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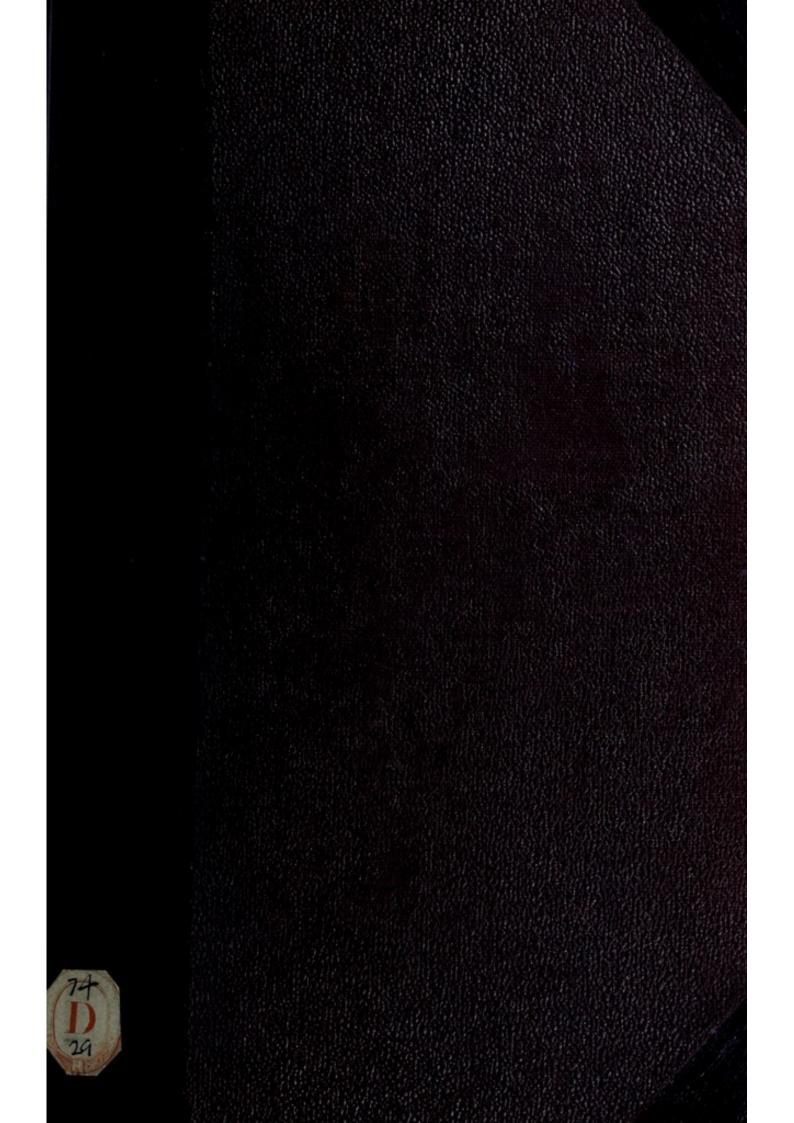
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The Goulstonian Lectures

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ON

SOME ABNORMAL PSYCHICAL CONDITIONS IN CHILDREN

Delivered before the Royal College of Physicians of London on March 4th, 6th, and 11th, 1902,

BY

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The Goulstonian Lectures

ON

SOME ABNORMAL PSYCHICAL CONDITIONS IN CHILDREN.

LECTURE I.1

MR. PRESIDENT AND GENTLEMEN,-The particular psychical conditions with which I propose to deal in these lectures are those which are concerned with an abnormal defect of moral control in children. Interesting as these disorders may be as an abstruse problem for the professed psychologist to puzzle over, they have a very real practical -shall I say social ?-- importance which I venture to think has been hardly sufficiently recognised. For some years past I have been collecting observations with a view to investigating the occurrence of defective moral control as a morbid condition in children, a subject which I cannot but think calls urgently for scientific investigation. It has long been recognised that such a deficiency may occur in association with those disorders of intellect which are ordinarily recognised as idiocy, imbecility, or insanity, and I suppose no one doubts the morbid nature of the moral defect in these cases, whether it be regarded as dependent upon the intellectual failure or not. But there are other cases which cannot be included in this category-children who show a temporary or permanent defect of moral control such as to raise the question whether it may not be the manifestation of a morbid mental state, but who nevertheless pass for children of normal intellect; it is this condition in particular which seems to me to call for careful observation and inquiry. The importance of some more widespread knowledge of these morbid states, if such they be, is very great, and although some of them persist into adult life, at no other period are the opportunities for investigating them so favourable as in childhood; for in early years the influence of environment has not yet become so varied and complicated as to be

1 Delivered on March 4th.

altogether beyond our gauge, and it is possible to obtain a more or less accurate and detailed history of the whole life of the individual, a point of extreme importance when the question of a congenital deficiency arises, as it will do in connexion with these cases: moreover, if there be any question of a morbid failure in the development of a mental process it can best be studied in the child, who is still at the age when, as we shall see, such development should be in progress. Whilst, therefore, I propose to consider generally the occurrence of defective moral control as a morbid condition in children, my particular object in this general survey is to determine what evidence there is on which we can base an answer to this question : Is diminution or defect of moral control in children ever the manifestation of a morbid mental state, apart from any such general disorder of intellect as is ordinarily recognised as imbecility, "feeble-mindedness," or insanity? and if so, under what conditions does it occur? It is obvious that such a disorder, if it exist, cannot be studied apart from its clinical phenomena, although some light may be thrown upon it by the consideration of the physical diseases or gross anatomical lesions which are associated with it in certain cases.

MORAL CONTROL IN THE NORMAL CHILD.

It is perhaps hardly necessary to define what is meant by "moral control." For the psychologist it is "the control of action in conformity with the idea of the good of all." and such a definition is at any rate sufficiently comprehensive for my purpose and may serve to correct the misapprehension which is apt to arise in consequence of the popular use of the terms "moral" and "immoral" to connote some sexual The moral control to which I refer has a much relation. wider significance, and its defect in any individual case may have, and indeed often has, no concern whatever with sexual relations; at the same time I would point out that such a definition will cover, not only such activity as is concerned with the good of others, but also with the good of self-in other words, the moral control which I wish to consider is not only the altruistic but also the self-regarding.

Moral control can only exist where there is a cognitive relation to environment. I use the term "cognitive" for lack of a better to imply that capacity for reasoning comparison on which moral control is necessarily based: the term "conscious" would imply too little, the term "intelligent" would imply too much. Out of this cognitive relation arises a consciousness of the relation of every volitional activity on the part of the individual to the good of all and this we may call moral consciousness. Moral control is the control of activity in conformity with this moral consciousness. The capacity for reasoning comparison may be regarded as an intellectual capacity and moral consciousness, inasmuch as it is concerned with more complicated relations, must require a higher degree of this capacity. To this extent moral control also is dependent on intellect; but inasmuch as volition also is concerned in moral control, and volition can hardly be regarded as an intellectual process, it would seem that intellect is not the only factor concerned therein, although it is an essential factor. To this point I shall return again when we come to consider the mental pathology, if I may so say, of defective moral control.

Moral control, it is obvious, is not an attribute of the newlyborn child, for the infant only gradually comes into that cognitive relation which must precede the development of moral consciousness; moreover, moral control, as already pointed out, involves volition, and therefore cannot precede the earliest date at which activity ceases to be merely instinctive, reflex, or impulsive, and becomes volitional, a date which is extremely difficult to determine but certainly cannot be placed earlier than some weeks, or possibly months, after birth. Volition, in so far as it is concerned in moral control, may be regarded as inhibitory ; it is the overpowering of one stimulus to activity—which in this connexion is activity contrary to the good of all-by another stimulus which we might call the moral idea, the idea of the good of There is, in fact, a conflict between stimuli, and in so all. far as the moral idea prevails the determining or volitional process may be regarded as inhibiting the impulse which is opposed to it. Now volition, as I have already pointed out, does not appear until some time after birth and the gradual and comparatively slow development of inhibitory volition, especially in regard to those forms of activity which are most instinctive and almost reflex in character, such as the expression of the emotions, is a matter of everyday observation, especially to those who have the opportunity of studying children.

Corresponding with this gradual acquirement of inhibitory volition in the normal child we recognise as a matter of general experience a certain rough proportion between the degree of stimulus which can be successfully opposed and the age of the child. I shall not attempt to define this in more accurate terms, for it is practically impossible to do so; but perhaps I may be allowed to illustrate my point by a simple example. An infant, aged 17 months, had been given a key to play with; he was sitting quietly on his mother's knee looking at the key which he held in his hand, when I gently took the key away from him and offered instead a sheet of white paper. The infant burst into passionate cries, bounded up and down on his mother's lap, beating the air with his fists, and when the paper was proffered beat it angrily aside. Here was a little ebullition of rage which was perfectly normal in a child of that age on provocation of that magnitude, but the same ebullition in a child, say of 12 years, on exactly similar provocation would

have been altogether abnormal. My object in drawing attention to this point is to emphasise the fact that in considering the possibility of a morbid defect of volition as a factor in any case of defective moral control in a child, we must take into account not only the age of the child but also as far as possible the degree of the stimulus.

The possibility of moral control, as already pointed out, is the outcome of combined cognition, moral consciousness, and volition; but inasmuch as these are only gradually perfected or more fully developed as the child grows older, it is evident that the further development of moral control must also be a gradual process. The capacity for such development is present, we may reasonably assume, in the normal infant at birth, and so far there is an analogy, not to say connexion, between moral control and general intellectual acquirements ; moreover, both are largely dependent on training and environment for their increase. This gradual growth of moral control in the normal child is a point to be remembered when we come to consider how far defective control is to be regarded as a morbid manifestation, for it follows that a degree of moral control which may be perfectly normal in a very young child may be altogether below the average for a child a few years older. Further, we must recognise that the development of moral control varies considerably in different children at the same age; such variation is no doubt in part the result of environment, but partly also, it seems possible, the result of differences in the innate capacity for the development of such control. To this important point I shall refer more fully hereafter ; here I will only say that whilst the degree of development of moral control in children at various ages falls in the large majority of cases within a limited, albeit ill-defined, range of variation which we arbitrarily recognise as normal for the age, there are children in whom moral control falls so far below this standard that the question may well be raised whether in such cases the defect is not the manifestation of some morbid psychical condition. In seeking the answer to this question it will, I think, be best to consider, first, defect of moral control in association with general impairment of intellect, for here, at any rate, it will be allowed that the moral failure is a morbid phenomenon.

DEFECT OF MORAL CONTROL ASSOCIATED WITH GENERAL IMPAIRMENT OF INTELLECT.

Morbid defect of moral control in children is most often seen in association with idiocy or imbecility and this association calls for special attention, as it is here that the relation of moral control to intellect can be studied most easily, inasmuch as grades of intellectual capacity are here more easily discernible and therefore more readily available for comparison; moreover, it will, I think, be seen that it is in idiocy or imbecility that we can most easily discriminate between certain differences in the causation of moral defect. In the lowest grade of idiocy moral control is necessarily an impossibility. The drivelling idiot who recognises no one, does not distinguish his food, and is little more than a mere automaton stands in little or no cognitive relation to his surroundings and a fortiori lacks that higher form of reasoning comparison which we call moral consciousness. Here, therefore, the absence of moral control is complete. Such cases are of interest chiefly as exemplifying one cause of failure of development of moral control; they have otherwise little bearing on the question before us and need not detain us further. I may, however, point out that in considering cases with any degree of general impairment of intellect caution is required in accepting absence of activity as evidence of moral control; the idiot of low grade does not steal nor, perhaps, does he behave spitefully, but this is not to be attributed to moral control but to the absence of stimulus owing to the fact that he is not in cognitive relation with his environment; and going further one may say that where there is a cognitive relation only to a limited portion of environment to that extent stimulus is limited and the corresponding activities will be absent. For instance, the idiot whose intellectual impairment is such that he has no appreciation of the value of money and does not distinguish it from other objects and has no pleasure even in mere acquisition does not steal, whilst a higher grade idiot who knows the use of money or takes a delight in mere acquisition does steal. To contrast two such idiots as showing in the former case moral control and in the latter its defect would be entirely fallacious ; the absence of stealing in the former is due to the absence of stimulus-that particular idiot is, so far as money is concerned, cut off, if I may so say, from his environment.

With this caution we may turn to the consideration of idiots of higher grades, and the first point which calls for attention is the frequency of defective moral control in these children. Of 90 consecutive imbeciles from three to 12 years of age under my own observation 23 showed a lack of moral control which was quite unnatural for the age of the It must not, however, be supposed that any one of child. these children showed every possible manifestation of moral deficiency ; indeed, with a morbid defect of moral control from any cause, while it is probable that there will be several manifestations, it is quite unusual for all the possible manifestations to be present. Lack of moral control may be shown in many ways, and it will be convenient to have before us a list of those qualities which in their corresponding activities make up the picture of morbidly defective moral control, as it is seen not only with general impairment of intellect but also, as I shall show, with other conditions in children. These qualities are-(1) passionateness; (2) spitefulness—cruelty; (3) jealousy;

(4) lawlessness; (5) dishonesty; (6) wanton mischievousness-destructiveness; (7) shamelessness-immodesty; (8) sexual immorality; and (9) viciousness. The keynote of these qualities is self-gratification, the immediate gratification of self without regard either to the good of others or to the larger and more remote good of self. Some of these qualities, it will be observed, are natural to children at a certain age and to a certain extent; it is their persistence in a degree unusual for the particular age and not corresponding to the influences of environment which constitutes their abnormality in these children. Of the 23 cases which I mentioned 20 showed an abnormal degree of passionateness which in most of the cases was associated with other manifestations of defective moral control, but no one of these was so frequent as passionateness which in two of the cases appeared to be the only manifestation. This predominance of passionateness amongst the phenomena of defective moral control in children with general impairment of intellect is, I think, worthy of notice, for we shall find that not only in these children but also in many of the various conditions under which morbid diminution or defect of moral control occurs passionateness is the commonest of all its manifestations, and, as I shall show, this fact may throw some light on the psychical defect in these cases.

Next in order of frequency is spitefulness or cruelty which was a noticeable feature in 12 out of the 23 cases—I mean by this the wanton infliction of pain or discomfort on others; in my own observations I have somewhat arbitrarily restricted the term "spitefulness" to this tendency when it referred to infliction of pain or discomfort on other human beings, whereas when it was displayed towards the lower animals I have distinguished it as cruelty. Such cruelty was less frequent than spitefulness, it was noted only in two of the cases, but this may have been because there was less often opportunity for its display.

As a third prominent characteristic of deficient moral control not only in imbecile children but also in those whom I shall consider later, with no obvious intellectual deficiency, I may mention lawlessness. I have no figures to show its actual frequency, which, however, I fancy is very consider-By lawlessness I do not mean, of course, the able. occasional or even frequent failure to conform to lawwhether it be nursery law, school law, or the law of the land-which in greater or less degree is natural to children, but a reckless disregard for command and authority in spite of such training and discipline as experience shows will render a healthy child law-abiding to a certain roughly definable degree varying with the age. The other manifestations were all less frequent, and as I shall have occasion to illustrate them by actual cases I need say little about them here. By jealousy I mean, of course, not the mere emotion but its uncontrolled expression. Shamelessness and immodesty I have placed together as near akin to

one another, for both are emotional qualities concerned with the relation of self to others. The essential element in both is an emotional shrinking from exposure to others, whether the ground of such shrinking be fancied or real; and this implies not merely the lowest and simplest form of cognition but also a capacity for reasoning comparison with regard to more complex relations which must approach, if it does not actually reach, the level of moral consciousness. As might be expected, therefore, in imbeciles of low grade both shame and modesty are often lacking, and I would add that it is by no means uncommon with impairment of intellect in children to meet with a curious absence of shyness or reserve, which may be included under the heading immodesty and which may have similar results so far as violation of social custom is concerned. In the idiot of low grade such a condition scarcely attracts notice, for the inability to discriminate between persons or between the different relations of the particular idiot to those persons is sufficiently explained by the profound intellectual deficiency; but in the child who is only slightly backward this lack of natural reserve is often very remarkable and appears to be due to a defect of that higher form of cognitive relation which, as I have said, comes very near to, if it be not as high as, moral consciousness.

The following case may serve to illustrate these points. A girl, aged seven years; whom I saw by the kindness of my friend Dr. F. E. Batten, had had epileptiform attacks at intervals of a few weeks since the age of 12 months, associated with right infantile hemiplegia of the same duration. Intellectually the child was evidently defective, though only to a slight degree; she had not learnt to talk until fully three years old, but with only 12 months' teaching she had learnt to read short words and could count readily; she could also write the letters of the alphabet fairly distinctly. She described pictures intelligently and accurately. She was said to be very jealous and if much attention was paid to other children in her presence she would sometimes attack them, pinching them or striking them. Passionateness had been more marked formerly than now : at the age of five years she was said to have been "dreadfully violent"; for instance, one day when her mother was in the garden and she was not allowed to come out she flew into a rage, seized a stick, and deliberately smashed the window, and any such thwarting of her wishes was liable to produce an outburst of passion in which she would fling things recklessly about, including cups and saucers. Not the least striking of the qualities shown by this child was her lack of reserve. On entering my consulting-room she walked straight up to me, a complete stranger, and said, "I want a book"; on receiving a picture-book she exclaimed effusively, "You dear doctor; you dear little doctor," and then proceeded to examine the bookshelves for herself and

conversed at intervals in an airy way on various subjects, amongst other things describing a medical man whom she had seen previously as "a saucy doctor." She was also described as very self-willed and although she was obedient to a certain extent it appeared to be almost entirely the obedience of fear, for she was frequently punished for disobedience and had to be reminded repeatedly of the instrument of punishment to obtain obedience.

The heading "wanton mischievousness and destructiveness" calls perhaps for some explanation. At first sight it might be thought that such qualities were hardly related to defective moral control, but I think that a little consideration will show that not only have they a very definite relation to the moral deficiency which we are considering but that in these qualities par excellence we can discern the lack of those altruistic tendencies with which moral consciousness is chiefly concerned; and this lack, although it is natural, as I have shown, in the infant, and in a less degree in the young child beyond the age of infancy, may be unnatural when it persists in an older child. Let me illustrate my meaning by a comparison of two children. A healthy boy, aged 18 months, who had passed the age at which he cared to tear up books, paper, or anything he could tear, had recently shown a love of throwing things into the fire, no doubt for the pleasure of watching the weird and dancing flames, and perhaps with an almost unconscious pleasure in the power of arousing the flames at will; his action was, in fact, a method of self-gratification which in its total disregard for the possible injury to others by destruction of property obviously implied lack of moral control, a lack which was perfectly normal at that age. But the persistence of this infantile quality in an older child was accompanied by other evidence of a morbid moral deficiency. A girl, aged seven years, had always been backward but by no means extremely so; it was difficult to judge of her intellectual capacity from school attainments, for her attendance had been very irregular and she was so spiteful that it was necessary to separate her from other children in the class, for she would thump, bite, or pinch them, sometimes so severely as to break the skin. She had learnt to sit up alone at 11 months and to stand alone at 16 months. she had talked at 18 months, so that in these respects she was very little behind an average child. She had fits occasionally from infancy up to the age of seven years ; she was well developed; her facies showed nothing suggestive of mental impairment; her head measured 193 inches in maximum circumference-that is, nearly one inch below the average for the age. The mother stated that since the age of about five years her mischievousness had given continual trouble. She would tear up books, and other things, and on one occasion had apparently deliberately set the drapery on the mantelpiece on fire and then sat and laughed and clapped her hands. Seen again at the age of 10¹/₂ years

this girl, although apparently only backward, was as passionate and as spiteful as ever; in fact, the mother said that it was quite unsafe to leave her with other children. She was also cruel to animals-she would take up the cat and dash it down upon the floor with intent to injure it, and if it happened to cross her path she would kick it. Here, I take it, the child's act in setting fire to the drapery was, as in the former case, an act of selfgratification, but the lack of moral control and, no doubt, of moral consciousness shown in this and in her spitefulness and cruelty was altogether unnatural for the age, and that it was part of a morbid state was, I think, evident in the general intellectual deficiency and in the repeated convulsions. I mention this particular variety of mischief-the setting fire to property-because it is sometimes a prominent feature in the manifestations of a morbid defect of moral control in children who show no apparent impairment of intellect and in such cases it has obviously an important medico-legal aspect.

There is one other heading which, perhaps, wants some definition—namely, viciousness. By this I mean a lack of moral control in such things as concern chiefly the good of self—for instance, self-abuse or other pernicious habits. Dr. G. E. Shuttleworth tells me of a girl, aged 12 years, brought up in good position and apparently of normal intellect, who in addition to precocious sexual immorality would, if unable to obtain alcohol otherwise, drink the methylated spirit used for her mother's toilette.

There is no need for me to dwell upon the moral defect in children with general impairment of intellect; my only reason for referring to such cases is because I think they throw some light upon the conditions which underlie a morbid defect of moral control where there is no apparent intellectual impairment. It seems possible in these children to discriminate between certain differences in the causation of the moral defect. We can recognise, I take it, with certainty two groups, and probably three groups, of cases all showing defective moral control and yet differing considerably in the psychical condition which is associated therewith. In one group, as I have already pointed out, there is absence, partial or complete, of the simple cognitive relation to environment and therefore moral control is impossible; in another the child is, or appears to be, in full cognitive relation with environment so far as what one may call the simpler or lower form of cognition is concerned, but lacks that higher form of reasoning comparison which I have called moral consciousness. Again, I will illustrate my point by actual cases. A well-grown and pretty child, aged two years and four months, has had fits since the age of eight months and is an idiot of very low grade; he does not distinguish between people and it seems doubtful whether he distinguishes between animate and inanimate objects; he bites

anything within reach and as he sat in the out-patient room he worried the edge of the table with his teeth like a dog. Two days previously he had seized his mother's finger between his teeth and had bitten it severely enough to make it bleed. He has eaten his own fæces, soap, and such things indiscriminately. He is said to be passionate if thwarted in his endeavours. In such a case it seems evident that there is a lack of the simple cognitive relation, the lowest form of reasoning comparison by which he should have distinguished his mother's finger from other objects, and therefore *a fortiori* he lacked that higher form of reasoning comparison by which he should have distinguished the character of his act as contrary to what I have called the moral idea.

Contrast with this another case. A boy, aged nine years, had been brought to me for mental deficiency. He had learnt to walk and to talk at two years but was very backward intellectually. After being at school for three years he could only read words of one syllable. The chief trouble with him, however, was his passionateness, spitefulness, and disobedience. Any crossing of his wishes produced an outburst of passion, and he had repeatedly thrown knives at the other children with little or no provocation and had also thrown scissors at his mother. Recently he had stolen a shilling from his mother and after spending part of it brought back the change and gave it to her. The mother, a very intelligent woman, volunteered the statement that he seemed to have "no idea of right and wrong"; he seemed incapable of any sorrow for his misdoings. Subsequently this boy became so dangerous to the other children that it was necessary to send him into an asylum. Unlike the previous case, this boy was, at any rate to a large extent, in cognitive relation with his surroundings, but he lacked moral consciousness, so that, as in the previous case, but for a different reason, moral control was deficient.

But in addition to the two groups of cases thus illustrated we must recognise a third, in which the child is not only in cognitive relation with his surroundings but also shows moral consciousness even with reference to the particular activities in which he manife-ts his lack of moral control. For instance, a boy, aged six years, is backward ; he learnt to talk at two years and to walk at two and a half years ; he knows his letters but cannot read words of one syllable after being at school for more than two years. He appears to be deficient intellectually but not to any considerable degree. He is very passionate; if the other children offend him in any way he will run at them and strike them or bite or kick them; he is mischievous, will turn on taps to let the water or gas escape; he is very disobedient and it is found very difficult to prevent his throwing things into the fire which he delights to play with. In order to set fire to pieces of paper he will secretly take away boxes of matches and hide them in his clothes, under his shirt, or

elsewhere until he can get away from his mother to light them. After the outbursts of passion and attacks on his brothers and sisters he seems ashamed of his actions, is genuinely sorry for them, and sometimes says that he "didn't mean to do it." Here it seemed clear that there was some degree of moral consciousness—the child could, at any rate, with regard to some activities, differentiate between right and wrong.

This third group of cases is of considerable importance in its bearing on some of the cases with no general impairment of intellect which I shall consider subsequently. The defect is neither in the cognitive relation to environment nor apparently in moral consciousness, and yet the control of activity in conformity with moral consciousness is markedly defective. Have we here to do with a disorder of the will? Is it possible that inhibitory volition is imperfectly developed as the result of the same morbid condition of the brain which has impaired the intellect? There seems to be no a priori reason why volition should not be liable to impairment like other mental processes; and if inhibitory volition is of late development both in the individual and in the race it is easy to understand that it will be specially liable to defect in development and to disorder when developed. And there is some evidence that it is a late development; in the individual the control of the expressions of the emotions, such as joy, grief, and fear, is noticeably weak in early life, the infant and the young child weep at causes which would be quite inadequate to produce such an effect in an older child, who in turn will weep over causes which in a higher race would fail entirely to produce any such expression of emotion. Darwin in this connexion has quoted (from Lubbock) the case of a New Zealand chief who "cried like a child because the sailors spoilt his favourite cloak by powdering it with flour." That a similar defect of inhibitory volition with regard to the emotions may result from disease without apparent impairment of intellect is shown in the curious outbursts of weeping which are so common in children with chorea, who at other times show no such lack of control. A very similar failure of inhibitory volition in connexion with grief and fear is not uncommon with gross cerebral lesions-for example, intracranial tumour. I shall have occasion to say something more on this point in a subsequent lecture-here I will only point out that some of the activities in which defect of moral control is shown are expressions of the emotions and are associated with those other manifestations of uncontrolled emotion, such as excessive grief and fear, which are not in any way concerned with moral consciousness; it is probable, therefore, that the defect of moral control in regard to these particular activities, at any rate, is in some cases due to a failure of inhibitory volition.

It would seem, then, that we can recognise in children with defective moral control in association with general impairment of intellect three grades, if I may so say, of deficiency, all characterised by lack of moral control—(1) defect of cognitive relation to environment; (2) defect of moral consciousness; and (3) defect of inhibitory volition. Moral control, in fact, might be compared to a three-storey building; the second floor is impossible unless the one below is present and the top storey—inhibitory volition in accordance with moral consciousness—is impossible unless the two lower floors are present.

Such a categorical statement of the building up of moral control and of the causation of its deficiency of course makes the matter appear much simpler than it really is; no one of these defects is likely to be complete, and hence it is often extremely difficult to make out how far any one of these defects is the chief factor in producing the moral failure in any particular case, and it is quite conceivable, nay, highly probable, that all three may sometimes share in its production.

This consideration of the psychical defects which are concerned in the causation of moral deficiency in children with general impairment of intellect leads up to the important question as to the relation of the moral defect in such cases to the general disorder of intellect. Is the moral defect necessarily proportionate to the intellectual defect? Can we say that this child is of more feeble intellect than that, and therefore will manifest the greater deficiency of moral control? The very question implies that I am drawing a distinction between the manifestations of intellectual capacity and those of moral control. As I have already pointed out, both the simple cognitive relation to environment and the moral consciousness which are essential to moral control imply a reasoning comparison, albeit of very different degrees of complexity, and may therefore be regarded as intellectual processes. and consequently in so far as defect of moral control is dependent upon the lack of either of these it is itself a manifestation of impaired intellect.

But granting all this it may still be that the intellectual process or rather complex of processes concerned in the comparison between right and wrong, between the moral idea and opposing stimuli, may be sufficiently specialisedfunctionally, of course, I mean, not locally-to allow of its being disordered or defective apart from any such general defect as is commonly recognised as idiocy, imbecility, or insanity. One might bring forward an analogy in the well-known differences in capacity for particular intellectual acquirements which are shown by different individuals. Each of these acquirements represents a particular combination of intellectual processes, and often it appears to be the particular combinations rather than the separate processes which are at fault. A very small capacity for such reasoning as is required in arithmetic or higher mathematics is common enough where the capacity for other intellectual acquirements is even above the average. May I

illustrate my point by another analogy? A boy, aged 12 years (for the notes of whose case I am indebted to Dr. R. Farrar of Chiswick), was fully up to the average in the ordinary school accomplishments but was entirely unable to spell words correctly from dictation. For "and then what rogues they are; while one monkey is busy cracking a nut" he wrote, "and torse wothe roeg eose. Woet one loreoy is beoys coreing a beors." Here the special combination of mental processes involved in spelling from dictation was defective, although none of the separate processes involved in that particular combination could be singled out as in any way deficient and in other combinations of these same processes there was no defect whatever. No doubt this condition is explicable on a physical basis in a failure of connexion between parts of the cortex, but the case illustrates the possibility that the particular combination of mental processes concerned in moral control may be defective whilst other combinations of the same processes in what we ordinarily recognise as intellectual acquirements may show no defect whatever.

But apart from any such theoretical probability the clinical phenomena show, I think, that there is ample justification for considering moral consciousness and moral control as liable to disorder apart from the more general intellectual Perhaps the most striking feature of these cases functions. of defective moral control with general impairment of intellect is the disproportion in many cases between the moral and the intellectual deficiency-if capacity for the ordinarily recognised intellectual acquirements may be taken as the gauge of intellect. It is true that in the lower grades of idiocy and imbecility where the simple cognitive relation to environment is lacking or defective the resulting defect of moral control appears to be directly proportionate to the general intellectual defect, and this is only natural, for the cognitive relation to environment is just as essential a factor in general intellectual development as in the development of moral consciou-ness, so that in so far as this cognitive relation is lacking, both intellectual and moral failure will result-the two, in fact, are dependent on one and the same cause and to this extent are related to one another. But in other cases with a slighter degree of imbecility the relation between the moral and the intellectual defect becomes much less close, and it would seem that there is not necessarily any direct proportion between them. This much, at any rate, may be stated with positiveness, that of children with slight general impairment of intellect many show a degree of moral control which would not be considered defective in a child of average intellect, whilst others whose general intellectual capacity appears to be exactly similar show a marked defect of moral control; and a child who is only slightly weak-minded may show a much greater moral deficiency than one whose weakness of intellect is much more evident.

It hardly seems necessary to quote cases in proof of these points which must be familiar to anyone who sees many imbeciles ; moreover, most of the cases which I have already quoted were children who showed only minor degrees of general intellectual impairment, and I selected them purposely as having for this reason more "points of contact" with the cases which I shall consider in my subsequent lectures. I will, therefore, only add two more to those already instanced. The first case is a girl, aged five and a quarter years, of stolid appearance, although her facies does not suggest any general impairment of intellect; she is backward, did not learn to walk until the age of two years and did not talk until three years She does not know her alphabet but has not old. yet been to school, she takes an intelligent part in ordinary conversation. Her head is below the average in maximum circumference, it measures 183 inches, and in the frontal region is unduly narrow. She is extremely passionate ; if crossed in any way she will throw herself down on the floor and scream and kick. At meals she has on various occasions thrown cups, saucers, and knives at her mother in rage because she could not have some particular food which she desired. There are other children in the family, and when these have not allowed her to have what she wanted she has run at them and bitten them sufficiently to break the skin. She is also wantonly mischievous, turns on the water-taps and leaves them running, and has at various times stolen eatables and other things. She is said to have very little sense of obedience and corporal punishment seems to have little or no restraining effect. The second case, a boy, aged 11 years, is a pleasant-faced boy, stands up well, and as far as ordinary conversation goes might pass for But he is decidedly backward in a normal child. school attainments, can only read words of one syllable, and cannot multiply beyond twice 12; he also laughs too easily and too often. He is said to be extremely excitable and very passionate on slight provocation; he seems to take a delight in bullying other children-for example, he will go up to children who are quite strangers to him in the street and snatch away their toys, not in order to keep them, for he will give them back afterwards, but apparently because he enjoys their grief; he has stolen considerable sums of money from the teacher at school, probably twice within the last year. In both these cases the general impairment of intellect was very slight; indeed, the children could hardly be classed as "imbeciles," they were rather "backward children," but the moral defect was very marked-in fact, the latter case was sent to me for this rather than for the intellectual condition.

It would be easy to quote cases in which with a general intellectual condition as closely as possible resembling that present in these two children there was no abnormal defect of moral control; for instance, an almost exact parallel to the girl just mentioned was another girl, aged six years, with a dull appearance, who had not learnt to walk or to talk until the age of three years; she took an intelligent part in ordinary conversation but was very slow at school and could not identify the letters of the alphabet in spite of careful teaching; morally, however, this child was in marked con trast to the other, she was good-tempered, honest, and showed, in fact, no abnormal defect of moral control. It would seem, then, that moral defect in children with general impairment of intellect shows no constant proportion to the intellectual defect.

Lastly, the question must be raised whether we can associate defect of moral control with any particular type or types of idiocy or imbecility—a question of considerable importance, for if it were possible to do so we might hope by a study of these types to find some anatomical basis for this abnormality of function. Of the 23 cases to which I have referred two were syphilitic and both had had fits (in one case up to the age of seven yearsthat is, 18 months before I saw the boy-and in the other up to three months before the date of observation when the boy was five years old); one was epileptic; one was paralytic with infantile hemiplegia and fits; one was an imbecile of the Mongol type; one was a cretin who had been treated for several years with thyroid; and of the remaining 16 who corresponded with no particular type and might be classified with the "genetous" idiots of Dr. Ireland four had had convulsions or epileptiform attacks at some period of their life, but the relation of these attacks to the intellectual impairment was uncertain. In 16 cases the maximum circumference of the head was recorded. In six it was below the average, but only in one case (the Mongol) to any considerable degree (18^{\pm} inches at the age of five years); in two of the remaining cases it was below the average. So far, therefore, as these observations go it did not seem possible to associate any particular type of idiocy or imbecility with defective moral control. The relation of moral defect to convulsions or epilepsy is, however, noteworthy-the association was noted in eight out of 18 cases in which the point was inquired into. This proportion is only slightly above that which has been recorded by Dr. Fletcher Beach in discussing the causal relation of convulsions or epilepsy to idiocy or imbecility in general (namely, 33.63 per cent.), quite apart from any question of moral defect, so that no great stress can be laid upon these figures. I may, however, add that Dr. Ireland specially notes of epileptic idiots that "they are often wild, intractable, and irritable-in fact, seem on the boundary line between idiocy and insanity"-and also says that "where epileptic attacks occur eccentricities of conduct may be looked for, such as stealing, cruelty to animals, sleep-walking, or some strange outburst of temper or change of mood." As we shall see,

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this association of morbid moral defect with epilepsy in children is not peculiar to the epileptic idiot, it is seen where the general intellectual condition appears to be perfectly normal, so that we cannot attribute it to any anatomical condition peculiar to these particular idiots ; the subtler changes, whatever they may be, which produce epilepsy alone without idiocy, are equally capable of diminishing moral control. We are, I think, driven to the conclusion that the types of idiocy or imbecility associated with defective moral control are too varied to allow us to connect any particular anatomical condition with the moral defect without post-mortem evidence which at present is lacking. That there are cortical changes, either in the way of arrest of development-for instance, in the Mongol idiot and in some of the genetous idiots-or in the form of gross lesions or degenerative changes, as in the paralytic type, seems almost certain from our knowledge of these conditions where they have occurred without moral defect; but the fact that any of these varieties of idiocy may occur without any morbid failure of moral control, and, further, that a marked degree of such failure may occur apart from idiocy or imbecility, strongly suggests that the cause of the moral defect is to be sought not in any gross lesion or gross failure of development but in some much finer physical abnormality, and this view, I think, will be corroborated by the facts which I shall mention in my later lectures.

If I may sum up the points upon which I would chiefly insist in the foregoing considerations they are these: that a morbid failure of moral control is not uncommon in children with general impairment of intellect—there is, in fact, a congenital limitation of the capacity for the development of moral control associated with a similar limitation of the general intellectual capacity; that except in the lower grades of idiocy and imbecility where the cognitive relation to environment is absent or extremely defective there is not necessarily any direct proportion between the moral limitation and the general intellectual limitation; that no particular type of idiocy or imbecility can be specially associated with moral defect; nor is there any evidence, so far as can be judged from a clinical study of these cases, that any particular gross lesion of the brain is requisite to the limitation of moral control.

LECTURE II.1

MR. PRESIDENT AND GENTLEMEN,-In my first lecture I drew your attention to some points in the psychology and development of moral control in the normal child and then considered the occurrence of defective moral control in association with general impairment of intellect; before going further it may be well to review briefly the points which have been raised. Moral control, we saw, is dependent upon three psychical factors, a cognitive relation to environment, moral consciousness, and volition, which in this connexion might be regarded as inhibitory volition. Moral control, therefore, is not present at birth, but under normal psychical conditions is gradually developed as the child grows older. The variation in the degree of moral control which is shown by different children at the same age and under apparently similar conditions of training and environment suggested that the innate capacity for the development of such control might also vary in different individuals.

Proceeding, then, with our inquiry as to the occurrence of defective moral control as a morbid condition in children we considered the occurrence of this defect in association with idiocy or imbecility and saw that whilst defect of moral control is often associated with general impairment of intellect there is no constant proportion between them; the child with only slight intellectual impairment may show far greater moral defect than a child with more impaired intellect. There appeared to be no grounds for connecting any particular type of imbecility specially with moral defect, and beyond the fact that such physical changes in the brain as produce general impairment of intellect may also produce defect of moral control, it was impossible on the clinical evidence available to attribute the moral condition exclusively to any particular structural abnormality. Whatever the cause of the defect may be, it seems clear that in these cases there is a morbid limitation of the capacity for the development of moral control, and the fact that this limitation is not necessarily proportionate to the limitation of capacity for general intellectual development seems to make it at least conceivable that the mental processes involved in moral control may be affected altogether apart from those concerned with more general intellectual acquirements. Ι propose now to bring forward evidence that this isolated affection of moral control does actually occur.

1 Delivered on March 6th.

MORBID DEFECT OF MORAL CONTROL ASSOCIATED WITH PHYSICAL DISEASE.

In considering defect of moral control apart from general impairment of intellect it must, I think, be recognised that the morbid character of such a defect may be shown not only by its degree as compared with our empirical and arbitrary standard for the age and by its non-correspondence with the influences of environment, but also by the fact that the failure of moral control is entirely at variance with the previous habit, if I may so say, of the particular child ; and this is a point of some practical interest, for, as we shall see, in some cases comparatively trivial manifestations which, if they were habitual in the child, would be regarded as quite within the limits of normal variation, assume a considerable importance as premonitory symptoms of physical disease.

Perhaps the most conclusive evidence of the morbid character of deficiency of moral control in some cases where it is not associated with general impairment of intellect is to be found in its close relation to physical disease, which I shall now consider. Naturally one turns first to cases with gross lesions of the brain, for here, if anywhere, we should expect that physical disease might cause alteration of moral control. Unfortunately for the purposes of my argument, where the lesion causes any psychical change, it is so apt to produce also some general disorder of intellect that many such cases—for instance, cases of infantile hemiplegia—fall rather into the group which I have already mentioned than into that now under consideration. There are, however, a sufficient number in which the moral alteration is unaccompanied by any general disturbance of intellect, to establish the fact which I wish to insist upon.

Cerebral tumour.- A girl, aged 10 years and nine months, was under my care about six months with symptoms of pontine tumour, paralysis of the sixth and seventh nerves on the left side, and paresis of the right arm and leg, only occasional headache, and then not severe, no vomiting, no fits, and no optic neuritis up to a few weeks before death. The child's general intellectual power seemed unimpaired up to the last time I saw her, about a fortnight before she died; but about two or three months after she first began to ail (the whole duration of the disease was about nine months) a change was noticed in the child; she had previously been good-tempered and obedient, she now became extremely passionate, if the food at meals was not exactly to her liking she would fling it across the table and the slightest thwarting of her wishes by her seven-year-old sister produced an outburst of rage in which she would attempt to strike her sister on the head; she was extremely self-willed and the mother repeatedly complained of the difficulty of managing her. This child was at the same time extremely emotional, a point to which I shall refer again. The necropsy showed a new growth infiltrating the pons, but more on the left side than on the right; there was some flattening of the cerebral convolutions and the whole cortex was unduly hyperæmic. The ventricles were little if at all dilated; there was no trace of new growth above the level of the pons.

Very similar was the case of a boy, aged seven and a half years, who had symptoms of intracranial growth, occasional occipital headache, fits involving chiefly the right side, vomiting and optic neuritis, with some weakness of the left external rectus and exaggeration of the knee-jerks. 12 months after the first onset of symptoms the mother noticed a change in the boy's behaviour, without any general disturbance of intellect, he became extremely passionate, the least irritation-for example, his brother accidentally and very gently pushing against him-threw him into a passion in which he clenched his fists and screamed; these outbursts occurred many times a day, sometimes he would attack his brother in his passion ; he had also become very disobedient, whereas previously he had been a good-tempered and obedient child.

Infantile hemiplegia may, as in a case I mentioned in my previous lecture, cause moral deficiency in association with general intellectual impairment, but in the following case it affected only the moral condition. A boy, aged about four and a half years, had left hemiplegia dating from the age of 20 months; he was an attractive child, very intelligent, and talked brightly; he was, however, extraordinarily spiteful, for instance, if knives or forks were available he would suddenly throw them at people when they were not looking, and the mother was afraid that he might do some serious injury; whilst walking in the street he had attacked with a stick children who were quite strangers to him ; he had been sent to school, but was quickly sent home again as too spiteful to be allowed with other children; he was extremely passionate and if crossed in any way threw himself on the floor and screamed. Corporal punishment had been tried at times but the mother said that it made not the least difference in the boy's behaviour.

Meningitis, as is well known, is sometimes ushered in by symptoms like mania but without any such profound intellectual disturbance; loss of moral control may be an early, if not the earliest, symptom. For instance, a girl, aged about 10 years, was reported by her school teacher to have unaccountably changed from an obedient well-behaved child into an extraordinarily disobedient and unruly one. About a week later she became drowsy with headache and other symptoms, which pointed unmistakably to tuberculous meningitis, from which she died. In another case a boy, aged four years, after recovery from posterior basic meningitis became ludicrously passionate, beating himself in fury if meals were not ready directly he wanted them.

Epilepsy also has a close relation to moral deficiency. As I have already pointed out, the imbecile with epilepsy is apt to be distinguished by his lack of moral control; as I shall show later, convulsions or epileptic attacks not infrequently figure in the early history of children who in later childhood come under observation for defect of moral control. Moreover, quite apart from any general impairment of intellect, the approach of an epileptic seizure is preceded in some children by a definite moral change. A girl, aged 10 years, who had had frequent fits since the age of 14 months, was always troublesome to manage, self-willed, disobedient, and passionate; on one occasion at the age of six years on receiving some new clothes which did not please her she flew into a passion and tore them up. These characteristics were noticeably increased for one or two days before the onset of an epileptic attack, the child at such times becoming extremely disobedient and difficult to manage. Another child, a boy, although much younger (just over three years old), may serve to illustrate the same change. He had had fits for the previous four months; their onset was said to be preceded by extraordinary excitability and spitefulness, which began two or three days before the fit, and at such times he had bitten people, and, indeed, bit a baby, aged 11 months, sufficiently severely to draw blood. Neither of these children who suffered from epilepsy showed any general disturbance of intellect.

Head injury in a boy, aged six and a half years, appeared to be the cause of a temporary loss of moral control. The boy fell down some steps, striking the left side of his head and producing a large hæmatoma which covered the whole of the parietal bone. Within a few days after the fall it was noticed that the boy's behaviour was "different altogether," so the mother said, from what it had been previously. He had now become spiteful, passionate, disobedient, and destructive. When given bread-and-milk which he did not want he flew into a passion and knocked it off the table ; when told to do something against his wishes he struck his mother in the face; he had also struck the baby only nine months old; and when a little boy and girl of whom he is usually very fond came into the room he threatened that if they did not go away he would throw his toys at them, which he forthwith did; when told that his little brother, of whom he is particularly fond, was going away from home he said he was glad to get rid of him ; he also tore up books and threw them in the fire. He showed no general disturbance of intellect, unless one remark made on the fourth day after the injury can be taken as evidence of a delusion. He said that his toast at breakfast was "poisoned" and he would not eat it; but there was no other evidence of any delusion, and it seems doubtful whether this remark was not rather an exaggerated expression of dislike than an actual delusion.

But it is not only with physical disease or injury directly affecting the brain, but also in relation to physical disease of more general nature, that loss of moral control is seen.

Typhoid fever in children, as in adults, is sometimes followed by a temporary insanity, but without any such general disorder of intellect the moral character may undergo a definite alteration. A girl, aged 10 years, was in the Children's Hospital suffering from typhoid fever which was severe and complicated by otitis media. For several months after this the child, who had previously been a well-behaved child, was extremely disobedient and unruly; she was spiteful and passionate. Her general intellectual condition appeared to be normal. The moral alteration persisted for some months, after which the girl gradually regained her former condition.

Diphtheria was followed by a similar change in a boy, aged five years and two months, who after the acute illness seemed nervous and excitable. He became extremely passionate; he threw a knife at someone who had crossed his wishes and on the slightest provocation he would scratch, kick, or bite; he also became disobedient and mischievous and a few days before I saw him he deliberately set fire to some clothes, apparently in a spirit of defiance, having just been warned of the danger. The boy showed not the least general impairment of intellect but there was a history of epilepsy in his sister and probably also in his uncle and aunts.

Scarlet fever in a case recorded by Dr. Hack Tuke² had a similar sequel. "A gentleman's son, a boy of five years old, favourably circumstanced in his moral surroundings, had an attack of scarlet fever. He recovered, but his moral character had undergone a remarkable change. Instead of being a truthful, he became a very untruthful, lad. For a time he was honest, then he began to take what was not his own without the slightest occasion for doing so. A further stage was reached-he evinced a disposition to injure others." Subsequently as a young man he had to be placed under special supervision to prevent some criminal act. In another case,³ recorded in America, a girl was normal in every way until seven years old, when she had scarlet fever, with convulsions and delirium. On recovering from the fever she appeared to have lost her moral control. She could no longer be made to obey, she displayed violent paroxysms of passion, she had become untruthful, and when eight or nine years old she showed a marked tendency to sexual immorality. It was specially noted that there was "no intellectual impairment; she was, on the contrary, exceptionally bright." "She keenly distinguished right from wrong and only seemed

² Journal of Mental Science, July, 1885, p. 178.
³ American Journal of Insanity, October, 1883.

lacking in the power or will to control herself." It was noteworthy that the father of this child had been melancholic and had committed suicide.

Acute rheumatism seemed to be directly related to moral alteration in a boy, aged nine years, who after an attack of rheumatic fever at seven years of age was ailing with pain in the præcordium and frequent palpitation of the heart; there was no bruit and no obvious dilatation of the These symptoms lasted for some months after heart. the acute onset and about six months after the rheumatic fever the boy, who had previously been a goodtempered, tractable child, became violently passionate; in his rage he would attack anyone with extreme fury. These attacks occurred once or twice a week, generally after some slight provocation. He was spiteful and recently had shown a disposition to kill himself. The boy had a furtive look, and whilst in the hospital he was found one morning with a draw-sheet twisted round his neck, but otherwise he showed nothing abnormal. All these symptoms gradually diminished, but at about 12 and a half years of age he had rheumatic fever again and after this again became more spiteful, taking pleasure apparently in wantonly inflicting pain on his brothers and sisters and laughing immoderately when he had succeeded in hurting them; he was also at this time extremely passionate, clenching his hands and turning pale with rage, and then pouring forth abuse. He got on well at school and seemed to be perfectly normal in intellect apart from his lack of moral control. He had convulsions during his second year and his mother had epileptic attacks for two years, from 16 to 18 years of age. Dr. Savage has referred to a similar occurrence,⁴ a severe attack of rheumatic fever being followed by moral perversion.

In all these cases it seemed clear that there was a close relation between the psychical and the physical conditions, that both in fact were morbid manifestations, and in none of the cases was there evidence of any general disturbance of intellect. So that here we have, I take it, instances of a morbid alteration of moral control without any general impairment of intellect. In almost all these cases the moral change consisted in a loss of already acquired moral control ; but had the physical disease occurred at an earlier age, before the development of moral control, it seems only reasonable to suppose that the moral development would have been arrested or delayed; and, indeed, this appeared to have happened in the case of infantile hemiplegia to which I have referred. This point is of some importance in its bearing on the etiology of the group of cases which I shall consider later.

The loss of so complex a mental function as moral

4 Journal of Mental Science, July, 1881.

control in children with physical disease is no doubt in part referable to its recent development, and there-fore "unstable equilibrium," if one may so say; and one might compare with this the loss of speech which sometimes occurs in very young children as the result of any illness whilst speech is still in process of acquirement, and we must remember that moral control is later and much more gradual in its development than speech. This, however, is only a comparison, and whilst it seems probable that some of these cases do indicate such a retrograde change to the conditions of an earlier age, in others there would seem rather to be a morbid perversion of one or other of the mental processes concerned in moral control; in some of them there is evidently an insufficiency of inhibitory volition, as may be seen from the general excitability and emotionalism which accompanies the moral failure; in others there would seem to be a perversion of moral consciousness, which one might compare with the perversion of appetite, the craving for disgusting substances, such as earth, tallow, &c., which one sometimes sees in children who are out of health and who lose their unnatural craving when their general health improves. Whatever may be the psychical alteration in these cases they at any rate emphasise the point upon which I have already insisted-namely, the differentiation of moral control from other mental functions, albeit dependent upon the same fundamental processes of mind activity, and the differentiation, as we have now seen, is sufficient to allow of a morbid diminution of moral control without any impairment-at any rate, recognised impairment-of those other combinations of mental processes which are involved in general intellectual development.

So far, then, we have seen, not only that defect of moral control may be the result of congenital limitation of the capacity for its development by some morbid condition of the brain dating from antenatal life, but also that it may be due to arrest or delay of its development by physical disease occurring in infancy, and, further, that after there has already been considerable progress in its development it may be lost to a greater or less degree as the result of physical disease, particularly lesions of the brain and certain febrile conditions.

DEFECT OF MORAL CONTROL AS A MORBID MANIFESTA-TION, WITHOUT GENERAL IMPAIRMENT OF INTELLECT AND WITHOUT PHYSICAL DISEASE.

I turn now to the question whether similar morbid failure of moral control may not occur in children without any general impairment of intellect and without evidence of gross lesion of the brain or any more general physical disease. That moral alteration may occur as a symptom of insanity in adolescents and adults is well known, and the occurrence during adolescence of more limited psychoses affecting only the moral qualities has been pointed out by Dr. Clouston. But the period to which I am referring is the period of childhood-which, if one includes infancy, extends from birth up to the age of puberty-and this, as I have already said, is the period in which moral control makes its first appearance and is gradually developed. At what age its development ceases it would be hard to say, but there can be no doubt that its most active development is in the period of childhood-from non-existence at birth up to a varying but large measure at puberty. No doubt in the years that follow puberty and which make up the period of adolescence with new and more permanent relations to environment moral control attains to a fuller degree, but its development at this period is rather the widening and strengthening of an already present function than the evolution of a new one as we see it in the infant and the young child. If, therefore, defect or delay may occur in the development of moral control apart from the associations which have been already considered it is in this earlier period that one would naturally look for its incidence. Moreover, if in adolescence instability of moral control is related to the growth and changing conditions of that function, as has been suggested, then a fortiori in childhood one would expect to meet with disturbances of the newly acquired function as well as failure in its development.

In considering deficiency of moral control in children apart from general impairment of intellect and apart from physical disease we are met at once by a grave difficulty. On what grounds are we to decide whether the lack of moral control is the manifestation of a morbid condition? As I have already pointed out, some range of variation is the natural outcome of differences of environment, using that term in its widest sense; but, granting this, we must also admit that with conditions of environment which are as closely as possible identical-for example, in children brought up in the same family with training and general influences apparently in every way similar-there are such wide variations in moral control as seem to point to some difference in the innate capacity for its development. Within certain limits such variation is arbitrarily recognised as normal; at any rate, it excites no suspicion of a morbid mental state, but there are certain children who show so marked a deficiency of moral control that even in large institutions containing some hundreds of children they can be picked out at once as different in this respect from all the others. This excessive degree of the defect, the outrageous character of its manifestations, is one point which, although insufficient as evidence of morbidity when taken by itself, may be important evidence when taken in conjunction with other facts.

A further point is the absence of any correspondence

between the deficiency of moral control and the child's training and environment, even when allowance is made for the considerable range of variation which we arbitrarily recognise as normal at the particular age. For instance, when a boy of wealthy family, brought up by high-principled parents, surrounded with every care and refinement, and, moreover, liberally supplied with pocket-money, is expelled from school after school for petty thefts, as has happened in several cases either under my own observation or brought under my notice by others, this in itself is strongly suggestive of a morbid mental state which in almost all these cases is corroborated by other evidence to which I There is also another point in conshall refer later. nexion with the manifestations of the moral defect which may have some bearing on the question of morbidity-namely, the oddity, if I may speak thus vaguely, of the child's misdoings in some cases. In his thieving, for instance, there is sometimes a handsome generosity; the child steals, but he does not want or keep for himself what he has stolen : one child pilfered repeatedly at school but on returning home would present his ill-gotten gains most dutifully to his mother, to her great distress. Or he steals but makes no use at all of the stolen property-his theft appears to be the gratification of mere acquisitiveness. Again, in their lying there is sometimes an apparent absence of any efficient motive; their lies are often picturesque inventions which remind one of the romancing which is sometimes shown by perfectly normal children during an earlier period of childhood (at about two to four years of age). I say "apparent absence," for no doubt there is always a motive, if only in self-aggrandisethe same connexion must be mentioned ment. In the extraordinary failure of punishment to have any deterrent effect in many of these children. In some of the cases to which I shall refer the child would commit the same misdemeanour within a few hours after punishment, although he had shown extreme fear at the time of punish-The mother of one little girl (the child who showed ment. permanent loss of moral control after scarlet fever) expressed this by saying that when the child was whipped "she seemed to mind it at the time but it never did her the same good it did the other children." But it is not merely to the exceptional degree of the moral defect, or to the unnatural character of the particular misdoing, that we must look for evidence of its morbid character; the antecedents, and, as later events show in some of the cases, the sequences of the lack of moral control, link it on almost indisputably to other morbid mental states. Family history throws no unimportant light on this condition, and the after-events in the career of these children, where it has been possible to trace them, should, I think, make us not merely "wise after the event" but capable of discriminating between those defects which are merely the result of faulty

training and environment and those which are, indeed, the manifestation of a morbid condition. I shall refer more fully to these points in my third lecture and also to the very significant association of other psychoses and mental peculiarities with the moral deficiency in some of these children. A further indication of the morbid character of the defect which must also be considered and which is certainly sometimes of importance when taken in conjunction with those already mentioned is the presence of so-called "stigmata of degeneration." As we shall see, peculiarities of physical conformation are often associated with failure of moral control, as in other children they are associated with general impairment of intellect.

So far as my own experience goes the occurrence in children of defective moral control as a morbid condition, apart from general impairment of intellect and apart from physical disease, would appear to be by no means common. The facts and conclusions recorded here refer chiefly to 20 cases which have come under my own personal observation, but even this small number was collected partly by special effort to see such children. My observations have, however, been confirmed by comparison with the notes of a much larger number of unpublished cases, for the use of which I am deeply indebted to the kindness of Dr. Savage. In almost all these cases medical advice had been sought on account of the moral defect which had suggested to the parents or guardians that there must be some morbid mental condition. Of the 20 cases five were girls and 15 were boys, a disproportion which, I think, is not altogether accidental; at any rate, it would seem from recorded cases that boys are more frequently affected than are The age at the time of observation varied from four girls. years and eight months up to $13\frac{1}{2}$ years. But there was a notable difference in the ages at which the manifestations of defective moral control had first attracted attention. In none of the cases was any such defect noticed until after the age of infancy (the end of the second year), but in three of them the child was noticed to be unusually troublesome through passionateness or spitefulness as early as the third year; in two cases nothing abnormal was noticed until the fifth year, in two probably in the sixth year, in two not until the eighth year, while in others this point was not ascertained. No doubt this difference in the dates assigned for the earliest manifestations is in some degree attributable to differences in capacity for observation on the part of the parents; moreover, one parent would not consider abnormal the early phenomena which to another were suggestive of mental disorder. But after full allowance has been made for these fallacies it seems clear that whilst in some cases the failure of normal control dates from very early in its development, in others an arrest of this development, or perhaps a loss of already acquired control, occurs at a later period of childhood.

¹he manifestations did not differ in character from those seen in the cases already considered. An extreme degree of passionateness was the most constant feature; but, as in the previous cases, there were in almost all the children other manifestations of defective moral control which will perhaps be shown most clearly by an account of some of the actual occurrences.

The cases fall, I think, naturally into two groups corresponding with differences in the date of the first manifestation of the morbid defect: (1) cases in which there is a morbid failure of the development of moral control; and (2) cases in which there is loss of already acquired moral control. These groups are, in fact, the counterpart of those which we have already considered, where the moral defect was associated in the one case with general impairment of intellect and in the other with physical disease.

Morbid failure of the development of moral control.-At first sight it might appear that the defect in such cases was necessarily congenital in origin, but the history in some of them strongly suggests that it is not always so; it would seem, indeed, that, as in idiocy and imbecility, while the defect may be due to a congenital limitation of the capacity for the particular development-moral in the cases under consideration, general intellectual in the idiot and imbecileit may, on the other hand, be due to some morbid process occurring during infancy and arresting the development of moral control at a very early stage, as in other children it arrests the general intellectual development and leaves the child an idiot. A boy, aged five years and four months, was sent to me from an orphanage where he had been since the age of two and a half years. There he was thought to be different from all the other children in being of ungovernable temper ; in his rage he would scratch and bite and scream. He was also very spiteful and seemed to take a delight in tormenting the other children; he sometimes took away their toys and threw them in the fire and then laughed at their grief, as the teacher said, "most hideously." He was also deceitful but had not been caught stealing. No animals were kept in the home so that there was little opportunity for the display of cruelty, but the other children had complained that he was cruel to such insect life as he could find in the garden. He was a very pleasing child to talk to, and the teacher said that he was "perfectly intelligent." His head measured 204 inches in maximum circumference-that is to say, it was slightly above the average ; the forehead was narrow and low, there was a marked epicanthic fold, and his palate was rather narrow and high. The rest of his body was well formed. His sister, aged seven and a half years, was in the same institution and showed no abnormal moral defect. The father from his earliest years was extremely passionate, guarrelsome, and jealous; he killed the child's mother, and was then placed in

a lunatic asylum. In this case the deficiency of moral control. which was sufficient to mark the child as unique in an institution containing a very large number of children, together with certain, albeit slight, peculiarities of conformation, and the history of insanity in the father, all these are points which seemed to indicate that the condition was a morbid one; and judging from the very early date at which it was present (details of the child's life before two and a half years of age were not obtainable but are of no great importance as the morbid nature of a moral defect is, for the reasons already stated, hardly appreciable at so early an age), one seems justified in concluding that here there was a failure in the development of moral control, and the family history, with its suggestion of heredity, seems to point to a congenital limitation of the capacity for the development of moral control.

As another instance of this morbid failure of development I may quote the case of a boy who from a very early age, indeed almost from infancy, so the mother said, had shown a propensity for stealing. At first he would take food and articles of little value out of the cupboards, but since the age of seven years he had stolen money whenever he had had the opportunity. He was very untruthful and made every effort to conceal his thefts, hiding the stolen property in his boots or even in his stockings. This he had done again and again in spite of severe punishment. When sent on an errand he would appropriate part of the money and explain its absence by saying that there was no change or that he had lost it. When I saw him, at the age of nine years, he was filthy in his habits and frequently passed his fæces in his bed, not because of any morbid inability to control the sphincter, but because it was too cold, so he said, to get out of bed, which he refused to do. He seemed to have no shame whatever for his misdoings, and when caned for it took his punishment silently and sullenly, and no amount of punishment seemed to have any deterring effect. So far as school attainments go, he was reported by his schoolmaster to be an average boy, and there was nothing in the boy's appearance or in his conversation to suggest even the slightest degree of imbecility; but he had a furtive and sullen manner which I have noticed in other children with similar moral defect. On careful inquiry it was evident that in spite of his schoolmaster's testimony he had been backward in his earlier years, he had not learnt to walk until he was two years old, and he talked first at three years old. He had had convulsions twice at the age of 15 months, but none since. There was difficulty in obtaining information as to the family history except that the father had been a disreputable character. The boy had been brought up by his mother and stepfather, apparently with every care and endeavour to train him properly. There seemed to be nothing in the boy's environment to account for his lack of moral control; the father had deserted the mother shortly after the child

was born, so that the influence of his example could be excluded.

The next two cases which I shall mention may illustrate the morbid failure of moral development as the result of its arrest by some cerebral disturbance in early infancy. A girl, now aged 13¹/₂ years, had been unruly and difficult to manage from her earliest years; she seemed to be lacking in natural affection for her mother, she was untruthful, and she had stolen money which she used for herself. She seemed to have very little idea of obedience and at school was the plague of her teachers. She was sometimes wantonly filthy; for instance, one day she amused herself by spitting all over a shop window; she would expose herself indecently in the streets and was always "running after" the opposite sex, and on at least one occasion was said to have encouraged one of them to indecent or immoral practices with her. This child was slow and backward at school; she seemed to lack power of attention, although the schoolmistress said that she was "quite teachable" otherwise ; except in her backwardness at school she might pass for a normal child. This was a tall girl with a dull expression ; she had a very narrow frontal region ; the maximum circumference of the head was $21\frac{1}{8}$ inches; the palate was very high and narrow. She had never had convulsions, but birth was instrumental and very difficult, the establishment of respiration was much delayed, and there was still evidence of the difficult parturition in very slight weakness of the left arm which had apparently shown Erb's paralysis up to the age of four years. Whilst, however, the asphyxia seemed to be a probable cause for the morbid mental state it was noteworthy that the child's father was of feeble intellect and deserted the mother before the child was born.

Another child, a boy, aged five years, was brought to me with the history that he had been unusually spiteful from the age of two years; he would bite his mother and strike anyone with a stick in wanton spitefulness; a few days before he was brought to me he had thrown a glass at a child and cut its hand severely. He was also extremely passionate; for instance, on two occasions when put out of the room for being naughty he had taken up a stone and flung it through the window. He frequently stole ; after having a good meal he would steal food out of the cupboards; he would also steal purses and hide them, but he did not use the money. He was said to be very quick at school. He read small words well, knew "twice-times" perfectly, and seemed to be quite up to the average in ordinary intellectual attainments, and in this respect passed for a normal child. He was, however, curiously distrait ; for instance, in saying "Good-night" he went round the family five times one night. apparently not noticing that he had said it before; and he had done the same with his prayers. He showed also a curious perversion of appetite, almost amounting to

"pica," to which I shall refer again in my last lecture. There was no history of insanity in the family, but the child had had a large number of convulsions, together with some illness which was called "compression of the brain," between one month and four months of age. He was rather late in learning to walk (he began at one year and 10 months) and also in learning to talk which he began at two years. His head measured 201 inches in maximum circumference-that is, about three-quarters of an inch above the average for the age. This child could not have been called backward in school attainments; there was no general intellectual impairment, but none the less the peculiarities to which I have referred pointed to an abnormal mental condition underlying the failure of moral control, and the history of severe cerebral disturbance in early infancy suggests that the moral development had been arrested thereby.

Loss of already acquired moral control. - In this second group, as I have said, the earliest manifestations of moral defect appear at an age when some considerable progress has already been made in the development of moral control : the child who has hitherto been a normally well-behaved, perhaps an exemplary child, shows an unaccountable change of character; the good-tempered, tractable child becomes violently passionate and unruly, the truthful and honest child seems to have lost all sense of honesty, and natural affection seems to have disappeared. And here, again, I would point out that this group probably includes cases which are not altogether similar in character-at any rate, they differ markedly in the course which they run; for whilst in one case the loss of moral control appears to be permanent, if one may judge from a duration of years, in another it lasts only a few weeks or months, and in a third, as I shall show, it would seem to be a recurrent disorder. Whether in any of these cases moral control is fully up to the average standard before the defect attracts attention may be doubtful, but it is clear that the manifestations to which I refer are in marked contrast with the child's previous behaviour.

A boy, aged nine and a half years, has been under my care for the past 12 months. Up to the age of seven years and one month he was a very obedient, well-behaved child, but he was said to have been always rather bad-tempered. He learnt to walk at 18 months, and talked well at two years. He had convulsions repeatedly at the age of 10 months but otherwise he was thought to be a perfectly healthy child until the onset of the present condition. Just after the age of seven years he seemed to alter altogether; he became extremely disobedient, taking little or no notice of commands. He was very self-willed; for instance, on receiving a new hat he refused to wear his old one and, rather than do so, disposed of it altogether, the mother thinks, by burning it, and if he did not like his clothes he would tear them to He showed also an unnatural cruelty; he was pieces. found one day cutting up a rabbit alive with scissors and was already, so the mother said, "smothered in blood." At another time he was found beating chickens with a stick; taken to Sunday-school he was so outrageously unruly and quarrelsome that he had not been allowed to go again, and at day-school he was a continual trouble. For some time past he had pilfered small articles at home and quite recently he had stolen half-a-crown from his mother. On being taxed with these and other misdemeanours he denied them flatly and on being driven into a corner, so to speak, invented the most plausible tales to account for them. Although extremely frightened by corporal punishment he would commit the very same offence almost directly afterwards. When I first saw him he would smear his fæces about the wall of the water closet and sometimes about his bed, but he had not done this recently. With this history one might expect to see a child of obviously defective intellect, if not an actual idiot, but the facts are far otherwise. He is a bright, attractive little fellow with a pleasing face; his conversation also is bright and intelligent; he is backward in school attainments but his attendance has been very irregular and he shows that lack of attention which is very noticeable in many of these cases and which no doubt accounts to a considerable extent for backwardness in school acquirements. In such a case the degree and persistence of the moral deficiency as shown in the manifestations which I have described, and also the contrast between the present and the previous condition, without any apparent explanation in changed influences or environment-these alone might warrant us in regarding the loss of moral control as the manifestation of a morbid mental state ; but here there is confirmatory evidence in the family history: the child's maternal grandfather attempted suicide three times, his great-grandfather was thought to have done the same, the paternal grandfather is now insane, and the mother's uncle died in a lunatic asylum. The boy shows no "stigmata of degeneration," unless the unusual size of the head be considered as such; in its maximum circumference it measured 215 inches at the age of eight years and three months. I may add that before this boy came to me he had been seen by three medical men. all of whom were, quite independently of each other I believe, of opinion that, owing to his cruel and dangerous propensities he ought to be placed under restraint in some asylum.

Another boy was brought to me at the age of five years with a history that for two months he had been very excitable and had at the same time become extremely spiteful, throwing things at people apparently in wanton spitefulness and attacking strange children in the street without any provocation; he had expressed a wish one day

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to "chop his mother's head off with a chopper," and was caught one day in the act of putting the cat into the fire, and on a subsequent occasion he attempted to put it into a copper of boiling water. I saw this boy 18 months later when he was said still to be very excitable and extremely passionate, kicking or striking anyone who offended him. Nine months previously he had hit his mother on the head with a big toy gun because he could not have some trifling thing that he wanted ; he was also said to be spiteful to other children. He was untruthful, but his lying was of the purely romantic type, so much so that it was difficult to imagine that the boy intended to deceive. His head was unusually large, measuring 213 inches in maximum circumference at the age of six and a half years. He is a heavylooking but well-grown boy and he is fully up to the average in school attainments. His maternal grandfather had diabetes. one maternal uncle attempted suicide twice, and two other maternal uncles have become confirmed drunkards. The boy's parents are respectable middle-class people and seemed to give the child excellent care.

Of course, without watching such a case for a much longer period one could not be certain that the condition was permanent, but its already long duration with very little improvement suggests that it is so. The same doubt must attach to the case of a boy aged five years and 10 months, who was brought to me on account of persistent stealing and lying. Nothing of the kind had occurred until about five months previously when he brought home two door-keys and said that he had found them. It was proved that he had taken them out of the doors at school. He was severely punished but three weeks later he brought home an inkpot which he presented to his mother, saying that he had found it; this also had been stolen out of a school cupboard. Soon after this he stole a chain from one of his schoolfellows, and when suspicion was aroused by it at home he invented a plausible tale of receiving it in exchange. The stealing had become so frequent when I saw him that it was necessary to search him daily before he left school. The parents were much distressed and had evidently taken unusual pains to train the child aright. The boy seemed perfectly bright and intelligent but he had only learnt to walk at 21 months and did not talk until he was two and a half years old, and then only said single words. There was no family history of insanity or neurosis and the boy showed no "stigmata of degeneration."

In other cases the subsequent history has shown that the loss of moral control was temporary. For instance, in a girl, aged four years and three months, nothing abnormal was noticed until the age of four years and then almost suddenly she became so passionate that she was brought to the Children's Hospital with the idea that there must be some mental disorder. The least thwarting of her wishes would produce an outburst of rage in which she would tear her

clothes and fling china or anything near down upon the ground, and she would scratch or bite anyone who offended Sometimes in her rage she would bang her head her. against anything near and twice she had been sent home from school for fear she should injure herself. These manifestations lasted for nearly four months and then ceased. She is now, five years later, not a good-tempered child but she shows no abnormal defect of moral control. She is fully up to the average in school attainments; but her palate is extremely high and narrow and she shows marked fidgety, almost choreiform, movements such as Dr. Warner called "microkinesis"; the mother is also a very nervous woman and says that she has frequent twitchings in her limbs and face; the child's brother has recurrent outbursts of rage and excitement to which I shall refer in my next lecture. There was no insanity in the family.

Another child, a boy, aged four years and two months, was brought to the hospital because he had recently changed in disposition; he seemed to have lost all sense of obedience, so as to be almost unmanageable; he was restless and he was also spiteful. He showed at the same time an interesting association in a temporary diurnal incontinence of fæces—a condition which, as is well known, occurs specially in children of unstable nervous equilibrium. After a few weeks the lawlessness and spitefulness were much less marked and then very quickly disappeared; there had been no recurrence when I heard of the child again two years later.

It would seem, then, from clinical evidence, that, as was suggested by the lack of any constant proportion between general intellectual and moral defect in imbeciles, a morbid defect of moral control may occur apart from any general impairment of intellect. The possibility of such an occurrence was confirmed by the relation of moral defect to physical disease in certain cases where there was no general impairment of intellect. We have considered, also, the occurrence of a morbid defect of moral control apart from obvious physical disease, and we have seen that we can recognise in children both a morbid failure in the development of moral control and also a morbid loss of already acquired moral control. In my next lecture I shall mention a further variety of these manifestations, and consider more fully some of the grounds upon which these defects are regarded as morbid.

LECTURE III.1

MR. PRESIDENT AND GENTLEMEN, -In the preceding lecture we were considering the occurrence of morbid defects of moral control in children without general impairment of intellect and without physical disorder : I pointed out that we could recognise certain groups of cases differing in the time of onset and in the duration of the disorder ; that whilst in some cases the defect of moral control dated from the earliest period at which such control becomes possible, in others nothing abnormal was observed until the child was already several years beyond the age of infancy. Further I pointed out that whilst in some cases the defect appeared to be due to a congenital limitation of the capacity for the development of moral control in others it seemed to be the result of an arrest of such development at a very early stage by some physical disease affecting the brain in infancy. In another group of cases there appeared to be a loss of already acquired moral control; and it was shown that whilst in some cases the loss was probably permanent in others it was temporary.

In illustration of this temporary loss of moral control cases were quoted in which the psychical disturbance after passing off showed no tendency to recur; but there is yet another subdivision of this group and one of considerable practical importance—cases in which periods of defective moral control alternate with periods in which no such defect is present, or it may be that with some degree of permanent defect exaggerations of this defect occur at irregular intervals. A boy, aged $11\frac{1}{2}$ years, was sent to me with this history. For weeks together he was affectionate, well-behaved, and in no way troublesome, then he would seem to lose his moral control to a greater or less degree for several days during which he became quite dangerous in his spitefulness, seizing every opportunity to inflict pain on other children, banging their heads against the walls or desks, twisting their arms and otherwise maltreating them. During these periods he became dishonest and untruthful and had to be watched carefully to prevent the thefts which he perpetrated whenever he had the chance; at these times also he masturbated shamelessly and even exposed himself indecently in the class at school. The slightest provocation at such times produced an outburst of rage in which he scratched the skin off his hands and face till they bled and

1 Delivered on March 11th.

ground his teeth and wrung his hands. When punished for his thefts with beating he cried and protested that he would never do it again, but he stole again within the next few This was a well-grown boy who talked brightly and davs. intelligently and was said by his school teacher to be by no means backward in school attainments-certainly so far as reading and calculation were concerned he appeared to be fully up to the average-but his gait, with his elbows slightly flexed and wrists loosely dropped, suggested a lack of mental tone, if I may use so vague an expression. His head was square and rather large, its maximum circumference being $21\frac{3}{8}$ inches; his palate was very high and narrow, forming a sharply pointed V. There was no history of insanity or epilepsy in the family, but there was a noteworthy fact in the boy's history, that just after measles in infancy he had severe convulsions and was said to have been comatose for three days. Similarly a boy, aged 13 years, had been subject to outbreaks of a propensity to steal from very early childhood. For several months together he was as honest as other children and showed no tendency to steal, then for a short time, perhaps a day or two, he stole numerous articles, sometimes of considerable value, sometimes almost worthless, and displayed some ingenuity in concealing his thefts. Another boy, aged 13 years, showed a similar recurrence of passionateness. From infancy up to the age of six years he had banged his head against anything near on the least provocation, and although this head-banging has now ceased he still has outbursts of excitement with extreme passionateness in which he has at various times kicked and struck his mother and becomes so unruly that it is necessary to give him bromides during these outbreaks. The sister of this boy was mentioned in my last lecture as having shown very similar manifestations for a few months only and their mother complains of a nervous twitch in her face and limbs occasionally. In view of such cases as these we must, I think, add recurring loss of moral control to the moral disorders which we have already considered.

For the sake of clearness these disorders might be grouped thus:—1. Morbid failure in development of moral control: (a) congenital limitation of capacity for moral development; and (b) arrest of moral development by disease in infancy. 2. Morbid loss of already acquired moral control: (a) in relation to physical disease; permanent or temporary loss of moral control; and (b) apart from physical disease; permanent, temporary, or recurring loss of moral control. All these varieties, as we have now seen, may occur apart from any general impairment of intellect.

I turn now to the clinical facts which seem to corroborate the morbid nature of the moral defect in those cases where there is no confirmation to be obtained from associated physical disease. By far the most striking evidence is to be found in the family history.

Family history.-Disorders of intellect, epilepsy, or moral egeneracy of one kind or another figure in the family history in a considerable proportion of these cases. This point was noted in 17 out of 20 cases, and 12 patients out of the 17 showed evidence of instability of this kind: (1) the father was insane and had murdered the child's mother; (2) the father was a confirmed drunkard; (3) the father was feeble-minded, he deserted the mother before the birth of the child; (4) the father was a sexual profligate, he deserted the mother when the child was an infant; (5) the paternal grandfather was of immoral character; (6) the maternal grandfather died from diabetes, two maternal uncles were confirmed drunkards, and a third has attempted suicide twice; (7) the maternal grandfather tried to commit suicide three times, a maternal uncle died in a lunatic asylum, and the paternal grandfather was insane; (8) an uncle and an aunt on the maternal side were both epileptic; (9) a maternal aunt was epileptic and insane; (10) the paternal grandmother was thought to be insane; (11) an uncle had epilepsy, and the mother was neurotic ; and (12) the mother was neurotic and the child's brother has recurring attacks of passionateness.

"Stigmata of degeneration."—Another link in the chain of evidence is the presence of certain anomalies of physical conformation in many of these children. No less than 15 out of 19 cases in which the point was investigated showed obvious anomalies. The most frequently noticeable feature was the large size of the head. In 15 cases head measurements were taken; in seven of these the maximum circumference was decidedly above the average for the age; in one case only was the measurement considerably below the average. This will be seen from the accompanying table, in which the average normal measurement (maximum circumference) for the year is given for comparison; the normal average is taken from statistics collected chiefly at the Children's Hospital, Great Ormond-street.

In four out of the 15 cases the frontal region was abnormally narrow. The palate showed some deformity in seven of these 15 cases; all the seven were strikingly high and narrow and two of them formed a sharply pointed V anteriorly, in an eighth case it was noted that the palate was unduly high and narrow but not to such a marked degree as in the seven other children. To these anomalies I should attach very little importance if they stood alone, but taken in conjunction with the family history, with the manifestations of defective moral control, and sometimes with other mental or nervous peculiarities in the child, they may, I think, carry some weight as evidence of abnormal development. Some observers, no doubt, would have found other so-called "stigmata of degeneration" in the epicanthic fold which was present in two cases, in the prognathous aspect in two others, in the unusually early signs of

puberty in two, and even in the sluggish circulation, marked by cold or blue extremities, in another.

Table showing Head Measurements in Children with Morbid Defect of Moral Control without General Impairment of Intellect.

Age of child. 4_{12}^{*} years.		Maximum circum- ference of the head in inches.	Average maximum circum- ference (inches) for the year in normal children.
		21	19.6 4 to 5 years.
418		203	19.6 4 to 5 years. 19.6 .
5		202	19.8
54		201	19.8 5 to 6
519		20	19.8 '
6		21	19.9
61		213	19.9 6 to 7 ,,
9		202	20.3)
912		204	20.3 > 9 to 10 ,,
91		213	20.3 9 to 10 ,, 20.3
10		203	20.4 210 40 11
101		203	20.4 10 to 11
11,1		19§	20.4 11 40 12
		213	20.4 20.4 } 11 to 12
1312		211	2113 to 14 ,,

Associated nervous and mental disorder.-There is, however, further, and to my mind important, evidence on this point in the relation of the moral defect to other morbid nervous and mental conditions. In one of the most striking cases of morbid defects of moral control which has been recorded,² the boy even when he reached the school age would eat plaster, chalk, wood, covers of books, pieces of blanket, and so on-in fact, showed that curious psychosis which goes by the name of "pica." The history of 12 years of this boy's life, up to his outrageous marriage at the age of 15 years, is one long story of stealing, lying, lack of natural affection, indecency, sexual immorality, and an attempt at suicide. His general intellectual development was precocious, for he was able to read and recite at three years old. It is interesting to observe that it is specially noted in this case that "the head is large." A somewhat similar perversion of appetite, although hardly amounting to "pica," was present in one of the cases which I mentioned in my last lecture. A boy, aged five years, with marked defect of moral control, was said to eat strange things. Just after having a good meal he would steal raw meat and eat it, and

² Boston Medical and Surgical Journal, May, 1888, p. 537.

he would pick up and eat a dirty piece of orange-peel out of the ashes in the grate. Some of these children are somnambulists, or show other evidence of nervous instability in night-terrors or in pronounced, almost choreiform, fidgety movements, such as I have referred to under Dr. Warner's term, "microkinesis," and I have mentioned the occurrence of diurnal incontinence of fæces in one case-a phenomenon which is not infrequently associated with other symptoms of unstable nervous equilibrium in children who show no impairment whatever of intellect. The relation to insanity also (I use the term here to exclude the defect of moral control which we are considering) points very strongly in the same direction. I referred to the father of one of these morally defective children who had himself shown a morbid defect of moral control from his earliest years in extreme passionateness, quarrelsomeness, and jealousy. On reaching adult life he developed maniacal symptoms and murdered his wife. In another case, which was not under my own observation, morbid defect of moral control in a child was followed in early adult life by insanity, and the girl to whom I referred as having shown permanent loss of moral control after scarlet fever at the age of seven years subsequently (apparently in adolescent or early life), after some disappointment, jumped off the roof of a verandah and was found below "screaming and maniacal." The acute mental disorder lasted for two davs.

The occurrence of loss of moral control as a marked feature of incipient insanity has been emphasised by Dr. Savage and . the occasional occurrence of insanity in the after-history of these children with defective moral control seems to bring these disorders which we have considered into very close relation with the more general morbid state of mind which is seen in insanity. And, indeed, although insanity is rare in childhood there are cases in which it seems clear that loss of moral control in children, as in adults, is a symptom of active insanity; for instance, a backward girl, aged 10 years, who was under my care, one week after an attack of influenza became self-willed and difficult to manage. She seemed to have lost her affection for her mother, said that she wished that her mother was dead, and that she would run away from her. A fortnight later she was brought home from school where she had suddenly begun rushing round the room crying and singing. She continued in a state of wild restlessness for one day and then gradually became less excited, and three weeks after the onset of mental symptoms she had regained her normal state as a tractable, good-tempered child. In another case a boy, aged eight years, became passionate and unruly after a blow on the head, but the moral change was accompanied by attacks of excitement alternating with depression and definite religious delusions. Such cases as these are obviously in a different category from those which we have been considering, but they may serve to emphasise the closeness of the

relation between defect of moral control and other morbid mental states in children.

We are, I think, justified in concluding that apart from the character of the manifestations of moral defect, which, as I have already pointed out, are often in themselves strongly suggestive of a morbid mental state, there are good reasons for admitting the existence of a morbid defect of moral control in children without any such general impairment of intellect as is ordinarily recognised as imbecility, feeble-mindedness, or insanity.

I come now to the consideration of the psychical conditions which obtain where moral control is morbidly defective, with or without physical disease, and apart from any general intellectual impairment.

As in the cases which I considered in my first lecture there are three factors which have to be taken into account, but inasmuch as it is evident that here there is no interference with the cognitive relation to environment it would seem that the failure of moral control must be due either to deficiency or loss of moral consciousness or to some failure of volition, In so far as these cases have been recognised at all as due to a morbid mental state, there has been a tendency to assume that they must be due to a morbid lack of moral consciousness, or, as some would call it, "moral sense," but whilst there seems to be good reason to believe that in certain cases this is so, it is an extremely difficult point to determine. To a certain extent one can judge from the child's conduct whether moral consciousness is present with regard to the particular activity-for example, from his efforts to conceal his vicious acts, from shame on discovery, and from remorse after the act; but there is an obvious fallacy in the fear which arises out of the memory of past punishment. For instance, a boy whom I have mentioned before had been punished many times for theft; he took great pains to conceal his stealing, and made great protestations of sorrow and reform on discovery, but he would commit the same offence again very quickly and neither for this nor for his filthy habit of wilfully defecating in bed did he show any shame. There could be little doubt that his sorrow was only an attempt to avoid punishment and was no more evidence of moral consciousness than the cowering of a dog after a fault for which it has been whipped on a previous occasion. But even when it seems obvious that moral consciousness is defective care is needed to distinguish the defect which is the manifestation of a morbid condition from that which is the result of deficient training, and it is necessary to take into careful consideration in each individual case the environment and the age of the child. After allowance has been made, however, for all these various sources of fallacy it seems clear that in some children-for instance, the boy just alluded to-there is a defect of moral consciousness which cannot be accounted for by any fault of environment, and the fact that in some cases the defect dates from very early childhood and has already persisted for several years seems to point to a morbid limitation of the capacity for the development of moral consciousness. In some of the cases also where loss of already acquired moral control occurs there seems to be a loss of moral consciousness, and if this particular factor in moral control be, as one can hardly doubt, the highest and latest product of mental evolution a special liability to loss or to failure in development would be quite in accordance with the phenomena of evolution

As a matter of speculation one might suggest that in some cases the incapacity for the acquirement of moral consciousness is a developmental reversion to an earlier type; and in this connexion one might mention a curious trait which is noticeable in some of these children—namely, solitariness: the child shows no inclination to associate with or to make friends with other children, and although apparently perfectly intelligent shows a complete lack of natural affection, so that its parents seem hardly more to it than any stranger might be—a point which may have some significance if the view be adopted that "so-called moral sense is aboriginally derived from the social instincts" (Darwin).

But the third possible factor in defective moral controlnamely, a morbid failure of volition-has also to be considered. Moral control, as we have seen, is concerned not only with such deliberate acts as stealing and lying but also with those activities which are connected with the emotions, and, as I mentioned in reference to cases of cerebral tumour, the defect of control of these particular activities is sometimes associated with a morbid exaggeration of emotional excitability which is quite independent of defective moral control. This is clearly shown by the expression of such an emotion as fear which has no moral relations; for instance, in the case of a girl with pontine tumour to whom I referred in my last lecture, during the period in which she was subject to outbursts of rage there was also an altogether abnormal degree of timidity. The child started and shrank away when she was looked at by any stranger and burst into tears whenever attention was drawn to her. It seems probable that in such a case inhibitory volition has to cope with a morbid increase in the tendency to certain activitiesin physiological terms a morbidly exalted irritability of nervous centres—so that even without absolute defect of volition it may become relatively insufficient.

As I have already pointed out, the fact that a morbid failure to control those emotional activities which have no moral relations is sometimes associated with failure to control those other emotional activities with which moral control is concerned, such as passionateness and jealousy, strongly suggests that the same cause underlies the failure in both cases, and that this is a deficiency of inhibitory volition rather than any impairment of moral consciousness. And there is some reason to believe that outbursts of rage in some of the cases where there is no evidence of cerebral lesion may be due to a similar exaggeration of excitability with consequent insufficiency of inhibitory volition. I have already referred to a boy in whom recurring attacks of passionateness were accompanied by recurring excitability. In a younger boy, between three and four years of age (whose case I have not included in any of the statistics mentioned on account of his very early age), great excitability with altogether abnormal timidity and the occurrence of those curious paroxysms of fear which have been called day-terrors, and in which the boy would suddenly scream with fright several times a day without any apparent cause, were associated with extreme passionateness, so that on very slight provocation he would kick and bite. In this case it was specially noted that after the outbursts of rage he would caress the injured person in evident remorse. It seems at least possible that a similar lowering of resistance, if one may so describe the nerve-cell alteration, whatever it may be, which underlies an increased excitability of nervous centres, may account for other manifestations of morbid defect of moral control. A stimulus, whether it be in the nature of a percept or a concept, which in the healthy mind would have only such a tendency to excite a particular activity as could be controlled by inhibitory volition, might in a morbid condition excite such activities as stealing, lying, vicious or spiteful acts, with an intensity which is beyond the control of inhibitory volition, and this quite independently of any lack of moral consciousness. Take, for instance, the case of the boy, aged $11\frac{1}{2}$ years, whom I mentioned at the beginning of this lecture: his mother stated that in the midst of playing quietly with other children he would suddenly seize two of them and bang their heads together, making them cry with pain and, she added spontaneously, "he seems unable to resist it." Some of these morallydefective children who steal things without any apparent object have said that when they saw the thing they felt an irresistible impulse to take it.

But in the absence of any morbid increase of excitability the defect of inhibitory volition would seem in some cases to be absolute rather than relative, and any further analysis of the psychical alteration can only be tentative, especially in the obscurity which surrounds the psychology of volition. Adopting, however, the view that "effort of attention is the essential phenomenon of will" (James) I would point out that a notable feature in many of these cases of moral defect without general impairment of intellect is a quite abnormal incapacity for sustained attention. Both parents and school teachers have specially noted this feature in some of my cases as something unusual. I have mentioned the case of a boy with moral defect who would repeat the process of saying "Good-night" several times before he was aware that he had done so; the same boy would often put his boot on the wrong foot apparently without noticing it. Another boy, aged six years, with marked moral defect was unable to keep his attention even to a game for more than a very short time, and, as might be expected, the failure of attention was very noticeable at school, with the result that in some cases the child was backward in school attainments, although in manner and ordinary conversation he appeared as bright and intelligent as any child could be.

These considerations on the nature of the defect may appear too speculative to have any practical value, but I venture to think that they have some basis in clinical fact, and my reason for bringing them forward in this connexion is to emphasise the possibility that other morbid conditions beside defect of moral consciousness may be responsible for defect of moral control. The child who steals repeatedly, or lies, or, with or without apparent provocation, inflicts injury on other children, and is proved to have full knowledge of the wrongness of his acts, may nevertheless be just as truly led thereto—or, shall I say, allowed thereto ?—by a morbid mental state, as the child whom we believe to be suffering from a morbid defect of moral consciousness.

There remains another point which may well be considered here and which is of considerable practical importancenamely, the intellectual condition of these children. Is a morbid defect of moral control compatible with a perfectly normal state of the intellect? The difficulty in answering this question depends largely upon the difficulty of defining exactly what is meant by "intellect." As I have already pointed out moral consciousness itself may be regarded as an intellectual function and its disorders therefore as disorders of intellect, and even volition, although itself hardly an intellectual process, is very closely connected therewith. But if we disregard psychological analysis and restrict the term "intellect" to its meaning in common usage, making it almost synonymous with intelligence and taking as our gauge the capacity for ordinary educational acquirements, then I think that it is possible to answer this question very decidedly. At least eight of my 20 patients were fully up to the average in intellectual capacity. They were bright, intelligent children, capable of any ordinary school work adapted to their age; and, indeed, one of the worst and most disastrous cases did excellently for a time, so far as educational progress was concerned, at a large public school. The remaining 12 patients had passed for children of average intellect and in some of them I think it would have been difficult to persuade any person without special experience that there was any intellectual flaw. Two of them, however, were undoubtedly backward, although they had for some years taken their place with children of their own age. Two others, although reported by their school teachers to be of average intellectual capacity, were, in my opinion, dull and slow. In some of these children there was, as I have already

mentioned, a marked inability to concentrate and to sustain attention; in others memory seemed abnormally defective, and in at least two cases where the child was thought to be of average intellectual capacity there seemed to be an abnormal lack of judgment in regard to everyday matters apart from their moral relation. It would seem, therefore, that in the large majority of these children with morbid defect of moral control without physical disease, and without any such general impairment of intellect as is commonly recognised as imbecility or even feeble-mindedness, careful, and perhaps in some cases only expert examination will detect some abnormality of intellectual processes which in its most pronounced degree may form a link between this group of cases and those which I considered in my first lecture. But I wish to insist upon the fact that if ordinary intelligence and the capacity for educational acquirements be taken as the gauge of intellect then there can be no doubt whatever of the compatibility of an apparently normal intellect with a morbid defect of moral control.

It is clear that although there is no general impairment of intellect in these cases there is a psychical defect which may or may not be associated with abnormality of particular intellectual processes. The nature of this psychical defect we have already considered but the cause of its occurrence remains obscure. That there is not only a perversion of function in the higher nervous centres but an actual physical abnormality underlying the moral defect seems more than We have seen that the association of defective probable. moral control with general impairment of intellect is sometimes observed in forms of imbecility in which either a gross lesion or a developmental abnormality of structure is known to be present in the brain, and also that gross lesions of the brain, such as meningitis and tumour, may cause loss of moral control in children who show no general impairment of intellect. The structural changes, however, in these cases, so far as we can judge from the small amount of evidence which is available, are not sufficiently constant in their localisation to allow us to say that a lesion here or a lesion there will produce moral alteration, and the fact that a similar moral change occurs after more general diseases, particularly the specific fevers, and is followed sometimes by complete recovery, suggests that cell-modification dependent upon interference with cell-nutrition, may be the physical basis of the moral defect.

The very striking relation to the specific fevers strongly supports the view that toxic substances, such as are known to be present in the blood in some of the fevers, may be the determining cause of the alteration in cell-nutrition, and the results of recent research on epilepsy would justify a similar explanation of the relation of moral change to epilepsy. The gradual accumulation of toxins in the blood prior to the epileptic seizure would correspond to the loss of moral control during the days immediately preceding the fit. More localised causes also, such as inflammation of the meninges with its accompanying affection of the subjacent cortex, increased pressure from the presence of intracranial tumours, and head injuries, might be expected to interfere with cellnutrition.

The occurrence of abnormalities of cell-structure in the brains of idiots who show no gross lesions suggests that cellmodification occurring during intra-uterine life or in infancy may account also for the limitation of capacity for moral development which we saw to occur in some children without any general impairment of intellect; and this suggestion finds some support in clinical facts. In two out of five cases in which there was no family history of insanity, epilepsy, or moral degeneracy, there had been severe convulsions in infancy, and one of these two patients, whom I have mentioned above, was said to have been comatose with the convulsions for three days. In some of the cases brought under my notice by Dr. Savage there was a history of very difficult and prolonged labour and I have referred to one case which came under my observation for morbid defect of moral control in which a difficult and instrumental labour had resulted not only in a marked degree of asphyxia, so that there was considerable difficulty in establishing respiration, but also in an Erb's paralysis; in others the mother had had some illness during pregnancy, and a premature birth in some cases may also have pointed to ill-health in the mother as a cause for defective development in the child ; in fact. it would seem that the same causes which produce idiocy or imbecility in one child may produce limitation of capacity for moral development in another; and this is exactly what might be expected if moral control be, as I have suggested, the most recent and therefore most unstable product of mental evolution. Any cause which acting on the brain with greater intensity-that is, producing more profound alteration of cell-nutrition-leads to general impairment of intellect, may, when acting with less intensity, interfere only with the highest, the moral, function.

Perhaps I may be allowed to add to these speculations on the physical basis of morbid moral defect yet another which also has some support in closely allied conditions. The cellchanges which have been found in some forms of insanity in which heredity plays a prominent part suggest that a morbid loss of already acquired moral control, with or without obvious physical disease and quite apart from any such mental change as would ordinarily be recognised as insanity, may be traceable to a low initial vitality of nerve-cells, determined it may be by heredity or other ante-natal influences.

Having now, as I think, shown that failure of moral control in a child of apparently normal intellect may be a morbid manifestation, however doubtful may be the exact nature of its physical basis, I shall venture to devote the short time that remains to some purely practical considerations arising out of the facts which I have mentioned.

The serious danger which these children constitute both to themselves and to society calls, I think, for more active recognition. We, at any rate, as advisers of parents and guardians, have a clear duty in warning them of the disasters which may occur. The pernicious influence which some of these morally defective children may exert on other children is appalling to think of. I have said very little about the sexual immorality which accompanies the other manifestations of morbid defect in some of these cases, but it is too important to be disregarded. Apart from masturbation, which is common in children who show no morbid defect of moral control, these children not infrequently show a desire to expose themselves indecently, especially to children of the opposite sex, and they sometimes show such unbridled lust that they are not safe to be left alone with other children. I shall not go into details for they would serve no useful purpose. I will only say that even some years before these children reach puberty their relations with other children may be most impure, and that as they approach puberty the danger naturally becomes more serious and in cases under my own observation, as in recorded cases, the uncontrolled sexual instinct has led to most outrageous and precocious immorality.

The possibility of physical injury both to themselves and to other children has also to be remembered. I have mentioned cases in which during outbursts of rage reckless attacks were made on others with knives, sticks, and missiles of various sorts; but, apart from passionateness, spitefulness and cruelty may lead to serious results. A boy, aged 10¹/₂ years, was brought to me with a history that he had always been difficult to manage but that he had been more outrageous during the past two or three years. He showed an almost diabolical ingenuity in inflicting pain on others. He had two baby-brothers, twins, aged two years. He put some shells in the oven on a tray and when they were well heated he told these two babies to hold out their hands for the shells which he then poured off the tray and so burnt their hands. Sometimes he would strike them on the head and make them cry apparently in wanton spitefulness. He persuaded his sister, aged four years, to sit on the back of a chair which he steadied by sitting on it until she was up and then he deliberately let the chair fall over backwards with the result that she struck her head and cut her lip, whilst he stood and laughed with enjoyment. He was cruel to animals; he would tie a string tightly round a kitten's neck, almost strangling it. The mother said that he was always trying to injure animals, so that she was afraid to keep any pets in the house. He was very untruthful and stole money which he gave away to his schoolfellows. He had behaved indecently both with girls and boys. This child was supposed to be of normal intellect but he was backward at school. He had the curious sullen manner which was noticeable in several of my cases; his frontal region was rather narrow, although the circumference of the head $(20\frac{3}{8} \text{ inches})$ was about normal. His paternal grandmother was thought to have been insane.

These children may also inflict injury on themselves. As I have pointed out, the keynote of the manifestations of morbid defect of moral control is self-gratification; and if for the moment "not to be" seems less irksome than "to be" they may not hesitate to choose it. A boy, aged 10 years, who had been under my observation as a hospital outpatient because he was troublesome and unmanageable and easily flew into a rage, one evening in one of these outbursts made a determined attempt to cut his throat and was only restrained by physical force. Another child, a girl, aged 11 years, was extremely passionate and was said to maltreat her younger brothers and sisters. For instance, on one occasion their screams attracted the attention of the neighbours who came in and rescued the children, who were scarcely more than infants, from their sister who was amusing herself by beating them with a thick rope. On one occasion this child was caught just about to throw herself from a third-storey window. She was a child of average intelligence, but with a small head, a narrow frontal region, and a very high palate. Her father drank heavily. She had been sent to a lunatic asylum for a short time before I saw her as she was thought to be dangerous. I have referred to the record published in America of 12 years in the life of one of these children. This boy, at the age of about 14 years, when not allowed to have breakfast with the rest of the family and threatened with punishment by his grandfather for stealing some money, deliberately shot himself, with very serious, but not fatal, result.

Apart from these risks there is the likelihood, nay, almost the certainty, that children with the more profound and permanent disorders of moral control will, if not protected from themselves, sooner or later bring public disgrace upon themselves and the families to which they belong and possibly be punished as criminals in spite of the evidence that their acts are the outcome of a mental state just as morbid as the more generally recognised imbecility or insanity. But whilst I think that it is only right to warn the parents of the possible dangers, it would seem, both from my own observation and from cases which have been brought under my notice by others, that the outlook is not so grave in all cases. Even where there appears to be a limitation of the capacity for the development of moral control the condition would seem to be comparable to imbecility in the capacity for development up to a certain limited extent ; it is, in fact, a limitation, rarely, if ever, a complete absence. The limit of possible improvement may be a very narrow one and, whether it be narrow or wide, there is probably little

hope in this particular group that the child will ever acquire a normal degree of moral control; but during the earlier years of childhood it is hardly possible to foresee to what extent careful training and environment will improve these cases.

With regard to those children in whom loss of already acquired moral control occurs as a morbid condition, with or without physical disease, it would seem that in some cases the condition is comparable to a temporary insanity and passes off after a variable duration, which may be days or months, and, as I have pointed out, in some cases it recurs at intervals like a recurrent mania. But it cannot be said that there is always recovery from these acquired defects. In the case recorded by Dr. Hack Tuke in which moral control was lost after scarlet fever at the age of five years, the patient still showed the moral defect when he had reached adult life, so that he required special supervision.

One other point may be mentioned in this connexionnamely, the apparent improvement for a time in some of these cases when the surroundings are changed. A common history is that the child has been tried at various schools and at each fresh school has seemed for a time to have overcome his morbid propensities but no sooner have the surroundings become commonplace and familiar than some fresh manifestation of his moral defect leads to his disgrace and early expulsion; similarly I have seen cases admitted to hospital on account of a supposed morbid defect of moral control and with a circumstantial narrative of some years of outrageous behaviour, but during the few days or weeks it was possible to keep them in hospital the behaviour has been exemplary, although in most of them the physical peculiarities to which I have referred, or some oddity of manner, together with the family history, left no reasonable ground to doubt the parents' statements. It would seem that as happens sometimes with hysteria and even with insanity in later life, the extra stimulus of unusual surroundings adds as it were a temporary reinforcement to volition, so that the morbid defect becomes latent for a time.

There are other aspects of this subject which it would be out of place to consider here but which are none the less of extreme importance for the welfare of these unfortunate children and for the good of society. The problem of education in face of the paramount necessity for separating some of these morally-defective cases from other children; the method of providing the constant and close supervision which is so essential in the management of these cases and which is often so impossible for the middle and poorer classes; how far restraint by confinement in special institutions is called for; and, last but not least, how far these children are to be held responsible for their misdoings—all these are questions which call urgently for consideration in their proper place. My object in these lectures has been simply to investigate the occurrence in children of morbid mental states in which only, or chiefly, the moral control is affected, and to determine as far as possible under what conditions these morbid defects of moral control arise. I am only too conscious that I have but touched the fringe of an extremely difficult and complicated subject, but I shall have amply succeeded in my purpose if these lectures serve to draw attention to morbid conditions which have so far-reaching an importance.

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