Syntonic Optometry*

Dr. Harry Riley Spitler
Eaton, O.

Your recent WEEKLY editorial has served to focus attention upon some work done by the writer over a period of more than fifteen years, and it is thought that your readers might be further interested in this subject. Reference to an editorial is to the one appearing on page 999, entitled, "A Field for Exploration."

While the editorial credited no one with having gone into the field, at least one article which previously appeared in THE WEEKLY indicates that the work done is known to the editor. In view of this it did seem a little strange to see no credit given to me for pioneering this field, nor to Syntonics, the name given to this new technic by the members of the first group to which it was taught over four years ago. Yet despite these editorial omisssions, the editorial could mean nothing other than this technic, hence this paper.

This field *has been* explored. Certainly, exploration does not imply that the field has been completely, or even adequately tilled. Many, many things yet remain to be done, but as much has been done as fifteen man-years would permit. The "field" has been investigated in the laboratory, in controlled biological experiments, and clinically on actual patients. Wherever possible the data have been recorded by recording instruments to avoid observational errors. The data have been correlated and co-ordinated into a *new technic in optometry*, impossible as that sounds. When I say, "new," I mean just that.

Syntonics is an understanding use of certain physical principles of light, and a knowledge of biological and physiological reactions thereto for the purpose of integrating the visual and the associated and supportive functions thereof. True enough, certain properties of the photic—visible—range of the spectrum, hitherto either unknown to optometry, or at least unused therein, have been studied, the reactions noted and these reactions interpreted and correlated for the purpose of meeting our optometric problems. In other words, it is an education in biological, physiological and reflex actions and reactions which may be altered or controlled by altering light *before* it enters the patient's eyes. Optometrists are limited to just that as the basic principle of their practice. Syntonists—optometrists who have a knowledge of the principles and method and who have an approved device for applying them—stay absolutely within that limitation, regardless of what any one who knows nothing of the technic may say. But, since syntonists know certain things and can do things for their patients that non-syntonists cannot do, it is to be expected that those "not in the know" will become vindictive and vituperative against their more fully trained optometric brothers. All pioneers have to endure such things and syntonists welcome it rather than otherwise. "Conflicts clarify."

Historically speaking, over fifteen years ago one of the instructors at Ohio State University made a suggestion for the use of filtered light during one of the steps of a refraction. This idea was brought home by the writer and tried for several months in his practice. When it worked the reaction was all that could be expected. But it failed in over ninety percentum of cases. Of course, there was a "why." But learning this "why" took about four more years of playing with the idea.

Then one morning there dawned a "bright idea." You are privileged to call it dumb luck, and you might be nearer the truth. The idea took something of this form: The way for the further development of optomtery does not lie in refinements in the field of geometric optics. This way leads into a "blind alley." Certain inspired souls still insist that optometry and geometry are only fit to pair, but that is of no concern here.

But if the *way* lies not in geometry, where is it?

Before attempts to discuss this phase of the subject, it seems fitting that we first establish a common premise. In this connection, and if anything makes my blood boil it is this, let me say that we as a class have fallen into the grievous error of defining our profession as a *method of doing something*, instead of taking a leaf from the books of other biological professions and defining optometry as a *principle of practice*. Nowhere do you find medicine defined as a pill, something to be taken off a teaspoon, or a "shot in the arm." *Never*. Definitions of method will ever serve to strangle advancement and improvement in the light of future knowledge.

So at the risk of pulling down about my head all the stone in the structure called optometry, and perhaps a few cabbages hurled at my head by over zealous defenders of the faith, I shall undertake a definition of optometry as a **Principle of Practice:** *Optometry is defined to be the application of optical principles or technical methods and devices in the examination of human eyes, the associated and supportive functions thereof, for the purpose of ascertaining departures from the normal, measuring functional powers and adapting or using optical accessories or devices for aid, improvement, integration and emendation thereof.* Undoubtedly this definition can be improved, but it is my first thought as I write this. Now, if we are agreed upon this premise, the rest of this article will require a mere hasty perusal.

*The phrase, "Syntonic Optometry," copyright 1933, College Syntonic Optometry. Dr. P. Scholler president; Dr. D. L. Gallagher, secretary–treasurer.

The late Dr. Augustine used to say, "Do not expect the child to fight life's battles with a broken sword." *Agreed.* But has not optometry been trying to do just that in a professional way? I have no great patience with those who would add modalities to optometry other than optical. As I see it this is an attempt to broaden optometry into a field not hers, yet I have no quarrel with those who believe otherwise. That is their own affair, and the investigation of the field might and probably will lead to a better understanding of some of our problems.

Optometry has built her structure on geometry and waves. Waves of what? Nothing, if you would believe the proponents of geometric optics. We were in a worse predicament than the child with the broken sword, we had the hilt but not the semblance of a blade, while he had at least a usable piece of blade in his hilt with which to fight. We merely had an imaginary blade, *literally.*

Therefore, the investigation turned from geometric optics to energy optics. For we are all agreed that light is a form of energy. Von Grotthus stated that only the energy absorbed did any work. Perfect radiators are perfect absorbers. The human eye possesses *two* black bodies, one a perfect one and one an imperfect one. The energy of the light incident into the eye must be and is completely absorbed. If so, something *must* happen. What happens may be chemical, electrical, reflex, or some biological or physiological reactions of the structures involved in seeing and the associated and supportive functions of these structures.

Investigation was begun in this direction. Many apparently useless and seemingly contradictory findings were made. Interpretation became difficult, particularly since geometric optics was still being used as a companion method. Here were two variables. One must be eliminated from consideration so that a proper evaluation of findings might be made. We therefore concentrated upon energy optics and very soon order became apparent.

Two factors, however, were soon discovered to be additionally operative. Tendencies of biological structures and the type and kind of work that could be done by the photic range of the electro-magnetic spectrum. This latter factor has been totally ignored in optometry in the past. But the evidence proves that no longer may we *safely* ignore it. Consideration *must be given to the power factor of light,* its ability to do work, physically, chemically, biologically and physiologically. This is the "blade in the sword." The syntonic technic was developed out of and around these two things.

Eyes, aside from being anatomical structures, are living biological and physiological structures and they and their associated and supportive functions are bound by and subservient to the laws of living things. Like it or not, nevertheless it is true. Syntonics does not eliminate the need for geometric optical aids and devices. But when such aids do not result in a proper integration of function, then the difficulty has its base in the associated or supportive functions of vision. Syntonics is an *entirely new approach* to any remaining difficulties the patient might have after the prescription of the best possible geometric aid by the subjective method. In other words, any such remaining difficulties call for *syntonic handling,* following which new aids will usually need to be prescribed. It is better to syntonize first. Perhaps this sounds like rank heresy. If you think so, make the most of it, my head is up. But remember there are almost four hundred other optometrists who are finding out in their practices that the above statement is a practical one hundred percentum statement of the facts. So, in this instance, heaving a cabbage may start a riot.

This is not the time nor place to go into the details of this *new method,* this *already explored field.* Opportunity is being periodically made available to all qualified and qualifying optometrists to obtain a knowledge of the physical, biological, physiological, reflex and other principles involved in syntonics, and they are privileged to attend these courses. Yet this thought should be clearly kept in mind, it is that this new technic requires a *little* basic training and a *lot* of study afterwards, then *realization.* I regret that this is so, frankly, I am proud of the approaching four hundred who have "knuckled into" the task. They are remolding optometry into the profession she should and will be.

"A Field for Exploration"? Yes. It has been explored, and it is now being developed. Syntonists have banded into the "College of Syntonic Optometry" for that purpose. A research department and an educational department are being maintained for the purpose of continued development and advancement along these lines.

In closing, a very prominent optometrist, one well out in the fore-front of things optometric, when certain patient's improvement in amplitude of accommodation were brought to his attention, said, "Say, if what you say is true, and I believe you, syntonics is knocking my stuff into a cocked hat." Regretfully for his sake, I agree.

This field has been explored, it is being developed and you might do well to investigate it. The editor knows my address, or perhaps he might be prevailed upon to tell you what he has learned about it in his contacts with those who use syntonics.

Syntonic Optometry College to Hold Third Assembly

Announcement is made by Dr. H. Riley Spitler that the third annual assembly of the College of Syntonic Optometry will be held in Eaton, O., April 7th to 9th inclusive. This decision was reached at a meeting of the board of directors recently.

One of the important matters to be considered at this meeting is the establishment of a research department or laboratory to be located in Eaton. Dr. Spitler will be in charge of the laboratory.

Reprinted From
The Optometric Weekly
November 22, 1934