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COVER: Is society passing through a period of accelerating change so great that only totalitarianism can assure survival, or will the indomitable human spirit (symbolized by Rodin's "Burgher of Calais") reassert itself, through enlightened science, to usher in an era of peace? Such is the rhetoric of many of today's futurists—members of a growing movement, developing new militancy. See p. 416. (Photo montage: John H. Douglas)

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Letters

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On shyness

Re the article "Seeking the secrets of shyness" (SN: 5/17/75, p. 321): It would be interesting to see statistics on how many shy people start wars, commit crimes and violence and force themselves and their opinions on others. This might give those who would change us reason to change the

direction of their thinking.

I suspect that many, if not most, shy people are shy only in the presence of aggressive people and are more relaxed and self-confident with people of a similar nature. Shy people are brainwashed into thinking they should change because they are not like aggressive or outgoing people, and are afraid even to defend their beliefs to the more aggressive ones. Just think what a peaceful world it would be if it were the aggressive individuals who changed!

How much brainpower, creativity, how many good things have been lost over the centuries because people lacked the sensitivity to listen to, or ask the opinions of, shy people?

Dan McGuire Hudson, N.Y.

Panda pandemonium

When is a panda a part of pandemonium? read of pandamonium (SN: 5/10/75, p. 300) in anticipation of a truly scientific explanation of why Hsing-Hsing, the sibling male panda, found Ling-Ling so unattractive, and mating attempts were nonproductive. Breathless humanoids will be required to wait another whole year for their consummation. As the headline suggested "fading charm," my perplexity increased. How could a charm fade which had not been known to exist? The mystery was surpassed only by that of a "quark." Possibly an observer might have detected the schadenfreudliche expression on my face. Further into the learned treatise was a quoting of "The law says that the amount the law. . . of the quality that exists before an event must continue to exist after it." Now, how could two innocent little pandas even suspect that there could be an element of quality if the quantity equalled zero? There was a known potential, but alas, no current! The amperage must also equal zero. All in all, it is respectfully suggested that your spelling ''a's' more sparingly, especially in headlines, lest the eager reader be led into unpaired by charmed quarks! Possibly in

another year, Hsing-Hsing may discover that quirk so needed by the male, when he seeks the charmed quarks of Ling-Ling!

Walter L. Shirley Indianapolis, Ind.

Chemistry in the sky

B. J. Luberoff's letter (SN: 5/3/75, p. 283) on interstellar vinyl cyanide points up important differences between chemistry in space and on earth, and illustrates some misconceptions that may exist about interstellar astrochemistry. The mechanisms he describes are used for mass production of chemicals of relatively high purity, while the molecules are mere trace constituents of the interstellar medium. Each species constitutes only perhaps one billionth of the total density, even in the specific dark clouds where they are found. Since the densest of the dark clouds is a better vacuum than any that can be obtained in laboratories on earth, and the temperatures are only 10 to 100 degrees K., one would hardly expect that the complex processes necessary in terrestial laboratories would be dominant in molecule formation in the interstellar medium.

Luberoff wonders about a terrestrial origin of one of the interstellar molecules, vinyl cyanide. The molecules are observed in such places as the Galactic Center, 30,000 light years away from us, and it is inconceivable that the earth is a supplier of vinyl cyanide on a galactic scale.

Jav M. Pasachoff Astronomy Department, Williams College Williamstown, Mass.

Marc L. Kutner Physics Department, Columbia University New York, N.Y.

Naming asteroids

I have come across your small article on aming of asteroids, "The Apotheosis of naming of asteroids, Fred Whipple," (SN: 5/17/75, p. 317). I had the pleasure of studying under and working with Dr. Samuel Herrick of UCLA. Dr. Herrick was a leading astrodynamicist and made a major contribution to our nation's space program. His two-volume book on astrodynamics is a classic. Dr. Herrick had the pleasure of naming a minor planet for his charming South American wife-Betulia. I can't remember the astronomical designation of the asteroid, an early 1950's find. I do recall "slaving" for many hours over a desk calculator in the early 50's calculating "her" orbit!

Gerald L. Matlin Minneapolis, Minn.

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