The History of Acupuncture in the West: Exoticism, Esoterism and Opposition to Cartesian Rationalism, Complementarity to the Occidental Medical System*

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Introduction and Generalities

It is quite difficult to separate acupuncture from Chinese Medicine as a whole, and especially when considering the sources of acupuncture used in the West. Consequently different periods are usually and successively presented: 1) A period when the sources reached and were used in Europe. This first step is intimately involved with the use and comparison of similar factors between the two medical systems (materia medica, diagnosis and moxas). 2) A second period of the discovery and use of needles. 3) A latent period when techniques coming from acupuncture sources were developed. 4) a fourth period of "Chinese acupuncture" correctly speacking. 5) The last period, which is modern, may be qualified as an investigating period when Eastern and Western people are trying to fit the data from Traditional Medicine with those coming from Western Science. (Table I).

These different periods have already been studied by authors who have approached this problem concerning the history of acupuncture in Europe, and I would like to mention Jarricot and Wong in 1972, and Huard in 1973²⁾ and just recently Feucht in 1977 and Baptiste³⁾.

It is quite strange, but understandable, that the documents which led to the introduction of acupuncture in Europe arrived by the diplomatic route. This was due to language difficulties, and further, concerning this problem, Soulie de Morant⁴⁾ writes: "The doctors sent to China during the twentieth century to teach Occidental science

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Table I.

	Sources	Needle	Latency	S O U	Chinese acupuncture Detection	Modern acupuncture and renaissance of tradition	
Sources	Travellers Diplomatic route (mostly in China)	B E R L I O Z	Diplomatic and military routes (French in Indochina)	L I E de M O R	Milit rou (US.	ary Diplo	ite
Use	Materia Medica (China) Moxas (Japan) Pulses (China and Japan)	Needling	Derived Techniques	A N T	Chinese acupuncture based on Yin-Yang theory	Scientific explanation	Renais- sance of tradition
Theory	Fluids	Sympathy Elecricity	Metallotherapy		Electricity	Nerve impuls	es Neurotrans mitters
	Exoticism		Exoticism		Esoterism and opposition to Cartesian rationalism Complementarity to the Western medical system		

could not fail to learn this primitive-type medicine". On the other side, during each period mentioned above, it has been the Embassies and mostly the cultural sections which allowed the introduction of these documents, and firstly the Jesuits who were appointed to the Court of Peking. If at this time Chinese Medicine was able to transmit some of its knowledge through this route, meanwhile doctors from the East India company brought exact data: we will mention again Ten Rhyne, Cleyer and Kaempfer.

A large correspondence was established between doctors, especialy from academies and the cultural missions in China. This correspondence in which the names of Jesuit Fathers frequently appear, has given rise to a lot of works and studies in all fields but only a few on acupuncture⁵⁾. Another wave brought an imporant contribution to Chinese Acupuncture in France; it was the work of the consul Dabry de Thiersant⁶⁾. Unfortunately his work did not have the impact it deserved. The third wave was established through the diplomatic route in the beginning of the twentieth century by Georges Soulie de Morant who, thanks to Doctor Ferreyroles, on his return to France left literature and devoted his time to Chinese Acupuncture⁷⁾.

In the course of this survey we can see that the two big streams of acupuncture expansion in the West took their origin in France (cf. plate 1). It seems that it is in this country that all the scattered sources came to be assembled, and this allowed the first stream to take off.

Apart from French Jesuit Fathers in Peking who transmitted important documents on Chinese Medicine, Materia medica and the pulse, there were on the one hand Iberian and Italian travellers who brought cultural aspects, and on the other doctors from the East Indian Company who brought back fundamental documents on acupuncture but particularly on moxas.

By its geographical position, France received all these sources and, thanks to Berlioz in 1810 who seems to be the starting point, assured the diffusion of it in the whole of Europe and in North America. Yet England seems to be the first Western country to apply acupuncture, if not the first to spread it.

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G. Soulie de Morant is universally recognized as the originator of the second stream.

In order to make the comparison in the spatio-temporal scale of the western world easier, in the analysis we shall follow the division by centuries: the sources (sixteenth, seventeenth centuries); the eighteenth century concerned with pulses studies and applications, and with direct sources concerning acupuncture and moxa; the nineteenth century, concerned with "needle therapy", or acupuncture, and derived techniques; the twentieth century, concerned with the second wave of expansion and the attempt at rapprochement between East and West; and lastly, we shall sketch the history of acupuncture in the neighbouring countries, which can be directly related to the general history of acupuncture in the west to a greater or smaller extent.

The Sources of Acupuncture: Sixteenth and Seventeenth Centuries

According to Sarton⁸⁾ it was the Jesuit brother Luis de Almeida (1523–1583) a Portuguese, who first introduced acupuncture into Europe. It seems that we cannot admit the account of the Portuguese Mendez Pinto's journey as Briety and Coury⁹⁾ seem to consider, and as Huard and Wong¹⁰⁾ mention. In fact according to Feucht¹¹⁾ there was no allusion made to acupuncture in the traveller's account as edited in 1628.

During the first half of the seventeenth century it is interesting to have a look at two published works:

—the "De Medicina Indorum" by Bontius published in 1642 at Leyde, $^{12)}$ and

-The thesis of Mauvillain on tea in 1648¹³).

The first one does not talk about acupuncture but essentially of Materia Medica, diseases, (the author describes the beri-beri especially) and an interesting part of it consists of a dialogue for the "maintenance of health" in which the air we breath and the food we eat are taken into consideration. (pp. 59–106). Meanwhile, some years after, Ten Rhyne quotes Bontius when talking about acupuncture;

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perhaps this is taken from another of Bontius' works: "Historiae Naturales et Medicinae Indiae Orientalis" (Gulielmo Piso, Amsterdam 1657) which I do not happen to know. Perhaps he is joining Feucht in his confirmation when he says that in ten lines Piso mentions glass needles used in Japan (Ref.: "De Indiae utriusque" by Piso W. Amsterdam, p. 26).

As for Armand Jean de Mauvillain (1618–1685), he was the godson of Richelieu, a doctor friend of Moliere and he became Dean of the Paris Medical School in 1666. His thesis, maintained in 1648, was written on the subject of tea; it was the first thesis in medicine on a subject coming from the Far East.

From this first half of the seventeenth century, Grmek¹⁵⁾ quotes Don Francisco de Herrera Maldonado's "Nouvelle histoire de la Chine" Paris c/o the widow Ch. Chastaillain, a translated Spanish edition 1621 by J.J. Bellefleur. In this work which appeared in France in the year 1622, it is said that doctors did their diagnosis and established their prescription just by taking the pulse without questioning the patient.

The second half of the seventeenth century was to see the publication of a large number of works, but only a few talk about acupuncture; most of them are accounts of travels, like Nieuhof in 1655¹⁶⁾ where two pages only are on medicine and only a little bit is said about pulse, or again like the text of A. de Rhodes¹⁷⁾ on his travels and missions in which he states that a doctor is also an apothecary and takes the pulse beat and prescribes medicinal herbs which he carries with him.

In 1656, appears a first publication from Father M. Boym¹⁸⁾ "Flora sinensis, fructus..." a French translation of which wa done by The venet (Relations de divers voyages, vol. II; 15–30). In this work Acupuncture is not mentioned.

A 1668 work by an anonymous author, "Les secrets de la Médecine des Chinois consistant en la parfaite connaissance des pouls" (The secrets of Chinese Medicine concerning the perfect sphygmic knowledge), was published at Grenoble in 1671¹⁹. This work is certainly one of the most important sources for Chinese Acupuncture. The author is

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unknown and his identity has aroused contention. The work has been assigned to Father Alemand who was only 15 years old on the date of its publication, to Father Boym who died in 1659 while the preface was signed in 1668, then to Father Hervieu who was born in 1671. Many suppositions have been made, but it seems the work will remian anonymous²⁰.

In 1682, A. Cleyer, published the "Specimen Medicinæ Sinicæ"²¹⁾. In spite of the fact that this work contains a representation of points and vessels of acupuncture, there is no indication of treatment by needles²²⁾.

We must wait for the publication of W. Ten Rhyne's work(1683) to find acupuncture mentioned, "Dissertatio de arthritide; Mantissa Schematica; de acupunctura"²³⁾. In this work, Ten Rhyne has concentrated more on the use of moxas than on acupuncture. Of the four plates in "Mantissa Schematica", two of them are Chinese and the other Japanese.

Following this publication we find the book of Boym, in 1686, "Clavis Medica...".²⁴⁾ Much ink has been spilt about this book, and incidentally, A. Cleyer has been accused of plagiary. In fact, this book was published thanks to Cleyer who deserves the credit²⁵⁾. It is the first work to expound the circulation of K'i through twelve principal (main) channels and it treats more Chinese philosophy, and deals with sphygmic technique and its practical application. In connection with the "Clavis Medica" publication, we must emphasize the fact that it was Christian Mentzel (1622–1701), who introduced Chinese Medicine to German doctors (Artelt, 1940 et Merkel 1932)²⁶⁾; he was a doctor in Stuttgart, a sinologue and counsellor of the Elector of Brandenburg and was in communication with Cleyer, with Ten Rhyne and also took account of Boym's publications.

According to Grmek (1962) during the final years of the seventeenth century, English names must be cited, besides John Ogilby 1673 "An Embassy from the East India Company...translated by J. Ogilby", (in fact a translation of J. Nieuhof's book (1665)¹⁶⁾. The most original information and comments are found in the writings of famous sinologues like Sir William Temple (1628–1699), Isaac Vossius

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(1618-1689)²⁷⁾, and most of all William Wotton (1660-1726) who seem to have translated the Nei-King. Their starting point with regard to the medical part is mostly the "Specimen Medicinæ Sinicæ" of Cleyer (1682). The main part of this book was even translated from Latin into English by W. Wotton ("Reflections upon ancient and modern learning", London, 1705).

David Abercromby (1621–1695) "De variatione ac varietate pulsus observationes" (London 1685), deals with the influence of climate, temperament, age, food, passions and diseases on the variations of the pulse. He seemed to know Chinese sphygmology quite well, and he tried to find out its real value through his own clinical experience which turned out to be encouraging (according to Grmek), but this is due to the fact that the Western conception of the pulse differs from Eastern views.

Eighteenth Century

General Considerations

In France, this century sees the end of "Siècle des Lumières", and the downfall of the "Ancien Règime". During this sinophile period and time of exoticism, the taste for the "Lachines" and the "chinoiseries" continued to grow. In this craze for things coming from the "East Indias", people were also interested in ideas, theories and specially the theory of fluids.

"It is only in the eighteenth century that the Chinese race and culture became known in Europe. It is François Bernier who, in the "Journal des Savants" (24 april 1684) and the "Etrennes" (Wishes) dedicated to Madame de la Sablière for the year 1688, first set forth a division of the human races into four groups in which, for the first time, the Chinese were taken into account as a yellow branch of humanity".(Huard 1959)²⁸⁾.

Henri Bertin (1720-1792), State Secretary in charge of communication with China and the East India Company, systematically organized inquiries on Chinese culture and civilisation as a whole, in collaboration with the Academician De Brequigny.

Medicine was not to be excluded, but it seemed that quests were

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made mainly to fill in gaps in medicine, and more to try to see relations between Chinese and Western medicine than to find anything novel. In this way Acupuncture was more or less neglected and less seriously taken into account in comparison with work in other medical fields. Nevertheless it is at that time that Acupuncture was to be reported in famous official publications: Dujardin, Vicq d'Azyr, etc.

Chronological analysis

Sir John Floyer who registered as a medical doctor on the 8th of July, 1680, published in 1707 a "comparison between Galenic sphygmology and the Chinese one which he attributed to Houang-Ti. He completed it by his own observations and inventions, the most important of which is his clock to measure the pulse's frequency" (Szesniak³¹⁾ and Grmek¹⁵⁾). Floyer preferred "the Chinese way (to feel the pulse) to the Greek one, because it is obvious, more reliable and concise, and because it is possible to build the whole medical practice on it". He got his sources of information mainly from Cleyer²¹⁾1682, but he also quotes Semedo (1642 et 1655), Navarette (1676) and LeComte (1697)32). Huard's opinion of him (1957)33) was that, "this apologist of subjective sphygmology (prefering Galen to Harvey) is also the father of the verifiable objective pulsimetry which neither Kepler nor Galileo, nor Sanctorio was able to introduce into medical practice, due to the lack of a good chronometer". Even if Floyer did not practise Acupuncture nor invent the chronometer (Grmek, Op. cit. 15) p. 86), he had a double impact because he wanted to build the whole medical practice on the pulse, as this is done in Chinese Acupuncture, and on the other hand he acted as an Western scientific man by introducing objective pulsometry. He is probably the first to unite traditional Chinese Medicine and Western Science.

J.B. Du Halde (1735) in the 3rd volume of his compilation³⁴⁾, explains the principles of Chinese Medicine, and translates Chinese conceptions into Galenic terms (Yang: vital heat; Yin: radical humidity; K'i: pneuma; etc...) In this way, oriental medicine became understandable to the European reader, but to the detriment of its true philosophical basis. Chinese Medicine is here limited to sphygmology

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and materia medica; so acupuncture seems neglected, as also dietetic, gymnastics, etc... "What appears to be strange in Chinese Medicine is the ability of doctors to recognize diseases feeling the pulse and to know the use of medical herbs which are their remedies. We will no doubt appreciate learning the secrets contained in the pulse and the use of their medical herbs from the Chinese people themselves" (p. 383). The chapter on pulse (III, 384-436) is a translation of a writing from MöKiué, dating from the time of Songs according to Grmek (Op. cit.¹⁶⁾ p. 90-91).

L.A. Folliot de Saint-Vast²⁵⁾ maintained a thesis in medicine in Paris on the Gin Seng in 1736, under the chairmanship of J.P. Vandermonde; after 12 years in Macao, he made a translation of the mineral Materia Medica of Li Che-tchen.

"In the eighteenth century when France was conquered by sinophily F. Boissier de Sauvages (1706–1767) and J. Astruc (1684–1766) fell under its influence. The former was chairman when Bridault maintained his thesis. The latter wrote the first book of occidental medicine to show the written symbols of Chinese Medicine" Huard and Wong, 1958)³⁶⁾.

In his survey of Chinese Medicine, A.M. Bridault³⁷⁾ outlined:

1) The theory of five elements with their organ links, their spatial orientation,...(in corde ignem,...cordi meridionalem,...aestate cordis...);

2) how the pulse must be in harmony with other different organs, although his description approaches more closely that of Bordeu³⁸⁾ than that of Chinese sphygmology by Cleyer²¹⁾, and he quotes the latter; 3) the means to be applied: Materia Medica; (in surgery) red hot iron and red needle (acus candentes) applied to different regions to get rid of "morbid breaths"; never bleeding; sometimes clysters and emetics and only rarely cathartics; on the contrary dietetic is largely used; 4) how different diseases were treated by tricks in which iron, gold an red hot nails are mentioned four times, and a long needle on which a cupping glass is applied only once³⁹⁾. All these details follow the accounts given in letters left by the Jesuit Fathers, Bontius, D. Couzier (1757), Dellon (1689).

Bridault does not escape the failings of his time (and those of

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many other periods); he estimates the value of Chinese Medicine against what already exists in Western Medicine (Materia Medica, pulse, cauterization), but Acupuncture did not impress him even though some allusions was made to it; for example: gold needles, and the long unheated needle. Note the use of a cupping glass on acupuncture points, the meaning of which was not understood by him.

As to J. Astrug, his "Essay on the origin, the denomination, the nature and the cure of venereal diseases in China" is found only in the fourth edition of his book (1773). The origin of this essay is quite interesting because it is the result of a correspondence, as was common at this time (1737-1739), between the author and the Jesuits at Peking (P. Foureau supervised by the famous L. Parennin, author of Manchu anatomy, 1723). (Huard, Op. cit., 36) 1958). The prescriptions of drugs, the distribution and etiopathogeny of diseases were compared, but acupuncture was not considered.

It is equally interesting to note that in the middle of the eighteenth century, we find the word "Moxa" and not "Acupuncture" in the pocket dictionnary of uncommon French words⁴¹⁾.

In the second half of the eighteenth century the pulse is given pride of place even by the sinophile (H. Fouquet, 1787⁴²⁾ and C. Gandini 1776⁴³⁾.

It is Dujardin(1774)⁴⁴⁾ who has in a history of surgery, first given a clear explanation in French of the technique used in moxas and the "Puncture by means of needles" (the French word Acupuncture is not used in the book whereas the Latin word Acupunctura is used with reference to Ten Rhyne²³⁾. Maybe the explanation of why acupuncture appears in a book like his history of surgery and not of medicine lies in the following statement "Those who apply external remedies are surgeons and their generic term is Gecqua".

Dujardin talks of remarkable figures in which the regions for the application of moxa and points of puncture are indicated. He asserts that one must not neglect the localization of points and he reproduces a sketch from Ten Rhyne²³⁾. He criticizes the method because of the ignorance of anatomy shown by these people and the lack of agree-

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ment between their idea of circulation and our angeiology.

He describes the blood circulation (Hiué) very well and the spirits (K'i), and the macroscomic correlations which exist between the two systems as seen by the Chinese. When he describes the channels he uses the term "Artery" and makes a distinction between the Yin and the Yang, between top and bottom, and between different forces (Tsiué Yin, Chao Yin, Traé, Yin, etc.). He talks about viscera and entrails and describes quite well the system of "trois cuiseurs", the third part of the body including the whole of the viscera and entrails. The description of the relation which exists between the different parts and the extra-ordinary vessels (extra channels) (according to Cleyer²¹⁾ who seems to have plagiarized it from Ten Rhyne²³⁾) is well done. The same goes for the diagnosis (complexion, sense organs, voice, nail, pulse, etc.). The practical use of moxas is studied more than the use of needles, but this emphasis comes from the original sources (Ten Rhyne²³⁾). Notice that the distant action of moxas is clearly indicated as well as the relations which exist between the organs and the different parts⁴⁵⁾. The technical use of needles is specified clearly. In spite of the fact that distant puncture is indicated we must take notice of the following statement: "In all these diseases we prick the part of the body from where the illness seems to have started", (p. 97), because it is only this simplified acupunceture which will be taken into account in its first applications in the West. The rest of this chapter treats dermatovenereology and Materia Medica but J. Astruc asked the following question: "Have not the Chinese borrowed the mercurial preparations from Europe?" Actually there are three criticisms often made by "official" western physicians and they are also found in the writings of this Academician:

1) "In fact we can see that their knowledge of Anatomy is a fruit of their imagination, so all that is deduced from it will not be firm" (p. 77).

2) "A charlatan of today is persuaded that in order to interest the common man it is necessary to show queer things and to raise all these reveries up into a book which can be dangerous to ignorant persons ("Le consevateur du sang humain" without any other precise details), but this book is only a bad new book on medicine for those who are

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learned and who have common sense" (p. 78). (It deals with the relations existing between blood circulation, K'i and astrology).

3) "The puncture has the same effect as moxa; it robably acts by attracting a great afflux of humors to the irritated part unless *imagination*, which is a distributor of much good and evil either physically or morally, helps a bit in this cure" (p. 98).

Finally, since the word "sympathy" has been mentioned by Ten Rhyne according to Dujardin we must not forget that it was the time when the "theory of sympathies" was born^{46,47}).

Vicq D'azyr (1748-1794)⁴⁸⁾ in his Methodic Encyclopedia writes an article on acupuncture which ends in the following way: "it is easy to judge from this account: 1°...that acupuncture is a method that must be classified among irritating and stimulating means; that it has the same effect as moxa, fire, and vesicant, and so can control violent spasm; 2°—In Japan, acupuncture is considered as a famous cure, just like others are considered famous in other countries, and that its virtue is overrated. It is up to those who know the animal system well and who have meditated deeply on the nature of diseases to decide whether we should regret that this method has been applied among us. Anyway it is certain that its effects shine light on many important questions in the art of [healing]."

Pouteau (1725-1775) also seems to have studied acupuncture and especially moxas. Op. cit. 1959²⁸⁾ and 1673²⁾.

Conclusion

Chinese medicine as a whole was known during the eighteenth century. Together with the taste exoticism there was a quest for what this medicine could bring. If Chinese culture and civilisation were revealed to the public, then Chinese Medicine also entered the official medical world, but this is true only for the parts acceptable in the West that is the pulse and Materia Medica which came first, then moxas which appeared like another form of cauterization, and which were already known through the Mediterranean route.

Finally we may explain the easy introduction of moxas into daily practice by the fact that doctors who went to Japan saw that moxas

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were preferred there, and so they brought back this soft of medicine to Europe. Ten Rhyne went to Desima, Titsing to Desima (op. cit⁶⁹). p. 88), Kaempfer to different Japanese towns, Thunberg to Nagasaki⁴⁹. Acupuncture although known theoretically does not seem to be used at the end of this century and this is confirmed by Vicq d'Azyr.

Nineteenth Century

a) Generalities: In spite of the loss of interest brought about by the French Revolution and the accession to the Empire State the stage was set for the acceptance of acupuncture. It is perhaps its theoretical background that was a barrier to its acceptance in Europe⁵⁰. It was only when animal electricity was discovered that a sort of acupuncture was adopted.

The history of acupuncture in France during the nineteenth century can be divided up as follows:

- 1) the main observation of Berlioz in 1810.
- 2) repeated trials between 1810 and 1830 with the active participation of official medicine.
- 3) the modifications of it brought about during 30 years.
- 4) the publications of Dabry de Thiersant giving a detailed account of Chinese Medicine and specially of acupuncture, but which did not receive the desired impact.
- 5) an extended silence.

The same procedure was followed in other Western countries at more or less the same time, as we shall see in the last section.

b) Chronological analysis: It was Louis Berlioz, the father of the musician, who had the idea of applying acupuncture seeing the failure of other therapeutics. He was the first to publish a case about this, along with other observations⁵¹. He approached the problem of local sympathies (p. 106) and distinguished acupuncture from bleeding (p. 297). He writes: "Acupuncture does not in any case pertain to blood extravasation, it can only help to establish indications" then he explained a few cases the first of which seems to be the first Western use of acupuncture. The author himself writes that it was the case of an autoacupuncture because it was the patient herself who pricked in

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the needle Berlioz dared not put the needle in!). If this case is the first to be published, it does not seem to be the first case practised, for when Berlioz writes of using "a sewing needle dipped in Spanish wax directed towards its eye" he speaks of this as the most practical method in order to avoid the needle getting lost in the tissues; this would seem to suggest that other people have tried this method before him. In this respect Dantu 1826⁶⁵⁾ talks of "a few scattered observations in medical textbooks".

In 1813, two important Parisian theses were maintain. The first one, by Remusat was on glossoscopy⁵³⁾ and the second was by Lepage⁵⁴⁾ Remusat was nominated as the first Professor of Sinology at the College de France. The second thesis follows the idea of Dujardin in 1774, maintaining that the sphygmology and Chinese Mdicine as a whole should go from medical practice to being only of historical interest. In this respect, he asked himself the question whether Bordeu³⁸⁾ had not borrowed the division of the pulse into superior, middle, and inferior from the Chinese. Here we find a difference between Sinophile theoreticians who are on the decline and practitioners who manage to bring acupuncture into practice.

Demours⁵⁵⁾ en 1818 proposed a modification of acupuncture by applying a cupping glass before and after the setting of needles. It is not an innovation as Bridault had mentioned it in his thesis³⁹⁾.

During the following year, Haine published an important article on acupuncture and its therapeutic effects in the Universal Journal of Medical Sciences⁵⁷⁾. He quoted Ten Rhyne, Kaempfer, and Bidloo. Unfortunately he gives no explicit reference to the latter; he may be referring to the thesis this anatomist asked A. Helvetius to maintain "Exercitatio anatomico chirurgico de Puncto", Leyde 1709⁵⁸⁾. Then he gave a summary of Berlioz's publication, after which he described three observations on rheumatism, and spoke of how the perforation of viscera and arteries by needles can be harmless (Bretonneau). His own contribution was to defend the theory of nervous fluid(?) which Berlioz had proposed, by denying the influence of the imagination. Finally, without giving the exact date, he wrote that Professor Dupuytren spoke about acupuncture in his public lecture each year at

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the Faculté de Médecine de Paris.

In contrast to the disdainful and unapproving article on acupuncture by Bedor, there are two good articles on moxas and moxibustion in the Medical Science Dictionary⁵⁹.

The first "treatise on acupuncture" seems to be the monograph of Churchill 1821⁶⁰⁾ as given in various accounts (Med. Repos. 7: 441–449, 1822; Gerson G., (1822) and Friedreich J.B. (1824) quoted by Feucht)³⁾.

The most important publication on acupuncture appeared in 1825 and it was during this very year that acupuncture was introduced in a hospital for experimentation. Cloquet is the first head of a medical department from a Paris hospital to put it in practice. The theses of Morand J. and Dantu T.M⁶¹⁾., drew their inspiration from him. I have not been able to discover whether they have the right of priority but surely there was competition between the two⁶²⁾; Cloquet did not interfere, and as a result the two works were published in a hurry "according to the observations of Mr. Jules Cloquet" and "under his eyes".

The work of Morand consist only of 56 pages and refers to previous French publications but the textbook of Churchill is not mentioned. Paradoxically it is Morand's memoir that was translated in the U.S.A. this same year by Bache and it seems to have been the main stimulating agent for the spreading of acupuncture in the U.S.A. (Cassedy, 1974)⁶⁴⁾.

The book of Dantu⁶⁵⁾ is much more important and complete (280 pages). We shall come back to give a summary of it after an analysis of publications in 1825.

In the Universal Journal of Medical Science⁶⁶⁾ we find the follwing:

- 1) An article from Demours on the treatment of ophtalmia with a French innovation (implanted needles or wire).
- 2) The treatment of anasarca by Tweedale who compared the action of acupuncture to that of scarifications or slight scratch.
- 3) An account of observations collected in Mr. Husson's medical department at the Hotel-Dieu, Paris, during the first three months of 1825

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by Dr. A. Lacroix (lombo-sciatica, scapulalgia).

In the Archives Cénérales de Médecine of January 1825⁶⁷⁾ volume VII, we can read the following notes, articles and publications:

- p. 140: Segalas and Beclard: harmless puncture of the viscera. Demours: implanted needle and the application of a cupping glass before and after.
- p. 143: Accidents due to acupuncture: frequent fainting due to sharp pain (Aumont et Beclard).
- p. 149 Notes on acupuncture which give a survey (without author's name). 1) Beclard (1816) harmless puncture of vessels
- 2) Berlioz (1816) memoir dated 1810 submitted to the "Société de la Faculté de Médecine de Paris".
- 3) Acupuncture used by Laennec, Demours and many other practioner from Paris, by Haine and Bretonneau at Tours.
- 4) Beclard, in the Medical Dictionary, vol. I accepts the harmlessness of puncture, but the results do not seem to be good; except sometimes for relieving pain.
- 5) then there is a loss of interest in the subject until Cloquet, who spoke of electricity when reading a memoir before the French Academy of Medicine at the beginning of December 1824. Then Beclard again took up experiments on electrical phenomena to present a rapport before the Academy on the 16th Dec. 1824.
- p. 231 to 249: Observations made on acupuncture in the Hospital de la Pitié, under the supervision of M. Bally and some thoughts on his way of proceeding by Dr. Meyranx: (rhematism, nevralgia, gastroenteritis, pleural or pericardic pain, sprain and retention).
- p. 305 Cloquet replies to Aumont's observation.
- p. 308 Ophtalmia (Cloquet, Husson, Meyranx).
- p. 309. Segalas accepts that blood extravasation through acupuncture does not give rise to accidents, and this is in accordance with Beclard.
- p. 387 à 396: Meyranx: thoughts on acupuncture procedure according to experiments by Prevost and Dumas; the explanation that acupuncture acts by withdrawal or reduction of the electric fluid is based only on simple conjecture and this is in opposition to Pelletan's theory.

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What comes out of this journal shows well that in the beginning of 1825 the whole official medical world was preoccupied by acupuncture and experimentation on it was made in all clinical fields.

But our Western world was still preoccupied by the mode of action of acupuncture. In the beginning of this same year, Pouillet studied the electromagnetic phenoma of acupuncture in the Journal of Magendie⁶⁸⁾ giving a description of the following experiment. The voltaic circle is described as follows: a needle is implanted on a part of the body and a wire goes from the needle to the mouth with a Scheweiger multiplicator in between; this shows that if the steel is replaced by an unoxidizablemetal like platinum gold or silver, there is no passage of current. Pouillet concluded that if electricity is the basis of healing then healing should not occur when gold, silver or platinum are used.

Again in 1825, Sarlandiere⁶⁹⁾, who was a friend of Magendie and who seems to have influenced Duchenne de Boulogne, published a book. In the preface he explains that acupuncture draws off electricity and that electropuncture saturates the electric fluid. He claims the right of priority in the use of acupuncture over Cloquet because he published the spectacular recovery of Montaigu from catalepsy (1815) in "Les bulletins de la Société Médicale d'Emulation" in 1816, but he does not quote Berlioz!

Sarlandiere gives the origin of his sources. It was an orientalist Mr. Klaproth, who gave him a Japanese figurine on which are indicated the different points used for the application of moxas and needles. Later he would use the same way to come into possession of a manuscript containing the fundamental principles of Chinese and Japanese Medicine. This manuscript which Titsing wanted to publish after a stay of 18 years in Japan, consists of one hundred and ten aphorisms in the Hippocratic manner⁷⁰.

This manuscript is interesting because the text corresponds exactly to the drawings of Tsoē-bosi⁷¹⁾, the points are numbered and there is a numerical index as well as an alphabetical one. A few notes that Sarlandiere added to the manuscript prove that he did not assimilate the "physiology" of acupuncture; on p. 93, with regard to the four-

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teen principal parts of the body (Jnes-Ky), 12 plus the middle ventral (nienginiakt) and middle dorsal (fokinjakt) lines, Sarlandiere writes the following "I am doubtful that this division comes from Tsoebosi"; on p. 90 Titsing "when we are attacked by an internal or external disease the vehemence of its action differs according to whether the five main entrails (1) or the six most noble parts (2) are attacked, because they are the seat of any disease. The notes are the following "(1) stomach, small intestine, large intestine bladder, vagina or the urethra, and (2) brain, lungs, liver, kidney, uterus or testicle", but the five organs are the lungs, heart, liver, kidney, spleen (pancreas), and the six entrails' stomach, small intestine, large intestine, bladder, gallbladder and sanjiao (triple warmer); on p. 100 "We know that the Japanese and Chinese are very superstitious and they take into account atmospheric influences"; finally on p. 101, in the footnote Sarlandiere confused Harvey's blood circulation and the Chinese "course of circulation".

The second part of the book on the preparation of Japanese Moxa was not new but only an account of the technique and of the author's experience.

Only the first part seems to be something new in spite of the fact that it had been suggested by Berlioz, and that Cloquet claimed the authorship of it (Dantu⁷²⁾ p. 278). According to the author the advantages of this method are the introduction of electric fluid up to the deep organs and the reinforcement of the action of the acupuncture needle. ("The electricity changes the nature of the pain and stops the irritation", p. 1. Isn't the present explanation of electrostimulation's mechanism?). Sarlandiere gives a dscription of the method and its indications excluding all acute inflammatory phenomena, mostly as a matter of principles rather than from experience p. 42. The distant action of acupuncture was not considered.

We come to the treatise of Acupuncture written by Dantu in 1826. It was a restatement of the situation of acupuncture in France (except for Sarlandiere?) In the first chapter (41 pages) he gives an account of the history "of acupuncture in China and in Japan" and the modern history "of acupuncture" where Berlioz is quoted as a

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promotor. This historic account came to the Science Academy through Jules Cloquet. (Dantu does not give the exact date but it seems to be at the beginning of December 182467). The second chapter (p. 43 to 229) gives an analysis of 90 observations done during two and a half months by the author in various Paris hospitals. (Hôpital Saint-Louis, Dr. Cloquet; Val-de-grâce Dr. Devergie; Hôpital de la Charité, Dr. Fouquier; Odonto-stomatologie (?) Dr. Toirac; Hotel-Dieu, Dr. Husson); Dantu described the failures (sixth series of observations) and underlines the interest they bring p. 245 "It is always more useful to publish the unfortunate cases than the successful ones" The third chapter (231-279) is quite interesting for understanding the "state of mind" of those who practised acupuncture at this time. The instruments and operation procedure derived from the galvanic conception of that time: the needle, "loco dolenti" is connected to a conductor dipped in a container of salt water in order to allow the issue of "galvanic fluid". If steel needles are used they must be cleaned to get rid of oxides formed on them before they are used, and that is why gold or silver needles are preferable. He described well the local effects of the puncture (erythematic halo, numbness, heavyness) and he avoided the possibility of an accident by the puncture of nerves arteries or viscera by taking into consideration research done by Cloquet, Beclard, Delaunay, Haine, Bretonneau. In connection with accidents in acupuncture he mentions intense pain, excludes whitlows, mentions some hematoma, one death by commotion (the disappearance of two headless needles); other authors had reported delirium, paralysis, convulsion, mortal inflammation. The loss of headless needles does not seem to cause serious accidents. The oxidation of the needle seems to be responsible for the galvanic phenomena (effect) and this oxidation is due to the body's heat; "it is not shown that the oxidation of the needle is not linked to the patient's recovery".

The theoretical study is intereting for understanding the mentality at that time:

- 1) Acupuncture acts differently from usual derivatives
- 2) According to Cloquet (and not Dantu) it is the galvanic fluid
- 3) According to Pelletan we must explain it through a theory of the

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nervous system like Berlioz felt it should be "it acts by stimulating the nerves and by restoring a function of which they were deprived by the pain effect".

4) It is probably in this way that acupuncture operates: either it draws off morbid fluid (which is the idea of M.J. Cloquet) or (according to M. Pelletan) it stops or spreads it in a few organs in the neighbourhood except for the nerves from where it goes to the ground.

Lastly the principles of the mode of its application are interesting because when the needle is introduced at the most painful point Dantu noted distant and controlateral actions, unfortunately unconnected with Chinese acupuncture. The consideration of the correct time of application of the needle, even a fixed needle, is quite new. "In all cases we must wait for the more or less complete disappearance of morbid pain". The indications are well known: (neuralgia, rheumatism, contracture, cramps, tetanus, inflammation, and even cancerous pain) but there are cases where it is quite useless," the affections which seem to derive from a loss of energy of nervous influx (paralysis, mercurial tremor)".

In 1828, Bayle published 9 items to show the state of things⁷³⁾. This was a summary of publications from Ten Rhyne and Kaempfer, observations made by Berlioz by Haine, by Cloquet and Dantu, by Churchill, Lacroix, Maritnet, Meyranx, Morand and Peyron, by Tweedale and Finch, the experiments of Carraro on animals, and the experiments on oxidization of needles and observations on ophtalmia by Renard. We notice that this restatement of the question by Bayle together with publications by doctors of the East India Company of the XVIIth century, revives foreign authors like Churchill, Tweedale, Finch (England), Carraro (Italy), Renard (Germany). Notice also the definition given to acupuncture "Acupuncture is a pocedure or method which consists in princking the suffering parts by means of needles with intention to cure".

Three years later in 1831, the thesis of Siame⁷⁴⁾ gives an excellent idea of the state of acupuncture in Europe at that time in 15 pages. In the historical part, on p. 5, he emphasises the fact that "they pricked parts of the body other than the suffering ones", but the in-

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tention of this statement is not clear. After a concise analysis of the history, of incidents, indications and results, Siame insists on three possibilities for needletherapy that remain: "The arterial obliteration of Velpeau, the resuscitation by heart puncture of Carraro, and deep exploration by needle (Finch) for liquid collection, etc..." but this has already been done in fractures for example.

At that time according to Huard (Op. cit.²⁾ p. 30) acupuncture was mistaken for the intradermic medication of Guerin (1740–1827) who, for lack of hollow needles, pricked needles coated with an analgesic preparation. Can we not say that with the help of the theory of fluids, this medicinal needle-therapy and needle-diagnosis were the origin of the use of hollow needles for hypodermic injection and for puncture? And by the tendency of things to come full circle we find actually even in China a sort of "Acupuncture" that recommends the injection of certain substances at the point of acupuncture.

As for the use of acupuncture as imagined by Velpeau in 1830, its evolution has been summarized well recently by Monsarrat⁷⁶⁾. Velpeau proposes to use a fixed needle on aneurysms in order to cure them. Pravaz, Guerard, Philipps and Petrequin (1846), imagined and realized galvanopuncture in the vascular field. Moore in 1864, Domville in 1871, Corradi in 1879 used a filiacupuncture without good results but it led to the "Wiring" of Poppe in 1949.

Finally we must point out the use of the twisted suture (Malgaigne's method 1806–1865) in this field. This method has sometimes been called "acupressure", which corresponds to the action due to foreign bodies represented by the needles in the aneurysm and the joint action of vascular striction by the threads binding the needles.

As time goes by research on acupuncture and its use slow down, and only some procedures derived from it will survive. For example: the hypodermic needle; deep electrotherapy; vascular application (see above). In the beginning of the century Remusat⁵³⁾ and Lepage⁵⁴⁾ foresaw that Chinese Medicine would be an ethno-medicine, that it would have only a historical interest, and would not be compatible with official medicine and its theories; the moxas disappeared in 1830 (Huard, op. cit.²⁾, before acupuncture. Nevertheless things have

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not finished. In fact in 1861 in the Medical Science Encyclopedia an article was published entitled "Acupuncture". It is a very important article well supplied with references, and which ends with the following words "Maybe we shall find an opportunity to come back to acupuncture and to remove it, at least for the benefit of the patient, from this oblivion into which it did not deserve to fall". The diagnosis of apparent death is mentioned in connection with direct and indirect indication of acupuncture. (Simonet and Parrot 1859). With regard to the explanatory theories which were surveyed here, the authors come to the conclusion that all these theories are related to the Hippocractic theory in "De Flatibus" which seemed to have been revived in the Chinese theory of wind. Finally we must point out a big mistake: "Acupuncture together with moxa are the only therapeutic agents of the Chinese people...", this error is especially serious as the Chinese Materia Medica and particularly opium was the actual subject of discussion.

By the end of the XIXth century the situation had not changed a lot in spite of two major publications "La médecine chez les Chinois" by Dabry de Thiersant in 1863⁶⁾ and "la Matière Médicale des Chinois" by P. Dabry and J.L. Soubeiran in 1874; Gubler made a report on the last one to the "Académie de Médecine" (1872) and it was decided that the work be printed at government expense.

"La Médecine chez les Chinois", prefaced by Soubeiran, was a compendium of Medicine in the Celestial Empire. According to Grmek¹⁵⁾ this book is written with great common sense, but the Chinese ideas are given with a galenic interpretation and a certain number of statements are without foundation. Personally I find this book to be the first complete and the most satisfying occidental work published on this subject. The first chapter on Chinese Medical theory (pp. 1-79) gives a very good preparation for the interpretation of signs, especially the pulse and this is necessary for the practice of acupuncture (chap VI). The 80 pages of this chapter, including three drawings, seems very small in comparison to the importance of such a subject. Dabry did not attempt to give an explanation of the action of needles, but seemed to attach himself to "pneumatic" pathology

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(Huard Op. Cit. 2 p. 32). The sinolog H. Masppero has studied this work with pleasure. On the other hand it did not contain words like "meridian" and "energy" which are at present used by western acupuncturists.

This publication did not have the impact it deserved because, as a result of every one having wanted to use acupuncture everywhere and in any way, acupuncture had already been completely discredited.

By the end of the century acupuncture seems only to form a part of metallotherapy. In the therapeutical dictionary (1883-1889) Dujardin-Beaumetz dealt with metallotherapy in 23 pages and accorded only 2 pages to acupuncture (Huard Op. cit. 2 p. 33).

Twentieth Century

It is absolutely unquestionable and beyond doubt that in the beginning of this century acupuncture remained in oblivion until the arrival of Soulie de Morant (1878-1955) and of Ferreyrolles (1880-1955). Even in China Traditional Medicine was discredited and forbidden in 192978). Nevertheless it is not all total silence. Indeed the Cultural aspect conceals often the medical character79 and in France we can quote the publications of Klotz, Regnault, Leprince80). The latter devoted four pages to acupuncture without giving its curing value but explained its action by "derivation" that is "by direct action on the organic or functional equilibrium of deep organs joined "to a skin area according to the description of Head. This comment shows well how the western medical mind wants to understand, with the help of actual knowledge, the medical acts carried out. Yet this is not always the case; and esoterism, the questioning of the western system of knowledge will allow the tremendous development of acupuncture in the west. To this we can add the overthrow of the Chinese Medical system with the accession to the Republic of China where we find a return to Traditional Medicine which is now subjected to much experimentation. This medicine is undergoing development, and this is shown by acupunctural analgesia or the pharmacodynamy-acupuncture association.

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As everybody knows, it is the meeting of Soulie de Morant and Ferreyrolles and their common publication of 1929⁸¹⁾ which open the modern era of Acupuncture in France¹⁾. Thanks to M. and Th. Martiny the first consulting department in acupuncture was opened at Leopold Bellan's hospital. In 1932 Flandin welcomed Soulie de Morant and Ferreyrolles at Bichat's hospital, where a true school of acupuncture would start; it would be a real nursery of acupuncturists who, while drawing from the source, will sometimes reject the Master because he has the great defect (for the French) of not being a doctor.

Soulie de Morant is also a diplomat who knew Chinese when he came to China in 1901. By the way we must mention that his first book was a translation of a Japanese work⁸².

The whole published work of Georges Soulie de Morant is and will remain the chief source of all western publications^{83,84)}. The proof of this lies in two words: Meridian and Energy, which many acupuncturists criticize at present, but both these words come from his publications.

The need to give a solid and scientific basis to the true Chinese acupuncture animated Soulie de Morant and his school. Biophysicists (Dimier and d'Arsonval) were encouraged by him to make experiments on "dermatometry". Pouillet⁸⁵ studied the electrical phenomena occuring in acupuncture. It was also the time when research was done to find out the relation or connection which might exist between viscera or deep organs and teguments. Jarricot⁸⁶ began with reflex-dermalgias, a fruit of the western mind, and was to end up finally with Chinese acupuncture.

After World War II many societies were created in France with either a traditional or a scientific orientation. In 1943 De La Fuye created the Société Française d'Acupuncture, while in 1945 was created the Société d'Acupuncture which included faithful disciples of Soulie de Morant.

Journals will appear and Schools will be opened. These Societies will try to unit western Medicine to Chinese Tradition. Homeopathy will be combined with acupuncture to create homeo-siniatry⁸⁷. This relation is also found in the second edition of Soulie De Morant's

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treatise. This need to complete acupuncture is found everywhere. The injection of a substance at the point of acupunctue will be generalized, specially in Russia where as well as in France microionophoresis will be done (Portnov⁸⁸), Cantoni⁸⁹), thus associating acupuncture with pharmacodynamics. But, in France, the fitting up of an apparatus to detect points on the skin will transform acupuncture in the middle of the XXth century. Niboyet is undoubtedly the promotor of this procedure⁹⁰. He continued his theoretical and practical research which led him to his thesis in Sciences in 1963⁹¹).

The bringing of acupuncture up to date by the "barefoot doctors" of the Republic of China, the dissatisfaction of doctors with the advancing technology where Man disappeared behind numbers and graphs, and the refusal of ill patiets to be treated as an equation or a common denominator by specialist teams, have certainly contributed much to the development of acupuncture in France. But the "return to the sources", the return to macro-microcosmic harmony and the rejection of aggressive medicines for the benefit of a so-called "natural therapeutics" have also promoted this expansion.

Around 1960, we must point out a very important wave of traditional research with the "rediscovery" of the theory of five elements, the study of ancient texts and Chinese philosophy, the attempt to understand Chinese thought and to apply thi tradition to medical practice; paradoxically it seems at this time to be in the background in the far west (except Hong-Kong, Taiwan and Japan perhaps). In this new orientation in France we must mention the names of Chamfrault, Van Nghi, Borsarello, Darras, Schatz, Le Prestre, de Tymowski, Mussat, etc⁹²⁾. who were all founders of schools working on ancient text and trying to give an interpretation which would promote this aspect of acupuncture.

But a large gap existed between official medicine and acupuncture. How to build a bridge between the two? The foundations were laid (Head and his referred pain, Jarricot and his reflex-dermalgias⁸⁶⁾ Nogier and his auriculotherapy⁹³⁾, relations to nerves and the vascular system established by Ribet and Nessler⁹⁴⁾ which Soulie de Morant had already approached in his precis⁸³⁾, Leprince and his reflexothe-

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rapy⁸⁰⁾, Verheggen and his dermalgias⁹⁵⁾.

Some were for a rigid and fixed Tradition others for a strong and strict Science. Then around 1970, exchanges take the place of misunderstanding and the language difference.

Acupunctural analgesia came to accelerate exchanges between traditionalists who accept new techniques and observations, and scientists who consider that knowledge should not include only western Science Both tendencies come together in a single effort to fight pain. A big effort is made to understand more and to progress; but per contra, multiple publications come out at such a rate that it is difficult to follow the progress made. For the years 1975-1976 the analytical index96) that I have just finished contains 775 titles and it is not complete because I have not been able to obtain certain journals, or reviews (Japanese, Chinese, Russian, etc).

More and more doctors practise acupuncture a bit in a hurry sometimes, and without adequate preparation, but the number of patients continues to increase. Many university research laboratories in all the

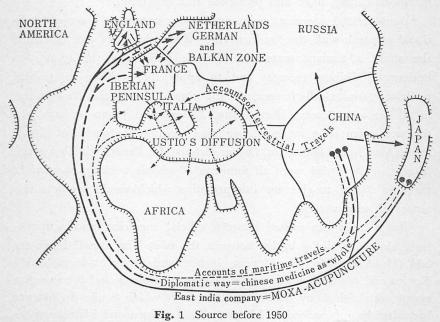


Fig. 1 Source before 1950

Western countries are examining this problem. They are all brooding upon this fact of observation which does not seem to interact easily with our system of knowledge.

Lastly without any doubt, the stay of military doctors in the Far East has promoted the acceptance of acupuncture in Europe and North America.

Acupuncture in the neighbourhood of France

If France happens to be the melting-pot for the development of acupuncture in Europe it is far from being the only nation to contribute to its development in the West, as was said on previous pages. In order to simplify we shall deal with each country in turn.

South-east: Italy

Acupuncture seems to have been introduced in Italy during the first years of the twentieth centuy⁹⁷⁾ and it was spread especially to the north of Italy. Bozetti⁹⁸⁾ seems to be the first to have used the

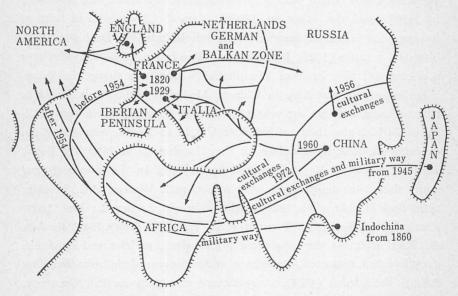


Fig. 2 Diffusion of Acupuncture

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Italian word "Ago-puntura." Between 1825 and 1830 Italian publications and publications made by Italian authors in foreign journals increased⁹⁹⁾. In the following ten years theses flourished¹⁰⁰⁾. Various scattered publications continued and we must underline Riberi's publication in 1840. He was the founder of the Torino Medical Academy¹⁰¹⁾. Then acupuncture received less attention for the rest of the century. In the twentieth century Professor Vinay of Milano was the first in Italy to try to give a solid basis to Acupuncture¹⁰²⁾. In those "recent" years the acupuncturists were divided in two as in many other countries the traditionalists under V. Lanza's leadership and acupuncturists having scientific and western tendencies siding with L. Roccia and A. Ouagliasenta.

North-east: Germanic and Balkan countries going up eastwards to Russia

I regret that I have not been able to procure Arnold's book on the History of Acupuncture in Germany¹⁰³⁾. But according to ducuments in my possession we must first pay tribute to M. Boym, R.F. Jesuit of Polish origin who left two fundamental works, one published in 165618) and the other in 168624), then to Cleyer who in spite of having been criticized deserves to be rehabilitated²¹⁾. In his medicohistorical treatise (1723) Johan-Conrad Barchusen (1666-1725) who was a doctor and chemist from Westphalia¹⁰⁴⁾⁾ put into shape the knowledge known at that time in Chinese Medicine. Afterwards it seems that we must wait for the year 1825 to find acupuncture in the medical world with the thesis of Scheider C.A.L. in Berlin, accounts of the experiments done by Meyranx at the Hospital de la Pitié by Bally, and the work of Renard quoted by Bayle⁷³⁾. In the following year many theses on acupuncture were maintained: Wooste, C.E., Leipzig, 1826; Beck D., München, 1828; Turk I., Utrecht, Lamer A., Pest, 1830; Kuntzek K., Wien, 1831; Twrdon F.X., Wien (or Prag), 1844; Paulsen A., Kiel, 1850. At the same time publications, reviews and articles in encyclopedias appeared, sometimes under famous signatures: Basedow (1833), Bardeleden (1874). Acupuncture was being used in Germany, and also the techniques derived from it such as electropuncture, moxa,

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and variolization; Baunscheidt who learned acupuncture in 1848 from a missionary returned from China, created a particular technique derived from acupuncture, blood extravasation and revulsion by the help of an apparatus which he invented "the Baunscheidtismus" which was spread to England, to the U.S.A. and to the USSR^{105,106)}. Finally if, like in other European countries, acupuncture seems to have fallen into oblivion by the end of the nineteenth century and the begining of the twentieth century, the sinologists continued to take an interest in Chinese Medicine and acupuncture. At the moment when Soulie de Morant was giving a second impulse to acupuncture. Hubotter¹⁰⁷⁾ published his book on Chinese Medicine. Afterwards a vast movement was born which included medical practioners grouped in societies of which Von Leitner (Berlin) seems to be the moving spirit, sinologists like M. Porkert (München) whose works encompass all Chinese Medicine, and university doctors (often anesthetist) who try to bring harmony between East and West. In Austria, J. Bischko, the Director of Ludwig-Boltzmann Institute for Acupuncture, is known throughout the western world for his worthy research done in Vienna, and for the stimulus he gave to this discipline in his own country.

Russia:

Following the accounts of Grmek¹⁵, Huard and Wong¹⁰, the implantation of acupuncture in Russia can be sketched in the following manner. It came through Tcharoukovskii (1828) and principally Tatarinov (1845)¹⁰⁸⁾ who published articles on anatomy, physiology and Chinese medicine without neglecting the pulse. Then we find a certain number of publications especially at the beginning of the twentieth century. The popularity of acupuncture was developed in Russia when a mission of specialists was sent to China to study thoroughly the technique of needles and moxas (1956). Medical congresses in 1958 and especially in 1959 held at Gorki took stock of the question, and acupuncture was developed through Sino-Russian exchanges (Huard and Wong, Op. cit. ¹⁰⁾. Three directions of research seem to have been developed in the USSR: detection, with the work of V.G. Vogralik around the year 1960, explanation of traditional acupuncture by the theory of nerves and especially the work of Pavlov, and substitution of

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needles by electrical stimulations and micro-ionophoresis which is studied at the institute of Portnov at Riga^{SS}).

North-east: England going up Westwards to North America

In England, Chinese medicine was known probably at the same time as in France thanks to the East India company and above all to the publication of Ten Rhyne's book23) in Londn in 1683, but this country seems to have given a most direct impact to diagnosis by the feeling of the pulse thanks to Floyer^{29,30)} in 1707. We must wait for Churchill's publication in 1821 in order to have an explanation of this method in its pratical application, and thanks to him we learn that it was Dr. Scott of Westminster who first practised acupuncture in England. Feucht³⁾ claims that acupuncturation was practised in England earlier by a Chinese doctor (1775?). By around the year 1825 a certain number of Englishmen became interested in acupuncture and they published in foreign countries (Finch, Tweedale, Eccles...) According to publications quoted by Feucht³⁾ it appears that the interest in acupuncture was reduced less than in France. In 1880, we must quote Dumontpailler109) who observed the disant action of acupuncture but does not seem to have retained the theoretical and practical value of it. Then as Aldous huxley writes in the preface of the first edition of F. Mann's book¹¹⁰⁾, it was Soulie de Morant and an international con gress on acupuncture that allowed it a comeback in Europe and in England. Yet we must notice that Cumberbatch published an article on galvanic acupuncture in 1929¹¹¹).

As for the United States of America and Canada, Cassedy has made an excellent survey⁶⁴⁾. European works and publications were known there from 1820 thanks to the analysis in "The Medical Repository". An analysis of Churchill's treatise appeared as early as 1822, yet it seems to be the work of Morand⁶³⁾ translated by F. Bache which was the true promotor of acupuncture. After this translation, Franklin Bache published his personal observations in 1826¹¹²⁾. The translated book of Tavernier "Elements of operative surgery" in 1829, as well as various other European publications occupied the North-America medical scene in this field for about twenty years. Philadelphia

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seems to be the town where acupuncture was most firmly implanted at that time. As elsewhere acupuncture was used for pains, to resuscitate drowned persons, and anasarca, but it was not free of criticism (inconvenient, accident, infection...). For the entire half century, 1850–1900", The Index Catalogue of the Surgeon General's Library could identify hardly half a dozen scattered American publications... However acupuncture did not die out in the United States. Even during this later, more skeptical period, occasional physicians, not the least of whom was William Osler, took sufficient interest in the practice to keep it alive" (Cassedy op. cit.). Nowadays many societies and journals exist and in almost all Medical Schools research is done to confirm or refute the effects of acupuncture. In some states, acupuncture has a legal status.

South-west

Spain and Portugal have brought basic documents and perhaps they were the first countries to do this as we saw in the first part of this study But three silent centuries followed because afterwards only a few documents took this route in acupuncture's evolution in the West. In contrast in the past ten years the interest of doctors from the Iberian Penninsula has grown, and as in other countries a pro-acupunctural movement is taking shape.

Finally to end this survey we must not forget many small countries which have not been mentioned but which now enter this present History. I want to mention Switzerland, Belgium, Denmark (which remained silent after the period of sources) Sweden and Norway (where interesting fundamental researches are being carried out), and in general all the countries around the Mediterranean Sea.

Conclusion

Thanks to the press and television, acupuncture is now well known throughout the world. The scepticism of some people has counterbalanced the sometimes puerile admiration of others; but acupuncture has now entered the history of the West, and men are working with great eagerness for its integration into Universal Medicine

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where the best coming from the East and from the West will act for the benefit of all patients.

To conclude, if we consider the general evolution of acupuncture in Western countries we can make the following remarks. The fundamental materials reached us through the diplomatic route mainly, and they were Japanese documents which reached us first; and finally we can say that this history has followed a sexagesimal cycle like that of the Far Eastern macrocosm.

1683 Ten Rhyne

1710 Floyer

1750 Bridault, Bordeu

1780 Dujardin

1810 Berlioz

1840 Decline

1870 Dabry

1900 Silence

1930 Soulie de Morant

1960-Scientific Researches

—Detection (Niboyet)

-Traditional Researches

1990

Let us hope that the year 1990 will see the official introduction of acupuncture into medical school and bring an appropriate stability between tradition and Science, between Ancient and Modern, between East and West, between Yin and Yang?

Such a balance is surely the definition of health in Chinese Medicine.

Notes

- 1) Jarrictot, H. et Wong, M. 1972. Connaissance et évolution de l'acupuncture chinoise en France-Lyon Méditérrannée Medical—VIII, 17: 1557-1592.
- 2) Huard, P. en 1973. Quelques emprunts de la médecine française a la médecine chinoise, XVIIe et siècles—Rev. du Palais de la découverte 12/2: 17-48.
- 3) Feucht, G. 1977. Die Geschichte der Akupunktur in Europa. Karl F. Haug Verlag, Heidelberg. R. Baptiste, s.d. Thése de Pharmacie, PARIS.
- 4) Soulie de Morant, G. 1939. L'Acupuncture chinoise, Mercure de France,

Paris.

- 5) "Mémoires concernant l'histoire, les sciences, les arts, les moeurs, les usages, etc...des Chinois" par les missionnaires de Pékin, 15 volumes (1776-1801). SUE. 1970. Etat de la chirurgie en Chine. Soc. de Médecine, Vendémiaire et Brumaire, p. 582-589.
- 6) DABRY de THIERSANT, P. 1863. La médecine chez les Chinois, Plon, Paris.
- 7) JARRICOT et Wong, op. cit. (1) p. 1583.
- SARTON, G. 1947. Introduction to the history of Science, Vol. III, p. 906, footnote 42.
- 9) BARIETY, M. et Coury Ch. 1963. Histoire de la Médecine-Fayard, Paris.
- Huard, P. et Wong, M. 1969. La médecine chinoise. Que sais-je-Paris,
 p. 89.
- 11) Feught, G. Op. cit (3) p. 3.
- 12) Bontius, J. 1642, De Medicina Indorum-Lugdun. Batav. apud F. Hackium.
- 13) Armand-Jean de Mauvillain 1648. An the Chinensium menti confert? Thése de médecine, Paris.
- 14) cf. (23).
- 15) Grmek, MD. 1962. Les reflects de la sphygmologie chinoise dans la médecine occidentale, Biologie médicale, LI, No. hors série, 120 pages.
- 16) NIEUHOF, J. 1665. L'ambassade de la Compagnie Orientale des Provinces Unies vers l'Empereur de la Chine ou Grand Cam de Tartarie, faite par les Srs. Pierre de Goyer et Jacob de Keyser Leyde, Jacob de Meurs II: 22-23.
- 17) de Rhodes, A. 1653. Divers voyages et missions du P. Alexandre de Rhodes en la Chine et autres Royaumes de l'Orient, avec son retour en Europe par la Perse et l'Arménie. S. et G. CRAMOISY, Paris, p. 189-194.
- 18) Boym, M. 1656. Flora Sinensis, fructus floresque humilline porigens, serenissimo ac potentissimo Principi, ac Domino duo Leopoldo Ignatio Ungariae Regi. Vienne, M. Rictius.
- 19) Anonyme 1668. Les secrets de la médecine des Chinois consistant en la parfaite connaissance des pouls. A Grenoble chez Philippes Charvys, 1671. Preface from Canton 1668 (Italian translation: Milano, 1676, and English: London, 1707).
- 20) Grmek 1962. op. cit. (15) 59-64.
- 21) CLEYER, A. 1682. Specimen medicinae sinicae, sive opuscula medical ad mentem sinensium. Francfort-sur-Main. J.P. Zubrodt, 226 pages et 30 tases.
- 22) According to Gremek (1962, op. cit. (15)), "Specimen Medicinae sinicae is only an assemblage from a Chinese- latin treatise given by Rumphius, manuscripts from M. Boym, letters and translations from a European scholar living at Canton. Furthermore, Cleyer claims himself to be an "editor", and not an author. This heteroclite book mentions principally pulses, chinese doctrine and philosophy; it contains translation of Mö-Kiué, a part of the Materia

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- Medica, and diagnosis by the tongue. This book also includes a diagram showing the direction and timing of the circulation of blood and fluids (air, breath) invessels, reproduced in Jarricot and Wong's paper (1) p. 1569. These authors also give an analysis of the six opuscules which constitute this book.
- 23) Ten Rhyne, W. 1683. Dissertatio de arthritide: mantissa schematica de acupunctura: et orationes tres,...Londoni, R. Chiswell. "Mantissa schematica" (p. 145-168) includes 4 very good plates; "de acupunctura" (p. 169-191), after a long preface of 12 pages describes technique and use in only 5 pages, then ends with an epilogue and a corollary.
- 24) Boym, M. 1686. Clavis Medica ad Chinarum doctrinam de pulsibus, autore R.P.M. Boymo, S.J., et in China Missionario. Hujus operi ultra viginti annos jam sepulti fragmenta, hinc inde dispersa collegit et in gratiam Medicae Facultatis in lucem Europeam produxit, CL. DN Andreas Cleyer, M.D. et Societatis Batavo-orientalis, Proto-Medicus. A quo nunc demum mittitur totius operis exemplar, e china recens allatum, et a mendis purgatum, Procuratore R.P. Philippo Copletio, Belga, S.J. Chinensis Missionis Roman misso. Admexa ad Decas II Ephemeridum Med-phys. sive Miscellanea Curiosa Academiae Naturae Curiosarum. Norimbergae, 1686. 144 pages, 5 tables.
- 25) JARRICOT et WONG, 1972, op. cit. (1) p. 1564-1565.
- 26) MERKEL, R.F. China und das Abendland in 17 und 18 Jahrhundert, Forschungen und Fortschritte, Vol. VIII, p. 367.
 ARTELT, W. 1940. Christian Mentzel, Leibarzt des grossen Kurfürsten, Botaniker und Sinologue, Leipzig.
- 27) Vossius, Isaac 1618-1699. "Variarum observationum liber" London 1685 (chapitre XIV: de artibus et scientiis sinarum page 69-85). The sphygmic art of the Chinese people is prodigous. These English books deal with pulses, but scarcely at all with acupuncture.
- 28) Huard, P. 1959. La médecine chinoise dans les milieux parisiens du XVIII° siécle. Sem. Hop. Paris, 58/8: 3519/S.P. 666 á 3527/S.P. 673.
- 29) FLOYER, J. 1707. The physician's pulse-watch, or, an Essay to explain the old art of feeling the pulse and to improve it by help of a pulse-watch, London—S. Smith and B Walford.
- 30) Floyer, J. The pulse-watch, Vol. II, or, an Essay to discover the causes of Diseases and a rational method of curing them by feeling of the pulse London, Nicholson.
- 31) SZESNIAK, B. 1954. John Floyer and Chinese Medicine-OSIRIS, p. 127-156.
- 32) Semedo, A. Imperio de la Cina, Madrid, 1642.
 ——. The history of the great and renowned monarchy of China, London, 1665.

NAVARETTE, D.F. tratados historicos politicos, ethnicos y religiosos de la

- monarchia di China, Madrid, 1676.
- Lecomte L. nouveaux mémoires sur l'état présent de la Chine. 2 ème éd. Paris, 1697.
- 33) Huard, P. 1957. Quelques aspects de la doctrine classique de la médecine chinoise. Biologie Médicale, Numéro H.S. (p. 80).
- 34) du Halde, J.B. 1735. Description géographique, historique, chronologique, politique et physique de l'Empire de la Chine et de la Tartarie chinoise. Paris, Le Mercier.
 - Reprinted at La Haye, 1736; Three English editions (1736, 1738-41 and 1742) by R. Brooker with some passages cut out; German edition, Rostock (1747-49) by F.E. RAMBACH; Russian edition Saint Petersburg (1774-77) by I. de Theils.
- 35) FOLLIOT de SAINTVAST, L.A. An infirmis a morbe viribus reparandis Gin Seng. Praes. J.F. VANDERMONDE. Thèse de médecine, Paris.
- Huard, P. et Wong, M. 1958. Montpellier et la Médecine Chinoise. Monspeliensi hippocrates, 1958 2: 13–20.
- 37) Bridault, A.F. 1759. Medicinae Sinensis conspectus Thése de Médecine, Montpellier, Praes. Fr. Boissier de Sauvages.
- 38) Bordeu Th- 1756. Recherches sur les pouls par rapport aux crises. Inspired from the work of Spanish physician Solano de Lucques Madrid, 1731..

 1818. Oeuvres completes précédées d'une notice sur sa vie et sur ses ouvrages par le Chevalier Richerand, 2 tomes, 1044 pages, Paris, Bordeu did not seem to have knowledge of Chinese sphygmology however, he knew acupuncture. As a matter of fact in "de la complication du pouls dans la fièvre maligne" p. 363, he writes: "We know that Japanese and Chinese people treat several diseases only by cautery as used at present and by acupuncture", etc....
- 39) Splenalgia. Cutem supra lienem incidunt acu proelonga, deinde ope cucurbitulae exugunt adipem puriformem.
- 40) ASTRUC, J. 1736. De morbis venereis libri sex. In quibus disseritur tum de origine, propagatione et contagione hurumce affectuum in genere: tum de singulorum atura, aetiologia et therapeia cum brevi analysi et epicrisi operum plenorumque quae de oedem argumento scripta sunt. Lutetiae Parisiorum apud O. CAVELLIER.
- 41) Manuel lexique ou Dictionnaire portatif des mots français dont la signification n'est pas familière á tout le monde...Tome II, page 113, Paris, Didot 1755.
- 42) Fouquet, H. 1767. Essai sur le pouls par rapport aux affections des principaux organes avec des figures qui représentent les caracteres du pouls dans ces affections. Montpellier. Vve J. Martel. The author studies the pulse of organs from the Chinese clinical data using the following sources: (Du Halde,

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- BOYM, CLEYER, Anonyme de 1668); in his techniques which he borrows from China, he recommends the feeling of the pulse at the two wrists with two or three fingers extended rather than flexed (GRMEK, op. cit. (15) 1962).
- 43) Gandini, C. 1776. Gli elementi dell'arte sfigmica osia la dottrina del polso racavata dell'antica e moderna storia della Medicina Chinese (!) ed. Europea, indi combinata e ridotta a regole no meno sicure che facili —Napoli—The author follows Fouquet, but he is much more sinophile.
- 44) Dujardin, 1774. Histoire de la chirurgie depuis son origine jusqu'à nos jours, Tome I: 75-105, Imprimerie Royale, Paris.
- 45) "Ten Rhyne...exclaims: "This harmony, this sympathy between parts depends on an arrangement of vessel-supply unknown to European physicians! Not at all, it is that our medicine has become too speechifier; in my opinion the study of parts has made us neglect the practical science of the whole, or of this interdependence between the parts so well pointed out by Hippocrates and by all the true doctors: in this alone Chinese medicine, even if it appears to be empirical and imperfect in this respect, is worthy of some attention". (op. cit. (44) p. 94).
- 46) Canjolle, J.B. Quelques cosidérations sur la sympathie qui règne entre le système cutané et les autres systèmes de l'économie vivante. Thése de Médecine, Montpellier, An X (1801–1802).
- 47) Huard, P. et Wong, M. 1957. Structure de la médecine chinoise, BSEI, XXXII, 4: 299-376, Foot-note 116: "the theory of acupuncture is not without relation to the old doctrine of sympathies according to which immaterial connectionse exist between parts of the same organism and between the similar organs of different organisms. For example, a synergy exists, in China and in Europe, between womb and breast. The vena salvatella (vein of safeness is supposed to correspond to the liver spleen and lungs. So bleeding it would act favourably upon diseases of these organs".
- 48) Vicq D'AZYR, F. 1805. Oéuvres complétes, Vol. V, Paris.
- Thunberg, K.P. 1788. Dissertatio de moxae atque ignis in medicina usa, Upsal.
- 50) Bernardin de Saint-Pierre, M. Harmonies de la naure, p. 317. "The Japanese attribute, not without reason, a lot of diseases to the stagnancy of this inner air. That is why they frequently use puncture, i.e. acupuncture and ustion (moxa) for curing it. Our scholarly theories have not dealt enough with the effects of the inner air inside the human body".
- 51) Berlioz, L.V.J. Mémoire sur les maladies chroniques, les évacuations sanguines et l'acupuncture. Croullebois, Paris, This is a modification of the report sent in 1810 to the Société de Médecine de Montpellier which gave him an "honourable distinction".
- 52) This does not confirm the views of SARLANDIERE (1825) (Op. cit. (6) p.

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- 97) and these of FEUCHT (1977) (P. cit. (3) p. 3).
- 53) Remusat J.P. A. 1813. Dissertatio de glosso-semeiotice, sive de signis morborum quae a lingua sumuntur, praesertim apud sinenses. Thése de Médecin, Paris.
- 54) Lepage, François-Albin 1788-1875. Recherches historiques sur la médecine des Chinois. Thése de Médecine, Paris, 1813.
- Demours, A.P. 1818. J. Complém. du Dictionnaire des Sciences Médicales,
 t. II, p. 367.
- Dictionnaire des Sciences Médicales, article "acupuncture" par Bedor, T 1,
 p. 149, Panckoucke, Paris,
- 57) Haine, A. 1819. Notice sur l'acupuncture, et observation médicales sur ses effects thérapeutiques J. universel des Sc. Med. 13: 27-42.
- 58) FEUCHT, Op. cit., 1977 (3).
- 59) LARREY, D. 1819. "moxas" (p. 460 à 474) et Percy et Laurent "Moxibustion" Dictionnaire des Sciences Médicales, tome 34, Panckoucke, Paris, These articles included elementary technique indications, and also an historical account and two plates.
- 60) Churchill, J.M. A treatise on acupuncturation, London. A French translation by M.R. Charbonnier has been published. Crevot, Paris 1824 (44 pages) and a German one "Abhandlung über die Akupunktur", C.M. Wagner, Bamberg, 1824.
- 61) MORAND, J. 1825. Diss. sur l'acupuncture et ses effects thérapeutiques Paris, et Dantu, T.M. 1825. Quelques propositions sur l'acupuncture, Paris.
- 62) Special circumstances having forced me to maintain my thesis only upon elementalry propositions. I delayed.... "Dantu (65) avantpropos i.j.
- 63) MORAND, J. 1825. Mémoire sur l'acupuncture, suivi d'une série d'observations recueillies sous les yeux de Mr. J. CLOQUET, Paris. English translaion by F. BACHE, Philadelphia, 1825.
- 64) Cassedy, J.H. 1974. Early uses of acupuncture in the United Stages, with an addendum (1826) by Franklin Bache, M.D., Bull. N.Y. Acad. Med., 50/8: 892-906.
- 65) Dantu, T.M. 1826. Traité de l'acupuncture d'après les observations de M. Jules Cloquet et publié sous ses yeux par M. Dantu de Vannes, Paris. Béchet jeune, 1826.
- 66) Journal Universel des Sciences Médicales tome 38, 1825.

 Demours, A. Observation sur une ophtalmie chronique avec épassissement de la cornée et cécité compléte depuis 2 ans guérie par l'acupuncture modifiée (pp. 105-106).

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LACROIX, A. Observation sur l'acupuncture recueillies à l'Hotel-Dieu de Paris

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- dans le service et sous les yeux de M. Husson pendant le premier trimestre de l'année 1825 (pp. 346-363).
- 67) Archives générales de médecine, 7 Feme année, tome VII, janvier 1825.
- 68) Pouillet 1825. Sur les phénomenes électromagnétiques qui se manifestent dans l'acupuncture. Journal de physiologie expérimentale et pathologique par F. Magendie, tome V, 1-2: 5-16.
- 69) SARLANDIERE, Chevalier 1825. Mémoire sur l'électro-puncture considérée comme moyen nouveau de traiter efficacement la goutte, les rhumatismes et les affections nerveuses, et sur l'emploi du moxa japonaia en France; suivi d'un traité de l'acupuncture et du moxa, pricipaux moyens curatifs chez les peuples de la Chine, de la Corée et du Japon; ornés de figures japonaises. Delaunay, Paris.
- 70) Original treatise of acupuncture and moxa in Japan with practical demonstration upon the Tsoë-bosi, in one hundred and ten aphorisms; translated from a Chinese manuscript by a Dutch scholar.
- 71) "Priest figure" explains Titsing, because of the shaven head which is similar to that of priests in this country. Could the shaven head on the plates be a peculiarity of their Japanese origin?
- 72) Dantu 1826. Traité de l'acupuncture d'après les observations de M. Jules Cloquet et publié sous ses yeux par M. Dantu de Vannes, Docteur en médecine Paris, Béchet jeune, 1826. In-8, III, 279 pages. The title of this copy (Faculté de Médecine e Paris) dose not correspond) to that quoted by Jarricot and Wong (1).
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- 82) Acupuncture et Médecine Chinoise vérifiées au Japon 1934. Traduction de l'ouvrage de Nakayama par G. Soulie de Morant et le Dr. Sakurazawa, édition du Trianon, Paris.
- 83) Soulie de Morant, G. 1935. Précis de la vraie acupuncture chinoise. Mercure de France, Paris 1935. Reprinted, 1947, 200 pages, 13 figures.
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- 85) POUILLET 1936. Note sur les phénomenes électriques se manifestant en acupuncture.
- 86) Jarricot, H. 1932. Sur certains états douloureux, viscéralgies, dermalgies réflexes, cellulies et quelques phénomenes réflexes d'origine thérapeutiques. Essai clinique et thérapeutique. Thése de Médecine, Lyon.
- 87) DE LA FUYE, R. Traité d'acupuncture, la synthèse de l'acupuncture et de l'homéopathie, l'homéosiniatrie diathermique. Le Francois, Paris.
- 88) Portnov, F. Rigas medicinas instituts (personal communication, 1974).
- 64) Cantoni, G. 1975. Diélectrolyse impulsionelle et acupuncture. Méridiens. 29-30: 57-75.
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- 91) Niboyet, J.E.H. La moindre résistance à l'électricité de surfaces punctiformes et des trajets cutanés concordant avec les "points" et "meridiens", bases de l'acupuncture. Louis Jean Gap, 1963.
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