

Syntonic Principle Applied  
and  
Influence on Color Fields by Applying Syntonic Principle\*

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PART ONE  
SYNTONIC PRINCIPLE

A Principle is a Truth, a Fundamental law or Element, therefore, the first to consider in all teachings, in all techniques, in all endeavors to render a useful service to and for our patients, is to be positive in our own minds that the proper or correct Principle, which necessarily must be a proven one, is applied to relieve or remove a dysfunction.

Today I shall show results attained by applying a certain "Principle" or "Element" to the human eye, a technique, if you please, with unlimited possibilities to render an ocular service above par, a complete painless ocular service, (excepting surgery), a technique<sup>1-2</sup> developed by the Optometric Profession for the benefit of humanity.

Some time ago, I heard a splendid definition of "Theory". Here it is: "Theory is the vehicle which carries us from the known to the unknown."

Syntonic Optometry is not a theory; it is a known<sup>3</sup> branch of ocular science consisting of the use or the elimination of certain light frequencies within the visual spectrum applied to the human eye, whereby we ameliorate the ocular physiological functions.

We have passed through the theoretic stages, and now we have the knowledge! The State of Ohio recognized us by granting a charter to teach the Syntonic Principle<sup>4</sup>. The next stage we must pass through is to disseminate the knowledge and make it available to the profession, thereby the scientists and the general Optometric practitioners will recognize the importance of Syntonic Optometry.

The above stages belong to the Department of Research and Education, not by themselves, but by the help of you and I, who must keep our records as accurate as possible, showing what we accomplish by the use of Syntonics, and furnish information to the two Departments regarding our successes and our failures.<sup>5</sup>

I said failures for a specific reason. Many practitioners are looking for some cure-all technique. They are looking in vain, there isn't any such element. If there were no failures (patients who cannot receive relief from their abnormalities by technique now available), you and I would live in a Utopic atmosphere. It was the failures which we encountered in our every-day practice which brought

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forth theories, the theories later became proven knowledge, the knowledge reduced the number of failures, then as the environment<sup>6-7</sup> changed, new types of failures, or dysfunctions became nightmares which brought forth new theories which in turn gave us more knowledge and increased our numerous techniques, each one useful in its own field.

Several practitioners have said that they “never studied Greek”, they seem to think that Syntonists are endeavoring to shroud the technique into something Hellenic, or mystify Syntonic Optometry.

To those of such opinion, may I remind you that the chemists use formulas which I know nothing about, because I am not a chemist. The Optometric Extension Program group uses numerals<sup>9-10</sup> to designate certain findings or functions, the Physicians write their prescriptions in Latin, all which is done for constructive and practical reasons, namely, enabling each practitioner, in each profession, to speak the same language, which is very convenient and effective.

In Syntonics, glass filters transmitting certain frequencies are designated by Greek Letters. For example, red is named “Alpha,” and rightly so, because Alpha means the beginning, and red is a sensory stimulant. Red has the longest wave length in the visible spectrum. It is the beginning (Alpha) of the light frequencies used in Syntonics.

Likewise, all the major colors, transmitters or filters are named for some specific reason. Take violet for an example, it has the shortest wave length and is named “Lambda,” which means a “junction,” and violet is just that because it is a slight motor depressant and a sensory stimulant.

There is nothing wrong in the use of Greek letters or words. Every profession uses Latin and Greek; your Gould’s Medical Dictionary is full of such words.

The foregoing is not a defense of Syntonics, it is presented to encourage the study of Syntonic Optometry<sup>11</sup> and to clarify<sup>12</sup> a few misunderstood aims, teachings and objects of the College of Syntonic Optometry.

The knowledge regarding Syntonic Principle is not completed nor at the end of the road. Further theories will produce more knowledge from men such as: Spitler, Simpson, Crawford, Hannis, Youngdahl, Babcock, Frye, Deane, McChesney, Mayer, Cline, Caye, Dalton, Scott, Brakeman, Scholler and a host of others from coast to coast, from Canada to the keys of Florida, who are gathering information pertaining to the subject; Syntonic Principle or Syntonic Optometry.

This brings me to the second part of this paper.

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PART TWO  
 SYNTONICS PRINCIPLE APPLIED  
 And  
 INFLUENCE ON COLOR FIELDS BY APPLYING  
 SYNTONICS PRINCIPLE  
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RX # 19369: The first case I will present is a very simple B Type case, typed according to the Optometric Extension Program teachings. Occupation, clerical; age, 20; Syntonics biotype: health, good; normal campimetry field; chief complaint, occipital pains when reading or working at his desk. No Syntonics prescribed.

The reason for presenting this case is to show an almost ideal color field so that we may be able to compare it with complicated cases which will follow.

O.S.				O.D.			
Meridian	Green	Red	Blue	Meridian	Green	Red	Blue
0	23	25	28	0			
45	16	18	20	45	15	18	20
90	13	17	19	90	15	17	19
135	15	18	20	135	16	18	20
180				180	25	27	28
225	14	18	20	225	14	18	19
270	15	18	20	270	15	18	19
315	16	19	20	315	14	18	20

This is a splendid chart of a perfectly healthy young man; the kind of case I seldom have the pleasure to serve, the kind of case which will be 100 per cent. Comfortable by using the proper lens correction.

Here is a complicated case. RX 18264: sex, female; age 24; asthenic bio-type; occupation, stenographer; married; no children; chief complaints, temples, throb; sees spots before her eyes, nervous and jumpy, thought her lenses were wrong. Lens correction, minus cylinders against the rule.

Dull, cornea; pupillary reflexes, Alpha Omega; blepharitis; absolute convergence or amplitude of triangulation, negative; low reading rate.

Iridiagnosis reveals stomach, acidosis (eats too much fried food), appendix interference. Ophthalmoscopy, pale, pink normal fundus.

Does not type according to Optometric Extension Program teachings.

Campimetry charts contracted and interlaced, slight enlargement of blind spots.

Here are the campimetry charts. The first was taken in the forenoon, the second in the afternoon. Fields of this nature are often found in women with irregular menstrual periods, also in neurasthenic case.

9 A. M., 11-11-39

	O.S.				O.D.		
270	7 1/2	8	5 1/2	270	6	10	5
0	9	11	12	0	9	10	11
45	8	11	13	45	8	9	6
90	8	10	12	90	8	9	7
135	8	10	11	135	8	9	6
180	8	10	9	180	9	11	6
225	8	10	11	225	6	8	5
270	9	11	12	270	8	9	6
315	8	10	11	315	7	8	6

5 P. M., 11-11-39

	O.S.				O.D.		
Meridian	Green	Red	Blue	Meridian	Green	Red	Blue
0	5	6	8	0	6	9	8
45	5	6	6	45	5	8	6
90	5	7	6	45	6	8	7
135	4	6	7	135	6	8	7
180	7	9	8	180	7	9	10
225	6	8	9	225	5	9	10
270	7	8	9	270	5	8	10
315	6	8	9	315	4	9	10

Blind spots enlarge in both the forenoon and the afternoon.

Prescribed Syntonics, and eliminated the use of lens correction.

The following Syntonic formula was prescribed: N/L Mu Delta, alternated with Alpha Omega.

Now look at the field chart after 15 visits:

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	12	26	29	0	11		
45	11	16	18	45	11	13	14
90	11	14	15	90	10	14	15
135	11	13	15	135	11	17	18
180	10			180	10	25	26
225	11	13	15	225	10	14	17
270	12	15	18	270	10	13	15
315	11	16	19	315	10	12	13

Notice that the fields are in almost normal ratio. The blind spots improved remarkably well. She stated that she could work with comfort. No lens correction prescribed.

I had her full confidence and she told me her complete history which is not necessary to give. Sufficed to state, she had been given shorts. I advised a complete physical examination and if negative to consult her physician about the advisability of bearing children.

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The next case No., 19353, is the kind which will either make or break a practitioner's reputation. A young women; occupation, secretary; age, 20 ½; Syntonic leaning toward asthenic biotype; using a lens correction of O.D. minus 1.00 sph; O.S. minus 1.25 sph. The practitioner had advised her to use the lens correction for near work and at moving pictures.

Perfect health and teeth. Goes in for athletics, such as: swimming, bowling, tennis, golf, and plenty of motion pictures. Her chief complaint was that the lenses felt too strong.

Amplitude of triangulation (push up test) no diplopia at 2 centimeters from eyes. Ophthalmoscopy, and pupillary reflexes, negative. Iridiagnosis showed healed stomach and renal scars. I was then advised that she had had diphtheria when a baby.

Habitual phorias, with and without lens correction, at near and at distance, esophoria. Dynamic Skiascopy and cross cylinder findings revealed plus acceptances at near, which was further revealed in the equilibrium findings; that is, the adductive stimulation and inhibition, the negative and positive fusional reserve, and the clear area of negative and positive accommodation. She was a B2 Type, according to the O.E.P teachings.

Let's now look at the campimetry chart.

BEFORE SYNTONICS

1-25-40

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	11	23	25	0	8		
45	11	15	19	45	9	13	16
90	10	12	15	90	10	13	15
135	10	12	15	135	9	14	18
180	10			180	9	24	27
225	12	14	15	225	14	17	23
270	14	17	20	270	13	14	17
315	15	19	23	315	12	14	15

Blind spots normal, all color fields contracted, but not radically so, unless we consider the contracted green field as a nerve interference, which we did. Not neurasthenic, however, as in neurasthenia, the green and red have a tendency to interlace.

Prescription: eliminate the present lens correction entirely, and give Syntonics as follows: L Omega, alternated with N/L Alpha Upsilon.

Nineteen days later, a progress examination was made at which time the finding revealed the following lens acceptance; At distance, O.D. minus .25 cyl, ax 90; O.S. minus .50 sph; at near, O.D. plus 1.00 sph combined with minus .25 cyl. ax 90; O.S.50 sph. Lens correction for near was prescribed.

Here is the campimetry chart:

AFTER SYNTONICS

2-14-40

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	25	28	31	0			
45	15	18	21	45	12	17	21
90	11	16	19	90	11	15	18
135	12	17	21	135	12	18	21
180				180	23	27	31
225	12	14	15	225	14	17	23
270	14	17	20	270	13	14	17
315	15	19	23	315	12	14	15

You will notice that it is almost identical with the chart shown in the first case presented.

She is happy and comfortable and here is the reason: By applying Syntonics, the sympathetic and para-sympathetic nervous systems were placed in normal function, the esophoria eliminated and the plus lens correction accepted which took care of the triangulation reflexes and the equilibrium finds.

She never was a myope, but because she saw better at the distance, the practitioner gave her the minus 1.00 and minus 1.25 sphs.

\* \* \* \* \*

Many patients with ocular fatigue do not need a lens correction. Case No. 18874-9 is that type. Occupation, electrical contractor; perfect health; 36 years old, pyknic bio-type, complains about the glare bothering him, could not read blue prints without headaches, had seven stye operations during the past years. He was referred to me for consultation.

No lens correction demanded at distance or at near. The eighth stye was making its appearance so we prescribed Syntonics, using the following formula: N/L five minutes, red before left eye (the stye was in the left lower lid); Mu Pi, ten minutes, alternating with Mu Pi plus D. The Nascentization period was gradually decreased to three minutes – the Syntonization period was gradually increased to fifteen minutes.

Over a period of six weeks, two styes came to a head and secretion eliminated without pain and no loss of time from work. We then furnished him with a pair of plano lenses made from a certain glass with a low transmission of the red light, and a high transmission of yellow, green and blue. Case was dismissed on February 1, 1940. On May 24<sup>th</sup>, I saw him and he stated that no symptoms of styes had returned.

This is one phase of Syntonics Optometry.

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Here is one of the many grief cases which have come to my attention recently.

A young man, occupation, bookkeeper; good health, no operations; left eye turn in, S.A. bio-type.

This patient has had several examinations and several pairs of glasses, along with “gyroscopic exercises” but continued having frontal headaches. Lens correction consisted of minus cylinders below 1.00 diopter with the rule.

Theoretically, according to the Ophthalmometer, he should accept the following lens correction: O.D. plus 1.50 sph combined with minus 2.25 cyl; O.S. plus 1.75 sph combined with minus 1.25 cyl.

Habitual phoria findings unreliable, so was the so-called ductions. The cross cylinder findings were taken monocular, (one eye excluded) which revealed an acceptance of a weak plus sphere added to the minus cylinder findings revealed by retinoscopy and subjectively.

The gross cross cylinder findings were prescribed and Syntonics applied immediately following completion of the examination as follows: N/L red on left, three minutes; N, twelve minutes, then for 10 days, N/L red on left, three minutes; Delta Omega, twelve minutes.

Now let's look at the campimetry chart (which was taken monocularly) as charted before Syntonics were applied.

1-15-40							
O.S.				O.D.			
Meridian	Green	Red	Blue	Meridian	Green	Red	Blue
0	8	9	21	0	7	10	
45	6	10	12	45	6	11	13
90	7	10	11	90	7	11	15
135	8	11	14	135	6	12	16
180	9	10		180	7	25	27
225	8	10	12	225	8	14	18
270	8	10	12	270	9	11	12
315	6	9	13	315	8	10	12

O.U. blind spots misplaced upward (downward on chart) towards the macula.

(NOTE): Size, shape and location of the blind spots are of vital importance in diagnosing a case).

Twelve days later we could take the habitual phorias satisfactorily, 8 esophoria at distance, 17 esophoric at near. The disassociated and associated cross cylinder were taken satisfactorily, which revealed further increase in plus lens acceptance, which was prescribed.

Syntonics was continued for 11 days, after which a progress examination was made. The habitual phorias had decreased to 6 esophoria at distance, 8 esophoria at near. The field chart showed marked improvement.

The Syntonic prescription or formula was altered to N/L, red on left, three minutes, Omega plus N, twelve to fifteen minutes, followed with three minutes of rest before leaving the office.

After fourteen visits, covering a period of four weeks, another progress examination was made. It was then possible to make a complete examination.

One interesting finding at this time was the accommodative stimulation. It had increased from practically nil at the time of the first examination to 9 ½ diopters. The habitual phoria findings showed improvement, the campimetry chart could be taken binocular a satisfactory macular stereopsis was found which showed that he was not suppressing the left eye.



Here is the campimetry chart. There is not much change in the location of blind spots, but notice the improvement in the fields.

3-4-40

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	24	25	27	0	10		
45	13	15	18	45	45	15	20
90	11	12	14	90	13	16	18
135	10	12	14	135	16	18	24
180	10			180	25	28	30
225	9	10	15	225	12	18	24
270	11	14	17	270	10	14	16
315	11	15	18	315	9	11	13

Blind spots normal size, still misplaced, but not quite as much.

Case dismissed for three weeks. Upon his return, he stated that he had not had a minute of ocular discomfort. Dismissed for six weeks.

Final progress examination was made on May 17, 1940. Habitual phorias now show 4 esophoria at distance, also at near. Field chart normal in ratio, blind spots normal in size and location, no symptoms. Happy as a lark and had gained seven pounds.

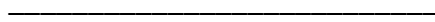
The final lens correction was, O.D. plus 1.50 sph combined with minus 2.25 cyl ax 10; O.S. plus 1.50 sph minus 1.00 cyl ax 2 ½. This, you will recall, is the theoretical correction for the right eye; the left eye accepted ¼ diopter less plus than the Ophthalmometer indicated.

The visual acuity with present lens correction is, O.D. 1.00% plus, O.S. .80% plus, against O.D. 1.00% minus, O.S. .40% minus with correction worn when we began the case. Case dismissed until next birthday, May 24, 1941.

Someone may ask about the esophoria. I am not worried about it. Past experience in similar cases has revealed that the esophoria takes care of itself after the application of Syntonics.

Let me tell you about a nice old lady RX # 16814, 63 years of age, chief complaint, didn't believe the lenses were right as she could not read very long at a time. History: had pink eyes when a child, eyes sore and blood shot ever since, no eyelashes, nothing but stumps, and the lid itched at all times, excessive lachrymation.

There was nothing wrong with the lenses, her spectacles needed a little adjustment. I decided to use Syntonics to give her some help if possible. Formula used: L Mu Upsilon and Delta Upsilon, which stopped the itching and "believe it or not," the eyelashes began to grow and today her eyelashes are as long as mine. That was three years ago; she is still going strong for me and for Syntonics.



Many times, I am asked how about patients living in distant towns, on farms, or so situated on account of work, or otherwise, that it is impossible for them to come to the office for Syntonics?

There is a right answer to every question, and the more simple the answer, the easier it is to comprehend. Here it is; "Prescribe a temporary lens which will transmit the desirable light frequencies.

I will prove my answer by presenting case # 19129-9.

Sex, female, asthenia bio-type; age 16 1/2; high school student; works in the afternoons; studies at night; good health, has had no operations, chief complaint, frontal headaches, which migrate to temples when studying, and periodical temporal headaches. Referred by family physician.

Objective examination by slit lamp, loupe, and ophthalmoscope, revealed pale normal fundus, stomach interference, (on questioning her, she stated that she was crazy about sweet and starchy foods), face full of pimples, amplitude of triangulation (push up test) diplopia at 17 12 centimeters (seven inches).

The ophthalmometer findings revealed the following lens requirements: O.D. plus .62 sph combined with minus .50 cl ax 180, O.S. plus .75 sph combined with minus .50 cyl ax 180.

Macular stereopsis, 20 per cent.

Habitual phorias were 5 exophoria at distance, 10 exophoria at near.

Static retinoscopy, high; dynamic low.

Adduction, convergence, and abduction, low.

No cross cylinder and equilibrium findings indicated an acceptance of minus lenses.

Amplitude of accommodation, low

Accommodative stimulation and inhibition, low

Remember this, she could not come to the office, her family physician had sent her to me after he had failed to relieve her headache, Optometry was on trial – I had to deliver the goods. Or else. -----

A plano lens was prescribed, ground from a certain glass which permits a high transmission of yellow and green, and a low transmission of red and violet, the lenses to be worn constantly, and to return in three days.

At the end of three days, she stated "THAT HER HEAD WAS FEELING SOMEWHAT BETTER!" The high exophoria had decreased slightly. Amplitude of triangulation (push up test) was 10 centimeters (four inches). Ductions improved, net cross cylinder findings indicated plus .12 sph acceptance added to the minus cylinders. Equilibrium findings showed an increase in adductive stimulation, adductive inhibition remained practically the same, so did the amplitude of accommodation. Accommodative stimulation and inhibition remained low.

We instructed her to continue using the same lenses for one week and return.

Upon her return, she stated that "HER HEAD FELT ALL RIGHT, THAT SHE COULD STUDY WITHOUT MUCH TROUBLE," and here are the findings:

Stereopsis 45%, 1 ½ exophoria at distance, 6 ½ exophoria at near.

Static and dynamic retinoscopy, subjective finds, not cross cylinder findings, equilibrium findings, accommodative stimulation, and inhibition findings all showed the acceptance of plus. Amplitude of accommodation, negative.

Lens correction prescribed, O.U. plus .50 cyl, clear glass, for constant use.

That was several months ago, she has not returned for a progress examination, but has promised to come in when school closes. She says she is comfortable and that "THE HEADCHES HAVE NOT RETURNED." Her skin has cleared up.

She and her physician are happy and so am I!

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I could go on telling you almost unbelievable stories about "Syntonic Principle Applied," but will stop after the next case which is of such a nature that neither lenses nor Syntonics could help very materially.

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RX # 17950. History: has had a number of spectacles, none of which gave him complete satisfaction. Occupation, barber: had been examined by Optometrists and Oculists, all of whom assured him of comfort and satisfaction. None of them delivered the goods and here is the reason. Look at the campimetry charts. I have three of them, all showing neurasthenia combined with toxemia.

\* \* \* \* \*

10:40 A. M.

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	7	10	5	0	8 ½	10	7
45	5	7 ½	3	45	5	6	5
90	6	7	4 ½	90	4	6	8
135	4	5	5	135	4	5	3
180	5	7	6	180	5	8	3 ½
225	5	7	6	225	5	8	3 ½
270	7 ½	9	5 ½	270	6	10	5
315	6	8 ½	5	315	6	9	5

12:30 P. M.

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	6	8	1 ½	0	7	10	9
45	4 ½	7	1 ½	45	5	7 ½	6
90	5	7	2	90	4	10	5
135	5	8	2	135	3	6	4 ½
180	5	10	2 ½	180	5	8	6 ½
225	5	11	1 ½	225	4	5	4
270	5	12	1	270	5	8	7
315	5	20	1 ½	315	6	10	5

2:20 P. M.

Meridian	O.S.			Meridian	O.D.		
	Green	Red	Blue		Green	Red	Blue
0	6	8	10	0	5	7	9
45	5	6	8	45	4	6	8
90	4	6	5	90	3	5	7
135	5	6	5	135	4	5	7
180	4	6	7	180	5	7	8
225	5	7	6	225	5	6	7
270	5	8	6	270	5	7	8
315	4 ½	6	9	315	4 ½	6	8

The blind spots kept increasing in size. In the third chart, the blind spot in the right eye was five times larger than normal, and the left, four times larger than normal.

Notice that the right eye in the last chart is contracted. All the rest are contracted, constricted and interlaced.

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Gentlemen, I have given you briefly a slight insight into "Syntonic Principe Applied." It is a subject most fascinating, effective, and pleasant. No pain, nor aches. Syntonic Optometry is not the answer to the maiden's prayer. It is, however, a technique which answers the "cry in the wilderness" for something of a non-medical nature, which will enable us to render a complete ocular service (excepting surgery).

In conclusion, I wish to state that the cases I have presented are not of a clinical nature, but a few picked at random from my everyday practice.

I THANK YOU.

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