

# An Overview of Research on the History of Leprosy

## Part 1. From Celsus to Simpson, Circa. 1 A.D.

## Part 2. From Virchow to Møller-Christensen, 1845-1973<sup>1,2</sup>

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The history of leprosy, important as it undoubtedly is, receives scant attention from leprologists today. Occasionally, a significant article may appear in Danish, German, French, and in isolated instances British and American periodicals, but on the whole the production is but a trickle and largely remains unnoticed. This void is unfortunate because the study of leprosy history makes it possible for today's leprologist to immerse himself in the lives and times of the great leprosy investigators of the past, their accomplishments and ideas, and their influence on their own and subsequent periods. In this way the leprologist can identify himself with the mature minds of yesteryear and consider himself a link in the great chain of tradition that shapes his work.

Moreover, because the history of leprosy has critical medical, social, cultural, psychological and educational functions; because leprologists are all prisoners of the past, in the sense that their options are limited by what has gone before and their preferences are shaped by their image of who they are and what leprosy has meant to mankind, it is of the utmost importance that they try to free the history of leprosy from the myth and error that surrounds it. The following bibliographical survey of works on the history of leprosy seeks to stimulate additional research in the field by identifying some of the significant works upon which the contemporary leprologist may build.

### PART 1

At the time of Christ, what was known as leprosy or elephantiasis had elicited a nebu-

lous and now controversial literature accumulated during an unbroken continuity of more than a thousand years, perhaps even several millenniums. With this disputed archaeological and semantic problem we are not concerned. Needless to say a recent implication that leprosy existed in ancient Egypt has not gone unchallenged (<sup>112</sup>). Be that as it may, the Roman writer Celsus (<sup>37</sup>), who was born in 25 B.C., and the Roman politician, Plinius Secundus, born in 23 A.D. (<sup>191</sup>), both had many antecedent writings to aid them in their fairly distinct descriptions of leprosy as did the later Greek physicians, Galenus (<sup>83</sup>), Aretaeus (<sup>10</sup>), and Soranus, of Ephesus (<sup>223</sup>).

The advance of knowledge concerning leprosy was abruptly halted by the collapse of the Roman world after 300 A.D., and by three centuries later there was almost no medical knowledge available concerning the disease in the Western world. Although copies of the preceding works and other treatises were probably extant, by 600 A.D. practically no layman could read those books. Thus, the embryo of leprology was dead in western Europe, a casualty of the semibarbaric hordes who had no tradition of learning.

The knowledge of leprosy had never sunk so low in the East during these centuries as it had in western Europe. Constantinople survived successive attacks by the Arabs and preserved its libraries, and the Greeks who peopled it had a high regard for learning, which was resumed when conditions permitted. During this time such physicians as Aurelian (<sup>15</sup>), Aetius, of Amida (<sup>3</sup>), Paulus Aegineta (<sup>186</sup>), and Oribasius of Pergamum (<sup>181</sup>) substantiated the existence of the disease and traced it to prehistoric times. Oribasius very much praised the eating of vipers, for he writes that this gave a wonderful help and relief to "lepers." The Arabs, though they lacked the tradition of scholarship, were an able people whose ancestors

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had lived on the edge of all the great civilizations of antiquity, and they respected erudition. Once firmly in control of a vast empire, the Moslems supported learning, and the great caliphs, including Haroun-al-Raschid, had camel caravans laden with Greek and Latin books brought to Baghdad, where they engaged Nestorians, Jews, and Persians to translate these works containing knowledge of leprosy into Arabic as documented by the laborious efforts of Janus Damascenus<sup>(48)</sup>, Issac Israeli<sup>(113)</sup>, the great Rhazes<sup>(196)</sup>, Ali Abbas<sup>(6)</sup>, Avicenna<sup>(18)</sup>, Abulcasis<sup>(2)</sup>, Avenzoar<sup>(16)</sup>, and Averroes<sup>(17)</sup>. This knowledge was available to the new schools which arose at Baghdad, at Cairo, and finally at Cordova in Spain. Collectively, the Arabs not only helped to preserve the ancient knowledge of leprosy but may have made important additions to it. By and large, however, the Arabic writers seem to have never entirely abandoned the notion that they were but humble disciples following in the footsteps of great masters, whom they were bound to revere, imitate, and quote, but never overthrow. Thus, they excelled in the synthesis of prior accumulated knowledge rather than in original findings.

Meanwhile, Christian Europe slowly struggled to lift itself out of barbarism and superstition aided by Jewish physicians who circulated Greco-Arabic knowledge throughout the Christendom and by translations of Greek and Arabic medical treatises into Latin. About 1060, Constantinus Africanus<sup>(45)</sup> brought a cargo of Islamic medical lore to Salerno and with the aid of his translations of Greek and Arabic works in medicine spurred the resurrection of such knowledge in Italy. His description of leprosy under the title "De morborum cognitio et curatione" with its theory of four species of leprosy was heavily borrowed from an Arabic work by Avicenna<sup>(18)</sup> who in turn had borrowed it with a little alteration from the Greeks themselves. Platearius, a 12th century successor to Constantinus, diligently followed up this theory in his compendium entitled *Practica Jo. Serapionis*<sup>(190)</sup>.

The author of the most popular encyclopedia of medieval medicine, in the 13th century, the Franciscan Bartholomaeus Anglicus<sup>(21)</sup> testified that persons afflicted with leprosy have "redde whelks and pimplies in the face, out of whom oftenne runne blood and matter; en such the noses swollen, and

ben [become] grete, the vertue of smellynge faylyth, and the brethe stynkyth ryght fowle," and when the disease is advanced they are "unclean, spoyed, glemy, and quythery [watery], and the nosethrilles ben stopye, the wasen of the voys is rough and the voys is horse, and the heere falls." Some 200 years later in the late 1400's Valesco de Taranta, a physician of Montpellier, strongly recommended castration as the cure for leprosy since the disease was caused by too great a dryness and by the removal of the testicles the body would be moistened<sup>(240)</sup>. Many of his contemporaries held views that were just as far fetched. They included Bartolomeo Montagnana of Padua<sup>(171)</sup>, Pietro d'Argellata of Bologna<sup>(11)</sup>, Ferrari de Gradi of Pavia<sup>(75)</sup>, and Hans von Gersdorff of Strassbourg<sup>(84)</sup>.

An early 20th century historian of leprosy, Hans Carlowitz<sup>(36)</sup> completed a dissertation under the direction of Karl Sudhoff which compared most of the important 13th and 14th century commentators on leprosy including Teodorico Borgognoni<sup>(230)</sup>, Gilbert, the Englishman<sup>(86)</sup>, Guglielmo da Saliceto<sup>(95)</sup>, Arnaldus de Villanova<sup>(12)</sup>, Lanfranco, of Milan<sup>(134)</sup>, Bernard de Gordon<sup>(23)</sup>, Vitalis de Furno<sup>(245)</sup>, John of Gaddesden<sup>(125)</sup>, Henry de Mondeville<sup>(170)</sup>, and Guy de Chavliac<sup>(97)</sup>. Carlowitz found that the authors differed from each other only slightly and that all except those who lived before Bernard (ca. 1285-1308) made use of Bernard's *Lilium medicinae*. He noted that Henry of Mondeville and John of Gaddesden were particularly alike as they frequently used the same phraseology, for example. Carlowitz concluded that all these physicians relied less upon their own observations than upon the work of such famous Arabian physicians as Rhazes, Ali Abbas, Avicenna, and their 11th century commentator, Constantinus Africanus. The most original of the accounts appeared to be those by Gilbert and Bernard de Gordon.

Thronike, Sarton, and Singer have all remarked on the fact that no notable contributions were made to medical literature, including that pertaining to leprosy<sup>(5)</sup>, for more than a century after the Black Death. The effects of the cataclysmic plague pandemic that killed an estimated 43 million people in the Christian world during the mid 1300's, are impossible to assess. It is important to note, however, that an added obstacle

during that time was implicit in the lack of the printing press to foster the distribution of the knowledge that did exist. Books were written by hand and copies were expensive. Time and time again an advance had been made in medical knowledge only to be lost, or to be known only to a few who did not pass on the information. The chief books on ancient leprosy and medicine were nearly all written in classical Greek, those of the Arab and Jewish physicians in Arabic and Hebrew, and none of these languages was widely known in western Europe. Such translations as existed were very imperfect. Then in the late 1400's a knowledge revolution was facilitated when movable type was devised and by 1500 Italy alone had 73 presses employing movable type. By about the middle of the 16th century an educated medical profession in western Europe had access to nearly all the accumulated medical and scientific literature that was then available and was again in full command of ancient medicine and leprosy as it had been passed down. But it had taken a full 1,000 years of fumbling effort to recover the leprosy knowledge that it had so unwittingly abandoned in the 6th century. Thus, at the onset of the Renaissance (*ca.* 1500), leprosy was soon attacked by an outpouring of new books that touched on the subject. The physician, physicist, and poet Girolamo Fracastoro's<sup>(79)</sup> work on syphilis helped to differentiate between that disease and leprosy. Other general treatises of the period that touched on leprosy were authored by Philippus von Hohenheim, known as Paracelsus<sup>(184)</sup>, Girolamo Cardano<sup>(35)</sup>, Julien Le Paulmier de Grentemesnil<sup>(142)</sup>, Henrik Smith<sup>(222)</sup> and Hans Christensen Bartsker<sup>(42)</sup>.

Concomitantly, the first separate books, either solely devoted to leprosy or heavily oriented toward that disease, appeared. In 1540 the French physician Pierre Bocellin wrote a 47-page treatise concerning the contagiousness and infectiousness of leprosy<sup>(25)</sup>. This was soon followed by a tract entitled "Examen leprosarium" in Conradus Gesner's collection, *De Chirurgia Scriptores . . .*, published in 1555<sup>(85)</sup>. One of the best works of the great French military surgeon Ambroise Paré entitled *Traicté de la Peste . . . avec une Brefve Description de la Lepre*, ably dealt with leprosy<sup>(185)</sup>. It was printed in Paris in 1568 and an altered edition was

translated into English in 1630. Philippus Schopff of Augsburg published another specialized effort in 1582<sup>(214)</sup> followed four years later by a 28-page doctoral study by Andreas Scholl<sup>(213)</sup> entitled, *Theses de ratione explorandi, et judicandi leprosos . . .*, which was written under the direction of Johann Vischer. At the end of the 16th century Guillaume Des Innocens very effectively synthesized what little was known about the disease by drawing from the works of the Greeks, Romans, Arabs, as well as Renaissance writers. This 132-page compilation probably contains the first substantial history of leprosy<sup>(54)</sup>.

Little advance in the writing of leprosy history occurred during the 17th century. As historical source material, Wilhelm Fabricius Von Hilden's observations on leprosy, contained in his *Opera observationum et curationum medico-chirurgicarum quae extant omnia*, published in 1646, are of little value<sup>(63)</sup>. The Danish physician, Thomas Bartholin<sup>(20)</sup> gathered a more substantial body of knowledge in 1671. Other worthwhile works, almost all of which contain the traditional interpretations of the leprosy's antecedents include those by Luria<sup>(146)</sup>, Sieboldt<sup>(217)</sup>, Helvetius<sup>(103)</sup>, and De Spina<sup>(53)</sup>.

Moving into the 18th century, Helyot of France wrote a splendid account of the Knights of St. Lazarus, who always had a "leper" for their Grand Master<sup>(102)</sup>. Helpful as constituting indicators of the then popular thinking on leprosy treatment are the accounts of Ovseel<sup>(183)</sup>, Voight<sup>(247)</sup>, Brooke<sup>(29)</sup>, Withof<sup>(255)</sup>, Peyssonnel<sup>(189)</sup>, Uzman<sup>(238)</sup>, Murray<sup>(176)</sup>, Schilling<sup>(210)</sup>, Maxymovycz<sup>(155)</sup>, Gislesen<sup>(87)</sup>, and Scherb<sup>(209)</sup>. Indeed the slight advance in knowledge concerning the malady was revealed in an official report to the Royal Society of Medicine of Paris in 1782 when two investigators cited Gilbert's 13th century description as the most clear exposition of leprosy that they had uncovered<sup>(38)</sup>.

The initial attempt at a singularly historical study of leprosy was made by Raymond of France in 1767<sup>(194)</sup>. His uncritical use of sources and shallowness of much of his research, however, reduced the value of an otherwise valuable work. John Howard's less ambitious account of the principal lazaretos of Europe is also superficial. This effort was followed in 1790 by the first success-

ful attempt to record the history of leprosy. It was published by Philipp Gabriel Hensler, First Physician to the King of Denmark, and Professor of Physics, University of Kiel (105). Unlike his predecessors, Hensler intensely studied original sources from the Greeks down to his own time.

In his first chapter Hensler investigates the traces of leprosy found in the works of ancient physicians and then subsequently describes leprosy in the West during the middle ages. He insists that leprosy was not brought into the West by the Crusades but rather had remained there from the times of the Romans. He does not deny, however, that leprosy raged with greater violence following the holy wars and cites Matthew Paris' now questionable estimate of 19,000 "leper houses" in the whole of Europe. In explaining the decline of leprosy in the West, Hensler notes that the symptoms of true leprosy gradually vanished as other cutaneous affections became more common toward the end of the 15th century. He further suggests that at length the leprous constitution passed into the syphilitic. Appended to the work are extracts from ancient and medieval writers along with several 18th century accounts of leprosy in various parts of the world. Hensler's work was reprinted in 1794 and has served as a point of departure for scholarly efforts in leprosy history for nearly two centuries (105).

At the beginning of the 19th century the standard clinical work on leprosy was that of Alibert (5). Around the same time Alefeld (4), Ottner (182), Vieira (241), Brown (31), Bergernon (22), and Brehm (27) prefaced their more specialized dermatologic studies with a few historical references pertaining to leprosy in ancient times. Brief historical accounts by Lejeune concerning the early history of the leproserie in Chartres (139), Lehmaier on the Biblical references to leprosy (138), and Shafter on the leprosy of the middle ages marked the ascendancy of the classical study of leprosy history to a new high (216). It only remained for James Y. Simpson (218) to publish his landmark "Antiquarian Notices of Leprosy and Leper Hospitals in Scotland and England" and its successor articles on the "Nosological Nature of the Disease" and the "Etiological History," to mark the culmination of the classical approach to leprosy and its history which

stretched back more than 1,800 years to the time of Celsus.

What then shall we say of the years 1 A.D. to 1845? For knowledge regarding leprosy, they were periods of slow evolution, followed by near dissolution, and subsequent evolution. The 17th century had supplied a scientific method for leprological history, the 18th century had provided an accumulation of facts with which to begin work, and the first half of the 19th century saw the fruition of classical historical scholarship and the initiation of the scientific approach.

## PART 2

The historical material inserted at the beginning of many present-day scientific leprosy monographs and articles, offers an excellent illustration of what has been for many centuries the primary form and almost exclusive source for the history of leprosy. That traditional genre appeared in the accounts of Danielssen (49), Wilson (254), Neisser (177), Kaposi (101), Leloir (140), Jean-selme (115), Klingmuller (131), Rogers and Muir (201), and Cochrane (44) in the last half of the 19th century and first six decades of the 20th century. It had previously enjoyed a continuous history from the Renaissance on up into the 18th century, when the scope was much expanded by the burgeoning collection of facts concerning the disease in different parts of the world. As previously indicated, from the last 50 years of the 18th century come the earliest historical studies that are sometimes still used as such, among them the seminal treatises by Raymond (194) and Hensler (105).

From a preliminary literature examination, we can conclude that the oldest and the traditional form of leprosy history was narration buttressed by occasional measurements. From the European inception of specialized leprosy history in the late 18th and early 19th centuries, however, both Philipp Hensler in Germany and James Y. Simpson in England sought to develop it without reliance on the yet to come scientific approach to dermatology. Moreover, they seemed to hold that the central problems of leprosy history, although they might be stated in terms of a particular historical phase, were in essence independent of social, economic, and political history. With few exceptions, this general view permeated the writing of

leprosy history in the world until the mid-1900's. While numerous facts and statistical data were collected they were seldom analyzed or used to test sociological propositions, and exhaustive monographic evaluations of the long-term social impact of leprosy were practically unknown.

German-trained leprologist-historians, who in their rebellion against English classicism called themselves "scientists," reinforced this empirical, positivistic trend. Works such as those of Virchow (<sup>243</sup>), Ehlers (<sup>59, 60</sup>), and Hirsch (<sup>109</sup>) were large, useful studies, full of factual detail and statistics, but generally devoid of theoretical interpretations. As a scientist writing history, Virchow insisted that hypothesis had only a transitory value, that is, to elicit new facts. Hypotheses could not rest without adequate proof or without verification. He condemned speculative thinking and emphasized the sacredness of facts.

Meanwhile, the epidemiological-oriented studies of leprologists such as Bidenkap (<sup>24</sup>), Rogenhagen (<sup>200</sup>) and Dehio (<sup>50, 51</sup>), and the reports of the Royal College of Physicians and the India Leprosy Commission (<sup>144</sup>), along with numerous papers presented at the Berlin Leprosy Congress (<sup>161</sup>), marshalled statistics to prove the contagious nature of leprosy. Like so many movements, that of the epidemiologists against deductive, neoclassic leprosy history went to extremes and in some instances resulted in antitheoretical attitudes that prevented development of new hypotheses. In the minds of many of these empiricists, including Jean-selme (<sup>115-124</sup>), Zambaco (<sup>256-260</sup>), and Ashmead (<sup>13, 14</sup>), there was an assumption that factually based theory would emerge from the data when it became sufficiently complete, but, except for limited propositions, it never did. Several epidemiologist-oriented historians of leprosy did, however, brilliantly fulfill their role as fact gatherers. Scores of articles and a still greater number of reports from various leprosaria form by far the largest part of the scientifically collected and prepared quantitative record of world leprosy history.

Both the scientific historiographic tradition of Virchow and the subsequent epidemiological-oriented tradition that followed, produced occasional monumental studies such as the prize essays by Newman (<sup>180</sup>)

and Ehlers (<sup>59</sup>). But the major objective of these two traditions was to clarify and deepen the understanding of contemporary leprology by tracing its evolution. Thus, 75 years ago most of those who wrote the history of leprosy were practicing leprologists, sometimes eminent ones like Hansen (<sup>98</sup>). Usually leprosy history was for them a by-product of clinical practice or applied research. Moreover, they saw in it, besides intrinsic value, a means to substantiate concepts of their current investigations by citing historical antecedents.

Since the turn of the century, within the field that might be loosely regarded as leprosy history, there appears to be five major subdisciplines: 1) medical leprological history; 2) the experience of leprosy in various political units; 3) medieval leprosy history; 4) "Biblical leprosy"; and 5) individual leprosaria history. We will briefly consider some of the most productive efforts within each.

The medical history of leprosy, systematically begun by Hensler, has tended to be scientific rather than therapeutic in its major emphases. Armauer Hansen and Albert Neisser have been studied in detail (<sup>78, 90</sup>), while the work of such other important leprologists as Arning in Hawaii, and Rake in Trinidad have received scant attention. Historical output since World War II has centered around the seminal paleopathological studies of Vilhelm Møller-Christensen (<sup>162-169</sup>). His work has facilitated a most productive marriage between science and history and has inspired an unexcelled school of historical research on leprosy history as evidenced by the monumental work of Andersen (<sup>8</sup>), and the more limited study by Brothwell (<sup>30</sup>). Other illuminating efforts in this area include those by Dokrr (<sup>55</sup>), Bourges (<sup>26</sup>), Fite and Mansfield (<sup>77</sup>), Goerke (<sup>88</sup>), and Schmitt (<sup>212</sup>).

While the national, provincial, and municipal history of leprosy had isolated early precedents, such as those of Minkh (<sup>160</sup>) and Buhler (<sup>33</sup>), the development of scholarly investigation of governmental reaction to the disease is notable in the late 19th century work of Sederholm (<sup>215</sup>) in Sweden, and Mouritz (<sup>174</sup>) in the Hawaiian Islands. Other studies devoted to the history of leprosy in various political units are those by Araujo (<sup>9</sup>), Montoya y Florez (<sup>172</sup>), Ketting (<sup>129</sup>),

Haug (100), Denney (52), McCoy (156), Faget (64), Abbe (1), Spenesberger (224), Enna (61), San Martin Bacaicoa (206), Kloekorn (132), Chirakadze (41), Tolivar (231, 232), Vogelsand (245, 246), Trevien (234), Richards (197), and Kalisch (126). Some of the most detailed nationalistic work has been done on Cuba by Gonzalez Prendes (91), and on France by Fay (65-71). Similar political unit studies include Maurano on Sao Paulo, Brazil (153, 154), Frohn on the German Rheinland (80-82), Cougoul on France, Gonzalez Urena on Mexico, and Wellman on the Kingdom of Hawaii.

Leprosy in medieval Europe has fascinated numerous investigators among whom the work of Virchow (242, 243), Wickersheimer (252, 253), MacArthur (148-150), Chaussinand (39, 40), and Brody (28) is outstanding. Other useful work has been completed by Lecouvet (135), Lutolf (147), Saletes (205), Herrey (104), Neret (178, 179), Mercier (158), Le-Grand (136, 137), Lallemant (133), Duliscouet (58), Remy (195), Pooth (192), Pawletz (187). Although largely devoted to the 16th century, Keussen's history of leprosy inspections in Cologne from 1491-1664 is a very careful compilation of notes and documents.

The controversy over the so-called leprosy mentioned in the Bible has produced an enormous amount of interest beginning with Essinger's 1843 study (62), continuing with those of Horsford (110), Finaly (76), Munch (175), Schamberg (208), Sack (204), Fels (74), Unna (239), Dubreuilh and Bargues (57), Hill (107), Jastrow (114), Vorner (249), Trenel (233), Drogendijk (56), Lie (145), Gramberg (93), Landrum (141), Cochran (43, 44), Goldman (89) and concluding with Browne's (32).

Leprologists' and medical historians' interests in recording the history of individual leprosaria are evidenced by the abundant accounts of such institutions from all quarters of the globe. Emphasizing the unique social conditions that created and sustained these unique institutions, are studies such as those by the eminent medical historian, Karl Sudhoff who ably dealt with various European leprosaria from the 13th to the 19th centuries. Similar approaches were employed by Pazzini (188), Harmand (99), Puech (193), Hildenfinger (106), Kalisch (128), and Russell (203). The interesting organizational story of The Mission to Lepers 1874-1917, has been compiled by Miller (159).

Several other topical strands in the history of leprosy are worthy of note. Leprosy as

depicted in art through the ages has been a compelling topic with Virchow initiating this inquiry in 1862 (242); followed by Meige (157), Richer (199), Sassy (207), Hollander (109), Van Andel (7), Grøn (94), Tricot-Royer (237), Martin (152), Frohn (80), and Vogt (247). Among the handful of attempts to write a popular world history of leprosy are the less than successful accounts of Weymouth (251), Mouritz (173), and Feeny (72). Other broad accounts that deal heavily with European leprosy history and elicit special notice are those by Barbezieux (19), Zubriczky (261), Leo (142), and Burnet (34). Most recently, dissertations by Schlotter (211), and Malet (151), offer a rather general treatment but suffer from an inadequate bibliographical base.

In all the previously discussed efforts, medical or institutional, religious or social, the reader cannot help but be impressed by the lack of manifest ideology. Traditional leprosy rationale appears to be based on an empirically based objectivity, which in practice means accepting existing folkways, mores, and institutions as the framework for analysis. Almost totally lacking is historical research that openly argues for a new leprosy ideology or shows a missionary bias in favor of radical change in existing conventions.

To say a word about methodology, at one extreme the antiquarian approach, which simply necessitates the collecting of bits and pieces of data, more or less without regard to their importance or interrelationships, is much in evidence. At the other extreme, the highly schematized or focused analytical model, which is all articulation and interrelationships, is seldom employed. As a result, most leprosy histories are essentially descriptive in nature and fall toward the lower end of this continuum. Although the history of leprosy is first and foremost a story, there are all kinds of stories: dull or exciting, scrupulously careful or wildly imaginative, painfully naive or subtly interpretive. Whereas much of this quality depends on the artistic ability of the leprosy historian, needless to say, the affective possibilities of the subject of leprosy are limitless.

The proper course for future work appears to lie not in moving back toward descriptive narration, but rather in broadening the scope and variety of leprosy history to encompass the findings of social research. So-

ciological and anthropological theory may explain, for example, why and how irrational motives based on leprophobia led to total institutional responses, but only by inference may explain why one leprosarium succeeded and its neighbor failed under approximately the same circumstances. Indeed, why did the various leprosaria in the British Empire of the 19th century yield such mixed medical and social results? Yet the historian should be interested as much in the social incentives as in the actual results. To bring order into this analysis of the total situation it is necessary for him to use theoretical models and knowledge from the behavioral sciences. The value of such an approach has been borne out by the studies of Skinsnes (219-221), and those of Gussow and Tracy (96). Out of imaginative but scholarly monographic research on these and other topics, on an international level it will begin to be possible to build a convincing synthesis of leprosy history, a synthesis independent of purely emotional responses.

### SUMMARY

This overview attempts to evaluate, in general, the results of nearly 2,000 years of writings on the history of leprosy. The ancients, although prone to confuse other skin diseases with leprosy, laid the emotional foundation for later work in superstition and lore. Their efforts were faithfully copied for hundreds of years and provided at least an accumulation of facts and a documentation of the state of the art. The dawn of scientific medicine in the mid-nineteenth century and the following 125 years has brought an increasing specialization of research in the history of leprosy that might be usefully divided into medical, political, Biblical, institutional, and medieval aspects. Some of the most productive efforts within each of these areas are considered. The challenge of the future is to develop models of analysis and evaluation based on the findings of social scientific research rather than relying totally on pure narration. This is the way in which to free the history of leprosy from much of the myth and error that surrounds it.

### RESUMEN

Esta revisión trata de evaluar, en general, los resultados de cerca de 2.000 años de escrituras sobre la historia de la lepra. Los antiguos, aunque

tendían a confundir la lepra con otras enfermedades de la piel, colocaron los fundamentos emocionales para trabajos posteriores en lo que respecta a superstición y conocimientos. Sus esfuerzos fueron copiados fielmente durante cientos de años y proporcionaron por lo menos una acumulación de hechos y una documentación sobre el estado del arte. El desarrollo de la medicina científica a mediados del siglo diecinueve los siguientes 125 años han traído un incremento de especialización en la investigación de la historia de la lepra, que puede ser dividida ventajosamente en aspectos médicos, políticos, Bíblicos, institucionales y medievales. Se consideran algunos de los esfuerzos más productivos dentro de cada una de estas áreas. El desafío del futuro está en desarrollar modelos de análisis y evaluación basados en los hallazgos de investigaciones sociológicas, más bien que dependiendo totalmente de la narración pura. Este es el medio por el cual se puede liberar la historia de la lepra de muchas de las fábulas y errores que la rodean.

### RÉSUMÉ

Cet aperçu tente d'évaluer, d'une manière générale, tout ce qui a été écrit sur l'histoire de la lèpre pendant 2.000 ans. Malgré qu'ils aient eu une tendance à confondre la lèpre avec d'autres maladies de la peau, les anciens auteurs ont posé les fondations émotions pour tout ce qui a suivi, empreint de superstition et de frayeur. Leurs efforts ont été finalement pendant de siècles, produisant en fin de compte une accumulation de faits et une large documentation concernant ce problème. A l'aube de la médecine scientifique, vers la moitié du dix-neuvième siècle, et dans les 125 années qui ont suivis, on a assisté à une spécialisation accrue de la recherche concernant l'histoire de la lèpre. Ces recherches peuvent être utilement divisées en médicales, politiques, bibliques, institutionnelles et médiévales, d'après les différents aspects traités. Quelques-uns des efforts les plus valables, dans chacun de ces domaines, sont passés en revue. Le défi qui se pose aux auteurs futurs est de développer des modèles d'analyse et d'évaluation qui seront basés sur les résultats d'une recherche sociale scientifique, et non pas uniquement sur l'anecdote ou la description. Ceci est le seul moyen de libérer l'histoire de la lèpre de tous les mythes et les erreurs qui l'encombrent.

### NOTES AND BIBLIOGRAPHY

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