



Intellectualist premise of folk names support their restoration in formal taxonomy

F. Merlin Franco

Editorial

In a recent article, Gillman and Wright (2020) have called for a debate on the need for 'assigning and reinstating' folk names in taxonomic protocols. This is a commendable proposal, as it would undo the historic injustice meted out to local communities whose knowledge often forms the basis for discovery of new species. Also, assigning exotic names to plants already known to local communities alienates them from the respective taxa and landscapes with which they have historically interacted.

Gillman and Wright (2020) identify three factors in support of their argument for according priority to folk names while coining new specific epithets: i) folk names communicate knowledge on 'form, uses, distribution, and ecology', ii) folk names remain unchanged for longer period of time, and iii) the need for de-colonizing nomenclature practices. Folk names of flora and fauna are not just names meant to identify taxa, but also condensed forms of local knowledge. Recognizing this intellectualist nature of folk names is the first step towards reinstating them in formal nomenclatures. However, implementing this is an uphill task.

By arguing that folk names communicate local knowledge, Gillman and Wright has set the ball rolling on an important topic that taxonomists have often disregarded while describing new species. In 'The Savage Mind', Claude Levi-Strauss (Levi-Strauss 1966) proposed that folk classifications have an intellectual basis. Folk names encode local knowledge on morphology, ecology, utility value of the denoted taxa (Kakudidi 2004). However, what is often overlooked is their capability to encode knowledge on ecological, and/ or cultural relationship between multiple denotata. Folk names that show such properties are usually metaphors or metonyms (Turpin 2013, Evans 1997). For instance, in the Dalabon language, both the cheeky yam and grasshoppers are denoted by the metonymic (Evans 1997) folk name *yawok* (Cutfield 2016). The name encodes the cultural knowledge that the yam is ready for harvest when the mating call of the grasshopper is heard. The Mayali term *nakarndekin* is a metaphoric name denoting both *Capparis* spp. as well as dingo (Evans 1997). Here, the spiky nature of *Capparis* spp., is compared to the sharp teeth of

the dingo. The ability of folk names to encode local knowledge related to specific taxa as well as multiple denotata attest to the intellect of local communities and their languages.

Folk names could also incorporate names of prominent personalities who introduce germplasms, to acknowledge their contribution. In Ethiopia, *dulla* a folk cultivar of *Sorghum* is named after Dulla, the farmer who introduced the cultivar to the locality (Mekbib 2007). Geographical locations from where cultivars originate are also acknowledged in the same way. This ability of folk names to recognize introducers of cultivars should be juxtaposed against the reluctance of formal taxonomy to acknowledge the prowess of local communities, and the priority they deserve. Indeed, colonial researchers who made substantial use of local knowledge in their discoveries are portrayed as solo discoverers (McCormack 2017). Such colonial legacies are not a thing of the past, but continue even today. I would like to point out the existence of three current nomenclatural trends here:

i) a new taxa is described and published with no notes on the contribution of local knowledge or prior existing folk names (Karunaratna *et al.* 2020, Jain 2020), ii) a new taxa is described with a new name, and published with clear notes on the contribution of local knowledge and prior existing folk names (Geissmann *et al.* 2011), and iii) a new taxa is described acknowledging the contribution of local knowledge, and also incorporating the folk epithet (Gillman & Wright 2020).

Correspondence

F. Merlin Franco

Institute of Asian Studies, Universiti Brunei Darussalam, BE1410 Brunei Darussalam

Correspondence: merlin.francis@ubd.edu.bn

Ethnobotany Research & Applications
21:26 (2021)

As proposed by Gillman and Wright, the third scenario is the best practice for taxonomy to embrace. For that, the first and essential step would

be to recognize the intellectual premise of local knowledge and folk names, and the priority of the latter. However, I identify three major bottlenecks that would make this difficult.

Folk names are dynamic

Folk names are products of both local knowledge and languages (Franco *et al.* 2015). Naturally, they undergo changes as communities come into contact with new knowledge and languages (Hidayati *et al.* 2018). In instances where there are more than one folk name existing prior to the describing of a new taxa, it would require robust linguistic analyses to establish priority.

Local power dynamics underplay indigenous rights

Countries such as Australia, New Zealand, and Canada have made rapid strides in restoring indigenous rights. However, for a vast majority of countries, majoritarianism is the prevailing norm. In such cases, the languages and folk names of the politically powerful majoritarian communities would wield power in dialogues aimed at generating consensus for naming new species. For instance, in the Indian subcontinent, learning Sanskrit until recent years was a privilege reserved exclusively for the politically powerful elite castes (Ramaswamy 1999). Yet, a good number of species described newly from India using local knowledge are given Sanskrit names, superseding extant folk names. Likewise, a considerable percentage of biodiversity in Southeast Asia exist in the highlands that are home to communities classified as minorities, while political power is retained by communities from the lowlands, especially coasts (Enfield & Comrie 2015). Navigating such local majoritarian power dynamics is not easy in reality, when funding and policies are controlled by communities that form the majority.

Number of taxa requiring nomenclatural revision would be high

Gillman and Wright (2020) are of the view that taxa requiring 'retrospective name changes would be limited'. This might be far from reality. Given the co-occurrence of biological and linguistic diversity (Gorenflo *et al.* 2012), the proportion of described taxa that would become eligible for such retrospective changes would be humongous.

In the light of the bottlenecks identified above, limiting retrospective name changes to those taxa where it can be clearly established that the respective authors had made use of local knowledge, and /or were aware of the pre-existing folk names would be a better option. The codes of nomenclature could be then amended to ensure that in future, priority be accorded to pre-existing folk names. Gatekeeping taxonomy journals should also make it mandatory for authors publishing new taxa to include information on local knowledge and folk names of the respective taxa. If not, local communities, their knowledge, culture and languages will continue to remain underappreciated pillars of biodiversity (Frainer *et al.* 2020).

Literature Cited

Cutfield S. 2016. Common Lexical Semantics in Dalabon Ethnobiological Classification. In Language, Land & Song: Studies in Honour of Luise Hercus. Edited by PK Austin, H Koch and J Simpson. EL Publishing, London, Pp 209–27.

Enfield NJ, Comrie B. 2015. Mainland Southeast Asian Languages: State of the Art and New Directions. In Languages of Mainland Southeast Asia: The State of the Art. Edited by NJ Enfield & B Comrie. Mouton de Gruyter, Berlin and Boston, Pp. 1–17.

Evans N. 1997. Sign Metonymies and the Problem of Flora-Fauna Polysemy in Australian Linguistics. In Boundary Rider: Essays in Honour of Geoffrey O'Grady. Edited by DT Tryon, M Walsh & GN O'Grady. Pacific Linguistics, Canberra, Pp.133–53.

Frainer A, Mustonen T, Hugu S, Andreeva T, Arttijeff E, Arttijeff I, Brizoela F, Coelho-de-Souza G, Printes RB, Prokhorova E, Sambou S, Scherer A, Shadrin V, Pecl G. 2020. Opinion: Cultural and Linguistic Diversities Are Underappreciated Pillars of Biodiversity. Proceedings of the National Academy of Sciences 117(43): 26539–43. <https://doi.org/10.1073/pnas.2019469117>.

Franco FM, Hidayati S, Ghani BAA, Ranaivo-Malancon B. 2015. Ethnotaxonomic Systems Can Reflect the Vitality Status of Indigenous Languages and Traditional Knowledge. Indian Journal of Traditional Knowledge 14(2): 175-182.

Geissmann T, Lwin N, Aung SS, Aung TN, Aung ZM, Hla TH, Grindley M, Momberg F. 2011. A New Species of Snub-Nosed Monkey, Genus *Rhinopithecus* Milne-Edwards, 1872 (Primates, Colobinae), from Northern Kachin State, Northeastern Myanmar. American Journal of Primatology 73(1): 96–107. <https://doi.org/10.1002/ajp.20894>.

Gillman LN, Wright SD. 2020. Restoring Indigenous Names in Taxonomy. Communications Biology 3(1): 609. <https://doi.org/10.1038/s42003-020-01344-y>.

Gorenflo LJ, Romaine S, Mittermeier RA, Walker-Painemilla K. 2012. Co-Occurrence of Linguistic and Biological Diversity in Biodiversity Hotspots and High Biodiversity Wilderness Areas. Proceedings of the National Academy of Sciences 109(21): 8032–37. <https://doi.org/10.1073/pnas.1117511109>.

Hidayati S, Ghani BAA, Giridharan B, Hassan MZ, Franco FM. 2018. Using Ethnotaxonomy to Assess Traditional Knowledge and Language Vitality: A Case Study with the Vaie People of Sarawak, Malaysia. Ethnobiology Letters 9(2): 33–47. <https://doi.org/10.14237/ebl.9.2.2018.740>.

Jain N. 2020. Mysterious New Bioluminescent Mushroom Glows in the Forests of Meghalaya. Mongabay. <https://india.mongabay.com/2020/11/mysterious->

new-bioluminescent-mushroom-glow-in-the-forests-of-meghalaya/.

Kakudidi EK. 2004. Folk Plant Classification by Communities around Kibale National Park, Western Uganda. *African Journal of Ecology* 42(1): 57–63. <https://doi.org/10.1111/j.1365-2028.2004.00462.x>.

Karunarathna SS, Mortimer PE, Tibpromma S, Dutta SK, Paloi S, Hu Y, Baurah G, Axford S, Marciniak C, Luangharn T, Madawala S, Lin C, Chen J, Acharya K, Kobmoo N, Samarakoon MC, Karunarathna A, Gao S, Xu J, Lumyong S. 2020. *Roridomyces Phyllostachydis* (Agaricales, Mycenaceae), a New Bioluminescent Fungus from Northeast India. *Phytotaxa* 459(2): 155–67. <https://doi.org/10.11646/phytotaxa.459.2.6>.

Levi-Strauss C. 1966. *The Savage Mind*. University of Chicago Press, London.

McCormack C. 2017. Collection and Discovery: Indigenous Guides and Alfred Russel Wallace in Southeast Asia, 1854-1862. *Journal of Indian Ocean Studies* 1:110–27.

Mekbib F. 2007. Infra-Specific Folk Taxonomy in Sorghum (*Sorghum bicolor* (L.) Moench) in Ethiopia: Folk Nomenclature, Classification, and Criteria. *Journal of Ethnobiology and Ethnomedicine* 3(38): 1–18. <https://doi.org/10.1186/1746-4269-3-38>.

Ramaswamy S. 1999. Sanskrit for the Nation. *Modern Asian Studies* 33(3): 339–81.

Turpin M. 2013. Semantic Extension in Kaytetye Flora and Fauna Terms. *Australian Journal of Linguistics* 33(4): 488–518. <https://doi.org/10.1080/07268602.2013.857571>.