

Summer 1939

Form Blindness and Proof (Sight Defects in Relation to the Administration of Justice)

Albert S. Osborn

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

Albert S. Osborn, Form Blindness and Proof (Sight Defects in Relation to the Administration of Justice), 30 Am. Inst. Crim. L. & Criminology 243 (1939-1940)

This Criminology 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.

FORM BLINDNESS AND PROOF

(*Sight Defects in Relation to the Administration of Justice*)

ALBERT S. OSBORN†

It is well known that there is a curious human sight defect described as color-blindness or the inability to distinguish colors. In some instances this is a very pronounced defect and in other cases it is only partial. It is not so well known, however, that there is another peculiar human sight defect that is perhaps best described as "form-blindness." In several ways it is similar to color-blindness. Moreover, it is a combined physical and mental fault that may have a very important bearing upon a decision in a legal controversy depending in any way upon human sight. It has an especially important bearing on the investigation and proof of the physical facts regarding handwriting and documents. Serious errors are made in these cases because those who must decide cannot see well.

A Pennsylvania legal opinion¹ contains the following statement: "Having the testimony present to their eyes as well as their ears, the truth may be made manifest beyond any substantial doubt." There is no doubt, of course, that the eyes help the ears in many kinds of proof, but it avails little that facts are "present to their eyes" if these eyes are defective, especially if the one thus crippled is not aware of the defect. In some instances it may thus appear that twelve pairs of eyes may be better than only one pair. One trained pair, however, with the usual knowledge and technical experience that go with them, is usually better than the twelve. If,

† Author of *Questioned Documents* (1910, 1929); *The Problem of Proof* (1922), and *The Mind of the Juror* (1937).

[Editor's note: Readers of the Journal may be interested in knowing that in June of 1938 Colby College of Waterville, Maine, conferred a Doctor of Science degree upon Mr. Osborn in recognition of the following named achievements and contributions: "Author of legal works and a court-room expert in cases involving forgeries and other questioned documents; best known to the general public for the testimony which led to the conviction of Bruno Richard Hauptmann. We honor him today for his achievement in science. He has reduced to the laws of an exact science the field of document examination, which had previously been the preserve largely of shysters and lunatics. In order to apply his new techniques, he had to become his own engineer. He designed the necessary apparatus for his work; cameras, microscopes, and many ingenious instruments of precision. By patient and comprehensive research he has mastered and codified the information necessary for identifying styles of handwriting and typescript, and for dating papers, inks, and writing-instruments. Though he has confined himself to forensic work, his methods are generally applicable, and have revolutionized all manuscript examination." Statement from citation accompanying degree.]

¹ Sharpless Estate, 134 Pa. 250 (1890).

however, the one is a "cripple," then the decision is not a conclusion but a guess.

It is because of this varying seeing ability and the necessity of making things perfectly obvious, that experienced trial attorneys see to it that proper drawings, charts, models and enlarged photographs are provided in disputed document cases as well as in numerous other classes of cases depending in any way upon human sight. In certain cases prospective jurors might well be asked about the quality of their eyesight.

Defective sight is often corrected by the oculist and the optician, and one of the most deserving of charities is that which provides aid to those who need suitable corrective lenses before their eyes. Investigation has shown the pitiful fact that thousands of school pupils that were thought to be stupid simply needed the aid of the oculist and the optician. These aids and corrections are, however, mainly physical, and this human shortcoming that may be called form-blindness, like color-blindness, is not usually corrected by the oculist. Form-blindness is no doubt in considerable part a mental defect and is due to the inability to interpret correctly what is actually focused on the human retina.

A dignified, impressive and generally capable man may wear the robe of a judge and yet be wholly unaware of the fact that he cannot see certain things as well as other persons see them. He might even be offended if it were suggested that perhaps he could not see well; and therefore a lawyer practicing in his court, who realized such a defect in the jurist's sight, would have to resort to tactful procedure in order to make the visible evidence so obvious that it fairly screams.

This varying quality of human vision may account for varying taste and pleasure in looking at pictures, flowers, landscapes and cathedrals. It is obvious that in all these fields there are those who see much better than others, and this no doubt accounts for variations in artistic ability and varying interests in these visible things. One who does not see well often has but little sense of order and may have limited mechanical ability. He may perhaps hardly be able to sharpen a lead pencil, or cut paper at right angles with shears, and his desk may show his peculiar habits of order and arrangement.

This form-blindness defect has at least three different phases. The first and most important of these is the inability to recognize and distinguish varieties and variations in form. There are wide differences in this particular phase of seeing ability. If five differ-

ent, unfamiliar forms, not especially complicated, like the simpler Chinese characters, for example, are put upon one side of a white card, or book page, and numbered from one to five, and the same identical five characters are put on the opposite side of the page or card, mixed in with only a few differing characters, there are many observers who cannot remember the forms long enough to distinguish the five characters not numbered on the opposite side of the card. The observer is unable to carry a form in the mind even for three to five seconds, or from one page to another. This is no doubt due to deficiency in the ability to recognize distinctly the various identifying characteristics of a particular complete form.

It possibly might be arranged so that the younger men, who can still learn, and who are called upon to decide legal cases depending in any way on human sight, for their own information and satisfaction could be given a suitable technical sight test. There are those who have great difficulty in the simple task of matching duplicate script words, in varying styles of handwriting, arranged in a mixed group. This test, illustrated herewith, as well as other tests, might be given.

It is of course generally understood that actual seeing is in large measure, if not altogether, a mental operation and not, as many are inclined to think, a mere physical act. The statement, "I can see what is before my eyes," is not always a true statement. To really see a thing it is necessary to analyze and interpret it to some extent, and undoubtedly it is in this particular phase of sight that form-blindness is shown. A savage is no more impressed by a locomotive than by a pair of scissors; he does not really see what he is looking at. Unfortunately there are "savages," singly and in groups, who decide law and fact cases directly against the facts.

Another characteristic of this human defect is the inability to distinguish small differences in size. There are many observers who cannot distinguish between lines or dots ranging in width from $1/200$ to $1/8$ of an inch and arrange them in order of size. This is a phase of an inquiry that may have an important bearing on proof.

There are some observers who are unable to recognize variations in length and proportions of short lines, which differences are perfectly obvious to other observers. Some observers can distinguish the difference in length of two lines only about one-half to one inch long, that show only $1/200$ of an inch difference in length. There are others who are wholly unable to see these or even larger differences.

There are still other observers who are unable to determine whether or not two lines are parallel. If the lines are comparatively short, in many cases a difference of two to five degrees is invisible, and with a group of observers the difference in seeing ability ranges from the recognition of perhaps two degrees, or less, of difference, up to four or five degrees, before the variation in parallelism can be seen. This same limitation of seeing ability is also shown in comparison of width of angles. Some observers cannot see a difference until it approaches fully five degrees in width.

All of these problems, with many similar questions, arise in the scientific examination of disputed handwriting. In forgery cases there are observers, and some of them are judges, who simply cannot see obvious, outstanding and significant differences between an actual forgery and a group of genuine signatures. The observer is not obstinate and not insincere, but really cannot see what others see. There are legal opinions that undoubtedly were written in cases of this kind by partly blind judges; they did not know that the ability of others in this field was superior to their own ability. The physical facts, which were the basis of a correct decision, were actually out of sight. These opinions, sometimes with critical comments, may become valuable precedents for those who seek to prevent proof in similar cases.

It is well known that there are hundreds of appreciative observers who see in the landscape and the scenes around them, wherever they are, many things, little and big, that wholly escape the attention of others, and this deficiency certainly is correctly described as a kind of blindness. There are those who see a beautiful landscape and others who see only the cattle. Gilbert White and Henry Thoreau did not need to travel to foreign lands in order to see many interesting and beautiful things.

Study, observation, comparison and practice no doubt will correct some of the worst defects of form-blindness, in court participants and others, but the important thing is to know that it may possibly exist. There is some misunderstanding on the subject. The plainsman as well as the sailor is given credit for sharper sight than others, but it is probable that his physical sight, with all of his experience and practice, has not been greatly improved, if at all, excepting that he has acquired the ability to interpret correctly the indistinct images which he sees, and this is true of observation in many fields. To the real student, handwriting discloses many interesting and peculiar qualities invisible to others. It may be that the common use of the word "see," meaning understand, is a more

accurate expression and more significant than it is generally thought to be.

In disputed document cases, especially of a certain character, it is obvious that, if in any way it can be obviated, difficult problems should not be submitted to untrained jurors, or judges, who are even only partly blind. This is especially true of typewriting problems and is also true of numerous handwriting problems in which significant differences in design, size, proportions, parallelism and angle are the important questions to be solved. With an ordinary jury, or a judge of unknown quality who must alone decide the case, the facts should be made as plain as it is possible to make them.

It therefore becomes necessary in these cases, especially when only one person is to decide the case, not simply to point out but to enlarge, interpret and explain significant identifying or divergent characteristics so that possibly they will come within the visible and mental comprehension of even those with defective sight, or inadequate understanding, of the subject. With the jury, as often selected, the task seems almost hopeless but if the rules permit a fair and free exposition with ample time, clear explanations and proper illustrations, it may be possible to show the fact even to a jury. Two or three out of the twelve may be able to see and they can show the others.

With defective hearing a sound is not heard by certain persons until it reaches a certain degree of loudness, and the same is true of sight; in each case a thing is practically not recognized until it is brought up to the loudness, or to the size, that comes within the observer's limited comprehension. These facts appear to be obvious but there still are attorneys who strenuously object to enlarged photographs and there is a judge here and there who does not seem to understand why they are necessary.

This same deficiency in sight is shown by varying ability to recognize individuals. There are those who have what is described as a photographic memory of faces, or the "camera eye," and there are others whose ability in this field is of a very low order. Sincere but erroneous evidence is given by those who do not see clearly who attempt to identify persons. This is very dangerous testimony and many errors of this kind have been made.

Finally, if the reader has read this far and has understood what is here said, he may do well to ask himself, "I wonder if I see as well as others see?" It is especially important that he should ask this question if he is a referee or a judge who must decide a case

that even in part depends upon the accuracy of human sight,

For the purpose of testing himself as to possible "form-blindness" the reader is referred to the accompanying illustrations.

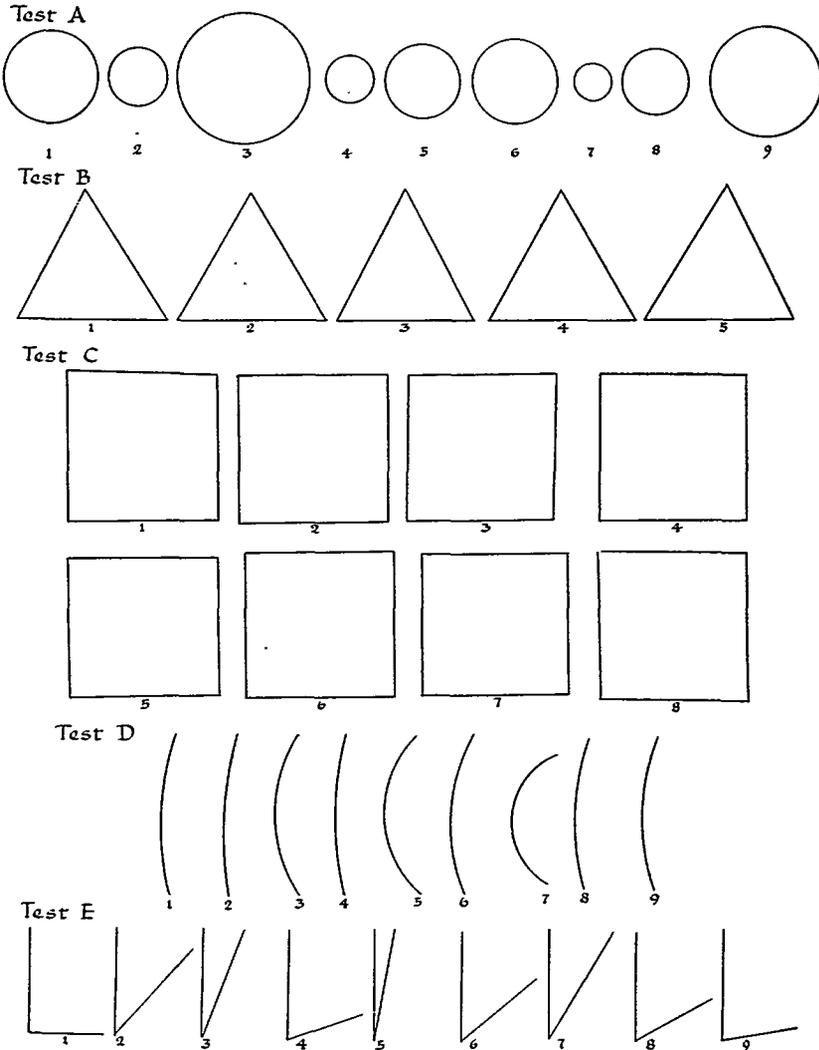


FIGURE 1

Test A: Size of circles in order. Test B: Which are equilateral triangles? Test C: Which are squares? Test D: Arrange numbers of lines in order of curvature. Test E: Arrange numbers of angles in order of width. No instruments to be used. (See page 251 for correct answers.)

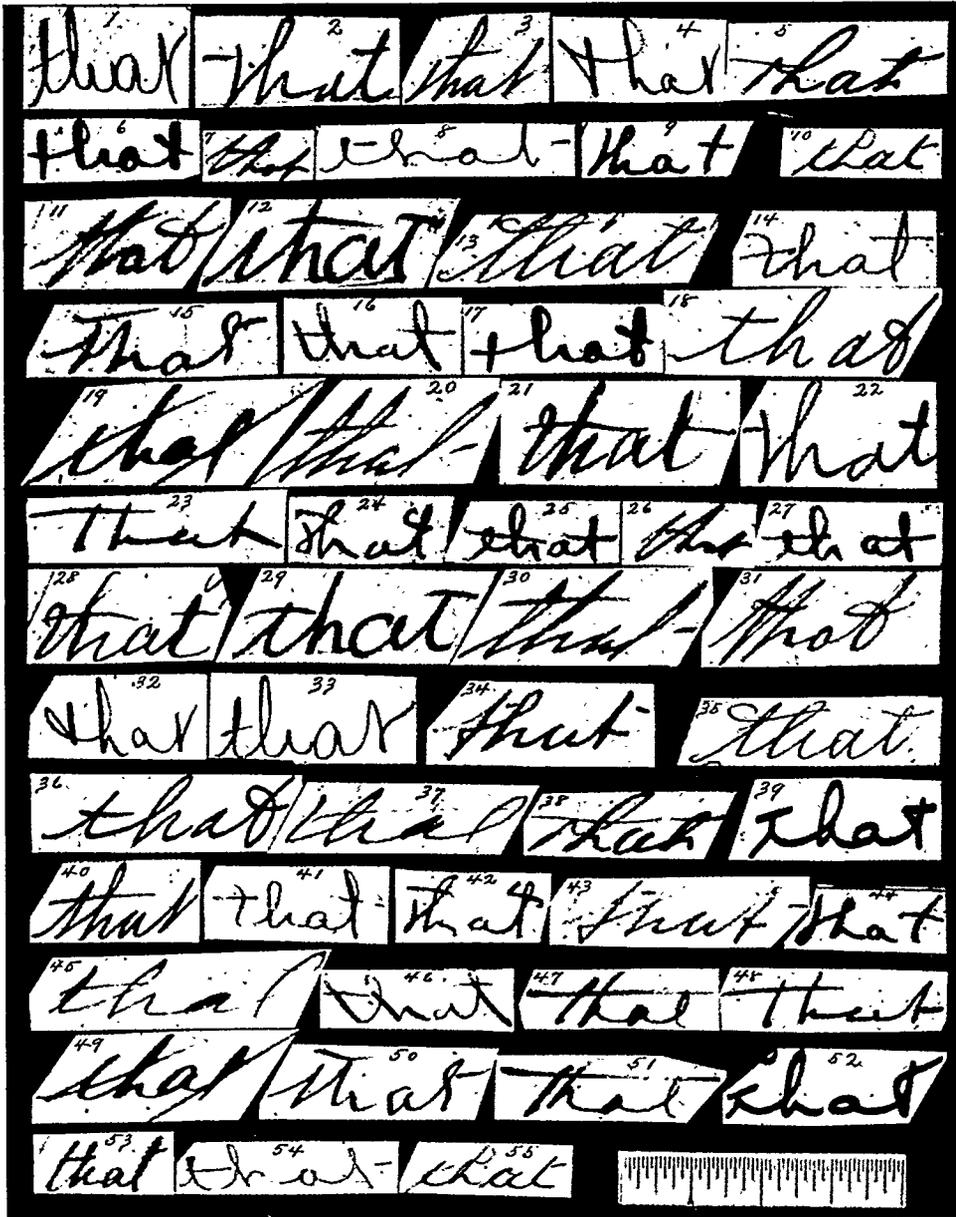


FIGURE 2

Test F: Match the twenty-seven pairs of words and find the one word not mated. These words are all taken from actual letters and illustrate variations in handwriting. The identity is unmistakable when the duplicate word is found. The test should be completed in from thirty to sixty minutes. (See page 251 for correct answer.)