It is very difficult to estimate the degree of prevalence of leprosy in these islands in medieval times. The disease existed; that is beyond question, and the first essential in arriving at some idea of its extent and importance is to understand the language of the times, and try to get inside the minds of those who used it. Surely this is obvious enough. No one would dream of writing seriously about Shakespeare’s plays without having made a preliminary study of Elizabethan English and the changes in meaning which words have undergone since the poet’s day. He would know, for example, that “comply” meant compliment; “curious” meant full of care; “prevent” meant go before; “niece” could stand for granddaughter; and “harlot” might mean a cheat. Yet many persons gaily take up their pens and write on the history of this disease in the mistaken assumption that the words “leper” and “leprosy,” and their equivalents, then meant just what they do in the usage of today.

In English the word “leper” originally signified the disease itself, and not as at present the diseased person. This word, in a variety of related forms, runs through the Aryan languages. The basic meaning is, something that peels off; and for this reason it was early applied to the inner bark of trees. The Latin form of the word was liber, and as this bark was used to write on, liber came to mean a book, so it is interesting to remember that the modern “library” and “leprosy” are in origin the same word. In the past, “leprosy” and its equivalents had a multitude of meanings. It was used for the true disease and for every disorder that was formerly supposed to be leprosy. The Greek form of the word was lepra (lepris, scaly), and was applied by the Greeks themselves to scaling skin diseases of the psoriasis type, and never to leprosy for which they used the word “elephantiasis” because of the thickening and corrugation of the skin. Unfortunately “lepra” was adopted as the classical medical term for leprosy, with the result that, by suggestion of the word itself, a host of skin

*Parts of this discourse are taken from papers published under the speaker’s name in Journal of the R.A.M.C. and Irish Historical Studies.*
conditions associated with scales or scabs, which have no connection with real leprosy, were identified as manifestations of this disease. The conception that "lepra" conveyed to the minds of the early English clerics is shown by the Anglo-Saxon word they used to translate it, \textit{bteofla}, that is, scableness. The use of the plural, the leprosies, by writers as far apart as Pliny and Lord Macaulay, shows that they, at least, were aware of the comprehensiveness of the term. Again, it was applied to maladies which were not thought to be leprosy, even in the elastic sense once common. The English chronicler Je Baker who lived through the Black Death, recognised it as bubonic plague and notes its symptoms. Yet when describing the extension of the pestilence into Scotland, he calls it "lepra." So, too, we have in the chronicles "the leprosy that is called small-pox." Also, "leprous" could imply nothing more than infirm, and in the ancient MS known as the Wurzburg Gloses, Latin terms for weakness and infirmity are translated into Old Irish as "leprosy." "Leprosy," too, was used for mange and scab in animals—"the cankered mangeness called the Leprosie"; and for diseases of plants—"Myst and fog . . . make the graine leprous." It was often used to describe a miserable and pitiable state where there was no question of disease of any kind. The Hebrew word \textit{nagd} (afflict) in a well-known passage in Isaiah LIII, said to foretell Christ's sufferings on earth, is translated "stricken" in the Authorized Version—"Yet we did esteem him stricken." In keeping with ancient usage, St. Jerome in the Vulgate translated this word by "leprous," and John Wyclif, a thousand years later, used "leprous" in the same passage. If Jerome and Wyclif were alive today they would agree that the Authorized Version "stricken" expresses exactly the meaning they wished to convey by "leprous"—perhaps the only point on which they would agree! And so far did the sense of these terms expand, that "leprous," by association of ideas, could stand simply for "beggar." The Hebrew word \textit{tsaraath} rendered "leprosy" by the translators of the Bible, was clearly a general term embracing a number of different diseases. Whatever it may have conveyed to the ancient Hebrew mind, some of the diagnostic tests given for \textit{tsaraath} would be meaningless if applied to leprosy in the restricted sense of the word today.

The writings of some mediaval physicians give recognizable accounts of the disease in its more characteristic forms, along with much that is incomprehensible, and even misleading like the weight attached in diagnosis to itching of the skin and cloudiness of the urine. These texts, however, must not be taken as representing the
general standard of knowledge and practice, for we find the famous Gordonius protesting against the wrongful diagnosis of leprosy common then, and protesting, too, in no great hope of reform, for he ends his complaint, "Whoever therefore hath ears, let him heed this, if he will." These texts, such as they are, were not available to the early monks with whom we are most concerned, and the majority of the diagnoses encountered are mere assertions of leprosy, unsupported by any evidence. When clinical details are included in a narrative these often suffice to show that the malady in question was of some other kind. The sad story of Marjorie Bysseth in Elgin is worth re-telling in this connection, for the "leprosy" which she was accused of having to have been something in the nature of an extensive cellulitis; at any rate, the severe wasting and deformity of the limb had developed within some period of less than a year, an impossibility in leprosy. This unfortunate old woman was charged with witchcraft by certain friars on the grounds that she had repeated her prayers backwards, and had transformed herself into a hare. To her tears and prayers of "Pitie! Pitie! I am guiltless of ye fausse crymes, never sae much as thought of by mie," was added the evidence of a parish official who testified to her known good character. Suddenly the favourable atmosphere of the inquiry changed. A "Leper" came running from the neighbouring lazaret-house, and passing through the crowd, he "bared his hand and his halill arm, ye which was wythered and coverd over with scurfs, most pyteous to behold, and he said, 'At ye day of Pentecost last past, thys womyan did give unto me ane shell of ointment, with ye which I annoyned my hand to cure ane imposthume [swelling] which had cum over it, and beholde, from that day furthe untill thys it hath shrunk and wythered as you see it now. . . . But ye said Marjory Bysseth cried pyteously, that God had forsaken her, that she meanted gude only and not evil." But all this availed her nothing, since she had smitten a man with "leprosye." Thereupon the poor old creature was dragged amid mony tears and cries to ye pool . . . and soo they plonge her in ye water. And quhen as she went down in ye water, there was ane gret shoute, but as she rose agayn and raised up her arms, as gif [if] she wod have cum up, there was silence for ane space, when agane she gaed doune with ane bubblinge noise, and they shouted finalie—'to Satan's kyngdome she hath gane,' and forthwith went their wayes." To add to the confusion, the extent and importance of the disease were exaggerated out of measure by ecclesiastical example and precept. The fifty references to "leprosy" in the Bible, the
common employment in religious exhortations of the words leper and leprosy as meaning sinners and sinfulness, in mind, with the result that imaginary lepers started up from the pages of Holy Writ. The patriarch Job was pronounced a leper because of the swellings that afflicted him. The beggar who lay at the rich man's gate was similarly diagnosed, record does not even mention leprosy, and the Vulgate, the only text then in use, "uleribus plenibus," full of sores; but to the obsessed mediaval mind this suggested leprosy only. So the beggar's name, more than "Without help, disease, and still survives as in lazar and lazar house. Lazarus of Bethany, the brother of Mary and Martha, leper, and became a patron saint of these stricken creatures by a series of gradations which shows the height to which imagination can soar. It is recorded that Jesus cried with a loud voice, "Lazarus come forth"; and as Lazarus signifies "leper," what stronger evidence of his disease could anyone require! Yet in face of all these extravagances, leprosy made by men who could reason in this illogical fashion, are accepted as if purged and snuffed of ambiguity and equivalent to the precise usage of today.

When we come to the subject of leper houses we find the same misunderstanding and exaggeration. During the 1100's there was a great outburst of sympathy and pity for lepers, encouraged by clerical influence. The Church taught that these unhappy people were Christ's Poor, kin to the beggar who was carried by the angels into Abraham's bosom. In their zeal, many persons interpreted Jerome's "leprosus" in the literal sense of the word, and believed that Christ on earth had gone to His death as a leper, so that noble ladies in a kind of religious fervour would wash the feet of lepers and embrace their diseased bodies. It is some consolation to us to reflect that in many instances these devotees ran no greater risk than that of contracting scabies. As a result of this crusade, leper houses were founded up and down the country. Some of those who endowed them were inspired solely by love of God and of their fellow-men; others who, like Falstaff, had heard the chimes at midnight in their youth, thought that it might be well to have something on the credit side in the Recording Angel's account. The houses were mostly small establishments with the religious aspect taking precedence of the nosocomial, for some required that a married applicant for admission must separate formally from his wife, or even that she should become a nun. Each house had its own rule, and vows of obedience were imposed.
on the entrants. They had to conform to certain laws of behaviour and wear whatever dress was prescribed, not because they were lepers but because they were in a manner professed brethren. This movement brought relief and comfort to many sufferers among whom there must have been some uncertain proportion of true cases. It is sad to know that they were not always as grateful to their benefactors as might be expected, for it is recorded, for example, that the inmates of the Kingston leper house rose in revolt, demolished the building, and took to the roads.

The disappearance of leprosy in Britain is often attributed to the enforcement of "absolute and strict segregation." There is much evidence to show the unreality of this alleged "absolute and strict segregation." The custom of reading the burial service over a leper, regarding him as one dead and deprived of all civil rights, was not in force in England. Chaucer when stressing the confirmed tippling habits of one of his characters, says that he knows all the taverns of the town better than any lazare or beggar does. There is no contemporary evidence that what are nowadays called "leper squint-windows" had anything to do with leprosy.

The idea is wholly modern and I have found no suggestion of it which dates back more than a hundred years. It appears to have arisen from the misinterpretation of an old picture. Authorities on ancient architecture believe that these squint-windows might serve several purposes according to circumstances. Some gave ordinary worshippers a view of the altar who else would have been cut off by some architectural obstruction; others served for hearing confessions; and others, again, enabled an anchorite to witness the service while still keeping to his vows of seclusion.

We often see accounts of what are called English leper laws. These are mostly excerpts from the rules drawn up to control the occupants of one or other of the leper houses, some of which included directions designed to protect the local population from the risk of infection. Such rules, however, had no more general force than rules for patients in one of our own hospitals would have at the present time. No one could be forced into a leper house against his will. So far as I am aware, the only measure in statutory law directed against lepers was that which enabled a writ De Leproso Amovendo to be issued. This had a limited application, as follows: "The Writ de Leproso amovendo lieth, where a Man is a Lazar or a Leper, and is dwelling in any Town, and he will come into the Church, or amongst his Neighbours where they are assembled, to talk with them, to their Annoyance and Disturbance—then he or they may sue forth that Writ for to remove him from their Company. But it seemeth, if a Man be a Leper or a Lazar, and will keep
himself within his House, and will not converse with his Neighbours, then he shall not be moved out of his House."

The rules of Sherburn leper house expressly permitted the inmates to receive their friends, and those visitors who came from a distance could remain for the night. It is illuminating to read in these same rules that a mutinous leper, whose contumacy yielded neither to flogging nor to a diet of bread and water, would receive the final penalty of—expulsion! Similar rules were in force in other institutions, and a long account has survived of the expulsion of a leper from the Ilford house because he had imported a woman of light character under the pretence that she was his sister. (This is hardly the modern conception of “absolute and strict segregation,” whether as regards the leper, the friendly lady, or the townsfolk of Ilford.) In some places lepers had a right to help themselves to food displayed in the market place, and in Shrewsbury they could take a handful of corn from any sack offered for sale. Moreover, they could refuse to enter a lazaret house, and in 1344 it is recorded that the revenues of St. Julian’s, in St. Albans, are too large for its needs, for in general there are no more than three inmates, sometimes two, and occasionally only one, because of the difficulty of finding lepers “willing” to lead a restricted life.

The old nursery rhyme “Hark! Hark! the dogs do bark, The beggars are coming to town” was once something more than a meaningless jingle, for an unending war was waged by the authorities against the beggars whose lawlessness and tumult were a perpetual threat to peaceable folk. Lepers, however, had a right to beg, a privilege ordinarily denied to most others under the heavy penalties of whipping, branding and even death. This valuable concession must have given great encouragement to imposters, for an imputation of leprosy provided the easiest means of livelihood then available to rogues and vagabonds. In 1346 Edward III issued an edict expelling all the lepers residing in London. Its wording shows that these people had been accustomed to roam about as they pleased; indeed, one declared reason for the measure is that they had endeavoured to contaminate others, “that so, to their own wretched solace, they may have the more fellows in suffering.” We may believe this, if we will. Even if there was nothing more behind the order than the professed concern for the public health, the departure of this body of professional beggars—lepers, genuine, supposed, or pretended—freed the citizens of London from an intolerable nuisance, although, as it proved, the relief was only of temporary duration. Industrious people have collected an imposing figure, 283, as
the number of leper houses in England. If it is assumed that at any period there was this number in active operation, each maintaining its specified complement of inmates, we should be far astray from the truth. Some of these alleged lazaret houses are names only, mentioned once in a single bequest in a will, with nothing known about their original destination or after-history, nor even if the institution were ever more than some temporary expedient. Others are graded as leper hospitals merely because of a statement to this effect made by a visiting antiquary long after the institution had ceased to exist. Some, like St. John’s, Aylesbury, were nothing more than alms-houses. In others, lepers and paupers had an equal right to admission. Thus, for example, Mary Magdalen’s, Ripon, was endowed for eighteen persons, either leprous or destitute; and St. Bartholomew’s, Oxford, for two healthy inmates, and six leprous or infirm. There were no lepers in either of these when visited by the King’s Commissioners in 1341. Foundations established specifically for lepers might be transferred to other purposes. St. James’s, Canterbury, endowed for twenty-five leprous women, was found by the King’s Commissioners in 1341 to be occupied by twenty-five women glowing with health. Sherburn, founded for 65 lepers, in 1344 could produce only thirteen poor men, and no lepers; accommodation for two lepers was provided at this stage, but it was not taken up because “ther cowide not so many Laizeris be found in that part of England.” Romney leper house in 1363 is reported as “derelict and totally desolate” chiefly because “for long times past” no lepers could be discovered; it was repaired and put to other uses.

No account of these institutions in the British Islands could omit the most widely known of them all, “the Leper Hospitals of Armagh.” Armagh, the ecclesiastical capital of Ireland, has enjoyed high fame ever since Queen Macha of the Golden Hair reigned there centuries before Christ. To students of medical history, however, the place is familiar as the site of these hospitals which are said to have gone up in flames when the city was sacked by Arlaf king of the Danes in 869 A.D. They are renowned because of their antiquity and because their existence is cited so often as evidence of the then prevalence of the disease. Being anxious to learn something more about these hospitals, I took the obvious course of looking up all the Celtic chronicles in which this sack of Armagh is recorded. To my surprise there was nothing about hospitals or lepers in any of them. Then I began at the modern end and worked backwards, and in the end traced the story to its beginnings. It arose from two mis-translations. First, an incompetent Celtic scholar in making a Latin translation of one of the
chronicles I have referred to, which means "oratories," a dative plural. Guessing at its meaning he guessed wrong, and translated it by the late Latin term *noso*comit*is*, hospitals. Next, a later writer in translating this Latin passage into English, for some unknown reason explained *noso*comit*is* by "leper houses"! And so began the story of the Leper Hospitals of Armagh, which were never anything more than fantasies of the imagination.

Various notabilities of the past are said to have been victims of this disease, Robert the Bruce, leper. To begin with, the Scottish historical writers of Bruce’s day makes any mention of this infirmity. The story began on the other side of the Border.

In early June, pied part of the country until the end of August, invaders in person, Douglas. At the same time he disappeared from the Scottish Court. Bruce’s known ill health, retirement from public life, as an explanation to someone wholly ignorant of the circumstances.

The earliest imputation of the disease in this connection which I have traced is found in the Lanercost Chronicle, attributed to a nameless Franciscan monk of Carlisle. Here it is asserted that Bruce’s unprecedented actions were due to his having become a leper; and the assertion, death less than two years later. Bruce’s absence from the field and from the Court was not due to leprosy or any other disease, but because he had gone on a secret mission to arrange for an invasion of Ireland, with the active help of the Ulstermen. An "Indenture," which still exists, Robert the Bruce and Henry de Maundeville, arranging for the provisioning of the Scottish army; and the seals of both were affixed to the document at Glendun, 12th July, 1327—the mid-point of the Scots’ campaign in England. Bruce’s plan for an invasion failed because of some unspecified “breach of agreement” on the part of the Ulstermen. He returned to Scotland, he carried fire and sword far into England so that the terror stricken population offered to pay an indemnity if he would call off his followers and return home. A notable military ascendency of a force led by a leper within some eighteen months of his death!

Bruce did not go into retirement but continued to direct the
affairs of his kingdom. No one shunned his company. He
attended Parliament in great state and crowned—with his own
hands—his son and Princess Joan,
was thought to spread infection by his breath and touch. Within
three weeks of his death he was still conducting State business in
public. When the end was near,
were summoned to Cardross,
Robert the Bruce peacefully "trespassed out of this uncertain
life." This was not the deathbed of one smitten with what the
age called "the foul contagion of leprosy."
Beyond any other man, Bruce lived under a burden of
sacerdotal malediction. Again and again he was excommunicated.
Yet for more than twenty years he continued to challenge and defy
the Holy See. When it was attempted to publish a Bull in Scotland
over Bruce's head,
was attacked,
Thereupon it was proclaimed that in every Mass,
days and holy days,
excommunicate; his lands and the lands of all his adherents were placed
under ecclesiastical interdict; and the children of all his adherents
to the second generation declared incapable of holding any
ecclesiastical office or benefice.
The dignitaries who pronounced these awful sentences con­
cerned themselves only with spiritual affairs. It is clear that this
was not the view of ordinary folk,
some material sign of the Divine displeasure. But the fiercer the
denunciations,
caused flourish. What a triumph it would have been to point at one
who "showed such contempt for the Keys of Holy Mother
Church,"
But there is
no contemporary suggestion of the disease except in the fancy of
an obscure monk writing his chronicle in a cell in Carlisle. I will
not waste time in referring to the same allegation in the pages of
later chroniclers,
These scribes had no personal knowledge of the matter,
content,
tion whatever a predecessor had written down. Bruce's enemies,
English and Scots,
tongue to—the Usurper,
spate of calumny there is no whisper of the one epithet that would
have outweighed all the rest—the Leper.

*Hemingburgh's chronicle can hardly be regarded as a contemporary record
on this point, for the relative portion seems to have been added by a later
hand: the story was probably taken from the Lanercost text.
This story typifies much that passes as historical evidence on the whole question of leprosy in the past. I hope that I have said enough to support my contention that no assertion of leprosy in old times can be accepted as indicating an infection with Hansen’s bacillus in the absence of clinical details sufficient to point the diagnosis. General descriptive terms are not enough. For example, when we find an account of some person cited by name as the victim of “terrible and manifest leprosy,” we might be tempted to relax this rule and accept the case as probably one of the genuine disease. And we should be wrong, because on reading further we find that after a given period of time the sufferer was cured and the skin restored to its normal state; so whatever the nature of the “terrible and manifest leprosy” it was not the disease called by that name today.

A notable champion of the literalists was Sir James Simpson, the writer largely responsible for spreading abroad the fable of Bruce’s leprosy. He quoted from old texts a number of examples of the use of the word “elephantius” as an alternative of the word “lepros,” and declared that this is a striking confirmation of his opinion that those called lepers in the Middle Ages undoubtedly suffered from elephantiasis of the Greeks (or elephantia), that is, true leprosy. Alas for this verbal evidence, for in Blundevil’s Order of curing Horses diseases the chapter on mange in these animals is headed: “The Leprose or universall mangene called of the old writers Elephantia”!

During the 1300’s and 1400’s it is recorded, as mentioned already, that a number of leper houses either fell short of their authorized establishment of inmates, or were altogether empty. Leprosy was diminishing over this period, mainly, I believe, because of the rising standard of living. None the less it is possible that in the institutions so affected, stricter tests of diagnosis were being imposed, with the result that many sufferers from other diseases were excluded who under the usual loose system of assessment would have been accepted as lepers.

In some special instances the authorities went to great pains in reviewing a diagnosis of leprosy that had been made. Thus, Johanna Nightyngale of Brentwood was accused of the foul infection of leprosy, and served with the writ De Leproso Amovendo. Johanna was made of stern stuff; she refused to depart from the company of her neighbours as ordered, and appealed to Edward IV. Under the King’s warrant she was examined by a commission, including physicians of skill, and pronounced to be free from any blemish of leprosy.

Similarly Peter de Nutle, formerly Mayor of Winchester, was
forced to leave the city because of his supposed leprosy. He appealed, and by royal order was examined by experienced physicians who certified that he was infected in no part of his body; and the sheriff of Hampshire was directed to make a proclamation to this effect.

Clearly such a cumbersome and costly process of law could be invoked only in a few most exceptional instances; and in general the diagnosis was made by monks, parish officials, or even watchmen at the gates of a town. If these functionaries were to carry out a leper hunt in English hospitals today they would not come away empty handed, though one condition which I believe accounted for some considerable part of mediæval leprosy would be missing—the extensive ulcerations of advanced scurvy. All the same they would find cases of intractable skin diseases, cutaneous ulcerations, and deformities, which would fit in with their conception of leprosy. If any of these had limited his studies to the medical treatise by John de Mirfeld of St. Bartholomew's Hospital, he might add to the haul by applying the simple and only test for "leprosy" given in that text—offensive sweating from the armpits.

In spite of all the uncertainty involved, some guess at the actual prevalence of leprosy in old times might be expected here. In this connection I cannot do better than quote the opinion stated by Creighton in Traill's Social Life in England, for I consider it a reasonable estimate of the extent of the disease at its worst. He says: "There might have been a leper in a village here and there, one or two in a market town, a dozen or more in a city, a score or so in a whole diocese." When a certain distinguished historian declared that in mediæval England leprosy was a more terrible scourge than bubonic plague, he was talking arrant nonsense.

On one occasion when visiting an independent tropical country I was shown a building called a leper hospital. It was a ramshackle structure with nothing to justify this grandiloquent description, and indeed little better than a shelter for diseased beggars. How the diagnoses had been arrived at in the first place I could not discover, owing to language difficulties. On making an examination—admittedly far from exhaustive—of about a dozen of the occupants, I found only two who showed any signs suggestive to my mind of leprosy. Some of the remainder were suffering from what seemed to be crusty scabies of long standing. Others I should have liked to subject to a course of that old and trusty standby, iodide of potash. I doubt, though, if a cure would have been welcomed by many of these "lepers," with a consequent loss of a congenial and assured means of livelihood. If it were possible for
the inmates of one of the old English leper houses to find a breach in Eternity and come back once more into Time, I believe that a proper investigation of their maladies would disclose something of the nature I have just described—a small minority of true cases of leprosy among a crowd of sufferers from repellant forms of disease of many another kind.

Those persons who choose to adhere to the literalist interpretation of words like "leper" and "leprosy" in old usage, ought to be consistent in their practice. They should maintain, therefore, that the Black Death was leprosy because Gilbert le Baker called it "lepra"; that the Old Testament prophecy (Isaiah LIII) foretold that the Christ would be afflicted with leprosy because He was called "leprous"; and that the leprous distillment that Hamlet's uncle poured into the king of Denmark's ear was in reality an infusion of Mycobacterium leprae.