DISCUSSION AND REPORTS.

POST-HYPNOTIC SUGGESTION AND DETERMINISM.

In his essay on 'The Dilemma of Determinism' ('Will to Believe,' etc., p. 145), Professor James says: "A common opinion prevails that the juice has ages ago been pressed out of the free-will controversy, and that no new champion can do more than warm up stale arguments which everyone has heard. This is a radical mistake." In agreement with this view the writer purposes to bring up a new line of argument. In the discussion of this question it has been generally agreed that we have nothing in the form of objective evidence to assist us, that, in the very nature of things, such evidence can only be subjective. Thus James, in the essay quoted above (p. 150): "Now, evidence of an external kind to decide between determinism and indeterminism is, as I intimated a while back, strictly impossible to find." So Hyslop ('Elements of Ethics,' p. 217): "The real weakness of the appeal to consciousness is that it can never have more than a subjective or individual value. It could not prove anything except for the individual who has it, and others might not possess any such power," and Simmel ('Einleitung in die Moralwissenschaft,' Band II., S. 306): "Wer es ausspricht (das Urteil, 'unser Geist ist unfrei') muss sich zunächst doch die Anwendung davon auf sich selbst gefallen lassen, und damit zugleich auf die Möglichkeit eines objektiven Nachweises seiner Wahrheit verzichten."

Now may it not be possible that we really *can* find something in the nature of objective evidence to throw new light on this question? If we give a young man, who is sleeping soundly, a slap in the face and see him awake in an instant, are we justified in believing that we know the cause of his waking? If instead, we tickle him until he awakes, have we anything in the nature of objective evidence as to the causes of his waking? Or must we accept his view of it, namely, that he 'simply awoke the same as at any other time?' Now let us take a case of post-hypnotic suggestion. We give the suggestion, and at the time set for its execution, the young man carries it out. Experimenters agree that we can foretell the results, and that the action of the young man has for its determining cause the suggestion given

him. Now is that opinion based on objective evidence or not? But the objection is made that such phenomena should not be considered at all in discussing this problem, that there is a vital difference between the process determining action in cases of post-hypnotic suggestion and that which takes place in cases of 'ordinary' volitional action. It is part purpose of this paper to show that there is no reason for believing that such a difference exists.

Frequently the assertion is made that the subject will fall into a slight hypnosis at the time he executes the suggestion, or that he feels himself acting under compulsion, or that afterwards he forgets about his having done what he did in carrying out the suggestion, or that while he is executing this suggestion he is easily brought to execute other suggestions given then and there. So, for instance, Lipps ('Suggestion und Hypnose,' p. 516): "Auch hier erneuert sich die Hypnose an dem Punkte, oder in dem Bezirke, dem die suggerierte Vorstellung in der Hypnose angehörte." Now the reports of different experimenters do not agree on this point, and in the experience of the writer, the manner in which the suggestion is executed depends upon a variety of factors. We find, for instance, in some cases, that the subject performs the action suggested in a perfectly natural way, in no wise differing from the way in which he attends to anything in his daily routine of actions. Again, we find him hesitating, or at other times still, actually passing through a struggle before executing the suggestion, or even refusing to execute it. Now how account for all this? If the order is, for instance, for him to get up and lie down on a couch after reading the daily paper for a few minutes, he will very probably do this without any sign of wavering on his part, and without there being anything in his manner that would seem in any way strange to those that know him best. If instead, he is asked to walk over to another chair (after reading a few columns) and to sit astraddle of it, facing its back, it is likely that he will show some slight hesitation, or that he will, before carrying out the suggestion, look sheepishly about him to see whether he is being particularly watched. If again, the suggestion is for him to go and lie down on a bed in an adjacent room, it is probable that there will be decided hesitation on his part before executing it, or even that he will not do so at all (unless he be a good subject who has frequently been experimented with). If, to bring out another point, he should be asked to get the hatchet and to break up a valuable piece of furniture, it is very probable that there will be a flat refusal. If asked afterwards in regard to the act suggested, the answers in the different cases will likely be different.

In the first case it may be: "Why, I don't know, it just occurred to me to do so," or something to that effect. In the second case the answer is likely to come: "Why, I just took a notion to," or "I just wanted to" or something of that sort and the subject is apt to show some annoyance in some cases. In the third case, if the action suggested was performed, especially if after a struggle, the subject will frequently recognize the fact that he was acting under suggestion.

It would seem that the nature of the action suggested, the manner in which it is given, and the character of the subject (including bodily state, as fatigue, etc.) are the chief factors that go to determine the results of the experiment. As regards the first factor, it has been the experience of the writer that when the action suggested is such as would in ordinary life be done without much thought and which would be in line with actions performed daily by the subject, it is executed without any hesitation and without any indication of hypnosis on the part of the subject at the time of the execution, and that questioning as to the reason for his having done so or so will generally elicit a response like that above under the first case. He does not seem to care to find out the reason why, in fact frequently doesn't seem to think that there was any reason why. That is to say, this will be the result if the suggestion is not given too forcibly. If the operator makes the mistake of impressing the suggestion too firmly in the mind of the subject, it is likely that it will startle him, thus make him suspicious, and, in many cases, enable him to detect the source; and, in case he should execute it, give him the feeling that he is acting under compulsion. Or, again, when the action to be performed is one that the subject would ordinarily not think of doing, something contrary to a habit of long standing, he will look puzzled or bewildered, will try to put it out of his mind, and yet, after he has once executed the suggestion, it is likely that he will say that he 'wanted to do it,' if asked about it. Of course, the nature of the action suggested, and the manner in which it is given, will not alone determine the result. The intelligence of the subject, his disposition, etc., are important factors. For instance, there are some subjects who, after the action, will always say, with a good deal of emphasis, that they did it because they *wanted* to, even in such cases where they seemed to go through a struggle before doing it. An intelligent subject, especially if he know something about the psychology of the matter, will be very apt to have his suspicions about many ideas that prompt themselves shortly after he has been in the hypnosis (it needs no saying that he will therefore also make mistakes at times).

In a general way, the truth of the matter seems to be this: as regards ordinary, non-moral acts that might come under the head of habitual acts, the testimony of the subject is generally that he didn't know why he did so or so, or that he 'just took a notion to do so,' or that he 'felt like it'; as regards non-moral actions contrary to habitual actions, especially such as seem foolish or distinctly in conflict with the views of the subject, the testimony, in case of an execution of the suggestion, is generally that he 'wanted to do it'; but where something immoral, or, for that matter, anything that is decidedly against the views of the subject, is suggested, the result is apt to be a refusal, and here we have, on the part of the subject, the consciousness of an 'outside' force or power, which seems to be present in the first two cases only when the suggestion given appears in consciousness with an intensity entirely out of proportion to the relative importance of the action suggested, due to a mistake on the part of the operator in impressing the suggestion too forcibly. This, in the mind of the writer, is a fact the importance of which has been somewhat overlooked. If we awake the sleeper by means of a slap he will probably be able to tell what woke him; if by tickling, the chances are that he will say that he awoke 'the same as any other time' (meaning that the cause of his waking was the same). So with post-hypnotic suggestion; if it is properly given the desired result will be obtained; there will be no indication of hypnosis; the subject will not be aware of its origin, and will furthermore tell us that he 'did as he wanted to.' This has been brought out by many experimenters. So, for instance, Bernheim ('De la Suggestion,' etc., p. 46): "*L'idée suggérée se présente dans son cerveau à son réveil: il a oublié son origine et croit à sa spontanéité.*" So also Jordan, Forel, Schmidkunz, Sidis.

The suggestion will then, if the experiments are properly conducted, be executed by the subject under the impression that he *wanted* to do what he does, and, also, that he *could have done otherwise*. On the other hand, we know that suggestion and deed are linked together by a chain of causation admitting of no alternative. It is similarly a familiar fact that the testimony of the subject under the influence of ordinary hypnotic suggestion is to the effect that he could do otherwise than he does. Here we have subjective testimony to the effect that he could do so, and objective proof that he can not. The objection is raised here that this proves nothing for 'ordinary' volitional acts, that he is here acting under compulsion. Now the significant fact is this: He, the subject himself, feels that he is *not* acting under compulsion, that he is acting out of his 'own free will'—meaning, namely,

that he could have done otherwise. The testimony of consciousness (of the subject) here is to the effect that the process in the two classes of cases is identical. In the one class we *know* that he is not free to 'choose,' and yet he thinks he is. So we do know that in this case subjective evidence is worth nothing, and hence, even if this does not prove that he is not free to choose in the other case, it at any rate proves that the subjective feeling that he can choose does not prove that he can. So far we know that *subjective evidence in the one case is false*, and, therefore, may be *justified in believing that it may be false in the other case*.

Now to a consideration of those cases where the subject feels that he is acting under compulsion. What they really show is not evidence in favor of the indeterminist, but rather in favor of the determinist. We know, for instance, that when, in giving a post-hypnotic suggestion, we impress it too forcibly on the mind of the subject, he will, at the time the suggested idea appears in consciousness, feel that there is an alien force trying to gain possession of him, and that if he executes it, he feels that he acted under compulsion. Here the subjective testimony is to the effect that the will was determined, that the subject could *not* have done otherwise, and here *subjective evidence is not only corroborated by objective evidence, but actually by objective proof*. How does it come, then, that in the one class of post-hypnotic experiments subjective evidence is incorrect, and in the other correct? In the first case the suggestion is weaker (or more familiar, etc.), in the second it is stronger (or more uncommon, etc.). That is, if the suggestion is given in such a way that it does not come up with startling force, or if it be one that is not directly contrary to his general inclinations, the subject is not able to see that his decision is 'univocally determined'; when, however, it comes up in a way entirely out of proportion to the end sought, or, contrary to his views or character, he sees that his decision is determined and that there is no ability to choose to do otherwise. In the first case the subject's introspection does not enable him to see the true state of affairs, because the motivating power of the suggestion is only average in power, or because it is common in its nature: in the second case it does enable him to see the connection between the motivating power of this idea and the volitional (or the non-volitional, compulsory) act following, and it is because this one idea comes up in so powerful and unusual a way. It is generally admitted that the testimony of consciousness is unreliable in this matter, and so there is too much of a tendency to look at it as though that meant equally much for both sides of the

argument. So Hyslop ('Elements of Ethics,' p. 214): "If it be illusory [consciousness], argument on either side of the question is perfectly futile, for I have nothing but the testimony of consciousness to the cogency of the argument for necessitarianism." Again (p. 217): "But I do not think that its testimony can be either proved or impeached. It is itself the last resort for such truths as we actually believe, and it proves too much to discredit it and then accept other beliefs which it attests." Now it does seem that, in the light of the above analysis, argument on the one side is not necessarily futile, for the same shows us why the testimony of consciousness in the one case is right, and why it is wrong in the other.

But there is another way in which to get at this question of freedom of choice, and many of the experiments of the writer were conducted with this special purpose in view. Here of course only a few such cases can be considered, but it is his intention to give the whole matter a more nearly thoroughgoing treatment at some later day. Because of the great number of courses of action between which choice can seemingly be made, it is desirable, if possible, to get a case where we can leave open only two such courses, and then see whether it is possible to choose *either* the one or the other. Take the following case in point: A young man is given the suggestion that the first time he meets a certain friend of his, he shall tell him that he is foolish, and, as a reason for saying so, shall tell him, either: (1) that he spends his income too wastefully, or (2) that he devotes too much of his time to a certain young lady. At the first meeting he does tell his friend, after some hesitation, just as was suggested to him, that his friend is foolish. When his friend asked him for the reason why he made such an assertion, he told him that he squandered his money. Now what light does this experiment throw on the question? In the first place, it certainly must be admitted that the suggestion given has determined: (1) his telling his friend that the latter is foolish, (2) his giving a reason for saying so, and (3) that he can choose only one of two given reasons. Thus far, then, we have volitional action under the determination of post-hypnotic suggestion. But when he chooses one of these two reasons we must say that this is 'ordinary' volitional action. Of course everyone is ready to admit that, when he told his friend that he was foolish, it was impossible for him to do otherwise. Now the question is this: When he gave the first of the two reasons suggested, could he have urged the other reason? When asked afterwards why he had thus spoken to his friend he said: "Well, it occurred to me that he is foolish, and so I told him so." "But you know

that he isn't in the habit of spending more money than most of us." "Yes, I know; but I didn't want to offend him by telling my real reason." On being asked for that, he said that he thought that his friend was paying too much attention to a certain young woman. He 'chose' the first reason; could he, constituted as he was, desirous of not offending his friend, and knowing that it would offend him to give the real reason, could he have urged the other reason—could he have 'chosen' the other reason? To answer affirmatively would be to express the most evident contradiction. But before proceeding with this thought, it is instructive to note that the subject called the whole action his own, that there was no hitch or halt in the process when 'ordinary' volitional action followed action determined by suggestion—to all appearances *the process was the same in both cases*.

This particular case shows clearly that only the one reason could be 'chosen' and that under the circumstances existing at the time, 'choice' of the other was entirely out of the question. But it may be objected that in most of the 'ordinary' volitional acts there may be more than two alternatives. Very well. The suggestion here might have been given, as it was in other experiments, simply to the effect that *some* reason be given, without giving a list of those from which a selection was to be made. What ground would there be, then, for believing that whatever reason he gave, was *not* determined (by his character—his self)? Or to take another case: The suggestion is given to call A either a 'fool' or a 'coward.' He calls A a 'fool.' Even if we couldn't tell beforehand what he would call him, there is no reason for believing that his 'choice' was not determined. The fact of the matter is that if we had known the subject well enough, we could have predicted just what he would 'choose' to call A. And so with 'ordinary' actions. Place a man we know very well in a certain position and we can foretell accurately which one of two seemingly possible ways of action he will 'choose,' whereas, with regard to a man we do not know so well, there is only the element of probability in our prediction; and again, with regard to an absolute stranger, of whom we know practically nothing, and who is placed in such a position, we could only guess as to the course he will probably 'choose.' (This, in the light of what has been said, really amounts to a proof by concomitant variations, as was suggested to the writer by Professor Harlow Gale of the University of Minnesota. But it is not the province of this paper to take up this line of argument.)

Simply because we can not in 'ordinary' volitional actions isolate our antecedents and show the causal connection between them and the

volitional acts as consequents, there is no logical reason for disputing such connection. Where the young man above mentioned thought, that under the circumstances then existing, he could have urged the other reason just as well as the one he did give, we of course know that that was out of the question. And so in all cases, just as Schuppe says ('Ethik und Rechtsphilosophie,' S. 96): "Im konkreten Geschehenen gibt es selbstverständlich nur Notwendigkeit, ein 'Gekonnt-haben' kann also immer nur den Sinn haben, dass etwas geschehen wäre wenn nur noch die und die Bedingungen hinzugekommen wären." It is not often that consciousness gives us the testimony in regard to 'ordinary' volitional acts, that they were determined. As Fowler says ('The Principles of Morals,' Part II., p. 330): "But it may be replied * * * that the reason is because I am not sufficiently acquainted with all the springs of action and their relative force, and that, when a man comes to reflect on the circumstances of his conduct, he often recognizes his past action as the necessary result of the various forces, internal and external, operating on him at the time." It is instructive to note that when we do so recognize an action of ours to be determined, it is not as a general thing one of the kind we call habitual, but rather one of an unusual nature, most likely one which came about after a severe inner struggle. After what was said in regard to the class of post-hypnotic actions where consciousness gives the testimony that the action was determined we can see why it is that consciousness is able to give that testimony here, and this amounts to *more evidence that the volitional process is the same in both 'ordinary' volitional acts, and acts determined by suggestion.*

One other objection must be considered here. It may be urged that in the case of the young man above mentioned, the suggestion was executed because it was not contrary to his nature (character). Very true. If it had been, he would, in all probability, not have executed it; yet, if in spite of this fact he had executed it, he would probably have said that he had acted under compulsion, as another man did who had been brought to slap a friend of his under the influence of post-hypnotic suggestion. It is this that Schmidkunz refers to ('Psychologie der Suggestion,' S. 276): "Wie die meisten, namentlich aber die misslungenen hypnotischen Suggestionen gerade für die Macht der zu überwindenden Widerstände zeugen, so zeugen die hypnotischen Suggestionen, insofern sie gegen die Selbständigkeit des Subjekts gerichtet sind, auch im siegreichsten Falle von der Existenz des Gegners." The answer to this and similar objections is simply this: The objection is not valid in so far as it is meant to show that

there is self on the one hand, and non-self on the other, either trying to overcome it or actually doing so, and that if the action is performed, it was performed by what was not self. The self at any moment of action is the previous self plus the last impression made upon it—plus the last influence motivating towards action, and the case where an action (of the above class) is performed under the feeling that it was compulsory is no exception. The action of the self may be likened to the action taken by a parliamentary body. Whatever action is taken, whatever the constituency of such body, the action taken is that of the self of that body, whether it took place after a change, either sudden or gradual, in the membership of such body or not. Similarly, in hypnotic experiments, we can change the membership, so to speak, of the self. We simply reduce or modify, at will, the real make-up, and through that, its expression, by means of suggestion. This may be done by inhibiting certain parts of this make-up, and leaving others free to gain their expression, as, for instance, when we suggest to the subject that he may be able to do certain things, but not others. Or, as in post-hypnotic suggestion, we can bring into the self a new factor, which, becoming a part of that self, helps to determine the expression of that self. Where this new factor is not of such a nature as to seek expression in a manner entirely strange to the self as constituted before the ingress of this new factor, it finds its expression, and the testimony of consciousness is to the effect that it was the act of the self. Where this suggestion is contrary to the character of what subjective consciousness has recognized as self, the testimony of consciousness will be to the effect that this was non-self, that the self was overpowered, or, in case of refusal to execute it, that there was non-self that tried to overpower self. A better psychological analysis shows how false this view is. Dewey ('Study of Ethics,' p. 129): "There is no factor foreign or alien to the agent's self; it is himself through and through." So also Stephen ('Science of Ethics,' p. 287): "When we say that his conduct is caused by one of those instincts, we do not mean that there is a man *plus* the instinct, but that the whole man, regarded as a unit, including this instinct, acts in a certain way in which a man (if such a man be possible) without that instinct would not act." That volition is the expression of the self, that it is determined by the character of the agent, is now generally admitted. "Which motive is chosen is perfectly fixed and dependent upon the character which cannot choose otherwise than it does." (Alexander, 'Moral Order and Progress,' p. 339.) " * * * but what it means is not that I might arbitrarily, or with no different

self have done otherwise." (Dewey, 'Study of Ethics,' p. 132.) "Zu sich selbst sagen: ich hätte anders handeln können, ist thöricht und sicher falsch." (Riehl, 'Der philosophische Kriticismus,' Band II., II. Teil, S. 271.) "As is its nature (that of a being), so it wills; as it wills, so it acts." (Carus, 'Monist,' Vol. III., p. 87.) "Ein Mensch handelt in einem jeden Augenblick seiner derzeitigen Beschaffenheit gemäss." (Gizycki, 'Moralphilosophie,' S. 219.)

After having attempted to show that the volitional act is determined, with the self as the main determining factor, the next step would be to take up the question as to whether that self itself is determined, but that is not the purpose of this paper. And so, also, the question of responsibility cannot be taken up here any more than to quote from several writers. Stephen ('Science of Ethics,' p. 285) says: "I do not diminish a man's responsibility when I 'cause' him to act, but only when I cause him to 'act involuntarily.'" And Dorner ('Das menschliche Handeln,' S. 129): "Man behauptet vielfach, dass alle Verantwortlichkeit mit Leugnung der Wahlfreiheit aufhöre. Allein das Ich, welches thätig ist, rechnet sich die Handlung einfach deshalb zu, weil es bewusst thätig ist, also sich als handelnd weiss. Ob diese Handlung aus Wahlfreiheit geschehen ist, kommt hierbei nicht in Betracht. Das Ich ist thätig, und weiss sich als thätig: die Verantwortlichkeit ergibt sich aus dem Bewusstsein der Aufgabe, nicht der Wahlfreiheit. Weil ich etwas vollführen soll, bin ich verantwortlich dafür. Freilich hört meine Verantwortlichkeit auf, wenn mich äussere Umstände, die ich nicht beseitigen kann, an der Erfüllung meiner Aufgabe hindern."

In conclusion, where most of the representatives of modern philosophy are agreed that the volitional act is determined, it has been the attempt of the writer to bring forth some evidence that will strengthen the position of the determinist still more. He has thus attempted to show that there seems to be no valid reason for believing that there is any difference between the volitional process in 'ordinary' volitional acts, and acts performed under post-hypnotic suggestion; that to the subjective consciousness there is ordinarily no such difference; that when there is such difference attested to by consciousness it can satisfactorily be accounted for by the explanation as to when the testimony of consciousness is apt to be right, and when wrong; and that even though all that has been said does not prove the absence of such difference, it must be assumed to do so in the absence of disproof.

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