
GIFT OF SIGHT

When Eyes Are Out of Line

"Gift of Sight" regularly reports on the human drama of eye care. It tells of sight restored or preserved and of optometric solutions to problems of everyday life.



AMY HAD BURNING EYES, Evan didn't dare to drive a car, and Ann came home with headaches. Meanwhile, Aaron was ready to give up music and Alan about to quit accountancy. What all these patients had in common was hyperphoria, a common eye disorder that is rarely treated and often undiscovered. They also had the same optometrist — Melvin Schrier, O.D.

Since he started practicing in New York City nearly 30 years ago, Dr. Schrier has learned that hyperphoria—the tendency of each eye to see things at a different level—is far from rare. He now finds that 15 to 20 percent of his patients have the disorder.

For Aaron, a professional flutist, the problem threat-

ened to end a promising career. Since his eyes picked up images at different levels, what they transmitted back to his brain could not come together to form a single, clear picture—not, that is, without considerable visual stress and strain on his eye muscles. Even so, his vision often blurred and he sometimes saw double. Most difficult, he found, was sight-reading. Instead of notes appearing on a five-line staff, Aaron often saw six lines—until he became Dr. Schrier's patient and his glasses were equipped with prisms that brought his visual images into line.

Not all of Dr. Schrier's patients are unaware of their hyperphoria. Evan has known about it since he was 6. A new patient, he is counting on Schrier-prescribed glasses to relieve a full set of hyperphoria symptoms. Double vision now makes him reluctant to drive a car, and he almost never drives at night (so disturbing is the glare of oncoming headlights). Since his brain often fights the double image by rejecting the input of one eye, Evan loses depth perception. He is particularly susceptible to the disorientation brought on by sudden exposure to a number of images. Dr. Schrier calls this effect of visual stimulation "Bloomingdale's syndrome" (after the New York department store celebrated for eye-catching displays).

For Evan, even walking out of his apartment building on to the street is often enough to cause dizziness and slight nausea.

During the past few years, a growing number of office workers who put in long hours in front of computer terminals have been to see Dr. Schrier. Their most common symptoms—eyestrain and headache—are often the result of hyperphoria. "The brain's first response to uneven images is to attempt to pull the eyes level," explains Schrier. But eye muscles are primarily designed to move the eyes laterally, not vertically, and the result is eyestrain and considerable stress.

Amy found that working a full shift on a split screen sent her home with burning eyes. She had trouble focusing and could barely read. "I'd gone to two or three doctors complaining of eyestrain. But all they said was I'd been burning the candle at both ends." Dr. Schrier asked her questions she hadn't heard before. He discovered she was unable to read on a bus and had a tendency to motion sickness—both are signs of hyperphoria. The glasses he then prescribed have made her job a snap.

For Ann, a computer programmer, the symptoms were severe headache and strained eye muscles. Fitted by Dr. Schrier with glasses that corrected her hyper-

phoria, Ann was able to work with no on-the-job stress or after-work problems.

Alan, an accountant, suffered extraordinary eyestrain, had trouble reading, and often found it impossible to track a line of figures across a ledger. Although ophthalmologists had tested him for hyperphoria, the condition remained concealed. But Dr. Schrier found the symptoms too suspicious to ignore. To make the disorder reveal itself, Dr. Schrier had Alan wear a patch over one eye for a week. When he removed the patch, Alan's eyes were unable to compensate as successfully as they had on earlier tests, and it was possible to measure his hyperphoria and prescribe the proper correction.

Dr. Schrier's concern about hyperphoria is far from a one-man crusade. Many eye-care professionals, however, are reluctant to prescribe corrective prisms for patients whose hyperphoria measures less than two prism diopters (a shift of two centimeters at a distance of one meter). But a correction of just half a prism diopter has relieved headaches and other symptoms for Dr. Schrier's patients. As the number of office workers who spend their days at computer terminals increases, it would not be surprising if more eye-care specialists come to share the Schrier point of view. ©