

Rethinking Changing “Unethical” Names in Taxonomy: An Asian Perspective

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Abstract

Despite concerns from taxonomists, at least 300 plant and fungi names starting with *caf[e]r-* or *caff[e]r-* were changed to *afr[e]r-* because of racial offensiveness. This comment offers a chronically overlooked Asian perspective on taxonomic ethics, highlighting gaps in global inclusivity and raising questions about practical challenges.

In July 2024, the XX International Botanical Congress in Madrid cancelled at least 300 names of plants and fungi with the species epithets starting with the root *caf[e]r-* and *caff[e]r-*, which were deemed racially “offensive” and replaced these epithets with names starting with *afr[e]r-* (Turland et al. 2024, Thiele and Smith 2025). That action of the Congress followed the voted decision of the Nomenclature Section, which accepted the formal proposal to add a new Article 61.6 to the *International Code of Nomenclature for algae, fungi, and plants* (ICN) “to permanently and retroactively eliminate epithets with the root *caf[e]r-* or *caff[e]r-* from the nomenclature of algae, fungi, and plants” (Smith and Figueiredo 2021). This move was widely discussed in high impact journals with wide readerships (Callaway 2024, Chala et al. 2024, Pérez Ortega and Stokstad 2024). Notably, a recent opinion described such changes as “simple and systematic,” and stated that objections against changes “are exaggerated” (Chala et al. 2024). Moreover, it encouraged other taxonomic domains to adopt similar approaches. This was notable, given that it followed a plea cosigned by more than 1500 taxonomists that advised caution with radical name changes, emphasizing universality, stability, neutrality, and transculturality (Jiménez-Mejías et al. 2024). Despite these concerns, renaming continues to be framed as a sign of moral progress, whereas dissent or concerns are largely confined to specialized taxonomic circles (Mosyakin 2022, Pethiyagoda 2023, Jiménez-Mejías et al. 2024).

Is the current racial and ethical discussion racially and regionally balanced?

One immediate question is whether *Caffra* or epithets starting with *caff[e]r-* or *hottentot-* truly deserved the top priority actions among all existing unethical or supposedly unethical words and phrases worldwide, especially given the expected confusion arising from changing so many scientific names at once. One plausible

explanation is that the concerns about *caff[e]r-* and *caff[e]r-* (Smith and Figueiredo 2021) and Rhodes (Smith et al. 2022, Mosyakin 2022) were published early in this debate, forming a kind of citation circle and reinforcing the perception that these were the most urgent and contentious cases within the community. Although this rapid, strongly argued approach drew significant attention and placed the region’s issues in the spotlight, ultimately leading to change, it also raises doubts about whether the discourse is genuinely balanced across different regions and cultures.

In this sense, the literature on naming ethics shows heavy regional biases focusing heavily on North America, Europe, and Africa. For instance, Chala and colleagues (2024) used the term racist to advocate renaming scientific entities but Chala and colleagues (2024) and the references therein cited North America, Europe, and Africa a combined 186 times, while mentioning Asia, home to both immense biodiversity and human population, only once (figure 1). Even more concerning, this single existing case was not about phrases offensive to Asians but rather a positive example of naming a species with an indigenous name, highlighting the complete exclusion of Asia’s perspectives on the discussion (Jiménez-Mejías et al. 2024). This stark disparity sidelines the world’s largest continent and reveals an implicit hierarchy regarding whose moral concerns receive mainstream attention. When one region’s moral values outweigh another’s, our endeavor to eliminate unethical names may reinforce existing imbalances, introduce new biases, and exclude diverse perspectives, ultimately undermining the goal of achieving a truly equitable system.

Do boundless and timeless moral names exist?

We must also consider the geographical nuances and historical context that shape our definition of morally unacceptable. Many contemporary ethical frameworks emerged after World War II,

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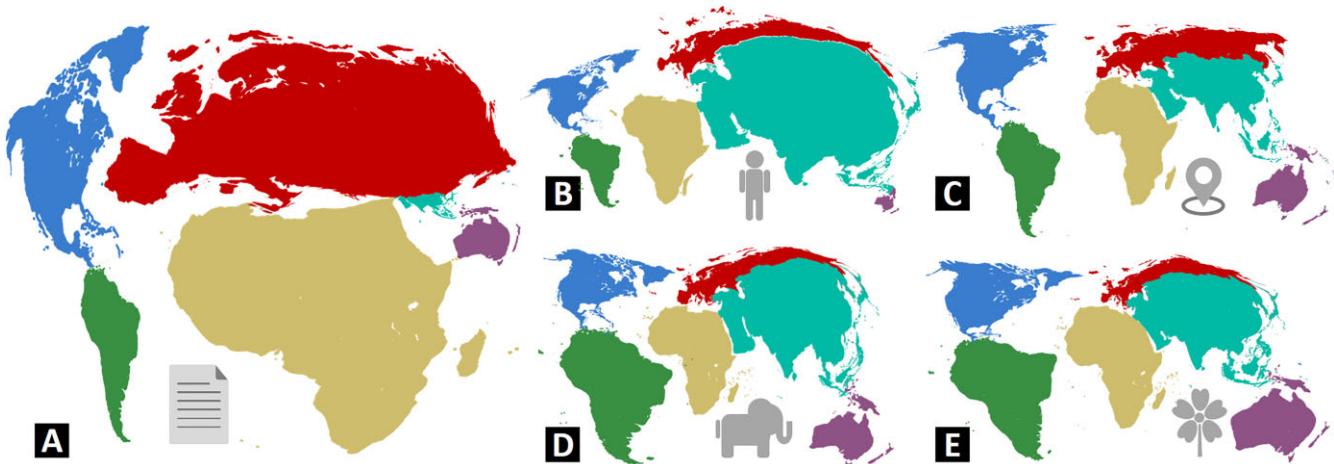


Figure 1. Global cartogram scaled by continent. (A) Frequency of mentions of regions, countries, and individuals' origins (Chala et al. 2024 and the references therein). (B) Human population (United Nations, <https://population.un.org/wpp>). (C) World map based on Equal Earth projection. (D) The number of mammal species described (Mammal Diversity Database, <https://doi.org/10.5281/zenodo.1059593>). (E) The number of vascular plant species described (Govaerts et al. 2021).

which explains why discomfort with the “Hitler beetle,” *Anophthalmus hitleri* Scheibel, 1937, is widely understood across both Eastern and Western perspectives. However, not all cases are as straightforward.

Even within the same region, ethical perceptions can differ across generations. One example is the Japanese term *Chosen*, which was used to refer to the Korean Peninsula during the colonial period (1910–1945) and is different from the Korean expressions *Josun* or *Chosun*. Names incorporating *Chosen* (e.g., *Vicia chosenensis* Ohwi, 1936; *Cirrodrilus chosen* Yamaguchi, 1934) may be deeply offensive and even traumatic to older generations of Koreans who directly experienced colonial rule. In contrast, younger individuals with no memory of that era may perceive it as far less inflammatory. Regional differences further complicate these discussions. Asian Americans may not fully grasp the emotional weight of the Black Lives Matter movement, and their perception of the movement varies significantly depending on their upbringing and personal experiences (Yellow Horse et al. 2021), just as someone unfamiliar with colonial history in Asia may struggle to understand why *Chosen* carries such a strong connotation. These ambiguities may explain why *Uta stansburiana* Baird and Girard, 1852, faces criticism for its association with Howard Stansbury, a recent Western figure, whereas *Khanitermes* Engel, Grimaldi, and Krishna, 2007, the fossil termite genus named after Genghis Khan, who caused far greater devastation but is distant in both time and place from the primary debate, remains entirely unchallenged.

Each region’s unique historical and cultural memory shapes its people’s perceptions of offensiveness. Therefore, before retroactive renaming efforts can be justified, a more globally inclusive intracommunity consensus is needed to determine which people, cases, eras, and regions qualify or may qualify as morally unacceptable.

More names to be changed, more effort needed

Scientific nomenclature has multiple layers—genus, species, authors, and year (subgenus and subspecies in some cases). Most renaming efforts so far have centered on generic names or specific epithets, but they may naturally extend to both the species names and authors of species. Retroactive application could implicate

numerous historical figures whose activities, viewed through a modern ethical lens, may be controversial; for instance, Carl Linnaeus, who has over 12,000 authorships, is also not free from controversy in this regard, given argued links to what is now perceived as scientific racism (Mosyakin 2022).

Tracing whether a particular namesake or author was involved in any unethical history is a monumental task, quite different from Western contexts with more varied surnames. This challenge grows more complex in East Asia, where only a few surnames are shared by large segments of the population (top three surnames: 2.5% in the United States; 1% in France; 43% in South Koreans, 20% in Chinese). For example, in *Allonychiurus kimi* Lee, 1973; *Pholcus yeoncheonensis* Kim, Lee, and Lee, 2015; and *Isotoma grana* Lee, Kim, and Kim, 1993, the four Lees and four Kims are actually eight distinct individuals. The scale and complexity of name changes required are often underestimated in current debates, underscoring the need for nuanced, region-specific approaches.

Can a committee address this?

Proposals for addressing problematic taxonomic names through dedicated committees have been widely discussed. Successful cases include volunteer committees such as the North American Classification Committee for birds and the Entomological Society of America’s Committee on Common Names, effective by being regional and the latter by focusing on flexible common names. When considering international or global scales, they face significant practical and ethical challenges. Given limited staffing and funding in taxonomy (Löbl et al. 2023), such committees strongly rely on volunteers, people who may be strongly inclined toward specific ethical stances rooted in their own life histories, thereby raising the risk of imbalance and partiality. As such, it is critical that such groups aim for greater equity and participation at global scales.

Representation remains a critical issue. Volunteer committees can inadvertently favor regions with greater resources or a longer tradition of scholarly networking, ultimately sidelining voices from developing countries. This risk is not hypothetical: The XX International Botanical Congress’ Nomenclature Section, which *de facto* changed at least 300 names in a single action of amending one article of the ICN, had 68% of votes come from the Western

nations (Europe, the United States, Canada, Australia, and New Zealand; Turland et al. 2024). These countries represent a minority of the global population but dominate taxonomic discourse; broader outreach is needed to ensure the diverse perspectives are heard.

Closely intertwined with representation is the question of legitimacy. Ethical judgments are inherently political and subjective, making it difficult—if not impossible—to establish a single set of moral standards acceptable to all. Consequently, if not made more inclusive, a centralized committee could function as an ideological gatekeeper, favoring certain cultural narratives while disregarding others. If primarily taxonomists, rather than historians or sociologists, assume the role of defining morally acceptable naming, well-intentioned reforms can end up reimposing colonial-era hierarchies by overwriting new local contexts (see the comments in Pethiyagoda 2023).

Under these conditions, how does one fairly set the agenda, and by what criteria should the committee evaluate ethical issues? Without broad, regionally balanced participation and clear, objective guidelines, tasks arguably beyond the purview of taxonomists, such efforts risk becoming another top-down imposition, perpetuating existing biases rather than dismantling them. It is only with these vital concerns addressed that we believe committees will be in a state that they can meaningfully and ethically enact nomenclatural changes at the global scale.

Who, when, how, and why?

Some propose neutral, judgment-free identifiers such as DOIs (digital object identifiers; Chala et al. 2024) that may address the current ethical issue. Beyond ethical neutrality, DOIs could also help address challenges in Asia, where a few dominant surnames (e.g., Korea, China) or the absence of surnames (e.g., Indonesia) complicate author recognition mentioned above. Linking species-level DOIs with ORCIDs (Open Researcher and Contributor IDs) could clarify authorship, enhance career tracking, and improve recognition for Asian researchers.

But adopting such a system would not eliminate current scientific names; rather, the two would almost certainly coexist, potentially doubling the effort needed, which is problematic unless other institutional supports can be involved. The full replacement of Linnaean names should simply be considered a nonstarter at this point, such that we should instead consider such proposals in addition to the current state of naming systems. Creating and managing millions of new identifiers alongside existing nomenclature demands significant labor and funding, as well as careful coordination among databases, libraries, and research institutions.

Even if broad agreement arises on many of these proposed initiatives for nomenclatural committees and name changes, several practical questions remain: Who will implement these changes and on what timeline? How will they be enforced, and why should this priority outrank other pressing taxonomic needs (e.g., exploring disappearing biodiversity hotspots, describing new species, adoption of next-generation taxonomy)? It seems likely that many proposed initiatives would rely on national or international volunteer taxonomic names committees, so we must find balance between research imperatives and potential new tasks. Furthermore, we must keep in mind that discovering and naming species has long been a vital incentive for taxonomists; replacing that practice with neutral codes of any kind could undermine the motivation to describe new taxa, potentially stifling future research. Ultimately, we must carefully balance the integration of new ini-

tiatives and identifiers with the needs and goals of the taxonomic community and all people using the scientific names of organisms.

Conclusions

Striving to rename “unethical” taxa can seem daunting, given the diverse cultural, political, and historical factors involved. Although increasing focus on Asia will not achieve even near-perfect balance, given its vast subregions and the continued underrepresentation of other areas, it is crucial to understand where the discussion currently stands, and which gaps remain. This awareness can help guide us toward more constructive and inclusive solutions. A productive path forward involves genuine collaboration with practicing taxonomists, local experts, and historically affected communities. By maintaining a clear perspective on these challenges and proceeding carefully, we can better integrate ethical insights with scientific rigor, ultimately shaping a more equitable future for the field.

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