politics through such discussion does a disservice to scholarly exchange, the absence of responsible political behavior may well signify the end of knowledge as a force for human progress.

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Reference

1. F. Bacon, in *The Collected Works of Francis Bacon*, J. Spedding, R. L. Ellis, D. B. Heath, Eds. (Hurd and Houghton, New York, 1869), p. 95.

Shape and Structure

The very human phenomenon (misinterpretation of flat images) discussed by Hans Elias in the article "Three-dimensional structure identified from single sections" (3 Dec. 1971, p. 993) is not unique to biology, geology, or stereology if the concept is generalized. It also appears in physics, chemistry, engineering, and statistics. I think G. Santayana (*1*) very aptly described it when he said, "The empiricist . . . thinks he believes only what he sees, but he is much better at believing than at seeing."

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Reference

1. G. Santayana, *Skepticism and Animal Faith* (Dover, New York, 1955).

Dyslexia: A Personal View

The letters (16 July 1971, p. 190) about learning in dyslexic children and the report that inspired them (26 Mar. 1971, p. 1264) were interesting to me. I comment on dyslexia from a personal standpoint. I believe that I was a dyslexic child, my 14-year-old son was diagnosed as having primary dyslexia, and my 80-year-old father also suffered from this problem.

Each of us has learned to read, but not by conventional methods. We all have the physical characteristics that are usually associated with dyslexia, that is, no strong left or right dominance, a tendency to "fall apart" under pressure to perform in reading and writing, and extremely poor handwriting.

I learned to read at age 11 by using verbal recall. I memorized whole stories and then attempted to match the known words with the written images. I was aided by the fact that I attended a small Catholic school, where the method of teaching involved a great deal of formal reading and reciting. I usually heard an entire lesson read aloud by another student, which gave me a chance to commit it to memory and then to compare the written text with what I had memorized. As my reading improved, whenever possible, I asked another student to describe what I was going to read, so I would have some idea of what was being said in the text. That is still my method—I skim for the main points before I attempt to read.

Our son was quite different. In addition to dyslexia, he also had an extreme amount of dysgraphia. We found a good tutor, a professional third-grade teacher, who began by teaching our son verbally every rule about word attack and phonics. She used a reward system to accomplish this. He then started to learn two-letter words, such as *it, an, at,* and *on.* His progress was slow, but the method worked. We used a flash-card system, timing him and rewarding him for knowing an increasing number of words in a set time. We always used a phonetic approach.

We also attacked the problem from the angle of motivation. Our son loved reptiles, and this provided us with a tool. We bought him several snakes and books about snakes. We encouraged him to catch snakes and lizards and to feed and care for them. Soon he was trying to read about snakes.

Another area of concern was our son's schooling. We received little cooperation from either principals or teachers. One principal felt that our son did not belong in public schools. We live in a city with few special classes. If our son had been dropped from the public schools, he might have been grouped in a class with retarded or emotionally disturbed children; he was neither of these. We felt that such grouping would be detrimental to him and refused to permit it. We always insisted that he finish assignments no matter how long that took, even if the teacher had already given him an F. What he didn't learn during the school year he made up during the summer.

We attempted to see that our son's whole body was developed as completely as possible. Most dyslexic children tend to be clumsy and usually drop out rather than compete. We encouraged him in sports (wrestling, swimming, and trampoline) that would not magnify his problem, but would give him the maximum development. We convinced him that competition was worthwhile, even if he had to practice twice as long as other children. He has competed successfully in both wrestling and swimming.

At age 14, in the ninth grade, our son is emotionally sound. He reads both fast and well, but fails to finish assignments, long essays, and essay or timed tests. His handwriting will never be really legible. He usually receives C's or B's in everything except English. He is still tutored by a high-school student, who helps him organize his assignments and corrects his math.

We have found that dyslexia does not end with just learning to read; it results in a way of life that compensates for a defect which seems lifelong.

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Erroneous Reference

Sandra Scarr-Salapatek, in her thoughtful review of the writings of A. R. Jensen, H. J. Eysenck, and R. Herrnstein on intelligence (Book Reviews, 17 Dec., p. 1223), refers twice (her reference 14) to two papers of mine (*1*, *2*). Her first reference correctly refers to my survey of certain gene frequency data in Africa and the United States, but the second reference incorrectly attributes to me views on intelligence which are completely absent from any of my papers. These two papers (*1*, *2*), like most or all of the other 11 studies of the last 20 years [references in (*2*)], as well as a recent paper of mine (*3*), are concerned only with gene frequencies in Caucasian American, African, and hybrid populations. There is no mention of intelligence, eugenics, or euthenics in any of my three papers on population mixture.

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References

1. T. E. Reed, *Amer. J. Hum. Genet.* **21**, 71 (1969).
2. ———, *Science* **165**, 762 (1969).
3. ———, *Proc. Nat. Acad. Sci. U.S.* **68**, 3168 (1971).

The intended reference was to E. W. Reed and S. C. Reed (reference 15). The correction applies also to the other authors cited in reference 14.

—EDITOR