curacy of expression, but are likely to create more mental obfuscation than they dispel.

Perhaps the agronomists need a few distinctive terms to add dignity to their science, but the chairman of their committee is not content to restrict his changelings to agricultural science.[3] He seems to feel that his "words" deserve a more widespread popularity and will fill a need in the language at large. The ignominious fate of simplified spelling has been forgotten; a reform justified by sound logic and sponsored by the indefatigable Roosevelt with the full weight of his dynamic personality.

Apparently the agronomists are no longer content to permit the cultured to determine good usage in American speech. Hereafter these matters are to be more democratically decided. The ignorant minority must prevail in language as in politics, and illiteracy is to displace culture. This is an innovation and if we accept agronomic canons of good taste there is no logical reason for rejecting pathological or genetic canons, or for that matter amalgamated truck-drivers' canons. If the agronomists are successful in having their orthographic solecisms incorporated in the respectable dictionaries we may expect similar minority domination from all quarters and our language will become the plaything of irresponsible committeemen.

Nothing could be more absurd than such an arbitrary method of adapting a language to changing conditions. Culture ever has been identified with intellect and never will be achieved by means of the ballot despite the cajoleries of these modern Malaprops with their complacently acquiescent organizations.

All work and no play is detrimental even in matters scientific, but the agronomists, having had their little excursion behind the looking-glass, should now take their vorpal swords in hand and slay the jabberwock. They can then return contentedly to a consideration of their researches, secure in the knowledge that the elegance of their published reports will not be marred with pleonasms imposed by philological mountebanks.

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NOTE ON THE INERTIA DYADIC

FOR the dynamics of a rigid body it has been shown that the moment of momentum may be expressed as the scalar product of a dyadic—called the inertia dyadic—and the angular velocity. The inertia dyadic is defined by the relation

$$\Phi = \Sigma m(\mathbf{r} \cdot \mathbf{r}\mathbf{I} - \mathbf{r}\mathbf{r})$$

Thus, it plays the same rôle for rotational motion as the mass for translational motion. There is an important difference, however. Whereas the mass is assumed constant, the dyadic is not constant and as a consequence it becomes necessary to obtain its time-derivative.

Starting with the expression given above it can be shown that

$$\dot{\Phi} = \mathbf{p} \times \Phi - \Phi \times \mathbf{p}$$

in which $\mathbf{p}$ is the angular velocity. This shows, as was to be expected, that the time-rate of change of the dyadic is due only to the angular velocity. The form, however, is not so simple as in the case of vectors and I am not aware that any one has ever taken the trouble to express the derivative in this way. The expression is useful as a step in the development of rotational dynamics, for when taken in conjunction with the fundamental principle

$$\frac{d(\Phi \cdot \mathbf{p})}{dt} = \mathbf{L}$$

Euler's equations for rotational motion are obtained immediately.

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A NEW AMPHIBIAN RECORD FROM KANSAS, HYLA PHAEROCRYPTA (COPE)[1]

IN the spring of 1925 a specimen of tree-frog was collected near Wildcat Creek, west of the Kansas State Agricultural College at Manhattan, Riley County, Kansas. It differed from any that had been taken in the region and in life somewhat resembled *Hyla crucifer* because its irregular and asymmetrical dorsal markings tended to form a cruciform pattern.

Later the specimen was sent to the U. S. National Museum for identification and was kindly identified as *Hyla phaerocrypta*. Because of the close resemblance of this species to other members of its genus I did not include this report in my list of the amphibians and reptiles of Riley County (1927),[2] but held it for further study. The specimen was consequently sent to Dr. G. K. Noble, who independently agreed with the previous identification.

Hyla phaerocrypta is an amphibian of unusual interest. It was described by Cope (1889)[3] from a

[3] According to the *Jour. of the Amer. Soc. of Agronomy*, for December, 1927, the case for general adoption of these new words is to be presented in "American Speech."

[1] Contributions from the zoological laboratory of the University of Michigan.

[2] Burt, Charles E., 1927, "An Annotated List of the Amphibians and Reptiles of Riley County, Kansas," Occas. Pap. Mus. Zool. Univ. Mich., 189: 1–9.

[3] Cope, E. D., 1889, "The Batrachia of North America," Bull. U. S. Nat. Mus., 34: 1–515.

single specimen from Mount Carmel, southeastern Illinois, as a subspecies of *H. versicolor*. Mount Carmel still remains as a northern record for the form. Viosca (1923)[4] has reported it from Mandeville, southeastern Louisiana, and has removed its subspecific classification. He has found that the size averages about one and a quarter inches and that the body is generally smaller than that of *H. versicolor*. Both Viosca and Ridgway (1924)[5] have called attention to the bird-like notes of *H. phaerocrypta* and its great difference from the croak of *H. versicolor*. An eastern point in the distribution of *H. phaerocrypta*, namely, Nashville, central Tennessee, has been given by Dunn (1927),[6] and I believe that this present paper sets a western record.

For the purpose of comparison the Kansas specimen (Univ. Mich. No. 65029) and an adult *H. versicolor versicolor* (Univ. Mich. No. 65018) from Cheboygan County, Michigan, have given data for the table below.

Measurement	*H. phaerocrypta*	*H. v. versicolor*
Width of head	11 mm	17 mm
Length of body	35 mm	48 mm
Length of arm	17 mm	23 mm
Length of foot	49 mm	65 mm

The dimensions given above not only illustrate the size-difference of the two forms, but also show the close similarity in their bodily proportions.

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GEOLOGIC AGE BY LEAD URANIUM RATIOS

DR. KIRSCH has kindly called my attention to a slip I made with regard to the atomic weight of the lead determined by Richards and Hall from the Etta Mine at the Black Hills, South Dakota.

The result was 206.07, and I suggested that to get the atomic weight of uranium lead .05 should be subtracted, whereas, allowing for the slower decay of thorium, it should be .02, making the atomic weight of uranium lead 206.05, practically the same as had been found before.

May I take the occasion to say that at the recent meeting of the committee on the estimation of geologic age by atomic disintegration Dr. Fenner reported some analyses of Brazilian minerals from the same pegmatite which checked remarkably well as to age, one contained mainly thorium and the other mainly uranium. Also Dr. R. C. Wells had obtained from the Upper Cambrian Swedish Kolm the lead: uranium ratio .056, which perhaps means that the upper Cambrian is twice as old as the lower Permian, though final results can not be obtained until the atomic weight of the lead upon which Bliss is working in Professor Baxter's laboratory is determined.

ALFRED C. LANE

[4] Viosca, Percy, 1923, "Notes on the Status of *Hyla phaerocrypta* Cope," *Copeia*, 122: 96–99.

[5] Ridgway, Robert, 1924, "Additional Notes on *Hyla phaerocrypta* (?)," *Copeia*, 128: 39.

[6] Dunn, E. R., 1927, "*Hyla phaerocrypta* in Tennessee," *Copeia*, 162: 19.

DATUM, DATA

DOWN in sunny Buenos Aires,
They call a vamp *patata*,
They speak *la lengua español*,
And insist upon *la data*.

But up in bleak New England,
Not quite so cold as Etah,
They follow Webster's unabridged,
And intonate it *dayta*.

Barbarians out in Arkansaw
Care not to whom they cater,
Any old parlance goes with them,
They call it simply *dayter*.

Some reckless folks in other climes,
Disgracing Alma Mater,
When questioned on their own research'
Reply, "I'm accumulating *dater*."

Then, there's the chap, who should be shot,
(His ré-search doesn't matter)
Who every time he opes his mouth,
Talks about his *dătta*.

And last we treat the hopeless guy,
If he doesn't know better he oughta,
Who in spite of profs and courses and books
Still pronounces it *daughta*.

So with *dayter, dayta, dătta*,
And with *data, daughta, dater*,
No matter where the mean may lie,
Statistically, there's too much scatter.

I don't know what in h—l to do
In this seeming simple matter;
But so long as God will grant me breath
I'll never call it *dătta*.

F. E.