dence to the Russians that Western "imperialists" are meddling in the affairs of a sister socialist country.

Direct aid, on an individual basis, is likely to be of much greater significance than nice-sounding words on paper. From Munich, Cierna, and Bratislava the Czechs have learned that words are cheap, and that, when the moment of truth arrives, they can count only on themselves. There are numerous small ways that individual scientists can aid their Czech colleagues. For instance, shortly after the events of August, the Academy of Sciences in Prague adopted as official policy a determination to continue all exchange programs with Western scientists. Support of these programs would be a tangible way of helping. Also, those who wish to help most can do so by expanding their contacts with Czech scientists, by going to Czechoslovakia to work if the possibility arises, and by seeking to increase the number of scientific positions available to Socialist-bloc scientists in the West. There is no evidence that a large-scale defection of scientists has occurred or is likely. Each of us, in his own way, can work to expand communication between West and East, not with empty platitudes, but with actions that indicate our support for Czechoslovakia.

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A Parable?

Many Kansas coyote hunters have mechanized their "sport" by equipping trucks (and in some cases airplanes) with two-way radios to keep in touch with ground crews. When a coyote is spotted, expensive dog packs carried in cages in the trucks may be released by opening the doors from inside the cab. Though such fancy "kill" equipment has been in use for some time, it is only recently that coyotes have been reported to be bigger, harder to bring down, more numerous, and even smarter. Formerly, most coyotes were killed when groups of men and boys would surround a section and start walking toward the middle. Many sections did not get hunted and it is possible that many animals lived their entire life cycle within a limited territory.

Now the trucks may "jump" a coyote, chase him for miles, and finally release the dogs to chase and kill. Admittedly, coyotes that escape to produce offspring would tend to be more vigorous. But in addition, if they survive the chase, driving these animals into a new territory would promote outcrossing and a restoration of vigor for both litter and individual size. These vigorous individuals would be harder to bring down and may even be smarter than their recent ancestors.

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"D" People and "S" People

Boffey's review of the work of Donald F. Hornig as science adviser to President Johnson (31 Jan., p. 453) states that a "communications gap" was peculiar to those two individuals. What the scientific and engineering world, on the one hand, and the managerial and administrative world, on the other, should both realize is that this communications gap is broadly characteristic of these two mental types.

Some 20 years ago John Mills discussed a basic difference in their approaches to a problem (*1*). The managerial (or action) people base their primary analysis on "differences" (or changes in the situation) and the scientific (or thinking) people form their judgment on the "similarities" they find in comparing situations or objects. Another characteristic is that the managerial person wants (or writes) a report with first a recommendation for action, followed by the technical conclusions on which the recommendation is based, and ending with a description of the process by which the technical data was obtained. The scientist, on the other hand, usually will begin by stating the origin of the problem, its history, the various possible attacks, the test procedures decided on, then the data in charts and tables, the technical conclusions, and finally, a recommendation.

J. P. Maxfield states that as civilian director of scientific work at the Navy electronics laboratory at Point Loma (Calif.), he increased the effective flow of information by telling his technical people, "Take the last page of your report and put it first" (*2*). He is also responsible, I think, for these two striking statements: "The difference people know only two degrees of probability, zero and one, and the similarity people recognize every degree of probability except zero and one," and "The 'D' people tend to act before they think, if they ever think; and the 'S' people think before they act, if they ever act."

These two mental classes have been occasionally recognized over the centuries. Pascal identified two types of men: the intuitive and the mathematical. About 1620 Sir Francis Bacon wrote, "There is one principal and as it were, radical distinction between different minds, in respect of philosophy and the sciences; which is this: that some minds are stronger and apter to mark the differences of things, others to mark their resemblances" (*3*).

In the absence of a basic explanation for these observations, a simple appreciation of them by both scientists and our public officials would promote efficient progress in a balanced program of research, technology, and use.

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1. J. Mills, *The Engineer in Society* (Van Nostrand, New York, 1946), p. 3.
2. J. P. Maxfield, personal communication.
3. C. P. Curtis and F. Greenslet, Eds., *The Practical Cogitator* (Houghton Mifflin, Boston, Mass., 1945), p. 18.

Fallacy of Undescribed Species

My experience as an adopted plant taxonomist has taught me that only a small proportion of the "new descriptions" which "accumulate" in botany are really of hitherto unknown species (taking a not-too-narrow view of that all-too-elusive taxon). Consequently, it would be surprising if their rate of accumulation for the animal world could give a sound indication that the "two million animal species" which have so far been described "are only about 50 percent of the extant species on earth" (R. J. Riedl, "Gnathostomulida from America," 31 Jan., p. 445). Indeed, I would expect that the number of "new species" described in the sister science would bear a far closer relationship, even in these relatively advanced days, to the number of describers and to their views of specific limits than to the numbers of genuinely undescribed taxa.

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