

1917

## Study in the Psychology of Testimony

Charles Stillman Morgan

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

---

### Recommended Citation

Charles Stillman Morgan, Study in the Psychology of Testimony, 8 J. Am. Inst. Crim. L. & Criminology 222 (May 1917 to March 1918)

This Article is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

# A STUDY IN THE PSYCHOLOGY OF TESTIMONY<sup>1</sup>

CHARLES STILLMAN MORGAN<sup>2</sup>

In a previous article<sup>3</sup> I acquainted the readers of this Journal with a new method of arriving at a sense of the value of courtroom testimony. In writing in the field of legal psychology, however, one feels that it is the exceptional reader who is not cherishing a desire, unexpressed perhaps, that the old order of things be let alone and that this newest intruder be suppressed before it has accumulated the momentum of a rapidly progressing science. To such honestly skeptical readers I hope to bring a sane statement of the place of psychology in legal practice that will enable them to establish more rationally their attitude toward this willing handmaid of the active lawyer. From an extremely enthusiastic believer in the unquestionable ability of legal psychology to save the law from utter disgrace in the eyes of the public I have gradually simmered down to a state of mind which makes up in practicability and utility for what it has lost in warmth. In this article, then, I propose to work out with the reader's assistance a simple statement of what seems to be the proper relation, so far as testimony is concerned, of legal psychology to legal practices. To do this properly it will be necessary to trace swiftly the various steps which preceded this simple statement of our conclusion. Any science proceeds from the complex to the simple and the test of our work will be the degree of simplicity which we attain in stating our conclusion. Incidentally it will be possible to develop a few collateral ideas that will solidify our treatment.

At the very outset it will be well to establish clearly a point which is really the *raison d'être* of this article. That point is this: the value of a particular piece of testimony is not established or disproved by a mere determination of the veracity of the witness. If the witness is not veracious; i. e., if he willfully tells as the truth what he knows not to be the truth, his testimony is obviously of zero value. An academic writer, like myself, could scarcely expect to add anything to the highly developed common sense methods of determining a witness's veracity now and for ages in use. But equally important and at times more important because more difficult to ascertain is the determination of the ability of a given witness, proved honest and

---

<sup>1</sup>The writer is greatly indebted to Professor W. B. Pillsbury, of the University of Michigan, for many valuable suggestions and other helps in the writing of this article and the earlier one, mentioned below.

<sup>2</sup>New Haven, Connecticut.

<sup>3</sup>"The Evaluation of Courtroom Testimony," this Journal, Vol. VII, No. 2, pp. 227ff.

anxious to tell the truth, to tell the objective truth, to translate an outward event into words for the auditor's use. The same set of facts will be given one interpretation by A and another by B; to this extent does the subjective overrule and condition the objective. In this article attention is confined to this latter problem.

There has been a gradual accumulation of literature on the psychology of testimony, some the work of pure scientists, some the work of novelists and journalists.<sup>4</sup> The great work in this field is yet to be written, however. Writers upon this subject are or should be largely inductive in their methods of research. The difficulty has always been in collecting sufficient dependable data from which to draw accurate conclusions. In working up this subject I have proceeded in two ways: in part I have used a large number (about one hundred and fifty) of people as subjects for a simple test of the laws of testimony; in part I have used about twenty subjects in a series of more intensive tests. The evidence is, then, both extensive and intensive.

In the extensive work the attempt was made to reproduce as far as possible everyday conditions of receiving and setting forth observations. Simplicity was paramount. In keeping with but in no sense in imitation of the work of earlier writers I took a situation about like this: by prearrangement with the lecturer I entered a university class in psychology in a very matter-of-fact way and presented to the lecturer a note. This he read and said: "I will be there at two o'clock." After replying "thank you" I left as unostentatiously as I had entered. A week later the professor in charge presented to these students a set of questions which I had prepared; the one hundred and fifty results were handed over to me for interpretation.

Here we have all the essentials of an evidential complex. Although prearranged and minutely detailed before consummation, my entry into this large lecture room appeared entirely casual. None of the students realized till later that they were being made use of as witnesses. The two or three who knew me were not allowed to influence the results. The lapse of a week allowed the incident to assume a still more insignificant place in their memories. Had the testimony been extracted the next day or a month later the results would have been vastly different. The great number of subjects used allowed the establishment of certain laws of testimony; the presence of both sexes

---

<sup>4</sup>In particular I have made use of William Stern's "Lectures on the Psychology of Testimony and on the Study of Individuality," *American Journal of Psychology*, Vol. 21, pp. 270-282.

contributed variety to the results. Every state of mind, from extreme concentration to playful or restless inattention, was represented in this class that morning. My careful guarding against doing anything or wearing anything that would unduly attract the attention rendered the results more significant for the purpose in hand.

There are two fairly distinct ways of reporting facts from memory; our present purpose is to discover the relative worth of these two methods. One way is to allow the witness to tell his own story from beginning to end without interruption—the narrative method (German, *Aussage*). The other is to draw out his knowledge by asking him pertinent questions. The former method is not commonly used in courts of law to-day. In going through the scores of narrative reports which these students were asked to make on the above simple incident, nothing stands out in clearer relief than the similarity, the mechanical character, of the workings of the human mind. In general the testimony thus obtained set forth the essential facts of the situation. There were errors, to be sure, important errors; on the other hand certain reports indicated a fine grasp of the situation. Some erred on the side of crudeness of statement; others on the side of *finesse* of statement. The typical report would have given any interested third party a picture of the situation that would have met his chief requirements. This general statement of the character of the results obtained by the use of the narrative method should establish or reestablish our faith in this form of testimony, and at the same time show us what degree of error can normally be expected under such circumstances.

All the papers set forth those facts which were too obvious to be neglected; but some went into detail to a surprisingly marked degree. Girls were more apt to do this than boys as well as to mince over the facts and add a touch from their imagination or related experiences. Thus the girls quite commonly said I was embarrassed, presuming to bespeak my condition as of that time, while the young men saw no occasion for a similar remark. Everywhere I was struck by the positive character of the statement's made. There were no "maybe's," no "probably's;" I wore a red coat and a brown hat when in fact the coat was black and the hat was a blue and white toque. Rare indeed was the candid reporter. The old desire to tell a good, a complete story, was here seen cropping out. The lowlands of their memories were filled up from the highlands of their imaginations. We all dislike to stop short of a rounded-out narrative; the

desire, the temptation, to be complete adds a fringe of untruth to nearly all of our everyday reports of facts. If our observations or recall be incomplete we dare not jump the intervening gap in our account; we bridge it, perhaps entirely unconsciously, with things that might have been. Indeed, it seems altogether probable that far too many witnesses are pressed to give forth evidence without being properly equipped with the facts to be able to do so; it seems that we err on the side of expecting too much rather than on the side of expecting too little from those we have on the witness stand.

In conclusion, then, I should say that the percentage of error in these narrative reports was from twenty to twenty-five per cent. This closely agrees with Stern's figure for similar experiments. This result will be compared with that obtained from the interrogatory method of eliciting testimony and our conclusion as to their relative worth can then be drawn.

In the second or interrogatory method of eliciting testimony there are really two persons testifying, the one who asks and the one who answers. By this statement the idea should be conveyed that suggestion, as coming from the interrogator, may play as large a part in the witness's mind as the objective facts with which he came to the witness stand. As Stern says, suggestion is "the imitative assumption of a mental attitude under the illusion of assuming it spontaneously." This influence of suggestion is all the more to be guarded against because of its insidious character; it enters the witness's mind, does its damage, and departs without leaving a trace of its existence apart from the perverted testimony which it has adduced. Suggestion is the great fact to be reckoned with in any discussion of the interrogatory method of obtaining testimony. Hence the second division of this paper is devoted to a discussion of this matter.

With this in mind I framed certain of the questions asked on the same set of facts as outlined above so as purposely to influence the answers to them. I tried to introduce and to measure degrees of suggestiveness. Thus the question, Do you think he was very tall? How tall was he?, as asked, was more suggestive than the request to state his height would have been. But to ask whether the suit worn was black or brown when it was in fact gray, or to ask what color of flower was worn when in fact none was worn at all, was suggestion carried to a very far degree. Other questions were asked in a way as free from suggestion as possible. Let us run through some of these questions and answers hurriedly.

The first question was as to the time of my entrance into the room. The actual time was 11:45. 11% answered correctly; 8% did not venture an answer; 5% set a time later than 11:45; 76% underestimated the time. While recognizing the peculiar character of telling the time in a classroom, there is yet some reason for the unexpected error on the side of putting the time too early. Just such situations as this show how carefully all relevant circumstances must be borne in mind in evaluating evidence. Any bit of testimony comes out of an enveloping complex of circumstances.

The answers to the question, How long was he in the room?, were likewise difficult to interpret. The actual time was one minute. Answers varied from one, two and three seconds (invariably rendered by girls) to ten minutes. One is the more surprised at these answers because of the ease with which one could estimate the time it took the incomer to do all that he did. The bulk of the answers varied between one minute and three minutes and about thirty per cent were accurate. There was probably no element of suggestion in this question.

When asked the question, Do you think he was very tall? How tall was he?, the surprising answers four feet and six feet six inches were received. Girls were very likely to underestimate my height, suggesting to what extent people calculate height in terms of their own stature. But the young men were not inclined to overestimate my height, as the above statement might predispose one to expect. About twenty-two per cent had the correct height and the bulk of the answers varied but two inches from correctness. Presumably height is better remembered than are colors, as we shall see presently.

The more suggestive question, Did he wear an overcoat? If you think he did, describe the overcoat, trapped about thirty per cent of the class, who said no overcoat was worn. A small per cent did not know whether a coat was worn or not, while 67% tried to recall the color of the coat. Stern says that colors are very poorly remembered and such seems to have been the case in this instance. While 27% of the 67% described the coat correctly, the rest gave answers in nine different colors and styles. This showing gives clear indication that their replies were not based on any real knowledge of the facts of the case.

The very suggestive question, Was his suit black or brown?, took a large portion of the class unawares. A few said it was neither, admitted they had forgotten, or said they could not see it, but a large

percentage went on record as thinking it was black or as thinking it was brown. As a matter of fact the suit was neither color. The percentage of accuracy was very low at this point. The answers to this question show how manifestly the witness's mind is in the interrogator's hands for safe keeping.

The percentage of error in the answers to the question as to how many books were carried was large. It looks very much as if the witnesses based their answers on the probabilities of the case without actually knowing anything for a certainty. If a student were used to carrying one book he would put down one book; if two, two, etc. As a matter of fact three books were carried. In a broad sense witnesses are forever thus supplying facts, largely unconsciously, to round out their knowledge. The answers to this question were largely fortuitous.

Although no flower was worn eighteen per cent thought one was worn and three per cent described its color. This question was too suggestive and overshot its mark. But few were led astray by it. It shows, however, the important point that suggestion must not be overdone and that there is a natural limit to its functioning.

To the question, Did he appear embarrassed or nervous?, the answers were as likely to be yes as no. This result shows how difficult it is to separate the subjective from the objective. Undoubtedly every person who said I was embarrassed said so because he or she would have been in a similar situation. This is interesting psychology but very poor testimony. The young ladies' greater tendency to find embarrassment is perhaps to be explained in this way.

Only 24% had enough courage to overcome the suggestive question, Why didn't he look at the class? This is all the more astonishing in view of the fact that practically all of the reports put in the narrative form expressly stated that I did look into the faces of the class. Here in very simple form is seen one of the worst effects of the interrogatory method.

Practically every witness reproduced correctly the lecturer's remarks to me and one-half reproduced correctly my reply. However, these two remarks represented the high lights of this memory concept, the climax of this little drama, and all ears were alert to catch them. Curiosity prompted attention and as a result gave a very accurate memory concept. This experience alone shows how important it is to have some information as to the degree of attention shown when the observation is taken, when the impression is made on the witness's mind.

It will have been noted that the percentage of accuracy in these statements drawn out by the interrogatory method varies from three to ninety-five per cent with perhaps forty the average. When the narrative method was used the corresponding figure for accuracy (75-80%) was much larger. Theoretically, then, we can conclude without formal argument that the narrative method is much the better from the standpoint of accuracy. But the practitioner will say that there is no assurance that all the necessary facts will be produced when only the narrative method is used. This is a valid criticism. We have seen that the most important facts were brought out by this method but we saw also that much is left out that would have to be produced if the testimony is to be completely useful. From this accumulation of statements two propositions can be drawn. The first is that for a statement that would be generally accurate, that would be consistent and constructed with a sense of sequence and perspective, the narrative method is by far the better of the two. Perhaps at all times a witness should be allowed to tell his whole story without interruption before being cross-examined. At any rate there should be more credence placed in the narrative method and more use made of it in courtrooms. Our second proposition is that only on points which to the witness are not significant or are not sufficiently clear or which he purposely avoids, should a thoroughgoing use of the interrogatory method be made, and then only under the very considerable limitation that so far as possible "leading" or suggestive questions shall not be allowed. It is for the opposing counsel to detect such questions and to bring to the attention of the presiding judge the inadvisability of allowing them to be introduced. These two propositions are set forth merely as the offerings of experimental science; no one appreciates more than the writer the extent to which they would need to be altered to be made useful in practice.

I have purposely abbreviated the discussion of the intensive work done with the twenty students enrolled in a more advanced course in psychology. The work was done with technical care and the detailed findings are available. But after all the important results can be conveyed in brief fashion to the readers of this Journal. The problem attacked was this: to what extent can and must courts of law apply psychological tests to arrive at the accuracy of a witness's testimony. For our purposes tests of veracity are omitted, as in the beginning we purposely addressed ourselves only to the question of accuracy. Such technical tests of veracity as the well known association-reaction time

test, are in existence, but I seriously doubt whether there are any objective or mechanical tests ever so intricately devised that will give faithful results and that will dispense with the human equation, the juggling of wits between the subject and his interpreter. If this is the case these tests are no improvement upon the time-honored methods now in use of letting men read other men's minds unassisted by the apparatus of the scientist.

Our own problem, then, is to discover the extent to which accuracy inheres in the testimony of a veracious witness. Accuracy in turn depends on a number of mental traits. If one adds to ready observation a retentive memory he has two prime marks of a good witness; if his powers of association are fertile and his imagination not too rich he again has some of the attributes of a good witness. And so on with the other traits and their respective opposites. It was with such a notion in mind that I devised a lengthy series of tests through which each of these twenty students was put.

The purpose of the tests was to gain an index of each subject's mind. He was therefore looked at from many different angles, as it were. Thus, to test his readiness of reaction he was asked to cross off a designated letter in a page of printed type thrown together promiscuously. If he were accurate but slow in doing this he was of one type of mind; if speedy but inaccurate he was of another type. The work was done under pressure and the percentage of error was rendered in terms of the time used. To gain some idea of his readiness of association he was given a series of words and told to give in a designated interval their respective opposites, the wholes of which they were a part, or a word commonly associated with them. Thus black usually brought forth the response white; door, the response house; and bread the response butter. This is all very simple, and purposely so, but with the time element added a very definite notion of the witness's mental processes could be gained. Or again, if it were the imagination that needed attention, a series of chance ink-blots was placed before him and he was asked to find all the various objects he could in them. The process was repeated for several other traits. It is surprising and encouraging to note what valuable information one can obtain through the use of such simple tests as these. No extensive laboratory equipment was needed; a little ingenuity and technical precision were all that were required.

In this way trait was added to trait for each individual and then so far as possible a coefficient of correlation was worked out for him. Either the Pearson or the Thorndike formula is available. Were such

mathematical accuracy in working up the results not necessary one could gain a fairly good idea of each witness's mental processes by merely looking over the unrelated results of each separate experiment. When this much has been done we have resulting a simple statement of A or B's mental processes that cannot fail to be of some value were either of these individuals to be used as a witness. The tests are reasonably simple and easy to apply. Of what practical value they are we shall see after turning aside for a minute to discuss another matter which is closely related to the topic under discussion; viz., individual differences and criminal responsibility.

This problem is a large human one; our mention of it here is only indicative of a larger demand for recognition of it. It is now a rather commonplace remark to say that it is the nature of the criminal and, not the nature of the crime which is the proper unit of legal processes. A and B are both murderers and are sentenced to death after it has been shown that there are no ameliorating circumstances in either case. The law says that death by hanging is the penalty for murder in this degree. But who of us is so callous and so shallow as to say that A and B are so alike that exactly similar punishment must be meted out to both? How different may have been the past histories of these two men and how different the circumstances connected with their crimes. But yet the law knows only one kind of death and both are made to experience it. The law is eminently practical and abounds in exigencies. Having been shown that A and B are both murderers in the first degree it jumps a vast number of embarrassing individual differences and places both A and B on the gallows. To be sure there is a changing attitude toward the criminal showing itself of late years. The indeterminate sentence, the parole system, houses of correction and reform schools of the better type, and juvenile court all indicate that we feel that behind every crime there is a personality and that both punishment and improvement are to be reconciled with this personality.

The practicing lawyer will feel, at this point, that he is slipping off of firm ground just as soon as he departs from an objective treatment of the criminal based on the relatively simple classification of crimes. It is all too true that there are immensely greater difficulties in classifying human types than in classifying men's actions, in classifying criminals as criminals by occasion, by passion, by habit, etc., than in classifying them as robbers, counterfeiters, murderers, etc.

Ideally speaking, society has no right to point an accusing finger at any man without knowing all the facts of his life which bear upon

his wrongdoing. Indeed, something should be known of his ancestry. Biology has of late years afforded us some very interesting and useful information as to the way in which some perverted ancestry, several generations removed, reaches down and despoils a living being. Science has largely annulled Lombroso's criminal type, but yet a lay observer realizes that some individuals from birth are destined to be social misfits. Legal practice is slowly beginning to see the point in all this and probably is doing all that can be asked of it in simply recognizing this sort of evil fatalism which bears so heavily upon some members of society. In fact it seems after all that we should lose in hopeless bewilderment all that we should gain in humanization by throwing the attention entirely to the personality side of the crime. As practical men lawyers cannot be asked to be psychologists, pathologists, or sociologists. Occasionally when the crime is one of sufficient importance it may be necessary to call in the expert. Quite commonly doctors and penologists and others are called in in difficult cases. But in the great majority of cases it is asking enough if both judge and lawyer are at least converted to our "psychological point of view." In resuming this discussion we shall be answering the problem with which we began this section of this study as well as be finishing the entire essay.

We need to recognize that there are very positive differences in the structure and workings of human minds. Our brief account of the more intensive tests, just given, has prepared us for this statement. Memory, imagination, loquaciousness, gullibility, powers of association and observation, all show important differences in individuals of apparently the same mentality. To be sure we spurn the testimony of a person notoriously feeble of intellect. But we do not seem to appreciate fully enough how strangely human minds are blends; how there is an eternal law of compensation which is likely to make the memory weak if the apprehension is ready, or which makes good reasoning power go hand in hand with fluent powers of association. After all we shall have to admit that it would be well if we could look into each witness's mind and into his past, for it is only as we sympathize and appreciate him that we can pass judgment on him with a decent accuracy. The tests as described above are at hand and ready for use. With the aid of Whipple's or Starch's manual a long series can be worked up in little time. With the use of the correlation formula comparable trait can be combined with comparable trait, until with mathematical calculations a single set of numbers can be produced that will represent this man's mental pro-

cesses. Sufficient has already been said as to these tests to allow us to pass now to a brief presentation of our conclusions. They will be twofold.

The first contribution to be spoken of is the answer to the question previously proposed: what is the assistance that psychology can render to law? or what is the proper relation of these two fields? I am much more convinced than ever that the significant contribution will be that of a point of view. If somehow the idea becomes real to the practicing lawyer that there is a science of the mind, that human minds are a complex of varying traits, that there are laws of the human mind but that these must be differently stated for every single individual, a great advance toward a better state of things will have been made. If he can be made to admit, and the more unconsciously the better, that he must come and reason with this science and reckon with these laws, a great battle will have been won. Happily, things point toward a realization of our desire in this respect.

Our second and last point is concerned with how this change of attitude can be facilitated. An enthusiast could convert the most conservative of men by showing them a few of the most striking facts which psychology has to offer. The curve of forgetting, the localization of the senses in distinct areas of the cerebrum, various illusions, as of visual perception, would be very persuasive, especially if related to actual cases which have come to their attention. There is need for a popular account, replete with concrete cases, aiming to win over the practitioner to whom it is addressed to new ways of thinking. If he can be shown how very little, after all, can be brought into the range of attention and how faulty it is to allow this or that witness to talk authoritatively on a vast number of assumed observations, he will perhaps feel the embarrassment born of a guilty conscience and mend his ways. To facilitate matters all law schools should give some training in normal and abnormal psychology. To date there has been little or nothing of this kind done.

Let us be sane on this subject; let us be skeptical but yet not scornful toward this new science; let us take what it has to offer us in the way of a new point of view with open minds. Its contribution is a very real one and cannot be neglected in justice to itself and to the law.