The *Journal of Marine Research*, one of the oldest journals in American marine science, published important peer-reviewed original research on a broad array of topics in physical, biological, and chemical oceanography vital to the academic oceanographic community in the long and rich tradition of the Sears Foundation for Marine Research at Yale University.

An archive of all issues from 1937 to 2021 (Volume 1–79) are available through EliScholar, a digital platform for scholarly publishing provided by Yale University Library at https://elischolar.library.yale.edu/.

Requests for permission to clear rights for use of this content should be directed to the authors, their estates, or other representatives. The *Journal of Marine Research* has no contact information beyond the affiliations listed in the published articles. We ask that you provide attribution to the *Journal of Marine Research*.

Yale University provides access to these materials for educational and research purposes only. Copyright or other proprietary rights to content contained in this document may be held by individuals or entities other than, or in addition to, Yale University. You are solely responsible for determining the ownership of the copyright, and for obtaining permission for your intended use. Yale University makes no warranty that your distribution, reproduction, or other use of these materials will not infringe the rights of third parties.

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. https://creativecommons.org/licenses/by-nc-sa/4.0/
Naviface, Oxyty, and Epichthon: Words versus Terms

John Lyman

Department of Environment Sciences and Engineering
University of North Carolina,
Chapel Hill, North Carolina 27514
and
Department of Geosciences
North Carolina State University
Raleigh, North Carolina

The suggestions by R. B. Montgomery (1969) concerning the need for new words in marine research raise in my mind the question of whether in fact it is new words or new terms that are necessary. By coining new words, are we not in danger of surrounding our discipline with a jargon that, while it may facilitate slightly communication among insiders, restricts to a greater extent communication with those in other fields? It seems to me to be preferable, even though they involve more than one word, to use terms that are intelligible on their face rather than to coin new words relating to each specialized aspect of our discipline. Through their proliferation of neologisms, ecologists and limnologists have already, to a certain degree, cut themselves off from ready communication with members of other groups.

Thus, it seems to me that “air-sea interface” is an adequate term for what Montgomery would redesignate “naviface,” and it certainly is more readily understood by, say, a lawyer or an economist. Nevertheless, all seafaring men will agree that, if a single word is in fact deemed necessary for this term, Montgomery’s “naviface” is a singularly happy choice.

“Oxyty” is perhaps sufficiently self-evident to be readily acceptable and should join the existing family of chlorinity, salinity, and alkalinity. But it needs to be pointed out that each of these other terms involves reference to specific units—grams per kilogram or milliequivalents per liter—and that Montgomery has omitted units in his definition. Can we agree that “oxyty” means “concentration of oxygen in cubic centimeters (STP) per liter (20°C) of sea water”?

Montgomery has also suggested the need for nouns to describe the ocean-lithosphere and atmosphere-lithosphere interfaces. “The surface of the bottom”
is indeed an infelicitous term, but I feel a new word is needed only to describe the interface between the lithosphere and the fluid envelope of the earth. For this I propose *epichthon* (Greek *epi* on and *cht Hon* earth, stressed on the penult), whose meaning should be evident at first glance to anyone acquainted with the meaning and derivation of "epidermis" and "autochthonous." For the finer distinctions proposed by Montgomery, the terms "subaerial epichthon" and "subaqueous epichthon" are both adequate and self-evident in meaning. The corresponding adjectival phrases are "subaqueously epichthonous" and "subaerially epichthonous."

**Reference**

**Montgomery, R. B.**