require an expert to use them. The extensive use of the chart tests in the present war emergency has brought sharply to public attention the fact that these tests are not only unfair, but are also unsafe. It would actually be safer to discard color tests altogether.

That there is some correlation between color thresholds and ability to distinguish colors at normal intensities may be admitted, although the amount of correlation is as yet undetermined. About 80 per cent. of persons who have flunked chart tests have been able, after use of Vitamin A in adequate quantities for an adequate period, to pass these tests. It is suspected that those who become normal for practical purposes, but still fail on some of the charts in a chart test are suffering from dietary insufficiency of protein; but this is not certain.

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THE USE OF GENERIC NAMES AS COMMON NOUNS

A GENERIC name is always a collective noun. It may be masculine or feminine or neuter, but it is always in the nominative case and it is always singular in number. It should be italicized and the first letter should be capitalized. A specific name is always a modifier of the generic name which it follows. It usually is an adjective, but it may be a noun in the genitive case or in apposition with the generic name. It must agree with the generic name in gender and number, and it should be italicized but not capitalized. Examples: *Paramecium caudatum, Amoeba dubia* (specific names, adjectives); *Paramecium calkinsii, Pelomyxa carolinensis* (specific names, nouns in the genitive case); *Amoeba proteus, Felis leo* (specific names, nouns in apposition with the generic names).

A generic name refers to all the individuals which are similar to the type specimens of the genus, and a specific name to all those which are similar to the type specimen of the species. Generic and specific names can therefore not be used to refer to a single organism or to a number of organisms smaller than the total number in the genus or species. To refer to a given number of individuals belonging to a species, *e.g., Amoeba proteus,* it is necessary to designate the number under consideration and add "specimens of," *e.g.,* "a specimen of *Amoeba proteus,*" or "the, some or × specimens of *Amoeba proteus.*" There is no such thing as an *Amoeba proteus,* or an *Amoeba* or the *Amoeba* or some *Amoebae* if the name is italicized and the initial letter is capitalized.

I have found that in some work it becomes very burdensome to use "specimen of" or "specimens of" every time I wish to refer to a given number of individuals belonging to a genus. I have consequently obviated this by using the generic name as a common noun, *e.g.,* an amoeba or some amoebae, without italics or capitals. If generic nouns are used as common nouns there obviously is no more justification for capitals and italics than there is in the use of other common nouns, *e.g.,* cat or cow. This procedure not only avoids excessive use of a cumbersome phrase but it also saves considerable space without any reduction in clarity and precision of meaning, provided the species is known. Wouldn't it be a nuisance if we had to use the phrase "male specimens of *Homo sapiens*" in place of "men" every time we refer to two or more human beings! Imagine an orator beginning his address with "female and male specimens of *Homo sapiens*" in place of "ladies and gentlemen"!

Some assert that it is "vulgar" and "illegitimate" to use generic names as common nouns, but no one, so far as I know, has ever maintained that it is either vulgar or illegitimate to use common names for organisms, *e.g.,* men and cats. I fail to comprehend why the use of a generic name, as a common name, should be considered more vulgar and illegitimate than the use of any other noun. Is it less vulgar, less refined, less common to call, *e.g.,* specimens of *Homo sapiens* "men" than it would be to call them "homines" and specimens of *Felis domestica* "cats" than it would be to call them "feles"? Moreover, a generic name as a common name has some outstanding advantages, for it at once indicates the genus to which the organism belongs, and is readily understood by foreigners as well as by natives. Is it not obviously more illuminating to call, *e.g.,* a specimen of *Chilomonas paramecium* a "chilomonad" than it would be to call it a "carbo" or some other common name?

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THEORIES AS TO THE ORIGIN AND NATURE OF LIFE

IN a recent number of SCIENCE,[1] Dr. A. L. Herrera published what is termed "a new theory of the nature and origin of life." An essential preliminary to the enunciation of any theory as to the origin and nature of life must be a statement of the criteria whereby the existence of a living unit may be established.

While there are difficulties in drawing a very sharp line of demarcation between living and non-living,[2] many, perhaps most biologists will accept the criteria of Alexander and Bridges[3]—self-duplication and the ability to direct chemical change by catalysis. The

[1] A. L. Herrera, SCIENCE, 96: 14, July 3, 1942.
[2] J. Alexander, "Colloid Chemistry," 4th ed. (New York, 1937).
[3] J. Alexander and C. B. Bridges, "Colloid Chemistry, Theoretical and Applied," Vol. II, pp. 9–58 (New York, 1928).