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In the 1960s, when I was assistant medical director and was making my rounds with Professor Hans Goldmann, he complained about the poor quality of the visual field measurements made by the assistants. Apparently it did not help to use a physically perfect hand perimeter (the Goldmann perimeter) when the person behind the perimeter was not perfect.

I believe that was the intellectual beginning of the automation of perimetry. Those were the times when Norbert Wiener, with his book "I Am a Mathematician," publicized the invention of servo automation and cybernetics. These thoughts excited everyone, but the question remained of how a perimeter could be automated. The first and clearly logical approach for a doctor at that time was the "automation" of the Goldmann (manual) perimeter. We began this task with great diligence and commitment of resources. It was Jean-Marie Parel of the Ecole Supérieure de Technologie de Genéve who "automated" the Goldmann instrument. Jean-Marie was at home in the fields of classical microtechnology and electronics. That was not enough. The impetus to break away from the much esteemed Goldmann perimeter and to begin anew came from Professor Brian Crawford of the National Physical Laboratories in Teddington, England. One had to believe this authority. Without him we would certainly have worked on for months.

Seldom do good things happen at the same time. But in this case they did. Professor Hans König, director of the Swiss Office of Weights and Measures in Wabern, offered me a laboratory in his new building, and I was also allowed to consult his outstanding team. Professor Pierre Koch, vice president of this office at the time, was the first person who, with great skill, supported our project. Then Professor Hans Bebie helped us for many more years. As we now received money from national funds, I could employ young physicists like Dr. A. Roulier, Dr. J. Spahr, Dr. Fankhauser, Alfred Jenni, Sam Hirsbrunner, and other brilliant minds, who approached the project, now called the Octopus project, with great eagerness. An important and perhaps crucial step was winning over Gerry Zühlke of Zühlke Engineering and his wife Helen. People like them can be found only once in a thousand years. They declared the Octopus project to be an affair of the heart and in their dedication went to the very limits of their possibilities. It was a hard struggle for years. Gerry and Helen are now retired and can probably sleep more peacefully again.

For more than ten years Haag-Streit has continued the project with great zeal. The new generation of Octopus instrument makers has now also automated the kinetic perimetry. Thus the Haag-Streit Goldmann perimeter, the gold standard for decades, has been replaced completely and with dignity from its own ranks. I think of my colleagues, who with brilliance and passion have shown strong, worldwide competitors what Swiss scientists are capable of doing.

