Bradshaw Lecture

ON THE

THEORY OF DIAGNOSIS.

Delivered before the Royal College of Physicians of London on Nov. 4th, 1926,

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Verumtamen praesentium cognitium proprie nomine *diagnosin*, hoc est dignotium, appellare consuevimus.
—*Galen* (18–2–24).

PART I.

MR. PRESIDENT, FELLOWS OF THE COLLEGE, LADIES AND GENTLEMEN,—My first duty is to acknowledge the responsibility, cast upon me by your late President, of commemorating the professional and domestic virtues of him whose sorrowful relict became, in 1880, our eponymous benefactrix. This responsibility is, however, not unmixed with gratification, for I succeed, *sed longo intervallo*, one whose memory should still be green within these walls—Dr. Vivian Poore who, in 1881, gave here the first Bradshaw lecture.

Amongst the Fellows of this College there have been not few more learned in the history of our art and of our science; there have been others more nicely versed in the subtleties of some narrow specialism; and there have been many who have commanded greater recognition. But they have not been many who have better earned the right to be called *Physician;* one whose practice is broadly based upon an intimate acquaintance with Nature, the kind parent of all things. His humanity, his wit, and his sagacity, were gifts not often possessed in such measure by those who obtain greater immediate reward but perhaps exert less lasting influence. I am grateful for the opportunity of saying how much I owe to him.

MEDICINE AND SCIENCE.

By the terms of the Bradshaw Trust, the subject of this lecture must be connected with medicine or surgery; and I have chosen for my theme the Theory of Diagnosis, believing that none other can be more proper either to medicine or to that part thereof we call surgery. Indeed, to diagnosis even therapeusis must yield pride of place, for, in the quaint words of Hart, written in 1625, ancient physicians "did . . . divide Physicke principally into two parts, to wit, that which we commonly call Therapeuticke . . . and that part which we call Diagnosticke, whose most common scope is to discerne the whole and sound from the like and the sick and infirme from the whole, being unlike the one to the other. And this part of Physicke doth farre excell the other, to wit, the Therapeuticke, the which without the Diagnosticke is of small use and profit."

Formerly, the greatest masters of scientific method—as Harvey himself—were accustomed to interpret their observations in the light of those fundamental principles that make up the very matrix in which all true sciences are formed. But the separation between philosophy and natural science that marked the close of last century became so wide that, although reaction has set in, and many are now eager to discuss the general validity of scientific conclusions, medical men are still prone to assert that medicine as a science stands, and must ever stand, upon a so-called solid base of observed fact and planned experiment, in complete dissociation from all mental discipline as such. It is in sympathy with this attitude towards inquiry into the mental processes by which we obtain our "facts" that all trace of metaphysics, logic, and philosophy has disappeared from medical education since, in becoming more medical, it became less educative. Profoundly dissatisfied, Dr. Mercier wrote, ten years ago, that, while the fundamental concepts in every calling are the most difficult to define, and the definition of them is not arrived at until late in the history of that calling, nevertheless in every calling a time must at length arrive when such definition is needed, and that such a time is now arrived in the history of medicine. Now medicine, so far as itself a science, is (as Hobson says natural science is in its every stage and its every department) a conceptual scheme and not a perceptual intuition. The need for clear definition of the integral concepts of medicine is, therefore, at least as imperative as is the practice of that indirect or analogical form of observation by experiment, which to so many seems to afford a more solid "basis of fact" than does direct observation at the bedside or in the field.

It is necessary to insist upon the conceptual aspect of medicine as a science, for—again to quote Hobson—in modern times until recently most men of science have been dominated by the philosophical theory of knowledge—essentially unnecessary to scientific method—known as physical realism. The influence of this theory is never more prejudicial than when unconsciously sustained by those who loudly proclaim the freedom of medicine from philosophical thrall!

No further excuse seems needed for an attempt to say what we have in mind when we speak about "this so noble a part of Physicke" and to give an account of its theory—that is to say, to explain it, by appeal to first principles in terms that are independent of medical doctrine. But if success is to be obtained—and by success I mean not finality but the clarification of thought—we must give ear to Galen and "come to agreement quickly about Words, getting soon to the Things themselves, and spending on these only our time and trouble, for most of those who call themselves educated do otherwise, and so do never perfect their Art." (7–43, 44.)

Important though it be to distinguish between words and things, it is no less so to distinguish between the words by which we tell our thoughts about things: these thoughts, and the things that are thought about. This triple distinction between what I have called names, notions, and happenings—or, as Messrs. Ogden and Richards say, perhaps with greater propriety, words, thoughts, and things—should be maintained during every discussion. We should, therefore, think separately of *diagnosis*, the name, or verbal symbol: of the notions for which this symbol has stood, and the explanations thereof; and of the processes concerning which these notions and explanations have been entertained. In so doing we follow the injunction of William of Occam, the greatest of English philosophers, and choose always the *suppositio* beneath the word; whether the word be employed physically, or *materialiter*, *pro voce;* conceptually, or *simpliciter*, *pro intentionae animae;* representatively, or *personaliter*, *pro re*. This is what Ogden and Richards intend when they speak of the word or symbol, standing for a mental *reference*, which itself represents the *referents* we observe or think about.

DIAGNOSIS: THE NAME.

The Greek word *diagnosis*, with its congeners, is infrequent in the Hippocratic Collection, though less so than may be thought, since some translators have avoided the use of exact equivalents, apparently because the full Greek meaning is not always conveyed by them. Recourse has been had to periphrasis; and the suggestion that the modern English usage of the word is not that of the Greek has been avoided. Without doubt Dr. Withington—to whom I am more than indebted—is right when he says that, in the Greek, the connotation of the particle *dia-* in *diagnosis* is at least as intensive as discriminative; his view is supported by the fact that though no formal definition of the word appears in Hippocrates, Galen, in whose writings it is exceedingly common, does define it (in the "Commentary upon the Prognostics of Hippocrates") as the clear cognition, or *gnosis*, of things present (18–2–24). So, too, when he declares that it took him long to make the fundamental *diagnosis* of the pulse—that the artery not merely rises and falls, but expands (8–771). Later writers seem to have used the word mainly in copying from

Galen and, although *dignoscere* is in Virgil, it is said not to occur in Salernitan translations or in mediæval writings generally. I have not seen it in any Latin work earlier than the last part of the sixteenth century, when its revival was probably due to renewed acquaintance with the Greek of Galen. (Withington.)

Diagnosticke we have seen as an English substantive in 1625 (Hart), but *diagnosis* does not occur till 1681, when Pordage, in the glossary to his translation of Willis, defines it as *dilucidation*, or *knowledge*. Later, the word does not appear to have been greatly used for nearly a hundred years, and then somewhat differently. In 1731 de Sauvages had attempted to classify diseases as if they were indeed objects or groups of objects in nature: in Sydenham's words, "to be reduc'd to certain and determinate kinds, with the same exactness as we see it done by botanic writers in their treatises of plants," and possessing "certain distinguishing signs which Nature has particularly affixed to every species." Faber has shown how Linne, fired with enthusiasm, applied to diseases his own aphorism, *Species tot sunt diversae quot diversae formae ab initio sunt creatae*, and caused a "Genera Morborum" to be compiled for the use of his own pupils. The fashion spread, and in 1771 a new era in modern medicine commenced when Hélian published his "Dictionnaire du Diagnostic, ou l'art de connaître les maladies et de les distinguer exactement les unes des autres."

Now whatever we may hold a *species* or *genus* to be, no disease is a discrete object of perceptual experience in the way that a single plant is, and, while much may be said on grounds of convenience for classifying the various kinds of illness we recognise, the implication that *diseases* are species of classifiable entities and that the art of diagnosis only came into existence after their recognition as such, is a consequence of our failure to follow Harvey's example and to inquire, with Aristotle, whence and how knowledge reaches us. Moreover, we cannot accept the identification of a process with one of its own modalities as a definition of that process. Now although Cullen in 1772 introduced into Scotland a systematic nosology based upon symptom-complexes, and Price in 1791 published in London a "Treatise on the Diagnosis and Prognosis of Disease," or, as Forbes gives it, *Diseases*, English physicians, on the whole, long regarded diagnosis as a process applicable to persons rather than to diseases, and displayed little enthusiasm for the botanical classifications of de Sauvages and his followers and the specifist doctrines of the later French Organicists headed by Bretonneau and Laënnec. Nevertheless, in Forbes's translation of the latter's famous "Traité" (1834) we find such a phrase as "the diagnosis . . . . of pneumonia," and the advantages of classifying clinical phenomena and creating diseases by the correlation of sign-groups with post-mortem patterns, in the style of Laënnec, became so appreciated that for many years to interpret in terms of specific diseases was almost the only duty of the diagnostician. Thus, in 1882, the New Sydenham Society's "Lexicon" laid it down that diagnosis is the distinguishing of things, the noting of symptoms, whereby a disease or plant *or other object* may be known for what (it) is and not another. The following year Hecht, in the "Dictionnaire Encyclopédique des Sciences Médicales," defined diagnosis as "cette partie de la pathologie qui a pour objet la distinction des maladies entre elles," a definition persisting so lately as 1904 in Dunglison's "Dictionary of Medical Science," which states diagnosis to be that part of medicine whose object is the recognition or determination of the nature of diseases and the knowledge of the pathognomonic signs of each. By the "New English Dictionary" diagnosis, in the medical sense, is said to be the determination of the nature of a diseased condition, or the identification of a disease by careful investigation of its symptoms and history, together with the opinion, formally stated, resulting from such investigation. The same dictionary gives the general, or biological meaning as "distinctive characterisation in precise terms." That it is characterisation that is of the essence rather than characterisation in terms of any particular convention is implied by Dr. Christian when, in the "Oxford Medicine," he writes that diagnosis depends upon a proper evaluation of signs and symptoms recorded by all available means and interpreted with the critical judgment of a large common sense.

Thus do we return to Galen's definition of diagnosis as the clear cognition of things present, and to the right to employ, without doctrinal or conventional prejudice, this word which, first used by the Father of Medicine, has been absent from literature during long periods of time, and to-day is more than ever conspicuous in our verbal equipment.

DIAGNOSIS: THE EXPLANATIONS.

It is disappointing to the student of medicine to find during the last 150 years—a period coterminous with what Singer calls the Reign of Law—so easy an acceptance of linguistic subterfuges which, however convenient when teaching students, are yet responsible for much confusion in the minds of students grown to be teachers.

In former days the physician brought to medicine a mind trained in the theory of knowledge: like Galen and Locke, he made contributions thereto. Diagnosis was then the application to the field of medicine of a method of thought already learned. So, when in the sixteenth century such physicians as Fernel discussed the first principles of all science in their Institutes of Medicine, the theory of diagnosis flowed naturally therefrom and called for no separate discussion.

In the nineteenth century the case was altered. Together with a distrust of logic and philosophy, and a strange belief that science alone gave a sure foothold, there grew up a desire to contain medicine within a cincture, and to-day many a student obtains no better idea of diagnosis than that it is what we do when we encounter a disease: and of a disease, than that it is the sort of thing we diagnose when we encounter it.

Of course, so long as Sydenham's pleasant fancy was accepted as a premise—and it was believed that there are in Nature objective and real, even if immaterial, entities called diseases, denoted by fixed characters and, *ex hypothesi*, the proper subject of diagnostic studies—for so long was it impossible to define diagnosis otherwise than as the art of distinguishing between them. This premise is even yet not decisively repudiated, but, unfortunately, when the nosological systems still perpetuated in our "Official Nomenclature of Diseases" first became rife, those who, like Jeremy Bentham then combated the errors of physical or scholastic realism, had not sufficient technical interest to develop the application of their arguments to medicine, whilst Marshall Hall, in his book "On Diagnosis" (1817) merely said that the diagnosis of *diseases* constitutes the foundation of the practice of medicine, and such medical logicians as Lanza (1826) cared more to undertake medical research, as they called it, by ratiocination than to discuss so humdrum a process as diagnosis appeared to be.

Even Oesterlen, of Heidelberg, whose "Medical Logic," translated by Whitley in 1865, ably exposes the vice of treating names of diseases as if representing existent objects, finding diagnosis fallen amongst thieves, passed by upon the other side and spent energy in a laboured attempt to torture medicine into compliance with the Procrustean demands of Mill's Science of Inductive Logic, or Inductive Philosophy, as it was called. Perhaps in medicine we still tend to use the word *induction* emotively rather than intelligently, and without any clear logical connotation!

At any rate, Barclay, who, in his "Medical Errors" (1864), spoke of the "positive induction that forms one of the elements of the deductive argument by which we arrive at the true diagnosis of disease," tried hard, in his "Manual of Diagnosis" (1857–70), to analyse diagnosis in terms of the prevailing logic, and suggested that the best method of teaching it

was to lay down rules whereby the student might distinguish the diseases described to him in the schools. He never questioned the adequacy of the heroic attempt to resume or group all clinical phenomena in terms of diseases only, or the permanent validity of the nosological distinctions in vogue at the time of the Great Exhibition. Still less did he appreciate the exercise of the diagnostic art by the greatest physicians of all time long before the promulgation of these distinctions, and we receive, in some sort, the impression of an excellent photographer of the period who, writing about Art, ignores the efforts of Phidias and Leonardo in their regrettable lack of acquaintance with the technique of the carte-de-visite and the dry plate.

The truth is that Barclay, whose text-book long remained deservedly popular, had no inkling of the scholastic doctrine of *ficta*, revived in these latter days to teach us that the primary concepts of the physical sciences are subjective interpretations, justified by their convenience and the measure of common assent that they may obtain, but not as perceptions of reality. And so, again girdling medicine with her own zone, he explained diagnosis as the application to any particular case of the lessons taught by semiology and nosology; much as we might define literature as the application to a particular theme of the lessons taught us by caligraphy, dactylography, stenography, and typography!

The professed logicians were not more happy than the logical doctors in their dealings with this subject. Bain (1870), like others, ignored routine diagnosis and, whilst condemning realism in the scholastics, showed himself, like many philosophers, a realist in medicine, giving rules for the naming of diseases which (he said) are generally localised in separate organs or tissues. To Jevons (1877) diagnosis was the operation of discovering to which class of a system a certain case or specimen belongs, an operation performed by the serial rejection of the infinite classes with which the case does not agree. We still do nominal honour to this scholastic operation implying the reality of classes, when we speak of diagnosis by exclusion; but Jevons did not care to examine what generally happens. He set out what people would have to do in order that logicians might say they were behaving in the way they ought to do. And he ended by believing that they did so.

For many years after Jevons the question was not reopened. But, since the South African War, many books have been written professedly devoted to diagnosis as the most important part of medicine. These books give excellent schemes for the physical examination of the patient, whilst strangely ignoring, almost completely, the psychical. The materials are arranged semiologically or topographically rather than nosographically, and all allusion to therapeutics is foregone. But they agree with text-books of medicine generally in avoiding all discussion of first principles, and, so far as possible, any attempt to define disease or diseases, and any hint that the nosological convention represents only one method of diagnosis. Such attempts as are made to define diagnosis are usually either descriptive or involve an obvious *circulus in definiendo*. Thus, one author tells us that diagnosis is prerequisite to accurate prognosis and effective treatment, so that the true end and aim must be the earliest possible recognition of any disease (1922); a second, that diagnosis is the method of distinguishing from one another diseases that have symptoms more or less alike (1925); a third, that a correct and integral diagnosis is the *sine qua non* of rational therapeutics and one that conforms to reality, as shown by the evolution of the malady, the success of the treatment, and the findings at the necropsy!

However, three determined efforts have been lately made to grapple with the subject, and all hail from North America. Dr. Stanley Ryerson gives a clear method of case-taking, but attempts once more to explain diagnosis in terms of inductive logic. Yet, since Mill himself defined induction as the process by which what is true at certain times or of certain individuals, is inferred to be true in like circumstances at all times or of a whole class, it is difficult to see how diagnosis can be said to be an induction or an inference from known particulars to an unknown general. There is a better logical case for speaking of diagnosis as *deductive* for frequently, though quite wrongly, some diagnosticians persist in inference from an assumed general to a present particular! Dr. Llewellys Barker, in the "Oxford Medicine," says rightly that in bygone days there was, as now, recognition by only a few that groupings of signs of illness are conceptual and to be changed when the purpose changes. But we feel the ghostly presence of the Victorian realists and logicians as we turn Dr. Barker's many informative pages and trace the steps we are told we take, or ought to take, when we tread the path of diagnosis.

We learn to distinguish the philosophy, the science, and the art of diagnosis, and are told that, in the application of the science to the art, there being recognition of a problem to be solved and a feeling of diagnostic difficulty, data are accumulated, the anamnesis is recorded, and the *status praesens* investigated, while the catamnesis and epicrisis are duly noted so that, data being summarised and arranged, diagnostic suggestions are considered and, hypothesis not being undervalued, fundamental relations are thought of and elaboration by reasoning, submitted to testing, is guided towards the end. But what is this end—the final cause, in Aristotelian phrase—of diagnosis? It would almost seem, from what Dr. Barker tells us, that diagnosis is the function we discharge when, a diagnostic difficulty being felt, we decide between diagnostic suggestions in order that we arrive at diagnostic conclusions—a solution reminiscent of Raymond Lully when he said that the digestion is the form by virtue of which the digestive digests the digestible!

Dr. Warren T. Vaughan very nearly hits the mark when, in a modest essay that avoids all sophistication, he compares the act of diagnosis to a detective enterprise. For the detective, employing no formal logic or scheme, reasons as does every man in every hour of his life; making use of his acquired knowledge and experience, he interprets what he observes by means of his commonsense. But this is what Dr. Christian says the diagnostician does. In other words, and if we may talk of faculties, the detective and the physician alike exercise what Sturt calls some common constructive or reconstructive faculty and do *not* adopt any of the rationalised methods that logicians and novelists say they do.

In Rignano's language play is given to two fundamental activities—the one intellectual, the other affective. Images of the past are evoked by the present, and the mind seeks the satisfaction that is attained when a judgment that well serves our purpose is achieved. More simply still, diagnosis is just the first stage of the physician's work, the process of forming and expressing those judgments concerning the present state of the sick that guide us in our office of healing; and it consists in observation of the sick, interpretation of what is observed, and symbolisation of the interpretations accomplished.

DIAGNOSIS: THE PROCESS.

Thus considered, diagnosis ceases to be an esoteric process for finding out "what is really the matter." We do not confuse it with any particular diagnostic convention, or assume that they who do not diagnose as we do do not diagnose. We appreciate that it is not governed by strict rules or comparable to the identification of a postage stamp by reference to a collector's catalogue. Finally, we proceed to investigate diagnosis by the methods of psychology, recognising that, like logic, it is a matter for psychologists rather than for the logicians who have so dismally failed us at their own business. This being so, we come to regard diagnosis as a kind of reflex process which, regarded subjectively, resolves into three members, whereof one is perceptive or observational, another associational or interpretative, and the third efferent or symbolising. Thus every response to injury becomes at once a reflex and a diagnosis;

and the reparative process, once regarded as something put forward by a *vis medicatrix Naturae*, is better understood as the effective symbolisation by the organism of the cognisance that it takes of the lesion. The salamander who, its tail being removed, sets about and grows a new one, and the cat, who, feeling ill, seeks and finds the grass that cures, both make diagnoses that may be instinctive but are perfectly adequate to the occasion! The surgeon may reply that one salamander cannot grow a new tail for another, and the salamander may retort that the surgeon cannot grow a new leg even for himself! Still, both salamander and surgeon, like all living creatures, exercise diagnosis in their own measure and according to their own opportunities!

Moreover, Signorina Locatelli has lately shown that the reparative powers possessed by newts are exerted through the nervous system in such fashion that we have to reckon with not only a generalised tendency to repair, possessed by every tissue and by every cell —whereof (as Prof. Leathes has recently said) the persistence is by definition required for the very maintenance of living existence—but a specialised regional reflex system which, for some creatures, assures the reproduction even of a limb. May we not inquire, then, if some healers, even though "unqualified," do not possess some instinctive diagnostic and healing faculty that finds expression practically rather than verbally, but *for others*; a faculty analogous to the instinctive mathematical gifts of the strange calculating boys? At any rate, the observable diagnostic series seems to extend, with gradual transition, from the so-called instinctive and selfish processes of the lower animals to the highly rationalised, and, of course, altruistic judgment-formations of the medico-legal expert, so that the only convenient criterion, restraining the word diagnosis to forms of human endeavour, is that of verbal expression or symbolisation. We are, then, burdened with the task of distinguishing between rational and irrational or—what is not the same thing—orthodox and unorthodox symbolisations.

However, recognition of this evolutionary aspect of diagnosis—stressed by Martinet when he said that "les degrés divers actuellement réalisés par la science diagnostique reproduisent les étapes mêmes de l'évolution diagnostique au cours des âges"—carries with it an obligation to undertake comparative studies that has been insisted upon by Masson-Oursel, though it was Rivers who first pointed out that some primitives practise an art of medicine more rational than ours, in that their modes of diagnosis flow more directly from their ideas concerning disease.

It is, at first, shocking to be told that diagnosis may be at least as rational and as practical when stated in terms of demons as in terms of diseases, yet a dose of castor oil is indifferently efficacious whether a demon or a disease be held responsible for the symptoms, while there is a closer affinity than may be thought between those who believe in specific demons and those who talk about the specific clinical entities that "attack the human race." It is certainly remarkable that, at the stage of human progress when, as Bordeu said, a natural medicine is practised that is comparable to natural religion, there should be clearly marked two diagnostic trends that are traceable throughout the whole history of medicine and that persist to-day amongst us.

Rivers found, diffused throughout America, Indonesia and Papuo-Melanesia, the notion that disease is an abstraction or loss of the soul, or vital principle, or a part thereof; in India and in Africa the belief that disease is due to a something added—a spirit or a demon. Clearly we have here a hint, and more, of the secular controversy between those who find in disease an impairment or failure of functional activity or adaptation—the Vitalists, who regard disease as an accident or *aliquid entis*—and the Organicists, who explain all disease worth their attention in terms of physical attack on organs, and consider each described disease to be an entity, or *ens*. This controversy is indicative of a dichotomy that has ever vexed medicine since first practised (as we say, rationally) some 2400 years ago—a dichotomy that has sometimes seemed best indicated in terms of practice, sometimes in those of doctrine, and again in those of philosophy.

Sometimes, perhaps, the difference has been obscured by the apparent inconsistencies of the greatest physicians who, like Galen and Sydenham, have seen something of the truth in each side, have attempted to reconcile the contending opposites, and have been claimed by each party in turn. But always the difference has been one that is best *stated* as a difference in *method* of diagnosis—that is, in observation, interpretation, and symbolisation—and is best *comprehended* as dependent upon fundamental psychological divergences.

These divergences are of more than medical interest, for in some sort they affect all mankind. They are allied to those which separate the romantics and classics of literature, and, perhaps, also Ostwald's romantics and classics of science, as well as the introverts and extraverts of Jung; they are, perhaps, those which Coleridge had in mind when he said all men are either Aristotelians or Platonists, and which architects divine between the Gothic designers who build from within outwards and the classics who plan from without inwards. That such divergences should obtain in medicine is only to say that physicians are as other men; but that laymen are likewise divided in respect of diagnostic outlook was well shown, a few years ago, during the course of public discussion concerning the alleged diagnostic inefficiency of doctors!

Mr. G. B. Shaw then declared that diagnosis is not the mere affixing of a nominal label, but the finding out all there is the matter with a patient and why; the editor of the *Westminster Gazette* pleaded eagerly for the establishment of a diagnostic caste, whereof the duty should be to affix the proper label and pass the patient on to him who should treat the disease nominated. Herein Mr. Shaw ranged himself definitely with the Vitalists—best represented for us by the tradition of Cos: his colleague as definitely set himself amongst the Organicists of Cnidus—the spiritual home of all who manifest exact nosological proclivities and diagnose diseases rather than patients.

The elderly practitioner who, remote from libraries and from laboratories but near to Nature, is hesitant when asked for verbal diagnosis in terms of recent convention, yet clear in action, is in like fashion opposed to his more formal colleague who, diligently making a diagnosis in strict accordance with differential tables and tests, searches his text-books in confusion for the treatment appropriate to the disease he suspects. Wherein lies the fundamental difference between these two diagnostic attitudes?

All men, when about to interpret what is presented in consciousness, proceed in one of two ways. Some interpret the present by reference to images of past experience stored simply as memories, or as composites of like memories. Others compare present perceptions with mental constructs, made up of memories of like past experiences, but *colligated* (in Whewell's phrase) by something predicated, abstracted, or imagined which, linking them together, converts mere aggregates or composites into organised units that we call ideals, general terms, or universals—just as a colligating staff transforms a thousand men into a battalion. Herein is the difference between the two types of diagnostician —a difference that carries with it many correlations but corresponds closely to what Mr. Trotter has lately recognised as that between the direct or concrete, and the indirect or abstract methods of thought.

The simple composites of *natural* diagnosticians—for whom the definition of diagnosis as clear cognition will suffice—are the *syndromes* of the post-Hippocratic empirics; as Hart said, nothing else but the collection of certain *accidents* and *circumstances* of disease. The mental constructs of *conventional* diagnosticians—for whom diagnosis must establish correspondence between the illness of each patient and some rationalised type —are, as a rule, diseases, but may be demons.

(The bibliography to Part I. will be given with Part II. in the next issue of THE LANCET.)