

## Appendix II Fingerprint History and Research

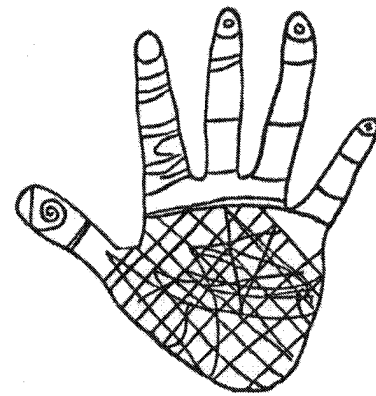
### History of Dermatoglyphics

Harold Cummins, MD, is known as the father of dermatoglyphics. Cummins coined this scientific term for the study of fingerprints and related line and hand shape designations in 1926. His extensive research into Down Syndrome and the embryonic development of fingerprints is largely responsible for bringing the field to the attention of the medical profession and the general public. Noel Jaquin, a contemporary of Cummins, plays a similar central role for hand analysts. Let's start our tour by going back thousands of years, working forward to Cummins and Jaquin on our way to the present.

### Early History

Cave drawings and petroglyph diagrams provide a record of early man's interest in hands; however, the significance of these pre-historic samples is subject to broad interpretation.

What can be stated with certainty is that as early as 500 BC Babylonian business transactions were recorded on clay tablets that include fingerprints. At approximately the same time, Chinese documents had clay seals imprinted with the fingerprint of the author. Some early pottery is similarly marked. Whether this means it was known that a fingerprint is a certain signature of personal identity cannot be proven one way or the other.



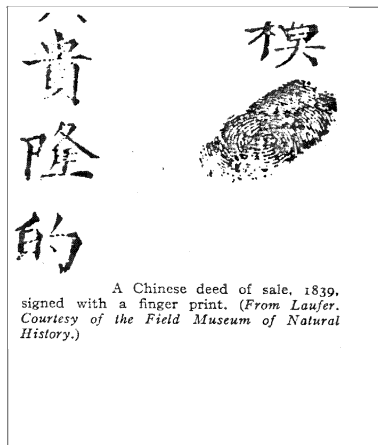
Aboriginal petroglyphs from Nova Scotia

On the hand analysis side, things go back further but with less evidence. I have been told by several hand readers versed in eastern traditions that the study of fingerprints began in India over five thousand years ago. It is written that Aristotle traveled to India, learned palmistry and taught it to his pupil Alexander the Great. Any fingerprint system that had been in use at that time, however, is beyond our reach today. Fred Gettings, noted author of several books on hand analysis, writes:

There is no remembered beginning to an art already old before Aristotle was born...[T]he poor fragments...which have survived stand as tantalizing evidence of some long-past Golden Age of chiromantic knowledge.<sup>1</sup>

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<sup>1</sup> *The Book of the Hand, An Illustrated History of Palmistry*, Fred Gettings, page 159



Perhaps the most bizarre use of fingerprints in recorded history dates to sixteenth century China where the sale of children was concluded by placing their hand and foot prints on the bill of sale.

The first “official” mention of fingerprints in medical literature was in 1684: Dr. Nehemiah Grew lectured to the Royal College of Physicians of London about the interesting markings found on human fingertips. As scientists explored the globe in the next two centuries, cataloguing animal and plant species and learning about the basic form and function of the human body, the study of fingerprints inched forward. Some notable landmarks:

1685	Gouard Bidloo	First book with detailed drawings of fingerprints
1686	Marcello Malpighi	Professor of Anatomy at the University of Barcelona
1788	J.C.A. Mayer	First observations of fingerprints under a microscope First to write out basic tenets of fingerprint analysis “Although the arrangement of skin ridges is never duplicated in two persons, nevertheless, the similarities are closer among some individuals. In others, the differences are marked, yet in spite of their peculiarities of arrangement, all have a certain likeness.” <sup>2</sup>
1823	John E. Purkinje	Professor of Anatomy at the University of Breslau First fingerprint classification system
1833	Sir Charles Bell	Anatomist: studied structure and function of hands <i>The Hand: Its Mechanism and Vital Endowments as Evincing Design</i>
1858	Sir Wm. Herschel	British Chief Administration Officer, Bengal India First to use fingerprint identification on a mass scale
1880	Dr. Henry Faulds	Tsukji Hospital, Tokyo; article in Nature <sup>3</sup> Suggests picking up fingerprints at crime scene
1883	Mark Twain	<i>Pudd'nhead Wilson</i> : Dramatic fingerprint identification secures murder conviction

<sup>2</sup> Ibid, page 13.

<sup>3</sup> Ibid, page 15

### The Will West Case

At the turn of the 20<sup>th</sup> century, Will West was brought to Leavenworth, Kansas for incarceration. When questioned about his prior record, West denied ever having been jailed. The Bertillon Measurement System was employed (detailed facial measurements used to establish identification) and a match was found in the prison records.

The matching file included the Bertillon measurements and a photograph that looked just like the new prisoner. The name on the file was William West. The only problem was that William West was already in prison, serving a life sentence for murder!

Fingerprints were taken of William West and compared to the new prisoner, Will West, proving beyond a doubt that these were two distinct individuals. In one fell swoop, fingerprint analysis leapfrogged three alternate identification systems: name, photo, and the Bertillon System.

1892	Sir Francis Galton	Anthropologist, cousin of Charles Darwin First practical method of fingerprint identification Responsible for basic nomenclature Scientifically demonstrated permanence of fingerprints, first twins research
1897	Harris Hawthorne Wilder	First American to study dermatoglyphics Named the <i>a</i> , <i>b</i> , <i>c</i> , <i>d</i> triradii points Invented the Main Line Index, studied thenar and hypothenar eminences, zones II, III, IV
1904	Inez Whipple	First serious study of non-human prints
1923	Kristine Bonnevie	First extensive genetic studies

### Harold Cummins, MD

Sixty years after it was published, Cummins and Midlo's seminal work, *Fingerprints, Palms and Soles* (1943) remains the standard reference work in dermatoglyphics. Cummins applied himself to all aspects of fingerprint analysis, from anthropology to genetics, from embryology to the study of malformed hands. He pulled together the diverse work of his predecessors and added original research. His famous Down Syndrome studies predicted a genetic link to the disease based upon the presence of the Simian Crease. Staking his reputation on research that only became scientific "fact" two decades later cemented his place in history and brought national attention to dermatoglyphics.

## Recent History

Although Cummins stands alone as the giant in his field, other researchers have made a significant contribution, including L.S. Penrose,<sup>4</sup> Sarah B. Holt<sup>5</sup> and Alfred R. Hale.<sup>6</sup> Particularly pertinent to *LifePrints* is the work of John J. Mulvihill, MD and David W. Smith, MD<sup>7</sup> whose comprehensive paper concludes that **fingerprint formation conforms to volar pad topography. In other words, fingerprints are a map.** Mulvihill and Smith build on Bonnivie, Cummins, Penrose, Hale and others. They cite primate studies showing that fingerprint patterns coincide with the location of walking pads: they review embryonic studies and make observations of malformed hands. They employ mathematical models. After exhaustive research, their findings can be summed up as follows:

6 - 8 weeks after conception	Eleven volar pads form on each proto-hand
10 - 12 weeks	Volar pads begin to recede
13th week after conception	Skin ridges (fingerprints) begin to appear, taking the shape of the receding volar pad
21st week after conception	Fingerprint patterns are complete

## Common Dermatoglyphic Variables

When a dermatoglyphic study is done, the common practice is to compare one group of individuals to another using a series of common variables. Variables are selected for mathematical purposes only. After the numbers are collected, either the test group shows a high enough degree of variance from controls to be statistically significant or it does not. The following is a list of the most common variables currently in use.

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<sup>4</sup> "The permanent configuration is the result of laying a carpet of parallel lines, in some way as economically as possible, over the contours presented by the foetal hand." Dermatoglyphic Topography, L. S. Penrose, *Nature* (205) Feb 1965 p. 544

<sup>5</sup> *The Genetics of Dermal Ridges*, Sarah B. Holt, 1968

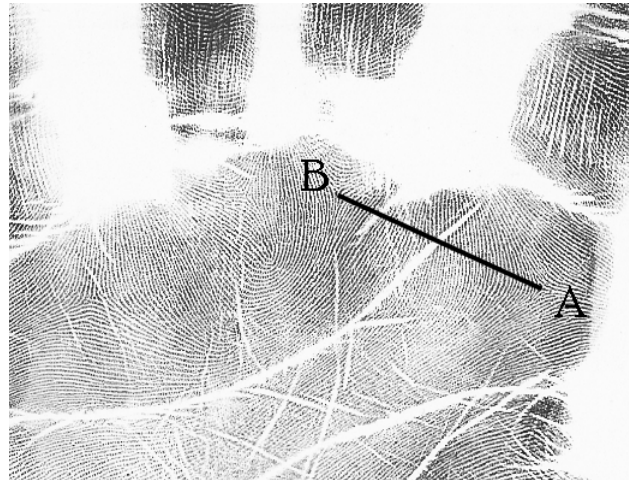
<sup>6</sup> Morphogenesis of Volar Skin in the Human Fetus, *American Journal of Anatomy* 91:147-173, 1952

<sup>7</sup> The Genesis of Dermatoglyphics, John J. Mulvihill, MD and David W. Smith, MD, *J Pediatr*, Oct 1969

## 1. *a-b* Ridge Count

The *a-b* ridge count is the number of fingerprint lines between the *a* triradius point and the *b* triradius point. 39.3 is the mean.

Other ridge counts, for instance the *b-c*, *c-d*, *a-d* ridge count and the combination of left and right hands are also used, though not nearly as often.



## 2. Pattern Intensity



Arch

Loop

Whorl

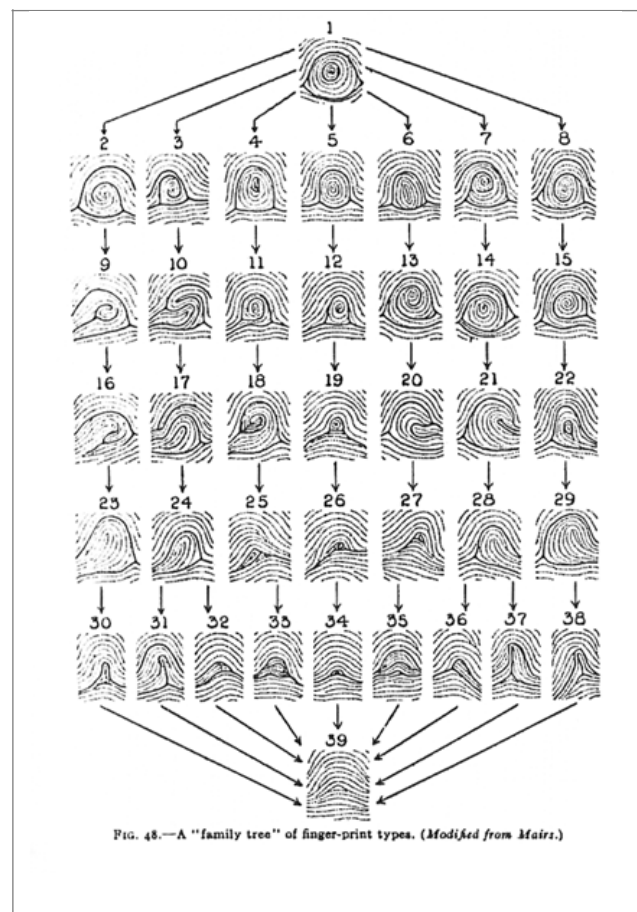
Pattern Intensity is the total number of triradii on all ten fingers.

A triradius is a point where the pattern deviates into three directions.

Arches have no triradii. Loops have one.

Whorls have two.

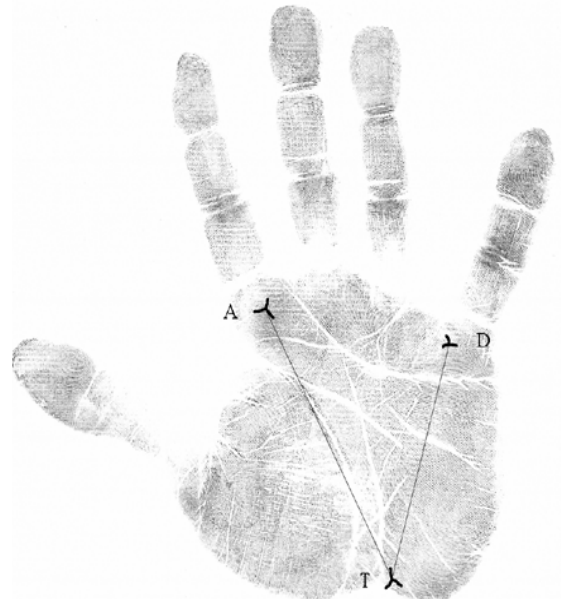
The Arch, Loop, Whorl Sequence, a continuum of fingerprints from the most basic arch to the most concentric-circle-at-its-core whorl, is pictured on the right.



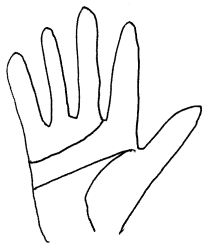
### 3. *atd* Angle

The *atd* Angle is made by connecting the *a*, *t*, and *d* triradii points. The lower *t* point is always used if there are more than one.

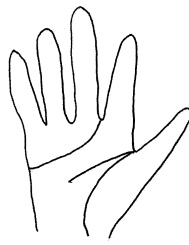
The mean *atd* Angle is approximately 45 to 50 degrees. The *atd* angle changes as a person ages.



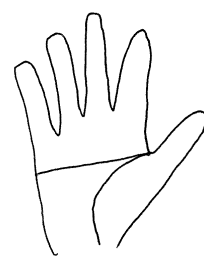
### 4. Palmar Crease Line Comparisons, absence or presence of Sydney Line or Simian Crease



Sydney Line: Head line goes completely across palm



Normal arrangement: Heart, Head, Life lines

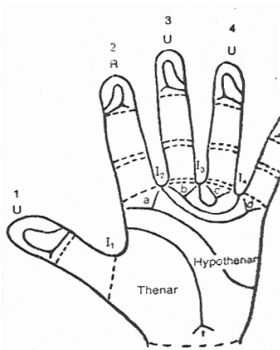


Simian Crease: Heart and Head joined

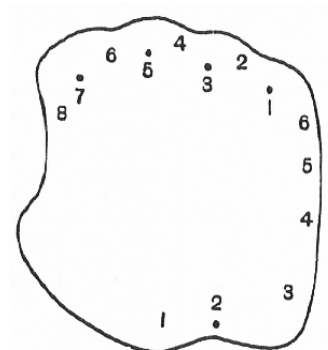
### 5. Main Line Index

The Main Line Index is a mathematical formula showing degree of transversality. To determine the MLI, track the lines from the *a* triradius point to a location on the outer edge of the palm and add it to the number derived from the *d* line terminus.

*a* line terminates at 3  
*d* line terminates at 6  
 Main Line Index = 9



From a review article by Preus and Fraser



Palm blowup with terminus numbers

## 6. Statistical Comparison of Pattern Types

How many subjects have whorls on the thumb compared to the general population? Etc. The following statistics come from Scotland Yard, 1905, 50,000 sets of fingerprints.

	Whorl	Composite	Peacock	Ulnar Loop	Radial Loop	Tented Arch	Arch
<b>Thumb</b>	25.5	9.3	0.5	60.9	0.2	0.01	3.5
<b>Jupiter</b>	23.5	3.2	2.2	35.2	24.7	2.1	8.5
<b>Saturn</b>	13.5	1.7	1.0	74.1	2.5	0.7	6.3
<b>Apollo</b>	28.5	0.9	5.1	62.3	1.0	0.1	2.3
<b>Mercury</b>	9.1	0.5	1.8	87.6	0.1	0.01	0.8

## 7. Statistical Comparisons of the Thenar, Hypothenar; Areas II, III, IV

Does Area II have a loop or whorl? How many in the subject group have such a marking compared to average?

According to the Scotland Yard study of 1905, the hypothenar eminence (the Moon zone to hand analysts) has whorls in only 6 cases per thousand; thenar (Venus) whorls are even less common. Certain formations occur with greater frequency in particular population subsets as we will see shortly.



## Adding the Arch, Loop, Whorl Sequence to the Standard List of Dermatoglyphic Variables

Thousands of studies to date confirm the connection between dermatoglyphics and medical and psychological conditions. Check the Index Medicus (the medical library publications list) for any year since 1926 if you want to learn more. Don't have your Index Medicus handy? Here is a small sample of articles listed:

*Am J Psychiatry* Ap 99 156(4) 617-23: Minor physical anomalies, dermatoglyphic asymmetries and cortisol levels in adolescents with schizophrenia personality disorder Weinstein DD et al.

*Anthropol AnZ* Dec 98 56 (4) 351-65: Dermatoglyphics of down syndrome patients in Malaysia Than, M

*Neurobiology (BP)* 98 (6)3 373-80: Dermatoglyphic analysis in children with cerebral palsy Simsek, S

There is no real debate on the issue; dermatoglyphic markings are a diagnostic indicator.

Diseases with genetic origins have received the most scrutiny (Trisomy, Tay Sachs, etc.), but statistical correlations have been found in the fingerprints of those with Alzheimer's, tuberculosis, diabetes, cancer, and many more medical conditions. At least 34 research papers have been published on dermatoglyphics in schizophrenia. Until a few years ago when DNA testing took over, the most scientifically acceptable test to determine whether twins came from the same egg or not was the dermatoglyphic test.

There is a lot more to the study of dermatoglyphics than I have described above, but the fact remains: different dermatoglyphic profiles are associated with different population groups, medical conditions, and abnormal behavior patterns. For some reason, however, no Index Medicus article appears in which the Arch, Loop, Whorl Sequence (the centerpiece of the fingerprint system presented in this book) has been studied. Although named as early as the 1930's by Dr. Harold Cummins, the father of dermatoglyphics, no one has added the Arch, Loop, Whorl Sequence to the standard list of dermatoglyphic variables.

Why not? No particular reason. There are plenty of other variables already available for study. For instance, take the *a-b* ridge count. Most *a-b* ridge counts vary between 38 and 42, but those with Wilson's disease tend to have *a-b* ridge counts skewed differently from Lupus patients, and so on. The *a-b* ridge count is a standard dermatoglyphic variable, but hardly anyone studies the *c-d* ridge count. Like the QWERTY keyboard, *a-b* simply got there first. In like manner, the Arch, Loop, Whorl Sequence has not been discounted as much as it hasn't been counted yet. However, if employed, the ALW Sequence has a variety interesting potential applications.

#### **Application of Dermatoglyphic Variables from a *LifePrints* Perspective**

In the American Journal of Medical Genetics (December, 1990, pages 482-488) authors Seltzer, Plato and Fox found "A pattern of six or more digital whorls was identified more frequently in women with breast cancer than in those without the disease...The positive predictive value...was comparable to that of mammography and that of breast biopsy." Wow, that is interesting!

This does not mean that women with six or more whorls will definitely get breast cancer nor that those with fewer than six whorls are immune. It is only a statistically significant indicator (one that was not verified in follow up studies). Then again, if you have nine whorls and a family history of breast cancer you may want to increase the frequency of your medical checkups.

Let me propose a thought experiment. Assume six whorls does indicate higher-than-average incidence of breast cancer. Let's add in the Arch, Loop, Whorl Sequence and Soul Psychology and see what possibilities arise.

According to the system presented in this book, if breast cancer is associated with six or more whorls then breast cancer correlates with a higher than average incidence of servitude behaviors. Could servitude be one causal factor in breast cancer? Why not? There are Type A behaviors said to increase the risk of heart disease, why not Type C behaviors that increase the risk of breast cancer? Again, this is only a thought experiment, a proposed study that has not occurred, but it is a study that requires no new technology to be put to the test.

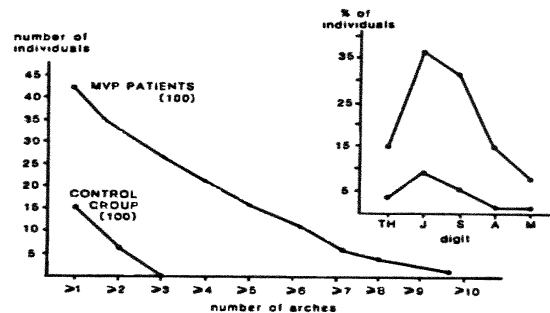


Let's assume six whorls does mean increased likelihood of servitude and increased risk of breast cancer. At the IIHA we have identified six line markings associated with servitude (there are hand shape indicators as well, but let's focus on the line formations). What if, in conjunction with a standard dermatoglyphic test, these six indicators are looked for? That is all a researcher need do. Indicator number one: present; indicator number two: absent. A chart is made keeping track of the percentage of participants with six out of six indicators, five out of six, etc. These sub-groups are monitored over time along with their control groups. My theory is that if a high numbers of whorls is associated with breast cancer (or any other disease for that matter) then increased servitude behavior indicators will correlate with increased onset compared to controls.

The test I am proposing not only marks higher statistical likelihood of breast cancer, it gives the prospective breast cancer victim something she can do about it. Get servitude counseling, join an "I Am A Servitude-Type Person" support group, etc. Compare those who undergo such procedures to those who do not and compare their breast cancer scores, ages at onset, recovery rates, etc. Then correct for social, economic, geographic and other factors. If the LifePrints system is bogus, this experiment will not yield useful results. But if it does work we have a non-invasive, inexpensive test that can be administered in a doctors office. It would be of special value for diseases that have multiple causation and late onset.

Here are two more examples of the application of standard dermatoglyphics using a *LifePrints* perspective.

"Dermatoglyphic patterns in Patients with Mitral Valve Prolapse: A Clue to Pathogenesis" was published in *The American Journal of Cardiology* in 1976. Using a statistical comparison of pattern types, it established a connection between an increased number of arches and mitral valve prolapse. (Several other conditions are also associated with a high incidence of arches, including chronic bowel problems.)



This research has been disputed by Randi Kramer-Fox, et al, in a 1984 article in the same journal.<sup>8</sup> Their figures show no difference in the number of arches on hands of people with MVP, but they did find that patients with seven to ten arches scored exceptionally high on their anxiety index (although in numbers too small for statistical reliability).

The definitive answer to the connection between high numbers of arch fingerprints and some form of heart disease and/or high anxiety awaits future study. However, according to *LifePrints* the presence of two or more arches indicates a lifelong challenge of converting struggle to ease. If this is correct, a higher anxiety index would be expected in this subset of the general population. Like looking for servitude factors in the line formations of those with six or more

<sup>8</sup> Lack of Association between Dermal Arches and Mitral Valve Prolapse; Relation to Anxiety; R Kramer-Fox, RB Devereux, WT Brown, N Hartman, RC Elston; *American Journal of Cardiology*; Jan 1984; 1:53(1)148-152

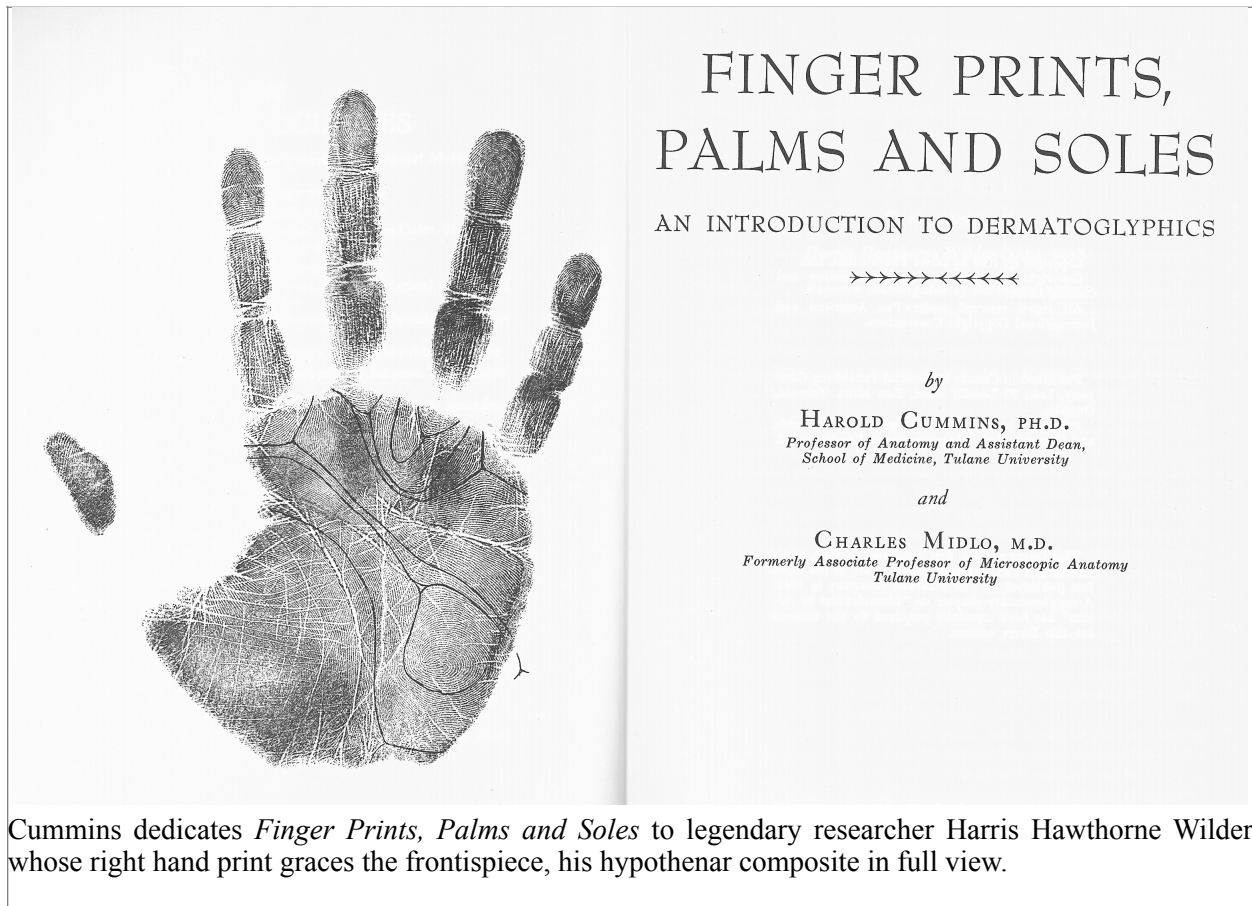
whorls, identifying multiple arch owners who also have line markers indicative of struggle addiction would offer a more specific diagnostic indicator, one that would empower patients by suggesting a way to reduce their symptoms. My multiple-arched clients tell me that being able to separate anxiety that is not related to current circumstances from anxiety that is one of the biggest gifts they received from hand analysis.

In a similar vein, *LifePrints* logic could be quite useful to those schizophrenics who have composite whorls on their hypothenar eminence. Composites on the hypothenar occur five percent more often on schizophrenic hands than for the general population.<sup>9</sup> Composite whorls on this part of the palm indicate a person with an intense imagination that flashes on and off. At its best we have the visionary, at worst, feelings of alienation and disorientation take over; Life Lesson progress tilting things one way or the other. I am not a clinical psychologist and have never met a schizophrenic, but going intensely in and out of one's imagination to the point of total confusion, feeling alone in an island universe—that certainly sounds schizophrenic to me.

All composites, whether on the hypothenar or elsewhere, are set off in negative roller coaster fashion when the Life Lesson is ignored. Gale, page 380, had a hypothenar composite and when it was triggered she became disillusioned and delusional, not to the same degree as a clinically diagnosed schizophrenic, but with consequences only marginally less troublesome. Therapeutic interventions based upon this one unalterable rule of Gale's existence could shift her entire life. Hypothenar-composited schizophrenics stand to benefit equally from an application of the same principle. This line of approach suggests vastly different interventions for the same subgroup population, interventions based upon Life Lesson designations. It may be too little too late for some and may only be feasible in cases of the least afflicted, but if it shows any efficacy at all it would be worth its weight in gold.

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<sup>9</sup> See *The Dermatoglyphics of Schizophrenics*, by Amrita Bagga , Mittal Publications, New Delhi, 1989



Looking through the *LifePrints* prism, we have examined two medical conditions, one psychological condition, and two of the seven standard dermatoglyphic variables. Let's look at one more variable, the palmar lines, and see what our scientific/anecdotal mixed marriage can produce.

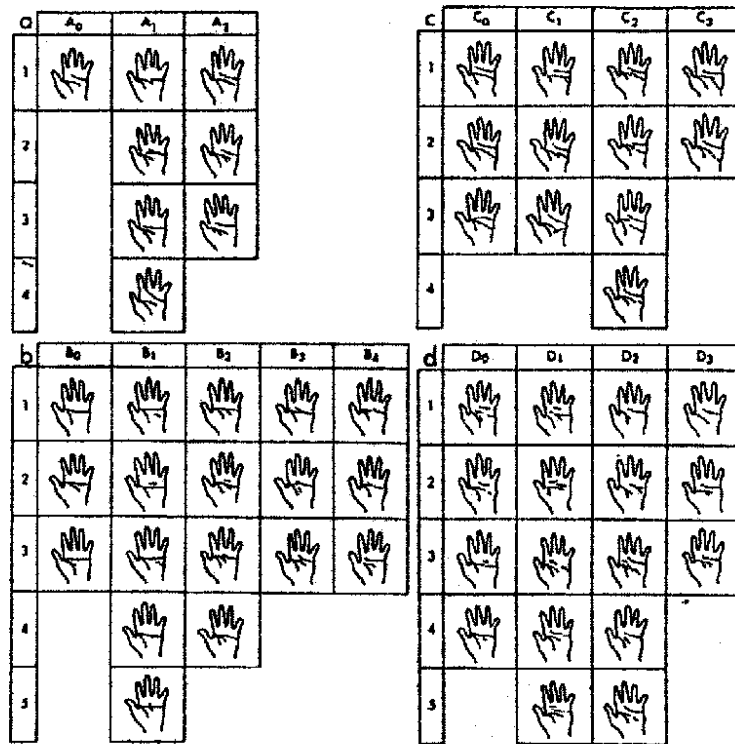
### **The Study of Palmar Lines**

The study of palmar lines provides an interesting window into the dermatoglyphic and palmistic communities and the possibilities for future collaboration and discovery .

When people think of examining the lines on one's palm, the first image to be expected is that of a fortune teller. Few realize that palmar lines are an historically significant aspect of dermatoglyphics and have been under scientific scrutiny for over a century. Whereas fingerprints are unalterable and easy to classify, line formations change and have proven more difficult to categorize. Nonetheless, numerous studies have linked line patterns to different diseases and psychological conditions.

Fere, 1900,<sup>10</sup> is normally cited as the beginning point in the scientific study of line formations. His system merely noted the presence or absence of six different line formations. Poch, 1925,<sup>11</sup> went a step further, adding line intersections in an attempt to correlate embryonic disturbance to line formation. Wurth, 1937,<sup>12</sup> was the first to observe that lines form before the fetal hand can move. Hand lines, it turns out, are not flexion creases as previously thought. Wendt, 1958,<sup>13</sup> added a seventh line to the previous system.

Consensus on line classification remained an ephemeral goal, however. The systems in use seemed both too simple to yield valuable results and too difficult to apply. Several new approaches appeared in an attempt to correct this deficiency. Lieber, 1969,<sup>14</sup> proposed a much more detailed line classification system, one section of which is visible below, but it proved cumbersome and hardly anyone else paid much attention to it.



<sup>10</sup> Fere, C., Le Lignes Papillaires de la Paume de la Main, *Journal Anat. Physiol.*, 36:376, 1900

<sup>11</sup> Poch, H., Über Handlinien", *Mitt. Anthropol. Ges.*, 55:133, 1925

<sup>12</sup> Wurth, A Die Entstehung der beugerfurchen der menschliche Hohlhand, *Z. Morph. Anthropol.* 38:187 1937

<sup>13</sup> Wendt, G.G., Zwillingsuntersuchung Über die Erbllichkeit der Handfurchung, *Z. Menschl. Vererb. Konstit.*, 35:205, 1960

<sup>14</sup> Lieber, B., Zur Systematik und Klinischen Bedeutung des Menschlichen Handfurchenbildes, *Z. Menschl. Vererb. Konstit.*, 35:205, 1960

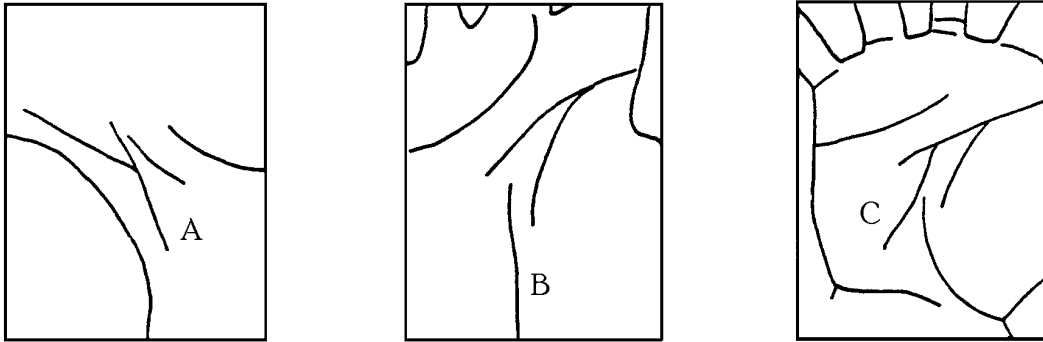
The most widely quoted expert on palmar line formations is Milton Alter, PhD. Finding all other line classification systems inadequate, he invented his own, which seemed at once simple yet more comprehensive and scientific. Starting with four categories of line, he broke each into a few sub-categories and statistically compared males and females, left and right hands.<sup>15</sup>

**Variations in Distal Transverse Creases [Heart Lines], Minnesota Series**

	Normal	Forked	Absent	Total	Distal Border Terminus	Accessory Distal Crease
<b>Males (# = 100)</b>						
Left	83	16	1	100	14	4
Right	81	16	1	100	18	5
Total	164	34	2	200	32	9
%	82	17	1	100	16	4.5
<b>Females (# = 100)</b>						
Left	77	22	1	100	20	14
Right	77	19	4	100	21	7
Total	154	41	5	200	41	21
%	77	20.5	2.5	100	20.5	10
<b>Total % (M &amp; F)</b>	79.5	18.8	1.8	--	18.3	7.5

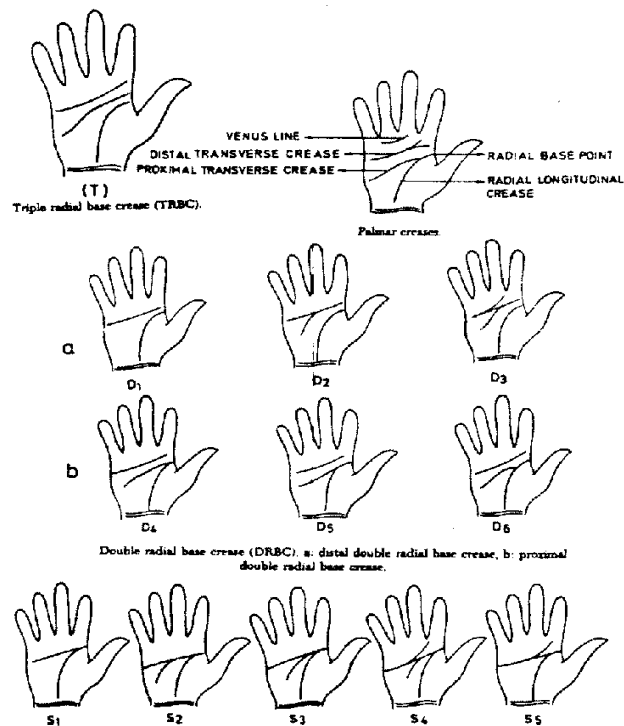
Although Alter's system was easily the most thorough and practical of its time and is still referred to as one of the standard works in the field, line formations can be complex, and different observers using Alter's system didn't agree on the presence or absence of lines. Further, Alter himself repeatedly made mistakes of identification. He read A below as a Head Line and B and C as Life Lines (A, B and C are primarily Fate Lines). This would not present a problem if he consistently made the same identification in other hands, but that was not the case. One need not agree with hand reader's assertions as to the meanings of these lines to benefit from a system that has a lengthy track record of consistent line identification. The fact that Alter's glaring errors have gone unnoticed for so long points out the need for more communication between the scientific and hand reading communities.

<sup>15</sup> Alter, M. MD, PhD, Variations in Palmar Creases, *American Journal of Diseases of Children*, 120:426, 1970



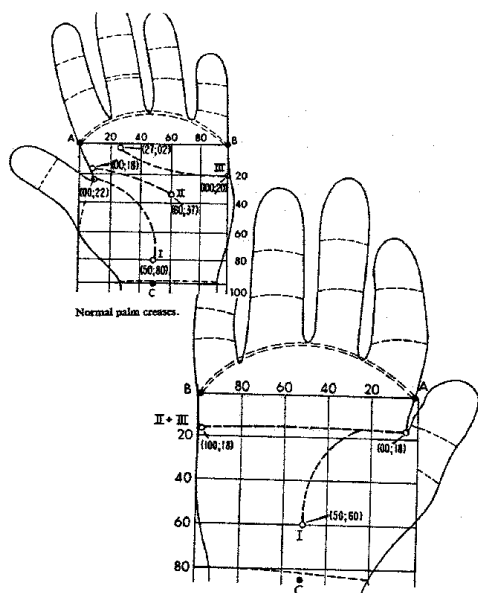
The most successful system of scientific line classification is Ramesh Chaube's (1971). Whereas earlier systems suffered from lack of detail, too much detail or substantial errors of identification, Chaube avoids these problems by focusing entirely on the radial point of the major lines. He suggests only three classifications, broken into twelve sub-classifications as seen to the right.

This system has produced statistically relevant data in studies of schizophrenia, cancer, tuberculosis, diabetes and leprosy, and stands as the most useful scientifically accepted line system. Using only a few line variations insures its accuracy. However, for the same reason, Chaube's system is likely to have only limited application.



The most logical approach to date was suggested by Dar and Schmidt in 1976.<sup>16</sup> They write:

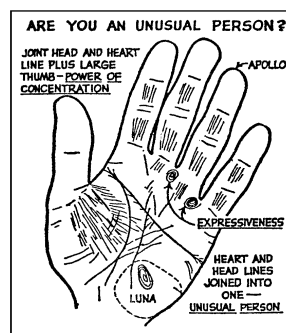
<sup>16</sup> Topographic Approach for Analysis of Palm Crease Variants, *J. Med. Gen.*, 1976 (13) 310-313 and Palmar Crease Variants and their Clinical Significance: A Study of Newborns at Risk," Dar, H and Schmidt, R and Nitowski, HM *Pediat. Res.*, 11:103, 1977, p. 105



**“As the variability and possible clinical significance of palm crease abnormalities receive greater attention, an accurate and objective method for evaluating palm crease variants is required.”** It is now 2005 and no one seems to have taken them up on this challenge. Their Latitude/Longitude Coordinates system (reminiscent of Noel Jaquin) lies dormant.

Johnson and Opitz are responsible for the most thorough comparison of medical and palmistic points of view from the scientific perspective.<sup>17</sup> In their follow-up study of hyper and hypoactive children, they conclude, **"The inspection of the palm creases should be a routine part of a pediatric examination."**<sup>18</sup> Bravo!

As you will read shortly, hand readers have been trying to connect with the medical community for years, marrying up if you will, while the scientific community has been playing hard to get. This historical inequality made me even more interested in Johnson and Opitz, but their purpose, it turns out, was not to make use of hand readers' data base. Instead, they merely consider it ironic that it coincides in any way with their own work. Displaying an entire page from *Fortune in your Hand*, by Elizabeth Squire, they say,



"Here, in an illustration taken from a book on cheiromancy, the heart and head lines when joined indicate an unusual person. In this one instance, the cheiromancer and the medical examiner are in complete agreement, for a child with a single palmar crease may indeed be unusual."<sup>19</sup>

Johnson and Opitz then give their data. They find a higher incidence of congenital abnormalities, borderline retardation and certain types of problem pregnancies in single palmar crease cases, reinforcing earlier research. They conclude that the Simian Crease suggests some insult to the fetus in the first trimester and that normal-looking infants with the Simian Crease should be

<sup>17</sup> Single Palmar Crease and its Clinical Significance in a Child Development Clinic, Johnson, CF, MD and Opitz, E. *Clin Ped*, (10)7 1971

<sup>18</sup> Unusual Palm Creases and Unusual Children, Johnson, CF, MD and Opitz, E., *Clin Ped*, Feb. 1973, 101

<sup>19</sup> *Fortune in Your Hand*, Elizabeth Squire, NY, Signet Books, 1968, p. 102

watched carefully for later difficulties. I would have liked to have seen more complete figures on the above average IQ's associated with single palmar crease hands included in the study (or any other of the numerous Simian Crease studies for that matter). In my experience with over two hundred cases, most clients were at least of normal intelligence and some were exceptional.

While not disputing their data, I do take issue with Johnson and Opitz's treatment of Elizabeth Squire's analysis. Squire included several other markings before reaching her "unusual person" conclusion, and she is not discussing the Simian Line or its implications, a topic covered much more fully in many palmistry books. It would not have been difficult to see if these interpretations were of any value to their study if the authors were so inclined. Starting as they did with the assumption that hand readers are "non-medical people who read palms to divine personality and predict the past and future," an overly simplistic misrepresentation of Squire is not surprising.

As it now stands, the medical profession is still in search of a workable system of line classification, detailed enough to yield significant data yet simple enough to be used by a doctor without specialized training. Perhaps someday, doctors may discover the system that has been patiently awaiting their attention for thousands of years.

### **Hand Readers Look at Dermatoglyphics**

We can assume that William Benham, one of the most famous authors on hand reading, would have studied fingerprints if they had been more well known in his era. His major work, *The Laws of Scientific Hand Reading*, a six-hundred-page-how-to book so detailed as to devote a chapter to reading the hair on the back of hands, makes no mention of fingerprints whatsoever. Considering that it was originally published in 1899, three years before Scotland Yard accepted fingerprints as conclusive proof of individual identity, this is not surprising. What is surprising is that in his second and last book published thirty years later, *How to Choose Vocation from the Hand*, there is still no reference to fingerprints. Apparently, Benham had fixed his system early on and added little or nothing to it through the years.<sup>20</sup>

It was left to Noel Jaquin, part scientist part clairvoyant, to introduce fingerprints to western hand readers. Jaquin's biography makes interesting reading. In 1927 he wrote an article for Pearson's Magazine that included an offer to analyze any hand prints mailed in. Jaquin was hoping to stir up some interest but was completely unprepared for the over ten thousand responses he received. It took six months, including weekends, but he answered every one. Before he was through, Jaquin would devise a series of medical diagnostic indicators based on skin ridge dissociation and would single-handedly invent the only system of fingerprint analysis widely used by hand readers today.

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<sup>20</sup> Benham does make use of one dermatoglyphic variable, the apex points under the four fingers. Their precise location plays an important role in his system of personality diagnostics. Comte C. de Saint Germain, *The Study of Palmistry for Professional Purposes*, makes largely the same apex observations as did Benham, and two years earlier, but his work is flawed and hard to read, making it less influential in the hand reading community.



Nearly every palmistry book that mentions fingerprints reiterates Jaquin's original assertions. Whether it is Terence Dukes in *Chinese Hand Analysis* or Gertrude Hurlimann in her astrologically based *Handlesen ist erlernbar*<sup>21</sup> (two very original and detailed books with premises far different from each other), the fingerprint meanings come out matching Jaquin almost exactly. The whorl is said to add an individualistic quality to whatever finger it appears on; the arch is a sign of crudeness or an elementary nature; the loop provides emotional elasticity;<sup>22</sup> the tented arch signifies a highly strung person. The composite is repressive and resentful (so I suppose it would be a good idea not to have any of these if you can work that out).

Jaquin's writing is a mixture of personal philosophy, hand reading interpretations, and rambling who-knows-what. His palmistry points include some of the most insightful ever published in any book on the subject. His latitude/longitude approach to the Head and Heart Lines forms the basis for my own system on these two major lines. That being said, not everything written by Jaquin bears up under objective scrutiny. Hand readers must have become so enamored of his wisdom that they have given him a free pass on his dermatoglyphics, or else he got QWERTY'ed into the hand reading data base and it is now just accepted.

I came to my conclusion regarding Jaquin's fingerprint system only reluctantly. It is true that on some hands the arches seemed to be part of an elemental psychology and some of my readees with whorls were secretive and individualistic as Jaquin suggests they should be, but other cases stood in full contradiction. Hands with multiple arches sometimes belonged to highly intelligent and refined professors and some heavily whorled persons constantly bent over backwards to please.

Many hand readers do not use fingerprints at all and those who employ a Jaquin-based system can usually work their way around these difficulties. They point to this line here and that hand shape factor there, suggesting that these markings counteract the particular fingerprint in question. In contrast, *LifePrints* suggests that the fingerprints are not one more influence on personality but a separate psychology all its own which interacts with the personality.

Only metaphysician Maurice Cooke suggests anything similar. Cooke<sup>23</sup> sees fingerprints as indicators of past life lessons learned or unlearned. Whorls on a particular finger indicate the former, arches the latter. This implies that the more arches you have the lower you are on the karmic totem pole, a conclusion that seems narrow and unwarranted, but his philosophy was close enough to my own and different enough from Jaquin that I was eager to put Cooke to the test. Unfortunately, his system did not pan out. Dennis Fairchild's *Humanistic Palmistry* also takes a karmic perspective, but on closer inspection his conclusions are approximately the same

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<sup>21</sup> Hurlimann has some interesting observations on the dermatoglyphic lines that emanate from the triradius points, the only hand reader I have found who has written about them.

<sup>22</sup> It is particularly interesting that so many modern writers repeat Jaquin's phrase "emotional elasticity" to describe loop psychology. Since approximately 70% of fingerprints are loops, is humanity primarily emotionally elastic? Are hands with six loops or less under-elastic? *LifePrints* also sees loops as emotionally based but not in the same way.

<sup>23</sup> *Body Signs*, by Maurice Cook, Marcus Books, Toronto, Canada, 1982

as Jaquin's. The same is true for Hutchinson,<sup>24</sup> Fitzherbert,<sup>25</sup> and Jaegers.<sup>26</sup> Each write extensively about fingerprints but mostly they organize and extend Jaquin's four typologies, adding hardly anything new to the mix.

As you have read, *LifePrints* operates quite differently: any attempt to interpret a single fingerprint without knowing the other nine prints leads to an incomplete and often erroneous conclusion. Cooke and Jaquin had each seen a piece of the puzzle but it is clear that neither had read the medical literature on the topographic nature of volar pad formation. Taking this into account would, I believe, have led both to a more holistically inclusive system.

In a similar vein, if any of the medical researchers had given a serious look at hand analysis they would surely have noticed overlapping conclusions and made appropriate use of the ancient art. But few modern doctors have attempted to cross the great divide. The two disciplines developed side by side, often studying the same phenomena, but like boys and girls isolated on the opposite side of the gymnasium, who would take the chance and ask someone to dance?

Charlotte Wolfe, MD<sup>27</sup> did. Based on the prior works of Dr. Carl Gustav Carus and Dr. N. Vaschide, in the 1940's Wolfe offered a detailed and internally consistent system of hand shape and line interpretation. She considered much of hand reading superstitious but thought it wrong to toss out the entire hand reading data base. Although familiar with Cummins and other dermatoglyphic researchers of her era, she did not go into the psychology of fingerprints at all. Pity.

Eugene Schiemann, MD<sup>28</sup> is a contemporary physician who has studied hand reading in depth. His book with Nathaniel Altman is a down-to-earth and comprehensive guide to using the hand as a medical diagnostic tool. He lists various conditions associated with fingerprint combinations but although he is both a doctor and a hand reader, in regard to fingerprints and psychology his views are purely Jaquinian.

The medical literature on palmistry is thin, but what about palmists studying dermatoglyphics? A good place to start is Ed Campbell.<sup>29</sup> Apparently, Campbell has read almost everything written in English by hand readers on the subject and discusses his findings in his book, *The Encyclopedia of Palmistry*. For even greater detail go to his website: [www. Edcampbell.com/PalmD-History.html](http://www.Edcampbell.com/PalmD-History.html). Unfortunately, almost everything written in English is pretty much Noel Jaquin's work rephrased by different authors.

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<sup>24</sup> *Your Life in Your Hands*, by Beryl B. Hutchinson, Paperback Library, Inc. N. Y. 1967

<sup>25</sup> *Hand Psychology*, by Andrew Fitzherbert, Avery Publishing, Garden City Park, N. Y. 1989

<sup>26</sup> *Hand Analysis and Dermatoglyphics*, by Beverly Jaegers, Aries Productions, St. Louis, Mo. 1974

<sup>27</sup> *The Human Hand* by Dr. Charlotte Wolfe, Alfred A Knopf, N. Y. 1944

<sup>28</sup> *Medical Palmistry: A Doctor's Guide to Better Health Through Hand Analysis* (with Nathaniel Altman), Aquarian Press, Wellingborough, England 1989

<sup>29</sup> *Encyclopedia of Palmistry*, by Ed Campbell, Berkeley Publishing Group, New York, 1996, pages 98 - 124

Christopher Jones is even more well read than Campbell. His staggering historical compendium on hand reading ([www.breathemail.net](http://www.breathemail.net)) dwarfs all other works of its kind.<sup>30</sup> You can find out more about the lives of many of those mentioned in Appendix II, though you won't find much more about what fingerprints mean.

Martijn van Mensvort, Arnold Holtzman, and Vernon Mahabel are three other hand readers up on their dermatoglyphics. Van Mensvort is probably more familiar with medical dermatoglyphics than any hand reader on the planet. His research on autism is of particular note. Holtzman takes a clinical approach and has an extensive website devoted to hand analysis ([www.pdc.co.il](http://www.pdc.co.il)).<sup>31</sup> Like Wolfe, his system is detailed, internally consistent and yields useful insights. He does use some dermatoglyphics, but fingerprints are not the focal point of his system. Mahabel, on the other hand, uses fingerprints extensively. Mahabel and I have compared our systems at length and find we agree on many foundation principles while disagreeing on others. Mahabel's introductory book, *The Secret Code in your Hands* (Mandala Publishing Group, San Rafael, CA 2000) only touches on fingerprints and the world will have to await future publications to see the depth of his research.

## Current Trends

So where does that leave dermatoglyphics today? In *The State of Dermatoglyphics* (2000) Ralph M. Garruto, Professor of Anthropology and Neurosciences, sums up the feelings of medical researchers as follows: "The field of dermatoglyphics ...continues to endure, yet it has not 'flourished' nor has it become irrelevant."<sup>32</sup> In other words: funding has almost disappeared.

By the early 1980's, DNA testing had replaced the dermatoglyphic test as the standard in twin studies, issues of paternity, and chromosome disorder research, gobbling up the grant money that formerly sustained dermatoglyphics.

In the same publication, several scientists struck a positive tone on the future:

- Dermatoglyphics may be in position to become the primary means of assessing complex genetic traits.
- Because fingerprints and line formations form during vital stages of fetal development, dermatoglyphic studies are in a unique position to evaluate the effect of toxins on the intrauterine environment (over 20% of all pregnancies never come to term).
- Dermatoglyphics are still useful for the evaluation of children with suspected genetic disorders and diseases with long latency, slow progression, and late onset.

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<sup>30</sup> Including Gettings, op cit. and Andrew Fitzherbert, *The Palmist's Companion*, Scarecrow Press, London, 1992

<sup>31</sup> The IIHA website, [www.handanalysis.net](http://www.handanalysis.net) has an extensive website review of Holtzman's work.

<sup>32</sup> *The State of Dermatoglyphics*, Edited by Durham, Fox and Plato, Edwin Mellen Press, Ontario, 2000, page 360

- The new findings that rats have dermatoglyphic patterns opens up a whole new realm of experimental possibilities. Bonnevie, with all her detailed research, had missed this (rat dermatoglyphics are quite small) and until recently, no one had looked.

However, there are some obvious problems beyond funding. The most commonly listed:

- Small sample sizes
- Incomplete diagnoses
- Limited number of variables studies per research paper
- Control group inadequacy
- Statistical methodology errors
- No agreed-upon standard for line evaluation

It is interesting to note that all these difficulties link together with one problem: although scanner technology and computer capabilities have advanced enormously in recent years, there currently exists no method and no new mathematically advanced software to apply these new technologies to dermatoglyphic research. Imagine putting your hands on a scanner at your doctor's office and in less than thirty seconds a printout appears with a diagnostic profile (and perhaps even a Soul Psychology profile) for you and your physician to discuss. There is absolutely nothing, except perhaps \$600,000, keeping this from happening next Thursday.

The history of science is replete with examples of new technologies creating the possibility of new advances: Galileo gets his hands on a telescope, or Loewenhook invents a microscope and the world is changed. It is exciting to contemplate what will happen when (not if) the study of dermatoglyphics makes use of the routine technological advances already employed by other branches of science.

“What then should we be looking for in a fingerprint? The answer might lie in those features that we know are present but that have not yet been analyzed.” (Jamshed Mavalwala)<sup>33</sup>

Extracted with permission from [Richard Unger's LifePrints Deluxe Manuscript](#)

which is +200 pages longer than the printed version of *LifePrints: decoding your life purpose from your fingerprints*.

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<sup>33</sup> Ibid, page 296