

WHAT'S IN A NAME? EVERYTHING. James H. Roberts¹ [dʒeɪmz 'rɒbɜrts] (James.Roberts@jhuapl.edu), Joseph Maserio² ['dʒoʊsəf ma:'sɛəro], Ingrid Daubar³ ['ɪŋgrɪd 'dɔ:bər], Jodi Berdis¹ ['dʒoʊdi 'bɜrdɪs], Krista Soderlund⁴ ['krɪstə 'sɔ:dər'lʌnd], Shawn Brooks⁵ [ʃɔn brɔks], Driss Takir^{6,7} [dʒrɪs təkɪr], Serina Diniega⁵ [sə'rɪnə dɪni'eɡə], Jennifer Piatek⁸ ['dʒɛnɪfər 'paɪjətɛk]. ¹Johns Hopkins Applied Physics Laboratory, ²Caltech, ³Brown University, ⁴University of Texas at Austin ⁵JPL/Caltech, ⁶Jacobs Technology, ⁷NASA Johnson Space Center. ⁸Central Connecticut State University.

Introduction: A name is a fundamental part of a person's identity and individuality. A recurring theme in folklore is that knowing the name of a person can give power over them [1]. While this power is often described in metaphysical or mystical terms, there are indeed tangible effects from knowing and using names. Correct use of a person's name can help that person feel respected and seen. Incorrect usage can make a person feel demoralized, excluded or even threatened. However, incorrect naming is a common occurrence. When faced with unfamiliar names, there is a tendency to mispronounce the name when speaking and misspell when writing. Another common infraction is to refer to someone by a name they no longer use and which may not reflect their current identity. This is of particular relevance to the transgender community, for whom "deadnaming" can reopen past trauma.

Failure to correctly use a person's name, whether through ignorance or malice, can be demoralizing at best and dehumanizing at worst. As a community it is imperative that we do better. Here, we present some common naming issues, offer recommendations to increase the respect shown for our colleagues' identities, and to create a culture of inclusivity, respect, and safety.

Language and Culture: An important strength in planetary science is the cultural diversity present in our community. Our diverse community is endowed with a diverse set of languages from which our names are drawn, and each has its own characteristics. Although our technical jargon and general scientific discourse is dominated by English in this country, and Indo-European languages worldwide, a substantial portion of the planetary science community speak Sino-Tibetan and Japonic languages, and there are representatives from other language families.

Pronunciation: When an English-speaker encounters an unfamiliar name and does not know the correct pronunciation, they may have a number of responses. One is to apply English phonology regardless of the name's origin. Another is to substitute a similar-looking name, which may or may not be a reasonable "translation." However, these responses could convey a message that the person possessing this name is "other," not fully included in the community. Another response is to not even attempt to pronounce a name for fear of getting it wrong.

A more inclusive strategy would be to simply ask the person how their name is pronounced, and this is the

best practice. However, this approach is not comprehensively practiced; instead, the question could be circumvented ahead of time, for example, by providing a field for phonetic spellings of names on the conference form. Orthography (written representation of the sounds of a language) in English is irregular; it is thus essential to use a standardized transcription scheme such as the International Phonetic Alphabet [2,3]. Examples are shown in the author list of this abstract. Such a scheme would be valuable for languages not natively using the Latin alphabet, and whose transliteration schemes may not be consistent, and also for English or anglicized names that may have multiple pronunciations.

We note that many languages have phonemes (distinct units of speech sounds) [4] not found in English, such as the uvular and pharyngeal sounds in Arabic. [5]. One strategy one might use to adapt is to use a close approximation of most phonemes in English [6]. A drawback to this approach is that by relying on the approximation, it prevents a learner from learning the distinction in the sounds. Moreover, while this approach can work for pulmonic (produced by air pressure from the lungs) consonants and vowels, it does not work in all cases. Tones are lost completely. Tones are phonemic in many languages worldwide (though not in English), particularly Sino-Tibetan and Niger-Congo languages [7]. Using the wrong tone conveys a very different meaning. There are also some categories of consonants that are largely unknown in English, such as clicks and ejectives (common in Khoisan and Amerindian languages, respectively, for example). The most inclusive strategy is to learn how to pronounce these names correctly as they are encountered, utilizing existing online tools such as HowToPronounce [8] and NameCoach [9]. We should also recognize that early attempts at pronunciation may be incorrect, and be ready to apologize and correct ourselves.

Spelling: A related issue for English speakers is the spelling of names, despite having ready access to the written forms of scientists' names. Although many languages commonly spoken by the planetary community use the Latin alphabet, many languages have modifications to that character set. In particular, diacritical marks are not standard in English, but are vital components to several languages' orthography. In some cases, they are considered modifications to letters (e.g., the umlaut on certain vowels in German), whereas in others they denote a separate letter altogether (e.g.,

the distinction between *ä* and *a* in Finnish). In any case, they have phonetic and orthographic significance and should be maintained in bibliographies, citations, etc. The available graphemes are no longer limited to the characters on a standard typewriter. The ISO and Unicode character sets [10] are capable of resolving diacritics on a Latin alphabet, and there are keyboard shortcuts for many of the most commonly used diacritical marks, such as the acute accent, dieresis, tilde, and cedilla. However, not all web forms handle these character sets correctly, and a set of web standards may be needed to enable this universally.

Different spelling challenges arise when treating names that come from languages that do not use the Latin alphabet. Logographic languages (such as Chinese) do not have direct correspondence between characters and phonemes, and a number of transliteration systems have been devised. However, a single language may have multiple romanization schemes in use concurrently. For example, although Hanyu Pinyin [11] is the dominant romanization scheme in use today, many older publications may use Wade-Giles [12] or others, with key differences in the resulting pronunciation. It is therefore critical that the transliteration scheme be identified, no different than providing a reference frame for planetographic coordinates on a geologic map.

Culture: Some researchers, particularly students in English-speaking countries have adopted “English” names when interacting with Anglophones. An example would be speakers of Chinese, a language which uses tones to convey meaning that is not readily transliterated into English characters. In this case, the person has made a choice to use a different name that is more likely to be pronounced and remembered correctly by an English-speaking audience. The decision to adopt an English name is both personal and cultural, and there should never be an expectation that anyone do so. It should be expected that we take the time to learn to pronounce others’ names (whether given or adopted).

Identity: Our names and identities describe who we are, and may evolve over time for many reasons. A person may have gone by a nickname in their youth that they no longer use as an adult. They may have changed their name upon marriage or divorce. They may identify with a gender different from the one they were assigned at birth and have changed their name. Use of their old name in this instance is extremely hurtful, even when unintentional. Repeated deadnaming can resurrect past trauma and lead to future harassment and violence [13]. Regardless of the reason for any name change, it is important to use a person’s name as they identify it rather than what they may have been assigned at birth, have previously published under, or had prior to significant life events.

Publication records highlight a particular need for a systematic, centralized process to enable invisible name changes. By default, a name change is highly visible in a researcher’s publication record, and in the case of transgender researchers may include their deadnames. The only current alternatives are for the researcher to disavow work published under that name (which undersells their contributions and damages career prospects) or to negotiate a name change with each publisher individually [14].

Recommendations and Best Practices: Use the name an individual identifies themselves as, regardless of any other names they may have used previously.

- Set up a centralized mechanism (e.g., through ORCID) to request name changes and push these to the publishers [14].
- Do not alter the spelling of names. Preserve the diacritical marks. For names from a language that does not use the Latin alphabet, identify the transliteration scheme when practical to do so.
- Use the correct pronunciation of names, or the closest approximation for names that contain phonemes not found in English. When in doubt, ask the individual how to pronounce their name rather than guessing or giving up.
- Conference registration pages should collect phonetic spellings to be printed on badges and to assist session chairs when making introductions.
- Include a guide on how to pronounce names in email signatures.
- When (not if) a mistake is made, acknowledge the error, and use the correct name going forward.

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