## **TELLING WHAT SYNTONICS IS**

An Interview with Harry Riley Spitler, M.S., D.O.s., F.C.S.O By Frederick A. McGill, Editor Optical Journal and Review

Will you tell about Syntonics for the benefit of readers not now familiar with it?

Dr. S. – That's a rather simple question, but because it is, it becomes a rather difficult one to answer. Tell something! Why man, I could talk for ten hours and not cover a tenth of the story.

Perhaps it will be well to begin with the word itself. The word is of Greek origin, <u>Syn</u> meaning "like" or "same"; <u>tones</u> meaning "tone," "tension", <u>like tone</u> or <u>like tension</u>, <u>same tone</u> or <u>same tension</u>.

With two opposing things, it is possible to undertake the establishing of equality of tension between them. These things in opposition are ever present in reference to ocular function. The tension may exist in muscles, in the opposing divisions of the nervous system and otherwise. It is just as correct to say "syntonic eyes" as to say "orthophoric eyes".

How about a definition of the art?

Dr. S. – Let me quote it for you: Syntonics is defined as that branch of ocular science dealing with the use of selected frequencies in the visible range of the spectrum, which when applied through the optic and nervous mechanisms of the eye, improves vision and effects such reflex action in the associated and supportive physiologic functions as to bring the organism into proper environment relationships for the emendation of the visual sense.

#### Can the definition be stated in a less technical manner?

Dr. S. – Of course. I gave you the formal definition. It means simply that certain forms, so-called colored lights, are by optical means caused to enter the eye for the purpose of making vision more easy and comfortable. Such an effect must be mediated, of course, through the normally present nervous mechanisms, as they pertain to the eyes and the visual sense. The ocular problems of people are constantly changing, by reason of the different types of work required of the eyes, or due to the environmental changes, such as moving from indoors to the golf links. Such changes may not properly be compensated by the nervous mechanisms without some form of optical aid. Syntonics has, as one of its aims, the increasing of a more facile mechanism in terms of ocular responses, so that the adaptations to change may be made with the least strain and discomfort.

All that is attempted to set up or establish or reestablish balanced function, either in reference to the associated or to the supportive functions of the eyes. This must be accomplished, of course, through the nervous system and particularly that portion of it which has to do with the eyes.

Syntonists talk about amblyopic cases and the improvement of vision therein. How about this?

Dr. S. – You are right, we do use this technique in an attempt to improve the visual perceptions as well as to control the associated and supportive functions of vision. But you must keep in mind that all this work is done prior to the final determination of lenticular aids.

You mean that syntonics is in reality a part of an optometric examination?

Dr. S. – You are might say it that way.

Then it is not a form of treatment?

Dr. S. – Absolutely NOT, if you imply its use for diseased eyes.

Will you explain its purpose when used as a part of the examination?

Dr. S. – As an illustration, let us suppose that, during the geometric optical examination of a pair of eyes, certain data are secured which are inconsistent with the data already secured, or that data are found which do not fit the diagnostic picture; then an effort is made by the syntonic technique to attack the inconsistency in an effort to remove it from the syndrome, or to make conditions fit it.

What does syndrome mean in optometry?

Dr. S. – The group of symptoms which enables the optometrist to determine the type, kind and degree of departure from the normal.

You say "departure from normal". Do you mean disease of the eye?

Dr. S. - Positively not. There are hundreds of departures from the normal that are well within the upper and lower limits of physiologic function. The optometrist, by birthright and legally, is limited to this particular field. Should the result of studying the syndrome show that there exists an ocular disease, outside these upper and lower physiological limits, that case should immediately be referred to some other practitioner. You are well aware that optometrists are taught pathology in the university courses, not for the purpose of applying treatment therefore, but that such conditions may be recognized and referred.

#### Would inflammation be such a condition?

Dr. S. – Most certainly, for inflammation is outside the physiological limits. Incidentally, there are four causes for discomfort, i.e., irritation, functional disorder, structural disorder and inflammation. Obviously, the optometrist deals solely with the first three. All forms of orthoptics, including Syntonic Optometry, are intended as an approach to the solution and correction of functional and structural disorders. Sometimes, and in a high percentage of cases, removal of or compensation for the conditions removes the cause of the irritation, thus eradicating that element, if present. We must not forget that excessive activity of the eyes, and the resultant irritation, may cause a temporary vasodilation, but this must not be confused with inflammation. Such vasodilation is well within the upper and lower physiological limits and disappears when the cause is optically overcome.

A syntonist said that he had been successful in some cases of convergent strabismus by using the syntonic technic after he had failed by all other methods. One of these cases as an "alternator"

Dr. S.- Such end results are so common that syntonists expect them somewhat as routine results.

Is this technique used for the phorias?

Dr. S. – It is used for phorias. In Syntonics we approach these cases from a viewpoint opposite to that usually employed. Instead of attempting to develop an opposing function in an effort to get balance, we undertake to decrease the stimulus which causes the phoria. That also applies to the squint cases.

# How about hyerphoria?

Dr. S. – That's a nice question. "Hypers" of  $4\Delta$ , or less, can usually be corrected, although I saw one case of right hyperphoria of  $11\Delta$  which showed orthophoria after seven syntonizations. I never advise undertaking "hypers" of more than  $4\Delta$ , however.

# How about myopia?

Dr. S. - Static myopia has shown little if any change under this technique alone. In progressive cases, however, it has been found possible to stop the progress and in some cases considerably to reduce the minus power required. I recall two cases, both requiring, at the start, -22.00 D., and both reducing power after application of syntonics. One of the patients now wears -14.00 D., and the other wears -13.00 D., and both now have better visual acuity than before. Admittedly these are extreme examples.

It is claimed that there had been a reduction in a case of lenticular opacity under this technique?

Dr. S. - <u>Hotaling</u>, <u>Melvin</u> and many others have reported cases of lenticular opacities that lessened and in some cases disappeared after the mere use of Calobar absorptive ophthalmic lenses. It is my understanding that this is not an uncommon experience. In syntonics, however, the eradication of a lenticular opacity is not necessarily or specifically sought, but an effort is made to improve the vision of the patient to its maximum and to keep the retina so stimulated and active that, if a case <u>must</u> go to operation, there will be an actively functioning retina to aid the attainment of the best results from the surgeon's work. It is true that such efforts, in many cases, have shown as an end result, or at least a parallel phenomenon, a very definite lessening of the opacity. While such a result may be a desideratum it certainly is not the specific aim of the optometrist, no more so than it would be had some ophthalmic tint been prescribed.

## How about syntonics for presbyopia?

Dr. S. – In pre-presbyopes it is used. By that I mean in these individuals in whom examination might indicate the need of a reading addition at ages less than 45. We have several hundred records of persons under that age in whom amplitude of accommodation has been increased from three to as high as five-and-a-half diopters.

## How about low amplitude of accommodation in myopes?

Dr. S. - Really, that's the easiest one you've asked me yet. The best answer to that is to ask the syntonists themselves, and there are about a thousand of them. Practically a half of these in attendance here at the A.O.A. convention are syntonists.

<u>Dr. Jaques</u> has published some reference to a "pupil that contracts to light, but will not hold contraction". Has that any syntonic significance?

D. S. – Let me thank <u>Dr. Jaques</u> for that compliment. That pupillary reaction is one of the eight criteria <u>first</u> taught to optometrists as a part of the basic course in syntonic optometry. It is used as a means of classifying patients, and as a guide in applying this technique. In my opinion, and also in the minds of all syntonists, it is of the <u>utmost value</u>. When found, it should be corrected syntonically before proceeding with the rest of the examination.

Suppose that a patient has a small cornel scar which impairs his vision, would syntonics help him?

Dr. S. – I do not know, although it is not an uncommon experience to have these cases improve as much as four or five lines on the Snellen chart. All that I could say is that if the active condition which caused the scar has cleared, and if the scar is an old one, there might be some improvement, maybe not. He'd just have to try.

How about those low adduction cases?

Dr. S. – The problem here often is to increase adductive power while at the same time not disturbing accommodation. In such cases this technique is quite effective.

It looks as though you've told of a 100 percent effectivity technique. Is that the idea?

Dr. S. – I didn't intend to give any such impression. While this technique is effective, it most certainly is not a 100 per cent complete technique. There just isn't any such thing as a 100 per cent complete technique. There can never be. However, you ask the next 50 syntonists you see here at the convention what they think of the results obtained by using this technique, and you'll get 100 per cent negative answers as to whether they'd now try to practice optometry without it, but not one of them will tell you that it is a one hundred per cent effective method.

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