890), pp. 466-89 (p. 468).

⁸ Nicholas Ostler, "Verb inflexion in Muisca and the Chibchan languages of Colombia" (paper presented at the 48th International Congress of Americanists, Stockholm/Uppsala, Sweden, 04-09 July 1994).

⁹ John A. Bonner, "Sierra Nevada Indians Map", *National Geographic* <http://ngm.nationalgeographic.com/ngm/0410/feature3/images/mp_download.3.pdf> [accessed 10 November 2009].

¹⁰ There was formerly a fourth member of this group, Kankui, spoken by the Kankuamo people near the town of Atanquez (the name of which has sometimes been applied to the language as well). This

14,000), while Kogi (also known to scholarship as *Kogui* or *Cogui*, though as *Kouguian* to its speakers) has some 9000 speakers, and Damana (spoken by the Wiwa people) perhaps only 2000.¹¹ The incredibly difficult terrain of the Sierra Nevada de Santa Marta (often aggravated by security problems, though more so in the past) and the (largely justified) suspicion of outsiders held by some Arhuacana speakers means that these languages are still relatively poorly known outside their speech communities, even to the relatively small handful of dedicated linguists who seek to understand them better.¹² The Arhuacan languages are certainly not so closely related that they may be considered dialects of each other, but they do share quite close affinities (and are generally assumed to descend from a common proto-language), a situation that probably aids the widespread multilingualism reported among Arhuacan speakers.¹³

Historically speaking, the modern Arhuacan languages are very likely to have some relationship with whatever languages or dialects were spoken by members of the pre-Hispanic Tairona cultural complex of the Sierra Nevada de Santa Marta and its coastal regions.¹⁴ Scholars have noted that elders among the Wiwa (the Damana-speaking tribe) and the Kogi claim knowledge of specialized ritual languages known, respectively, as *Terruma shayama* and *Téizua* (or *Téijua*), and it is thought that such terms may preserve something of the name recorded by the Spanish colonial chroniclers as "Tairona".¹⁵ However, although data regarding these ritual languages is extremely scanty (even in comparison to generally scanty nature of information about the Arhuacan languages), a tentative examination by Jackson suggests these ritual languages may post-date the breakup of Proto-Arhuacan and could be relatively recent developments, as well as perhaps revealing close affiliations with Damana (and Kankui).¹⁶ Although it would be tempting to relate a putative "Tairona language" to reconstructed Proto-Arhuacan, there is of course no real justification for doing so. While any predominant language spoken by members of the Tairona culture would probably have been a close relative of the modern Arhuacan languages, there seems

language seems effectively distinct, though the ethnic group maintains an existence, and it is understood that there have been some efforts to revive or reconstruct the language (though the relative success of these, if any, is unknown to the author). In any event, there may still be some speakers claiming knowledge of Kankui; see Carolina Ortiz Ricuarte, "La lengua kogi: fonología y morfosyntaxis nominal" in *Lenguas indígenas de Colombia: una visión descriptiva*, ed. by María Stella González de Perez & María Luisa Rodríguez de Montes (Bogotá: Instituto Caro y Cuervo, 2000), pp. 757-780 (p. 759).

¹¹ Over the years, a wide variety of names have been used to identify these groups of speakers and their languages; this study only notes what seem to be the most common and current usages. For a general overview on the languages, names, and (estimated) numbers of speakers, see Adelaar & Muyskens, p. 66.

¹² For brief but useful grammatical sketches of each of the Arhuacan languages, see the individual articles on them in *Lenguas indígenas de Colombia: una visión descriptiva*, ed. by María Stella González de Perez & María Luisa Rodríguez de Montes (Bogotá: Instituto Caro y Cuervo, 2000).

¹³ Adelaar and Muyskens, p. 67; Ortiz Ricuarte, "La lengua kogi", pp. 758-759.

¹⁴ For a recent overview on the Tairona culture, see Augusto Oyuela-Caycedo, "Late Pre-Hispanic Chiefdoms of Northern Colombia and the Formation of Anthropogenic Landscapes", in *Handbook of South American Archaeology*, ed. by William Isbell and Helaine Silverman (New York: Springer, 2008), pp. 405-428 (p. 413-24).

¹⁵ Adelaar and Muyskens, p. 67. A complication with the term "Tairona" is its many uses: it was recorded as an ethnonym by early Spanish chroniclers, whence it was borrowed to identify the wider archaeological cultural complex in the region to which the chroniclers' "Tairona" belonged, and different linguists may use the term with either the (probably erroneous) sense of Proto-Arhuacan or as a generic label for the ritual languages of the Kogi or Wiwa elders.

¹⁶ Robert T. Jackson, "Fonología comparativa de los idiomas chibchas de la Sierra Nevada de Santa Marta", *Boletín Museo del Oro* 38-39 (1995), pp. 57-69 (p. 67-68).

no obvious way of refining our understanding of such a relationship. Any one of the modern Arhuacan languages could be a direct descendent of such a “Tairona language” or, alternatively, they might all descend from a language or languages related to but already distinct from a pre-Hispanic “Tairona language”.

In any event, it is at least true the close relationships between the modern Arhuacan languages make them very suitable for comparative study—with regards to not just their own interrelationships, but also to their relationships with other Chibchan languages.

Previous Study of Arhuacan Historical Linguistics

One key study on the historical relationships between the various Arhuacan languages from the last 20 years was Paul S. Frank’s “Proto-Arhuacan Phonology”, which built on Constenla Umaña’s wider investigations of Chibchan languages to make important initial efforts towards reconstructing morphemes from the Arhuacan language’s common ancestral proto-language and to propose a number of sound changes leading to development of the modern languages.¹⁷ Frank’s efforts were complicated by the poor state of knowledge about Arhuacan vocabulary (notably poorer even than the still poor present state), and he seems to have been forced to work principally by gleaning vocabulary from earlier discussions of the languages and their phonology—an approach which, lamentably, is still generally all too necessary. Inevitably, there are some uncertainties and inconsistencies in Frank’s analyses,¹⁸ but they remain important starting points for further work and his list of cognates and reconstructed forms has hardly been bettered.

Nevertheless, since Frank’s study, at least a few further publications concerning the Arhuacan languages have appeared to provide the field with additional (if still insufficient) information about their vocabularies, phonologies, and grammars.¹⁹ Though the available information still leaves much to be desired, it may still be now worth beginning to re-examine the Arhuacan material in search of new insights regarding the histories of these languages and the relationships between them. With this object in mind, the present study especially considers the different words for “snow” and “ice” in the various Arhuacan languages.

Known Arhuacan Words for “Snow” and “Ice”

Frank compared three forms for “snow”—Ika *dʒan*, Kogi *nu’wabi*, Damana *dim*—on the basis of which he proposed a Proto-Arhuacan **dub*.²⁰ The modern forms Frank cited are largely the same as those reported for “snow” by Huber and Reed, whose work which additionally offers forms for “ice”: Ika *dʒwábu*, Kogi *nəbbu-gəlda*, Damana

¹⁷ Paul S. Frank, “Proto-Arhuacan Phonology”, *Linguística Chibcha* 12 (1993), pp. 95-117.

¹⁸ Some updates are provided by Robert T. Jackson, “Fonología comparativa de los idiomas chibchas de la Sierra Nevada de Santa Marta”, *Boletín Museo del Oro* 38-39 (1995), pp. 57-69.

¹⁹ Particularly the articles in María Stella González de Perez & María Luisa Rodríguez de Montes; also María Trillos Amaya, *Damana*, Languages of the World/Materials 207 (München: LINCOM Europa, 1999).

²⁰ Frank, p. 115. There is no standard orthography for any of the Arhuacan languages, and different studies tend to represent words from these languages in a variety of ways, mostly through efforts at phonemic representation using IPA symbols. Such phonemic or semi-phonemic representations are sometimes enclosed in double / marks and sometimes not. For consistency, this study represents all Arhuacan words in *italics*, regardless of how the source from which they are drawn presented them. Individual phonemes, when discussed, are enclosed in double / marks (for example, /a/).

dimi-ngina.²¹ The Kogi form here is broadly confirmed by the Kogi form *nab'gala* (/l/ being realized as [lʒ] intervocalically, explaining the spelling in Huber and Reed) as reported by Ortiz Ricuarte, who additionally gave the Kogi “snow” word as *nu'abi*.²² Ortiz Ricuarte also observes that Kogi /u/ is realized as [w] in syllable initial position,²³ making her form *nu'abi* seem effectively the same as Frank’s *nu'wabi* and Huber and Reed’s *nuwábi*. Turning to Ika, Landaburu provided the form *abitsi* for “snow” in a partial Swadesh list,²⁴ but this could be somehow related to what might have been a general Proto-Arhuacan word for “white” reflected in modern forms like Ika *bunsi*, Kogi *a'bunci*, Damana *ambinfi* (all “white”). However, in his discussion of Ika phonology, Landaburu also provided two additional different words for “snow”: *dzewə* and *dʒəN*.²⁵ The latter form seems comparable to Frank’s *dʒʌn*, as well as Huber and Reed’s *dʒən*, though it is difficult to account for the apparent contrasts between /n/ in *dʒən* (or *N* in *dʒəN*) and /w/ in *dzewə* without more information.²⁶ Paucity and inconsistency of data remain serious challenges to anyone researching Chibchan languages—even still living tongues that boast thousands of speakers.

Analysis of Known Arhuacan Words for “Snow” and “Ice”

Returning to consideration of relationships between the various Arhuacan words for “ice” and “snow”, there may now be enough evidence to consider revising Frank’s original reconstruction of Proto-Arhuacan **dub* for “snow”.

To begin with, it seems likely that Kogi *nab'gala* “ice” is directly cognate with Damana *dimi-n-gina*. Both seem to share a common suffix, Kogi *-gala* and Damana *-gina*, as Frank identifies intervocalic Kogi /l/ and Damana /n/ as common reflections of a Proto-Arhuacan intervocalic */d/.²⁷ The complete proto-form of this suffix may have been something like *-*gədə*. Ortiz Ricuarte describes the Kogi *-gala* suffix as providing the sense of “materia con que está hecho”, offering the examples of *sei'za* “machete” alongside suffixed *sei'zagala* “iron”.²⁸ Accepting this analysis (while remembering that there are less clear usage examples of the same suffix and that iron machetes are Spanish-era additions to Kogi culture), *nab'gala* “ice” would be “the stuff from which from *nab-* is made”, suggesting strongly that we could understand Kogi *nab-* here as “snow”, cognate with Damana *dim* and Ika *dʒeN*. Frank gives us further

²¹ R.Q. Huber and R.B. Reed, *Vocabulario Comparativo* (Bogotá: Instituto Lingüístico de Verano, 1992), pp. 316-317 (s.v. “hielo”/“ice” #324, “nieve”/“snow” #325).

²² Ortiz Ricuarte, “La lengua kogi”, p. 779 (s.v. “nieve”, #139).

²³ Ortiz Ricuarte, “La lengua kogi”, p. 762.

²⁴ Jon Landaburu, “La lengua ika” in *Lenguas indígenas de Colombia: una visión descriptiva*, ed. by María Stella González de Perez & María Luisa Rodríguez de Montes (Bogotá: Instituto Caro y Cuervo, 2000), pp. 733-748 (p. 748, s.v. “nieve”, #95).

²⁵ Here Landaburu uses *N* to represent a nasal consonant of variable realization, in this case probably [ŋ]; Landaburu, pp. 734, 736.

²⁶ At the time of writing, it has not been possible to isolate any descriptions of Ika words for “ice”. Neither has it been possible to extract Damana forms for “snow” or “ice” from any of María Trillos Amaya, “Léxico del cuerpo orgánico en damana” in *El léxico del cuerpo humano a través de la gramática y la semántica*, ed. by Natalia Eraso Keller, *Lenguas aborígenes de Colombia: Memorias 5* (Bogotá: Centro Colombiano de Estudios de Lenguas Aborígenes, 1998), pp. 35-57; Trillos Amaya, *Damana*; or María Trillos Amaya, “Síntesis descriptiva de los sistemas fonológico y morfosintáctico del damana” in *Lenguas indígenas de Colombia: una visión descriptiva*, ed. by María Stella González de Perez & María Luisa Rodríguez de Montes (Bogotá: Instituto Caro y Cuervo, 2000), pp. 749-756.

²⁷ The *-n-* preceding the Damana suffix is a connective element, actually a realization of an archiphoneme /N/; Trillos Amaya, “Léxico del cuerpo orgánico en damana”, p. 37.

²⁸ Ortiz Ricuarte, “La lengua kogi”, p. 770.

confidence regarding this equation, as he suggests that Proto-Arhuacan initial */d/ produced Kogi /n/ and, before high vowels, Damana /d/ and Ika /dʒ/,²⁹ while Proto-Arhuacan final */b/ gave Kogi /b/, Damana /m/, and Ika /n/.³⁰

Thus, it seems questionable as to whether Kogi *nu’abi* really is a direct cognate of Ika *dʒəN* or Damana *dim* as Frank seems to have understood it.³¹ Moreover, the vocalism of Kogi *nab-* seems unlikely to proceed from **dub*. Instead, a proto-form **dəb-* would better account for Ika *dʒəN*, Kogi *nab-*, and Damana *dim*.

However, it should be noted that a Proto-Arhuacan **dəb-* “snow” would be unexpectedly similar to Constenla Umaña’s reconstructed Proto-Chibcha **dəbə* (“feline”) that likely produced Kogi *’nabi* “feline, jaguar” as well as Muisca *nymy* “mountain cat”.³² Other apparent possible cognates of Proto-Chibchan **dəbə* may be found in Damana *dumá-ga* “jaguar” and perhaps the second element in Ik *seiku-númi* “jaguar”.³³ However, the *u* vowels in these Ika and Damana forms are difficult to explain, as there are no clear parallels for a change like PrCh */ə/ > /u/, unless the Ika and Damana *u* in the cited forms is meant to represent /ɯ/, as Jackson writes in Ika <*kunɯ*>, Damana <*kuna*> (both “leg”),³⁴ words whose first-syllable vowels Frank represents with, respectively, <ɰ> or <i> (i.e. Ika <*kɰni*>, Damana <*kina*>, both “leg”).³⁵ Unfortunately, there are no further examples of words for “jaguar” in the more recent reports regarding Ika and Damana by Landaburu and Trillos Amaya, so the issue of these words’ precise vocalism must remain slightly uncertain for now.

Moreover, Ortiz Ricuarte has suggested that Kogi *nu’abi* might possibly have been borrowed from Spanish *nieve*.³⁶ If this were correct, we would either have to assume Kogi *nu’abi* had no cognates with other native Arhuacan forms or that all the Arhuacan words for “snow” (and probably for “ice” well) were borrowed from Spanish *nieve*. Such explanations seem unlikely, however, or at least unnecessary. There seems no reason to presume inhabitants of the Sierra Nevada de Santa Marta had no native, pre-Hispanic word for “snow” (the Sierra Nevada being, after all, the “snowy mountains”). It would also be difficult to account for the change in vocalism from Spanish /je/ to Kogi /a/, based on what (admittedly little) is known so far about Arhuacan historical phonology. Perhaps more significantly, however, the available data suggests closely related terms for ice and snow in the Arhuacan languages descend relatively regularly from a common Proto-Arhuacan ancestor that (although it is difficult to propose dates for Proto-Arhuacan) is likely to have existed in the pre-Hispanic period.

²⁹ Frank, pp. 98-101.

³⁰ Frank, pp. 96-98.

³¹ Frank, pp. 98, 99, 108, 115.

³² Adolfo Constenla Umaña, *Comparative Chibchan Phonology*, p. 381 (s.v. “feline.”); *Diccionario y gramática chibcha: manuscrito anónimo de la Biblioteca Nacional de Colombia*, ed. by María Stella González de Pérez (Bogotá: Instituto Caro y Cuervo, 1987), p. 266 (s.v. “Gato montés”).

³³ Huber and Reed, p. 98.

³⁴ Jackson, p. 65.

³⁵ Frank, p. 114.

³⁶ Carolina Ortiz Ricuarte, “El léxico del cuerpo humano en la lengua kogui: Hacia una clasificación de los formantes nominales” in *El léxico del cuerpo humano a través de la gramática y la semántica*, ed. by Natalia Eraso Keller, *Lenguas aborígenes de Colombia: Memorias 5* (Bogotá: Centro Colombiano de Estudios de Lenguas Aborígenes, 1998), pp. 15-34 (p. 32); Ortiz Ricuarte, “La lengua kogui”, p. 770.

Conclusions

Indeed, it seems probable that we should regard Kogi *nab'gala* and Damana *dìmingina* (both “ice”) as suffixed forms of a proto-word for “snow” (whether from a form like **dab-* or with some other vowel) that survives directly in Damana *dìm* and Ika *dʒəN*. It also seems likely that the attested Kogi word for snow, *nu'abi*, is directly cognate with reported Ika *dʒwábu* “ice”,³⁷ apparently distinct from (but perhaps not unrelated to) Ika *dʒəN*, Da *dìm*, as well as the Kogi element *nab-* in *nab'gala*. Unfortunately, as yet it has not been possible to find any additional examples from the modern Arhuacan languages that might illuminate the developments of Kogi *nu'abi* and Ika *dʒwábu*. Clearly, more detailed information about the phonologies of the various modern Arhuacan words involved would help in unraveling the history of the forms more completely.

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³⁷ Perhaps from a proto-form like **duab-*?

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