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Presumptions, Assumptions, and Due Process in Criminal Cases: A Theoretical Overview

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Introduction

There is no agreement among legal writers as to exactly what a presumption is or how it operates. Most are agreed that a presumption is a legal mechanism which, unless sufficient evidence is introduced to render the presumption inoperative, deems one fact to be true when the truth of another fact has been established. In legal terminology, the fact which may or must be deemed proved is called the "fact presumed," and the fact whose truth must be established before the "fact presumed" will be deemed true is called the "fact proved." If sufficient evidence is proffered to render the presumption inoperative, the presumption is commonly said to have been "overcome" or "rebutted."

Since the decision of Mobile J. & K.C.R.R. v. $Turnipseed^1$ it has been fairly certain that the due process requirements of the fifth and fourteenth amendments will void the operation of presumptive language which works in an unreasonable or capricious manner. Since the decision of Bailey v. Alabama² it has likewise been clear that presumptive language may not be used to circumvent substantive constitutional rights. In the years since Bailey and Turnipseed, the Supreme Court has struggled to develop tests which isolate the illegal presumption from the allowable presumption. Although the Court has occasionally indicated in dicta that more stringent scrutiny will be given to presumptions operating against criminal defendants than to those operating in civil cases,3 the Court has used the same formulae to judge the legitimacy of presumptions in both areas. Only in Leary

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v. United States4 did the Court finally give express recognition to the proposition that a more stringent standard might be required in criminal cases, but the question was left unanswered.

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Intuitively, we feel that there are special considerations involved in the review of presumptions in the criminal area. The latitude of the state in defining the conditions under which a civil remedy may or may not be given is much wider under the due process clause than the latitude which it has in defining or altering the circumstances under which a criminal defendant shall suffer loss of life or liberty. One of the objectives of this article is to bring the special considerations applicable to presumptions against the criminal defendant under the due process clause from the level of intuition to the level of articulated principle.

Regardless of whether they are applied in the civil or criminal field, the constitutional tests currently used to evaluate presumptive language contain serious flaws. The Leary decision made clear that the dominant constitutional test to be applied to presumptive language is the "rational connection test." Although first stated in Turnipseed, the best known statement of this test appears in Tot v. United States:

Under our decisions, a statutory presumption cannot be sustained if there be no rational connection between the fact proved and the ultimate fact presumed, if the inference of the one from the proof of the other is arbitrary because of lack of connection.⁵

An examination of the cases in which the Court has relied, or claims to have relied, on the rational connection test reveals a number of open questions which stand as weaknesses in the test as now formulated.0 First, it seems obvious that the rational connection must be stronger in some circumstances than in others, even if the presumption is worded the same way in both circumstances. A comparison of the Court's decisions in Turnipseed and in Western and Atlantic Ry. v. Henderson' illustrates this best. Both cases involved a statutory presumption of negligence in suits arising from accidents involving a railroad company's equipment and resulting in death. In both cases, the presump-

^{4. 395} U.S. 6, 36 n.64 (1969).
5. 319 U.S. 463, 467 (1943).
6. See, e.g., Lindsley v. Natural Gas Co., 220 U.S. 61 (1911); Luria v. United States, 231 U.S. 9 (1913); McFarland v. American Sugar Co., 241 U.S. 79 (1916); Hawes v. Georgia, 258 U.S. 1 (1922); Yee Hem v. United States, 268 U.S. 178 (1925); Manley v. Georgia, 279 U.S. 1 (1929); Western & Atl. R.R. v. Henderson, 279 U.S. 639 (1929); Morrison v. California, 291 U.S. 82 (1934); Tot v. United States, 319 U.S. 463 (1913); Gainey v. United States, 380 U.S. 63 (1965); United States v. Romano, 382 U.S. 136 (1965).
7. 279 U.S. 639 (1929).

tion was interpreted by the court below to require the defendant to produce some evidence of due care to escape a directed verdict. In Turnipseed, if such evidence had been introduced, the issue of negligence would have been submitted to the jury with instructions that the plaintiff had to prove defendant's negligence by a preponderance of the evidence. In Henderson, however, according to the lower court, if evidence had been introduced by the defendant, the issue of negligence would have been submitted to the jury with instructions that they were to find for the plaintiff unless the defendant proved due care by a preponderance of the evidence. Both cases involved the same fact-proved, fact-presumed relationship. The strength of the inferential connection between the fact proved and the fact presumed was probably the same in both cases, and probably strong enough to justify using the term rational—i.e., as we interpret it, more likely than not. Yet in Turnipseed the presumption was held rational, and in Henderson it was struck down as irrational.

It seems apparent that rationality was not the only factor involved in the decisions. One difference between the cases is clear. As opposed to the interpretation of the court in *Turnipseed*, the court in *Henderson* interpreted the presumption so as to switch the burden of persuasion on the issue of negligence from the plaintiff to the defendant. Apparently, the rational connection was not strong enough to overcome this added disadvantage. Apparently we must not only consider the strength of the connection between the fact proved and the fact presumed, but also the way in which the presumption affects the relative positions of the parties. But the Court has never indicated the standards or principles according to which we should consider this factor. Another goal of our article will be to suggest how courts should analyze the application of presumptive language and what effect different applications should have on the validity of the presumption.

The Supreme Court did consider the magnitude of the disadvantage created by the operation of a presumption in formulating the second constitutional test applied to presumptions, the comparative convenience test. The test was first formulated by Justice Cardozo in a dictum in *Morrison v. California*, when he wrote:

The decisions are manifold that within limits of reason and fairness the burden of proof may be lifted from the state in criminal prosecutions and cast on the defendant. The limits are in substance these, that the state shall have proved enough to make it just for the defendant to be required to repel what has been proved with excuse or explanation, or at least that upon a balanc-

ing of convenience or of the opportunities for knowledge the shifting of the burden will be found to be an aid to the accusor without subjecting the accused to hardship or oppression.

... For a transfer of the burden, experience must teach that the evidence held to be inculpatory has at least a sinister significance . . . , or if this at times be lacking, there must be in any event a manifest disparity in convenience of proof and opportunity for knowledge, as, for instance, where a general prohibition is applicable to every one who is unable to bring himself within the range of an exception. Greenleaf, Evidence, Vol. 1, § 79. The list is not exhaustive. Other instances may have arisen or may develop in the future where the balance of convenience can be redressed without oppression to the defendant through the same procedural expedient. The decisive considerations are too variable, too much distinctions of degree, too dependent in last analysis upon a common sense estimate of fairness or of facilities of proof, to be crowded into a formula. One can do no more than adumbrate them; sharper definition must await the specific case as it arises.8

Thus stated, the test seeks to determine if the burden imposed on the opponent of the presumption is justified by the aid it gives to the proponent, or, in a criminal case, if the burden placed upon the defendant is outweighed by that lifted from the prosecution.9

Although Cardozo's language is eloquent, it does not shed much light on how one is to administer the comparative convenience test. The only principle which can be seen in the cases in which the test has been applied¹⁰ is that, in both civil and criminal actions, the inconvenience of the party for whom the presumption operates in producing proof will affect the standard by which the court will judge the presumption. Presumably, less of a rational connection is necessary to sustain a presumption if the party aided by the presumption would otherwise be at a severe disadvantage in mustering proof of the presumed fact. Exactly how a court is to make a judgment on this matter is not made clear, and indeed, Cardozo disclaims any attempt at setting out guidelines for such a judgment. Another object of our article is to set out

^{8. 291} U.S. 82, 88-91 (1933).
9. In Tot v. United States, 319 U.S. 463 (1943), the Court asserted that the relative convenience test was merely a "corollary" to the rational connection test and that the latter was controlling, inasmuch as the relative convenience test could not save a presumption from constitutional infirmity in the absence of a rational connection between the fact proved and the fact presumed. Without real explanation, Mr. Justice Harlan affirmed this proposition in Leary v. United States, 395 U.S. at 25. The authors contend in passing that the word "corollary" is somewhat inappropriate. Truly correlative tests cannot reach different results since a corollary is merely a necessary inference from a stated principle or rule ciple or rule.

^{10.} Rossi v. United States, 289 U.S. 89 (1932); United States v. Fleischman, 339 U.S. 349 (1949).

the criteria by which questions of the convenience of proof should be taken into account in judging the validity of presumptions against criminal defendants under the Constitution.

The varying application of the presumptions in Henderson and Turnipseed correspond to the interpretations suggested by two of the most famous commentators in the field of presumptions, Edmund Morris Morgan and James Bradley Thayer. By the Thayer approach, once the opponent of the presumption has introduced evidence which would justify a jury finding in his favor, the presumption "drops out" of the case, and the issue is submitted to the jury as if the presumption had never existed.¹¹ As in Turnipseed, the burden of persuasion remains on the party for whom the presumption had previously operated. By the Morgan approach,12 as exemplified in Henderson, the presumption imposes on the opponent of the presumption not only the burden of introducing evidence but also the burden of persuasion as to the issue involved. The operational results of this interpretation of the presumption in Henderson are very similar to those which would have been produced if the cause of action were "injury by railroad equipment resulting in death," and a statute provided the defense of "operation of equipment with due care."

The use of the Morgan approach to presumptions in the area of criminal law presents significant problems, for in effect it redefines the crime charged. For example, let us examine the Marihuana Import Act. 13 The Act purports to define a criminal offense whose elements are (1) possession of marihuana, (2) the imported status of said marihuana, (3) the illegality of said importation, and (4) the knowledge of defendent of each of these facts. The statute creates a presumption which, generously interpreting its obscure language, presumes importation, illegality and knowledge from the fact of possession. In Leary v. United States the trial court's instructions to the jury interpreted this presumption to operate approximately in accordance with Morgan's analysis.14 The defendant, upon proof of possession, had to prove "to the satisfaction of the jury" (a standard which is probably at least as rigorous as "a preponderance of the evidence") either non-importation, legality of importation, or non-knowledge, in order to escape conviction. The defendant would not be in a significantly different position if

^{11.} J. Thayer, Preliminary Treatise on Evidence 337 (1896).

E. MORGAN, BASIC PROBLEMS OF EVIDENCE 33-35 (1954).
 21 U.S.C. § 176(a) (1964).
 See Leary v. United States, 383 F.2d 851 (5th Cir. 1967).

the crime had been defined as possession, and defenses of non-importation, etc., had been provided in the statute. It becomes obvious that there is an intimate relationship between the operation of a Morgan presumption and the creation of an affirmative defense. But do the same principles of due process apply to the creation of defenses as apply to the creation of a Morgan presumption? The Supreme Court has never attempted to put forth constitutional standards for reviewing the designation of an issue as an affirmative defense rather than an element of a crime. We believe that such standards are necessary, and, consequently, shall try to develop them in this article.

The last problem with which we deal involves the language by which the duty of the jury in regard to the operation of a presumption is conveyed to those who are jurors. Some courts, for example, in instructing juries, state that the trier of fact may infer the fact presumed from the fact proved, rather than that the trier of fact shall infer the fact presumed. This permissive attitude toward the operation of presumptions in criminal cases has been adopted by the American Law Institute in the Model Penal Code.15 We believe that this approach gives rise to perplexing problems in regard to maintaining the proper role of the jury.

Similar problems arise from presumptions in criminal statutes which are drawn in language which makes it difficult to determine what standards the jury must follow in determining facts. For example, the presumption in the Marihuana Import Act, held unconstitutional in Leary, reads as follows:

Whenever on trial for a violation of this subsection, the defendant is shown to have or to have had the marihuana in his possession, such possession shall be deemed sufficient evidence to authorize conviction unless the defendant explains his possession to the satisfaction of the jury.16

Phrases such as "sufficient evidence" may, as we shall discuss later, interfere with the court's ability to control the jury and to establish correct standards of proof. The Supreme Court faced a similarly worded presumption in Gainey v. United States,17 and chose (as was astutely pointed out by Justice Black in dissent)18 to rewrite the presumption rather than face the problems it created. In Leary both

MODEL PENAL CODE § 1.13 (Tent. Draft No. 4, 1955).
 21 U.S.C. § 176(a) (1964).
 380 U.S. 63 (1965).
 380 U.S. at 76-77.

Justice Black and the Court ignored the problems created by the use of the phrase "sufficient evidence." The final objective of this article is to establish criteria by which such language may be examined.

II. Definitions

To fulfill the objectives outlined above, it is necessary to define the terms we shall use in the rest of the discussion rather more precisely than we have heretofore defined them.

Germane Issues:

When the state or plaintiff comes into court demanding that some action be taken by the court, the substantive law deems certain issues "germane" to whether what is demanded will be done. By our use of the term "germane issues" we mean all of those issues which must be resolved one way or the other before the court can come to a decision. Germane issues are characterized as being part of the case of the plaintiff (prosecution) or the defendant. Any criminal or civil action can be conceptualized in terms of this division: if the plaintiff or prosecution establishes A, B and C, etc., then what it wants will be done unless the defendant establishes X, Y or Z, etc. In a civil action for negligence, for example, A, B and C may represent proof of the defendant's negligence and the damages resulting therefrom. X, Y and Z might represent contributory negligence, the plaintiff's assumption of risk, and the fact that plaintiff's injury was beyond the scope of the defendant's liability. In a criminal case for murder, Y might represent self-defense and Z, insanity. As used above, A, B, and C are sometimes referred to as elements of the plaintiff's case or elements of the crime, and X, Y and Z as affirmative defenses.

The Three Burdens:

Three burdens are associated with each germane issue. The first is the burden of pleading, the responsibility of alleging that the necessary facts are true. The second is the burden of producing evidence, or, in some contexts, the burden of going forward with the evidence. The third is the burden of persuasion, the burden of convincing the trier of fact that what is alleged is true to the standard of certainty required by law. Normally, the plaintiff or prosecution must bear each of the three burdens in regard to each element of its case or of the crime, and the defendant must bear each burden in regard to affirmative defenses. In a number of cases, however, the burdens with regard to a specific germane issue are divided between the plaintiff

and the defendant. For example, the plaintiff may have to allege A in his complaint or indictment; the defendant may have to present evidence of not-A in order to escape the law deeming A to be true; and the jury may be instructed that they must be convinced of not-A to a preponderance of the evidence. Is this issue part of the plaintiff's case, or is it an affirmative defense which the law requires the plaintiff to raise for the defendant as a matter of course? We believe that attempting to analyze each of these hybrids separately as a different mechanism would be of little use. In terms of importance, the burden of persuasion is much more significant for purposes of classification than the formalities of pleading or the less onerous burden of producing evidence. We will therefore consider the question of who bears the burden of persuasion dispositive for classifying an issue as part of the plaintiff's case or as an element of the defense. Consequently, in terms of our analysis, if the prosecution has the burden of persuasion as to an issue, the issue may properly be characterized as an "element of the crime"; if the defendant has the burden of persuasion as to an issue, the issue may be called an affirmative defense.

Presumptions:

A presumption is that legal device which imposes the burden of introducing evidence as to a given issue upon the opponent of the party who has the burden of persuasion as to that issue. Thus, if in a particular jurisdiction the question of insanity is treated such that the defendant must produce some evidence of insanity in order to get the question of insanity before the jury, but the prosecution has the burden of persuading the jury that the defendant is sane, then the issue of insanity is governed by a presumption and there is a presumption of sanity.

As another example, let us examine the crime of possession of narcotics with intent to sell. The elements of the crime are (1) possession and (2) intent to sell. In addition, assume that the statute has the following language:

The intent to sell shall be deemed proved from proof of the possession of more than an ounce of the narcotic substance, unless the defendant introduces evidence, which if believed, would warrant the jury's finding no intent to sell.

An individual's intent to sell narcotics (the fact presumed) is presumed when he possesses more than an ounce of the substance (the fact proved). The statute imposes the burden of introducing evidence upon the opponent (i.e., the defendant) of the party having the burden of

persuasion (i.e., the prosecution). It is important to note that a presumption, as we have defined it, never "shifts the burden of proof." We are therefore rejecting the Morgan view of presumptions, which asserts that a presumption shifts this burden, and accepting the Thayer view. Although we side with Thayer as to the definition of a presumption, however we do not disagree in all cases with the result which Morgan reached in regard to allocating the burden of persuasion when he dealt with devices which he called presumptions. We merely do not call those devices presumptions.

Assumptions:

Earlier in the article, we set forth the rule that a given issue was in the case of the party who had the burden of persuasion as to that issue. Now we must ask an unusual question—a question asked to our knowledge by only one earlier commentator, Otis Harrison Fisk.¹⁹ What is the legal device which imposes the burden of persuasion and the risk of non-persuasion, as to a given issue, on one party or the other? Asked another way, what is the legal device that renders a "germane issue" part of the case of one party, as opposed to the other?

As suggested by Fisk, we shall call the device which imposes a burden of persuasion an assumption. Where the plaintiff or the prosecution has the burden of persuasion as to issues A, B and C, the law assumes not-A, not-B and not-C until the plaintiff or prosecution persuades the jury otherwise. As can be seen, there is operating in every criminal trial not a presumption of innocence, but an assumption of innocence, since the prosecution has the burden of persuasion with regard to the defendant's guilt. Similarly, for every issue X, Y or Z, there is an assumption of not-X, not-Y, and not-Z which can only be overcome if the defendant is able to persuade the jury otherwise. It is helpful to remember that when an assumption operates against a defendant, it does nothing more mysterious than to impose a burden of persuasion upon him and thereby create an affirmative defense.

It follows from our definition of assumption, that an assumption is operative in every case in which a presumption exists. An assumption is the device which allocates the burden of persuasion. A presumption imposes a burden of introducing evidence as to a given issue on the

^{19.} O. Fisk, The Law of Proof in Judicial Proceedings (1928). Otis Harrison Fisk is a brilliant analyst to whom the authors owe much of the direction in their thinking about presumptions. It is unfortunate that he was never recognized or studied by the most influential writers on presumptions.

opponent of the party who has the burden of persuasion as to that issue. Therefore, whenever there is a presumption of X, such that one party has the burden of introducing evidence as to X, there is also in operation an assumption of not-X. Once the presumption is overcome, the party in whose favor the presumption operated must defeat the assumption by proving X to whatever standard is established by law.²⁰

A Word of Justification:

Reconsider now our earlier treatment of the Turnipseed and Henderson cases. The device in operation in Turnipseed was a true presumption in our terms because it imposed a burden of introducing evidence upon the opponent (the defendant) of the party who had the burden of persuasion on the issue (the plaintiff). In Henderson, on the other hand, the device was not in our terms a presumption, but rather an assumption. The defendant in Henderson had the burden of persuasion on the issue of negligence. We believe that immeasurable confusion in the law has resulted from calling these two very different devices by the same name. The legal consequences of the two devices are significantly different in terms of the degree of evidentiary hardship incurred by the parties. The burden of persuasion entails a much heavier evidentiary burden than the burden of introducing evidence. As will become apparent later in this article, the difference in the evidentiary burden imposed by the two devices has a critical bearing upon the implementation of standards of constitutional scrutiny. We believe that acceptance of the terminology we have defined will avoid any confusion in the future.

III. The Effect of Presumptions in the Light of Due Process

The purpose of this section is to set forth workable standards for distinguishing constitutional from unconstitutional presumptions and constitutional from unconstitutional assumptions. We must first examine how such legal devices might infringe the constitutional rights of criminal defendants; we can then turn to the more important task of formulating sound standards by which the operation of these devices may be kept within the bounds of constitutional safeguards.

Let us begin by considering presumptions, a much easier starting point. Consider a crime defined by elements A, B and C. Absent any

^{20.} Throughout this article, the terms "presumptive language" and "presumptive device" have been used, for lack of any better generic term, to include both presumptions and assumptions.

presumption, the prosecution would have the burden of proving each of the elements of the crime beyond a reasonable doubt. There is, of course, no set formula for mustering such proof. The prosecution may produce abundant evidence as to each element; or it may produce only scanty evidence as to one or more of the elements, and then argue, for example, that by drawing on their general experience, the jury may reasonably infer that if defendant has, beyond a reasonable doubt, done A and B, then surely beyond a reasonable doubt he has done C as well. If, in the light of the total proof offered in the case, the inferential connection between A-plus-B and C is such that from proof of A-plus-B the jury might rationally infer C beyond a reasonable doubt, the verdict will not be upset. This inferential process is inherent in the use of a jury to determine criminal liability. While the accuracy of this process has never been adequately measured, our legal system postulates that it provides the greatest guarantees that the criminal defendant will be afforded a fair determination of his guilt or innocence.

Let us now consider a presumption that "if A and B are proved," C is also proved, unless the defendant introduces sufficient evidence tending to show not-C. This presumption alters the normal guilt determining process in two fundamental ways:

1. It requires a defendant to come forth with evidence of not-C before he can enjoy the untrammeled jury process—i.e., he must

participate and perhaps testify himself.

2. If the defendant does not produce sufficient evidence of not-C, he is deprived of the natural response of the jury to infer or not to infer C from the proof of A and B, because the presumption requires that C be deemed true automatically if the jury finds A and B.21

^{21.} Earlier we stated that when a party fails to meet a burden of introducing evidence upon an issue, that issue is not submitted to the jury. Rather it is decided against the party who failed to meet the burden of introducing evidence. Under this view, if the defendant fails to introduce any evidence which, if believed, would justify a jury's finding of not-C, then if the prosecution has proved A and B, C would automatically be deemed true; the jury would have no say in the matter. This result has disturbed a number of commentators, who maintain that such an operation is a denial of a trial by jury on the issue; rather than declare that the finding of C is automatic, they would prefer always to let the issue of C go to the jury. When the issue of C is submitted to the jury, according to this view, the jury is to be instructed along the following lines:

While the presumed fact (C) must on all the evidence be proved beyond a reasonable doubt, the law declares that the jury may regard facts giving rise to the presumption as sufficient evidence of the presumed fact.

This is an expression of what we call the "permissible inference doctrine"—the finding of C is not held to be automatic and beyond the will of the jury, but rather is held to be a "permissible inference" which, at least in theory, the jury need not make. We shall discuss the implications of a "permissible inference" in a later section of the article.

If the defendant successfully overcomes the presumption so that the prosecution must actually prove C beyond a reasonable doubt, any infringement of the defendant's constitutional rights resulting from the two alterations of the guilt determining process might be considered harmless. We do not wish to minimize the hardship imposed even upon successful defendants who have been forced to come forth with evidence, especially those who have been forced to take the witness stand for lack of recourse to other sources of proof tending to show not-C. In this regard, we suggest that defendants who are forced to offer their own testimony of not-C, who restrict their testimony to proof of not-C, and who would not otherwise have chosen to testify, should enjoy severe limitations upon being cross-examined. Our primary concern, however, is with the defendant who has not mustered such overcoming evidence and against whom the presumption operates in its full force.

On behalf of these defendants, constitutional arguments can be made along the following lines:

- 1. As to the element which is presumed from the elements proved, the defendant no longer enjoys any benefits from the "presumption" (more properly the "assumption") of innocence. In practical effect, although not technically, he is no longer assumed innocent of the element C.
- 2. The defendant is no longer provided a jury trial upon the element presumed, inasmuch as he is deprived of the untrammeled response of the jury as to that element.
- 3. Since the determination of the presumed element is automatic, the defendant is denied a trial altogether on that element: the trial as to that element was conducted in the hearing rooms and floors of the legislatures, or was effected by case-law development to which he was not a party.
- 4. As a corollary to (3), the defendant was not allowed to confront his "accusors."
- 5. The defendant may be punished, not as a result of all elements of the crime having been proved beyond a reasonable doubt, but for not having risen to his own defense, which, of course, is no crime.

We offer these arguments only in skeletal form, because they are only of tangential import to the reasoning set forth in this paper. They are important to our thesis to the extent that they render the use of any presumption in a criminal case suspect in constitutional terms; the more credence given to these arguments, the more suspect presumptions become. Mr. Justice Black, for example, finds the argument con-

cerning the compulsion to testify against oneself enough to render unconstitutional the operation of some presumptions.²²

One way in which such arguments have been met in the past is to argue that if Congress or the legislature could constitutionally punish individuals for commission of elements A and B, which remain to be proved by the prosecution beyond a reasonable doubt, then the fact that other elements are included in the definition of the crime and are allowed or compelled to be inferred from the proven elements, is a matter of legislative grace toward the defendant. At least under the presumptive machinery, it is argued the defendant—even having committed A and B—is afforded a chance of escaping conviction, whereas under a more narrowly defined statute, proof of A and B alone would have resulted in conviction. This rationale, termed "the greater includes the lesser" rule, was postulated by Justice Holmes in Ferry v. Ramsey.²³

The Ferry case dealt with a Kansas statute that made bank directors personally liable for losses to depositors on deposits made while the bank was insolvent, if the bank director assented to the deposits with knowledge of the insolvency. Proof of insolvency created a "presumption" of knowledge. Actually, the device operated as an assumption, since the burden of proving lack of knowledge rested on the defendant. The presumptive language thus created an affirmative defense, but the decision was written in language which would apply to presumptions as well. Since the state could legally punish a bank director for unknowingly accepting deposits when the bank was insolvent, Holmes reasoned, no injury occurred to the defendant in the working of the presumption.

The Ferry case was not well reasoned. In our country, the almost total elimination of common law crimes underscores a belief that the decsion as to which actions will be criminally punishable can only be made through the open political processes of the legislature. Consider the following two statutes:

- 1. It shall be a crime for an individual to be present in a house where he knows narcotics are illegally kept.
- 2. It shall be a crime for an individual to be present in a house where narcotics are illegally kept, whether or not he knows that the narcotics are so kept.

^{22.} See Justice Black's dissent in Gainey v. United States, 380 U.S. 63, 76-77 (1965). 23. 277 U.S. 88 (1928).

In the first statute, a legislature has deemed three factors germane to punishment: (a) presence of the individual; (b) the presence of narcotics in the house; and (c) the defendant's knowledge. In the second statute, only two factors are deemed germane to whether an individual will be punished: (a) presence of the individual; (b) the presence of narcotics in the house. The electorate might approve of the passage of the first statute, but not the passage of the second. The fact that a legislature might pass the second statute does not mean that, given the political temperament of the state, the legislature would in fact have passed it. If the legislature nominally recognizes knowledge as germane (as it did in the first statute) and further, as the type of germane issue to be proved by the state, and then arranges its processes so that most of those who lack knowledge are still sent to jail (as though the second statute had been passed), then those individuals are being punished for a crime which has never undergone the political checks guaranteed by representative government. This, we believe, is a violation of due process. It is this latter consideration which the "greater includes the lesser" rule fails to consider and which, in our view, is its major theoretical weakness.

In any case, we believe that *Ferry v. Ramsey* is no longer controlling for the following reasons:

- 1. The rule in *Ferry v. Ramsey* has never been followed. It has in no subsequent case been considered as a standard for testing the constitutionality of a presumption or a defense.
- 2. The decision in Romano v. United States²⁴ overrules Ferry, at least as applied to presumptions in criminal cases.

In Romano, the court was confronted with a statute that punished the possession of illegal alcohol distillery equipment. The statute, as interpreted by the Court, contained a presumption that possession is established when the government has successfully proved that the defendant was present at the illicit distillery.²⁵ The Court first held that there was no rational connection between presence and possession, expressly refusing to apply the "greater includes the lesser" rule:

It may be, of course, that Congress has the power to make presence at an illegal still a punishable crime, but we find no clear indication that it intended to exercise this power. The crime remains

^{24. 382} U.S. 136 (1965).
25. The statute provided that proof of defendant's presence at the illicit distillery is "sufficient evidence to authorize conviction unless the defendant explains such presence to the satisfaction of the jury." We would argue that this language may create an assumption. See pp. 196, 203-205 infra.

possession and not presence, and with all due deference to Congress, the former may not constitutionally be inferred from the latter.²⁸

Thus, while recognizing that Congress might have had the power to punish an individual merely for his presence at the still, the Court nevertheless refused to allow this "greater power" to save the presumption from infirmity. At least insofar as presumptive language in criminal cases is concerned, the test in Romano is not whether the greater offense might have been created, but whether or not the offense as created is constitutionally acceptable.27

After Romano, the constitutional attacks enumerated above²⁸ cannot be dismissed as easily. Yet, notwithstanding the strong rhetorical effect of these arguments, we must acknowledge that the presence of presumptions as a part of our law antedated the founding of our nation. This fact leaves three courses open to those sensitive to the operation of presumptions against criminal defendants. The first path is to argue that the initial tolerance for presumptions, as well as affirmative defenses, was a mistake which more refined notions of due process now demand undoing. The second is to argue that the so-called "traditional" presumptions (and also affirmative defenses) are historical accidents which cannot be undone, but that no analogous newly created devices should be tolerated. Finally, we can seek to articulate principles which will neither undo all of the past, nor freeze the present development of such devices, but which will nevertheless provide assurance that any presumption—past, present, or future will operate well within the demands of due process. We have chosen the third course for a number of reasons. First, while we do not believe that an absolute prohibition of, or "freeze" upon, presumptions would now produce an unworkable disadvantage for state and federal governments, we do believe that the possibility of unforeseeable future developments in the relationship between the individual and the state renders such an inflexible rule unwise. Second, we believe that this approach, which is more in keeping with the spirit of our law, will be more hospitably received by our courts. Indeed, if the principles we set forth will truly satisfy the demands of due process—and with

^{26. 382} U.S. at 136, 144.

27. We would hope that the same rationale would be applied to defenses created through specific legislation as well as through presumptive language. And we shall discuss this later. We can conceive of no reason why this should not be the case, for the rights of the defendant should not be made to turn on the employment of the term "presumption" in the creation of a defense.

28. See p. 176 supra.

makes sense when viewed critically.

the passing of the "greater includes the lesser" rule, we believe this is now possible—, any more absolutist approach amounts to "overkill." This we believe is the true significance of Romano. So long as it might have been held that the state had the power to manipulate the presumptive and assumptive devices in connection with a "lesser offense" because it "had power to punish for the greater offense," any test applied to the presumption or assumption was as much a "grace" as the presumptive and assumptive devices which were in contention. Now, standadrs can be formulated which, if accepted, will not be short-circuited. The problem remains to formulate some test which

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When dealing with presumptions which aid the prosecution against a criminal defendant, the authors believe that one of the factors in the comparative convenience test—the consideration of the prosecutorial difficulty in producing evidence on an issue—should be viewed only as a threshold standard to determine whether there is some proper state interest which legitimizes reliance upon presumptive devices. In addition, we submit that the interest of the government should be confined to the evidentiary problem of mustering proof and should not extend to its zeal to control a given type of misconduct which is proscribed by the criminal law. In other words, we see no justification for the proposition that the government's interest, as contemplated here, is stronger with respect to the prosecution of murder than the prosecution of petit theft. Our reasons for confining the state interest to an assessment of its evidentiary hardship will become clear after we have discussed two additional standards which we deem appropriate for the scrutiny of presumptions.

While we approve this one leg of the comparative convenience test as a threshold inquiry into the constitutionality of a presumption, we believe that presumptions which pass this test may yet present serious constitutional problems. Consider the two essential alterations in the process of adjudication which are occasioned by the existence of a presumption, which we repeat for convenience:

- 1. The presumption requires a defendant to come forth with the evidence of not-C before he can enjoy the untrammeled jury process, *i.e.*, he must participate and perhaps testify himself.
- 2. If the defendant does not produce sufficient evidence of not-C, he is deprived of the natural response of the jury to infer or not to infer C from the proof of A and B, because the presumption requires that C be deemed true automatically if the jury finds A and B.

We contend that these alterations may significantly increase imprecision in the process of guilt determination. These alterations will produce no imprecision only if:

1. All innocent persons against whom A and B can be proved will be able to produce sufficient evidence of not-C to overcome the presumption; or

2. In all instances where A and B can be proved, C is also true—that is, there is a 100% correlation between A-plus-B and C.

If the first condition is satisfied, the presumption will "drop out" of the case as to innocent persons who have committed A and B but not C. Once the presumption has been overcome, the prosecution must prove C beyond a reasonable doubt; and the jury is free to find or not to find C, just as though the presumption were not present. In this part of the discussion, for the sake of simplicity, we assume a totally accurate jury; therefore, free of the automatic determination of C which the presumption requires, the jury will without error acquit all those who have not committed C.²⁰ Consequently, if this first condition is satisfied, the accuracy of the guilt determining process will not be altered as a result of the presence of the presumption.

Now let us assume that the first condition is not met, and that there is at least one individual who has been found to have committed A and B, who did not commit C, and who cannot produce sufficient evidence of not-C to overcome the presumption. As to this individual, the presumption remains in full force. C will automatically be deemed proved. The jury is not free to separate those who actually committed C from those who did not. Thus if there are any individuals for whom A and B can be proved, but for whom C is not also true, and who cannot overcome the presumption, these individuals will be wrongly convicted. The only condition under which this will not occur is where there are no persons for whom A and B are true but for whom C is not true. This is merely a restatement of our second condition. Conceptualized in another way, if there are any persons for whom A and B,

^{29.} In this regard, the proponents of the ALI Model Penal Code rule might argue that the presumption, as they administer it, is not subject to the same objections as when the presumption requires an automatic determination of guilt. Under the Model Penal Code, they might point out, the issue always goes to the jury. Model Penal Code § 1.13 (Tent. Draft No. 4, 1955). A totally accurate jury, which is free to find or not to find, would invariably acquit those defendants for whom C is not true. We concede this. The problem is, of course, that juries are not wholly accurate. As we hope to demonstrate later, even juries that are usually accurate when no presumption is in operation are likely to produce as many mistaken findings as a process of automatic determination when they are laboring under the Model Penal Code instructions as to presumptions.

but not G, are true, the presumption will work to convict all of them. Without the presumption, a totally accurate jury would exonerate all of the innocent, and a jury in the real world, subject to errors, would exonerate at least some of them.³⁰

Before examining the dynamics of the two conditions, we must first determine what increased degree of imprecision the state can introduce into its guilt-determining process before standards of due process are violated. There is little in the Constituion to aid us in this determination. Shall we merely look to Justice Frankfurter's conscience?³¹ Can we derive mileage from the aphorism that "it is better that one hundred guilty men go unpunished than that one innocent man be convicted"? We assume that some types of guilt determination—for example, trial by a jury's flip of a coin—are not constitutional because they are so inherently irrational as to the actual determination of guilt or innocence that they might well result in the conviction of large percentages of innocent persons. But no principles of constitutional law will provide us with a mathematical yardstick; the answer is necessarily a subjective one. The Supreme Court in *Leary* left this question open when it said:

Since we find that the Section 176a presumption is unconstitutional under this standard, we need not reach the question whether a criminal presumption which passes muster when so judged must also satisfy the criminal "reasonable doubt" standard if proof of the crime charged or an essential element thereof depends upon its use.³²

30. Up to now, we have assumed, for the sake of simplicity, a wholly accurate jury. When we consider the situation as it really is, taking into account the possibility of errors on the part of the jury, we find that the conditions under which presumptions will produce no increased inaccuracy in the guilt-determining process are even more restricted.

Assuming a jury which is sometimes wrong in its finding of A or B, a larger class of innocent individuals will have to overcome the presumption. Therefore, in addition to the factors mentioned above, we must assess the ability of those individuals wrongly found to have committed A or B or both to overcome the presumption. Absent the presumption, some of the innocent persons who have been wrongly found to have committed A or B or both might have "lucked out." Through an incorrect finding of not-C, a jury might have reached the correct decision of acquittal. Therefore, assuming an inaccurate jury, unless all of these individuals can overcome the presumption, more innocent individuals will be convicted.

We shall for the remainder of the paper assume the rules which are appropriate to a wholly accurate jury. To incorporate the variables entailed by an assumption of jury inaccuracy requires a degree of refinement which, we believe, cannot realistically be achieved. But let it not be said that we are getting away with anything. Under the more realistic assumption of a jury subject to error, presumptions are even more imprecise and the state's use of them all the more suspect.

- 31. See Rochin v. California, 342 U.S. 165, 172 (1952).
- 32. Leary v. United States, 395 U.S. 6, 36 n.64 (1969).

For the reasons discussed in this paper, we strenuously urge that the question must be answered in the affirmative; and we submit that a standard of precision approaching 99%, and certainly greater than 90%, should be required before a presumption can be constitutionally sustained consistent with notions of due process. Percentages, although not subject to precise determination, have a shorthand value in suggesting analogous subjective limitations upon the acceptable standard of imprecision, and the device of percentages will be so employed throughout the rest of this article.

With this in mind, let us determine how far short of the two conditions set out above a presumption can fall and still operate within the acceptable limits of imprecision. Assume that to be constitutional a presumption must operate so that no greater than 5% of those convicted pursuant to it may be innocent.33 If nine out of ten persons who committed A and B also committed C, and if nine out of ten persons who committed A and B, but who have not committed C, can successfully overcome the presumption, then, assuming no inaccuracies in the jury process, under a presumption of C, out of every 100 prosecutions in which A and B have been found true, one innocent person together with 90 guilty persons will be convicted. Nine innocent persons will be able successfully to overcome the presumption. The conviction of one innocent person in 91 entails an imprecision of approximately 1.1%. Under these circumstances, the presumption might be held to be constitutional. But if only seven out of ten persons who committed A and B also committed C, and if only seven out of ten persons who have committed A and B, but who have not committed C, can successfully overcome the presumption, then, under the same conditions, out of 100 prosecutions in which A and B are proved, there will be 79 convictions, nine of which will involve innocent persons. Here there is a wrongful conviction rate of approximately 11.4%. Here the presumption should be held unconstitutional.34

33. This would seem to us to be a rather lax standard, for the authors would not really be satisfied if 50 of every 1000 people in our prisons were innocent, but it will do for purposes of illustration.

^{34.} We have assumed that the jury determinations will be accurate. In formulating the two indices of imprecision, we noted that this assumption proved to be a boon to the state, in that it made the presumptive devices seem more accurate than they actually were, supra note 30. But this assumption may not operate in the same way here where we are measuring the acceptable limits of imprecision. What, for example, if 11.4% of the persons convicted are always innocent? If this is so, then it might be that some of the persons convicted under the presumption would have been convicted anyway; and therefore the existence of the presumption may not have introduced an imprecision as high as 11.4%. If the correlation is exact, an unlikely coincidence, it would not introduce any imprecision beyond that of the untrammeled jury process.

We have discovered that we cannot achieve even a rough sense of the magnitude of the imprecision until we ask two different questions:

1. What percentage of innocent persons, subject to the presumption, will be able to overcome it? and

2. What is the correlation between the incidence of "A and B" and "C"?

It should also be noted that these two questions are similar to two standards already in use by the courts as discussed above. The second one is analogous to the rational connection test. The first is analogous to the second leg of the comparative convenience test, inasmuch as it inquires into the ease with which defendants can muster proof. However, it differs from the comparative convenience test in that it does not measure the propriety of imposing burdens upon the defendant against the burden lifted from the state. Rather it measures the propriety of the burden solely in terms of the risk of wrongful conviction which is imposed upon the defendant regardless of the hardship imposed upon the state. The difference is more than a technical one. It goes to the very manner in which the standards are employed.

The very existence of the rational connection test indicates that the Supreme Court has been concerned with the precision with which presumptions operate. However, it has provided us with very little from which to infer what is meant by a "rational connection." As we have previously discussed,35 what the Court calls a rational connection between two elements in one case may not suffice as a rational connection in a similar case if the presumptive language is applied differently. The presumption of negligence in *Turnipseed* was held to be rational; the assumption of negligence in Henderson was not. The defect in the

A number of factors militate for the assumption that the inaccuracies in the jury system may simply be ignored. First, there is the aspect of simplicity in formulating standards. Second, in view of the standard of "proof beyond a reasonable doubt," and the requirement of unanimity in most jurisdictions, it is not unreasonable to assume that the imprecision of the jury leads to few wrongful convictions. Third, there is something disconcerting in the argument that a given process which the government is imposing upon individuals is not objectionable because the one that the government is taking away from them might conceivably be as bad. Fourth, when we demand due process, we are striving toward an ideal of fair dealing. If and when the jury system proves to convict too high a percentage of innocent persons, there will be time enough to consider whether due process demands a fairer procedure at the option of the criminal defendant. Until the government is prepared to stand for all purposes upon the proposition that the jury system is so inaccurate that it consistently convicts a high percentage of innocent persons, and to face all the consequences of that alarming position, then it—as well as its citizens—should be held to the useful fiction (if it is a fiction) that the jury, if it is properly instructed and the trial is properly administered, will only in rare instances wrongly convict innocent persons. wrongly convict innocent persons. 35. See pp. 166-67 supra.

assumptive device in Henderson was not that the connection between accident and negligence was irrational; the problem was that, although there was a rational connection in Henderson, it was not a sufficiently strong rational connection to justify the burden which was being imposed upon the defendant. There is nothing magical about a "rational connection"—it can represent a positive correlation as low as 50+% between the fact presumed and the fact proved. Even with such a low correlation between X and Y as 50.0001% (if that is all the information one has) the only rational conclusion one can reach given that X has occurred, is that Y also has occurred. At long last, in Leary, the Supreme Court has affirmed this proposition.36

Once the strength of the rational connection between X and Y is measured, the question of whether the connection is sufficiently strong to warrant a particular legal result cannot be answered by staring at the rational connection again or jockeying the figures or renaming it an "irrational connection" instead. One must ask what kind of procedural hardship is imposed upon the defendant against whom the presumption (or assumption) runs. We might, for example, feel cause for alarm in learning that the rational connection between A-plus-B and C of the elements of a crime is a rational connection of only 51%, until we also discover that only one innocent person in a billion would have trouble overcoming the presumption of C. Conversely, a rational connection of 85% between A-plus-B and C may make us feel comfortable, until we learn that no one innocent of C will be able to overcome the presumption of C. Our courts cannot properly perform their function of safeguarding criminal defendants from the operation of presumptions which violate due process by relying upon a rational connection test alone. The attempt to do so has necessitated warping the concept of a rational connection so as to take into account the burdens imposed upon defendants, which generally have nothing to do with the incidence of correlation between elements.

A court must direct its attention to both questions set out above.37

^{36. 395} U.S. 6 (1969).

^{36. 395} U.S. 6 (1969).

37. At a very early stage in its consideration of the problems of presumptions, even before the rational connection test was formulated, the Supreme Court seemed inclined to direct its inquiry concerning the precision of the operation of presumptions somewhat along the line we suggest here. In Adams v. New York, 192 U.S. 585 (1904), when dealing with a presumption that allowed use of illegal gambling devices to be inferred from possession of the devices, the Court noted: "Innocent persons would have no trouble in explaining the possession of these tickets, and in any event the possession is only prima facie evidence. . . ." 192 U.S. at 599. While we favor inquiry into the evidentiary hardship incurred by the state as a threshold test for determining whether there is sufficient compelling interest to warrant further consideration of the presumption, we hope, for reasons

In answering the second question only certain factors are relevant. It is relevant to consider the kind of evidence which is being demanded of the defendant to overcome the presumption. Does it involve personal knowledge? Does it call for records which he can reasonably be expected to produce? It is also relevant to examine how much evidence is required of the defendant. To answer this question, the court must not only read the statute, it must also ascertain how the presumption is administered. The more evidence required of the defendant to overcome the presumption, the fewer the number of innocent defendants able to overcome the presumption; and therefore, the higher the rational connection must be. One thing not relevant in this inquiry is whether the defendant's burden is five or five thousand times lighter than that lifted from the prosecution. The percentage of innocent defendants that will be convicted pursuant to a presumption will in no way be affected by the difficulty which the prosecution might have in proving its case absent the presumption. The question of the difficulty which the prosecution might have in proving the presumed element is relevant to the judicial scrutiny of presumptions, but only in establishing the government's interest in relying upon the presumption in the first place.

By speaking in comparative terms, the court should not allow itself to stray into a balancing process involving elements which should not be balanced. To allow the government's interest to control the acceptable level of imprecision occasioned by the presumption is to lose sight of the meaning of that interest. The interest of the government is in proving that guilty persons are guilty; its interest is not simply in winning cases. The governmental interest in acquitting the innocent cannot be subordinated to its interest in convicting the guilty.

IV. The Effect of Assumptions in the Light of Due Process

The effect of the creation of an assumption of the element C, of the crime whose elements were defined above as A, B and C, is to redefine the crime to include only elements A and B and to render the proof of not-C an affirmative defense which the defendant must prove to a preponderance of the evidence or some other standard. Laboring under an assumption of C, the criminal defendant is confronted with a

that will become apparent, that when the Court assesses the degree of imprecision caused by a presumption it will return to the principle set forth in $Adams\ v.\ New\ York$ and confine its inquiry to the hardship incurred by the defendant.

more onerous task than if he were merely laboring under a presumption of C. Under a presumption of C the defendant merely has to introduce some evidence tending to show not-C which will be deemed sufficient to overcome the presumption, and, under a true presumption, the amount of evidence necessary to overcome the presumption will never amount to proof of not-C. It follows that there will be a higher number of innocent defendants convicted under an assumption of C than under a presumption of C. Since the kinds of protection we have attempted to create against the operation of presumptions could be totally circumvented if the legislature could, in all cases in which C is an admittedly germane issue, constitutionally create an assumption of C in lieu of a presumption of C, the government should not be able to create an assumption of C unless, under the rules we have formulated, it could create a presumption of C.

Accepting that this rule is proper where the creation of the affirmative defense is an obvious attempt to accomplish with an assumption what could not be accomplished with a presumption, it might nevertheless be argued that, for the "traditional" kinds of affirmative defenses and for affirmative defenses that do not seem "devious," a complex set of rules drawn with an eye to presumptions should not be grafted upon the jurisprudence of affirmative defenses without a more exhaustive analysis of affirmative defenses. We accept this point, and will proceed accordingly.

In creating the tests for presumptions, we found it helpful to examine how the existence of a presumption altered the guilt determining process. This same approach does not, at first, seem appropriate when dealing with assumptions. With presumptions, we were confronted with crimes defined by elements A, B and C. There is associated with each element a prosecutorial burden of persuasion and a jury process of adjudication, which the existence of the presumption could be seen to "alter." With assumptions, we have crimes defined only by elements A and B; not-C is an affirmative defense. Viewed in this manner, there is no "alteration in the guilt determining process" with which to take issue. The prosecution still must prove beyond a reasonable doubt each of the elements of the crime; no presumption makes the task easier. The defendant is afforded the "grace" of being allowed to interpose a "defense" which, of course, he must prove. Schematically, nothing could be more traditional and benign.

Viewing the defense as a "grace," however, begs the question. It can be a burden as well. Few people will question the constitutionality of "self-defense" as an affirmative defense to murder. On the

other hand, we would strenuously protest the legislature's creating the capital crime of "possessing a firearm" together with the affirmative defense of "non-murder." Similarly, the Supreme Court, in discussing presumptions and the relative convenience test, noted in *Tot*:

In every criminal case the defendant has at least an equal familiarity with the facts and in most a greater familiarity with them than the prosecution. It might, therefore, be argued that to place upon all defendants in criminal cases the burden of going forward with the evidence would be proper. But the argument proves too much. If it were sound, the legislature might validly command that the finding of an indictment, or mere proof of the identity of the accused, should create a presumption of the existence of all the facts essential to guilt. This is not permissible.³⁸

But why is it impermissible? What are the principles behind Mr. Justice Harlan's flat statement? Some mileage can be obtained by invoking tradition and history. Proof of murder is traditionally the burden of the prosecution; proof of self-defense is traditionally the burden of the defendant. But again, is there is a principle behind the tradition? Have we no other recourse than the subjective voltmeter which measures the shock on Frankfurter's conscience to divine which defenses are legislative "graces" and which are unconstitutional burdens?

We have also to address ourselves to the "greater includes the lesser" rule, which, it might be argued, has a continuing vitality in the area of affirmative defenses since the Romano case has only discredited it with regard to presumptions. As applied to affirmative defenses, the "greater includes the lesser" rule runs as follows: If the government can punish for the crime without providing the affirmative defense, then the existence of the defense cannot render the power to punish for the offense any less certain. It can be argued that, in Romano, what the Court refused to allow was a "redefinition" of the crime. But, with affirmative defenses, the government has already redefined the crime. Take for example our firearm statute. What if Congress itself defines the crime to be "possession of a firearm" and makes non-murder an affirmative defense? Now the Court would have no redefining with which to trouble itself. If Romano stands for no more than a refusal to sanction the "redefinition" of a substantive crime by the Court, does it not follow that "non-murder" is a perfectly proper affirmative defense to the crime of possession of a firearm? Why stop there? There are a whole string of graciously legislated affirmative defenses which

^{38.} Tot v. United States, 319 U.S. 463, 469 (1943).

could be afforded to lucky criminal defendants charged with the crime of "possession of a firearm, instrument of violence, or burglary tools": non-robbery, non-assault, non-rape, non-kidnaping, non-burglary, etc.

These affirmative defenses, we submit, are constitutionally unacceptable. We believe that the principles of Romano, when read in the light of the arguments below, are as applicable to affirmative defenses as to presumptions. To begin our argument, let us return to the concept of "germaneness," which we developed above.30 In the area of criminal law, generally it is for the legislative branch of the government to decide what is germane. It codifies its decisions by defining elements of a crime and by setting out affirmative defenses. Sometimes the courts define germane issues by "reading in" defenses (e.g., insanity) or by modifying the elements of the crime (e.g., requiring scienter for some crimes). By rendering issues either elements of a crime or affirmative defenses, legislatures and courts distribute burdens of persuasion and risks of non-persuasion.

In passing a criminal statute, three decisions must be made:

- 1. What issues must be resolved one way or another before an individual is to be punished; i.e., what issues are germane to punishment.
- 2. Who shall bear the burden of persuasion as to issues; i.e., what assumption shall be made with regard to each germane issue.
- 3. What presumptions, if any, shall be made with regard to each germane issue?40

When a legislature defines a crime to include elements A, B and C, which the prosecution must prove beyond a reasonable doubt, and provides for no affirmative defenses, it is making two of the types of decisions set out above:

- 1. It is proclaiming that the issues of whether A, B and C are true are the germane issues as to whether an individual will be punished, and
- 2. It is assuming that not-A, not-B and not-C are true until the prosecution proves otherwise.

When the legislature defines the crime to constitute only A and B, and renders X an affirmative defense, it makes the same types of decisions.

^{39.} See p. 171 supra.
40. In setting forth these decisions, we have omitted the question of what burdens of pleading or introducing evidence will be imposed upon which parties except, of course, the burden of introducing evidence, which is invariably imposed upon the party against whom a presumption operates.

Let us now examine the parallels between presumptions and assumptions in order to demonstrate why rules analogous to those formulated for presumptions should be applied to assumptions. The second and third rules for scrutinizing presumptions were geared toward determining what percentage of *innocent* persons would be convicted as a result of the presumption. If too great a percentage of those convicted because of the presumption were innocent, the presumption was found to be a violation of due process. Similarly, when we are called upon to sanction a legal device called an assumption, which simply assumes that a fact is true, we must ask whether the use of that device will result in the conviction of an unacceptably high percentage of innocent defendants. With presumptions, we found that the question could not be answered unless we asked two further questions:

- 1. What percentage of innocent defendants can successfully overcome the presumption; and
- 2. What is the rational connection, or correlation, between the facts proved and the facts presumed.

Analogous questions are necessary for assumptions. When the legislature defines a crime by elements A and B and renders X an affirmative defense, thereby assuming A, B, and not-X, we must ask:

- 1. What percentage of innocent defendants can successfully prove X; and
- 2. What is the rational connection or correlation between "A and B" and "not-X."

If, under this law, only seven out of ten innocent individuals can prove X, and if not-X correlates with "A and B" only 70% of the time, the law will include nine innocent persons in every 79 convictions. In other words, 11.4% of those convicted will be innocent. We will not trouble the reader with another long mathematical analysis; it would merely be a rerun of our discussion of presumptions.

One distinction, however, between assumption and presumption must be noted. The burden imposed upon the defendant in proving an affirmative defense of X to a preponderance of the evidence will always be greater than the burden of coming forward with evidence sufficient to overcome a presumption of X. This means that fewer innocent defendants will be able to sustain the burden imposed by an assumption than that imposed by a presumption. Therefore, in order to obtain the same precision in guilt determination, given equal ability to produce evidence on the part of defendants, the correlation between

the proof of the elements of the crime and the negative of the affirmative defense must always be stronger than the correlation demanded between the facts proved and the facts presumed under a presumption. This principle, which is the basis for the rule of thumb test put forth at the outset of our discussion of assumptions, also provides a rational basis for the differing results in Henderson and Turnipseed.41

There is yet another reason for desiring a stronger rational connection with regard to assumptions than we demand for presumptions—a reason which is independent of our scrutiny of the imprecision of the guilt determining process. The criminal law should be scrutinized not only from the point of view of protecting innocent defendants against wrongful conviction. The principles implicit in the term "probable cause" require us also to provide reasonable protections against the arrest and trial of innocent persons. Arrest, temporary incarceration, the posting of bond or the purchase of bail bond, and the cost of defending oneself are undeniable hardships. Nor can we take lightly the sense of human dignity which is all too often injured in the process. It is naive to look toward civil remedies as effective means of redressing such injuries.42 We believe, therefore, that there is an acute interest in not condoning a law which allows the arrest of large numbers of innocent persons, absent some clearly overriding state interest. The crime should be defined so that arrests pursuant to it apprehend a body of individuals the vast majority of whom will be found guilty if the elements of the crime are proved. Conversely, the definition of the crime should not be such that large numbers of persons arrested thereunder will ultimately be shown to fall into one or more of the various exceptions established by the creation of affirmative defenses.

^{41.} See pp. 166-67 supra. At first blush, there might seem to be an objection to our characterization that assumptions are always harder on defendants than presumptions. This argument is as follows: In the case of an assumption of not-X, such that the proof of X is an affirmative defense, the defendant's evidence of X always goes directly to the jury; whereas in the case of a presumption of C, the judge must decide whether the defendant's evidence of not-C is sufficient to overcome the presumption, before allowing the evidence of not-C to go to the jury. Thus an assumption of non-X is more favorable to the defendant; a presumption may operate so as never to allow the defendant's evidence of not-C to reach the jury. This advantage, however, is rather illusory. If the defendant has sufficient evidence to prove not-C to a preponderance of the evidence (which he must do to win when an assumption is operating against him), he will invariably have sufficient evidence to overcome a presumption of C. Having overcome the presumption, he will not only have his evidence of not-C reach the jury, but will also enjoy the advantage of having the burden of proving C beyond a reasonable doubt rest with the prosecution. In other words, any defendant who can win against the operation of an assumption could have won against the operation of a presumption. But some individuals who can win against the operation of an assumption. operation of an assumption.
42. Mapp v. Ohio, 367 U.S. 643, 656-58 (1961).

Expressed in terms of our letter notation, we can say that a crime is properly defined by elements A and B only if, with few exceptions, individuals who have been found to have committed A and B are guilty. If proof of X is an affirmative defense to the commission of A and B, then given the truth of A and B, not-X should be true as a general rule. This paradigm, which is merely a rephrasing of the condition requiring a rational connection between the elements of the crime which are to be proved and the negative of the affirmative defense, must be followed if arrests are to fall primarily upon the guilty. It should be noted that, for the purposes of avoiding the arrest of a disproportionate number of innocent persons, it is irrelevant whether there is a high or a low percentage of innocent defendants that can successfully prove the affirmative defense.

There is a third reason, independent of the protection against wrongful conviction and the protection against wrongful arrest, which requires a rational connection. A strong rational connection between the elements of the crime and the negative of the affirmative defense is necessary to prevent the criminal process from becoming an accusatorial proceeding where proof is largely a matter of the exculpatory efforts of the defendant. If the prosecution's proof of A and B still leaves in doubt whether large numbers of defendants fall within the factual setting which the state has deemed punishable, then much of the proof in the case will have to be provided by the defendant. Absent sufficient control over the creation of such defenses, the legislature is free to impose upon criminal defendants an inquisitorial system foreign to our notions of due process. As before, the strength of the rational connection that might be desired here is not dependent on the percentage of innocent defendants who can prove the affirmative defense; the success of even a very high number of defendants in proving the defense does not render the system less inquisitorial.

We have shown that there is a greater potential danger to the rights of individuals from the use of assumptions than from the use of presumptions for the following reasons:

- 1. Assumptions impose a higher evidentiary burden and a higher risk of wrongful conviction upon a criminal defendant than do presumptions.
- 2. Assumptions pose the treat of occasioning the arrest and trial of a high number of innocent persons.
- 3. Assumptions pose the threat of turning a prosecutorial system into an inquisitorial system.

The second and third reasons are applicable to presumptions as well,

but to a lesser degree. For these reasons, the creation of an assumption should require a stronger state interest in terms of the difficulty of producing evidence than was required for the creation of a presumption. As with presumptions, the determination of the state interest should be a threshold determination which antecedes the complex and subjective process of assessing the imprecision introduced into the guilt determining process and the potential for wrongful arrests which is occasioned by the existence of the assumption.

V. An Unanswered Question: Is a "Rational Connection" Still Necessary?

Implicit in our mathematical consideration of presumptions and assumptions is the principle that under our rules some presumptions might be constitutionally sustained even though there is less than a rational connection between the facts proved and the facts presumed. Similarly, some assumptions might be sustained without a rational connection between the proof of the elements of the crime and the negative of the affirmative defense. What if, for example, all innocent defendants could overcome the evidentiary burden imposed upon them? Or what if only one innocent defendant in a million would fail to sustain the burden imposed by the presumption or the assumption? In such instances, rational connections very much lower than 51% might not result in a wrongful conviction rate in excess of 2%. Shall we then not require a "rational connection" but merely an "inferential connection" strong enough to render the presumption or assumption sufficiently precise as an instrument for the determination of guilt? We believe that our analysis logically allows such a result.

An argument may be made, however, for requiring a rational connection regardless of the precision of the operation of the presumption or assumption. First, the requirement that the acts for which an individual may be arrested and the elements which the state must prove must more often than not be dispositive of an individual's guilt is a guarantee that our criminal procedure will not assume the characteristics of an inquisitorial system. Second, if the requirement of a rational connection were eliminated, the constitutional test might become so vague in the minds of some judges that it would be very difficult to administer. The natural propensity of judges to uphold legislative acts might then result in the retention of many unnecessary and undesirable presumptive devices. We believe that most individuals, including judges, make decisions on a "more likely than not"

basis. The continued requirement of a rational connection puts judges on naturally firm footing. Third, at the other extreme, some judges might occasionally be tempted to attribute more precision to our tests than the process of human inference can produce. The calculus we have suggested clearly has many subjective and impressionistic elements. In most cases, judges will be doing well to create three or four workable categories of inferential connection. The requirement of a bare rational connection, regardless of other considerations, provides a means of cutting down the number of presumptive devices for which a calculation of the ability of defendants to produce sufficient evidence, a difficult determination, must be made. Fourth, presumptive and assumptive devices may force defendants, unable to produce other proof, to come to their own defense. The requirement of a rational connection guarantees that, even as to a defendant who chooses to stand mute, it is at least more likely than not that he is guilty.43

VI. The Effect of Rules of Application on the Validity of Presumptive Language Under Due Process

In our comparison of the *Turnipseed* and *Henderson* cases,⁴⁴ we found that two different jurisdictions might utilize presumptions with similar wording, and yet treat them quite differently. In order for us to have some idea of the range of differences which we might encounter from jurisdiction to jurisdiction, we shall examine in some detail three of the approaches to the application of presumptive language which Morgan found to be most commonly employed in U.S. jurisdictions.⁴⁵

1. The existence of the presumed fact must be assumed unless and until evidence has been introduced which would justify a jury in finding the non-existence of the presumed fact. When such evidence has been introduced, the existence or non-existence of the presumed fact is to be determined exactly as if no presumption had ever been operative in the action; indeed, as if no such concept as a presumption had ever been known to the courts. Whether the judge or the jury believes or disbelieves the opposing evidence thus introduced is entirely immaterial. This may

^{43.} The authors have been unable to agree on what ultimate stand to take on this question.

EVIDENCE 729 (1965). 44. See pp. 166-67 supra.

^{45.} Morgan, Foreword to Model Code of Evidence 55 (1942).

be called the pure Thayer rule, for if he did not invent it, he first clearly expounded it.

2. The existence of the presumed fact must be assumed unless and until the evidence of its non-existence convinces the jury that its non-existence is at least as probable as its existence. This is sometimes expressed as requiring evidence which balances the

presumption.

3. The existence of the presumed fact must be assumed unless and until the jury finds that the non-existence of the presumed fact is more probable than its existence. In other words, the presumption puts upon the party alleging the non-existence of the presumed fact both the burden of producing evidence and the burden of persuasion as to its non-existence. This is sometimes called the Pennsylvania rule.

We will apply each rule to the same presumptive formulation, taking for example a presumption of non-registration arising from the clandestine possession of a whiskey still, such as was upheld in Rossi v. United States.⁴⁶

Under the first, or Thayer rule, if the defendant introduces any evidence of registration which if believed by the jury would justify a finding of registration, the issue would go to the jury for determination. This approach preserves the inferential power of the clandestine possession, the fact proved. The prosecution cannot generally suffer dismissal if no additional evidence of non-registration is submitted, since the jury would usually be justified in finding non-registration from clandestine possession. The jury performs all the natural processes which juries perform in weighing opposing evidence and credibility. The burden of producing evidence is shifted by the presumption, but the burden of persuasion remains upon the prosecution, and the quantum of proof attached to it remains unchanged: proof beyond a reasonable doubt.

Under the second approach, the introduction of evidence by the defendant which would justify a finding of registration would also be enough to escape a mandatory finding of non-registration and send the issue to the jury. However, the jury would be instructed that, in order to return a finding of registration, it must find registration at least as probable as non-registration. Thus non-registration need only be more likely than registration, a standard which is what is usually referred to as "proof to a preponderance of the evidence." The second rule shifts the burden of producing evidence to the defendant, leaves

the burden of persuasion on the prosecution, but reduces the standard of proof required on this issue to proof to a preponderance of the evidence.

Under the third rule, the quantum of proof necessary to send the issue to the jury is the same: evidence which would support a finding of registration. However, the effect of the third rule is to place the burden of persuasion on the defendant. Under our definitions, when the third rule is applied to presumptive language, the presumption operates as an assumption, and creates an affirmative defense.

It should be apparent that as each successive rule is applied to the same language, the hardship on the defendant is increased. All things being equal, an increasing number of innocent defendants would be convicted by the application of each successive rule. Therefore, by the rules which we have established, a stronger rational connection and/or a greater ability of innocent defendants to produce what is required to overcome the presumption would be necessary under each successive rule to sustain the operation of the presumptive language.

Two additional methods exist for applying presumptive language in criminal cases. In fact, they are probably the methods most commonly employed in criminal trials. The first approach is that of the ALI Model Penal Code; the second we will call the California approach, since we have taken our statement of it from an article dealing with California practice.

The ALI Model Penal Code, Tentative Draft No. 4, contains two separate statements on presumptions:

1. The majority view:

Presumptions.

- (5) When the Code establishes a presumption with respect to any fact which is an element of an offense, it has the following consequences:
 - (a) when there is evidence of the facts which give rise to the presumption, the issue of the existence of the presumed fact must be submitted to the jury, unless the Court is satisfied that the evidence as a whole clearly negatives the presumed fact; and
 - (b) when the issue of the existence of the presumed fact is submitted to the jury, the Court shall charge that while the presumed fact must, on all the evidence, be proved beyond a reasonable doubt, the law declares that the jury may regard the facts giving rise to the presumption as sufficient evidence of the presumed fact.
- 2. The minority view:

Alternative (5): When the Code establishes a presumption with

respect to any fact which is an element of an offense, it has the following consequences:

- (a) in the absence of evidence to the contrary of the presumed fact, such fact shall be treated as established by the proof beyond a reasonable doubt of the facts which give rise to the presumption; and
- (b) when there is evidence to the contrary of the presumed fact, the issue must be submitted to the jury unless, giving weight to the facts which give rise to the presumption and to the legislative finding that such facts, standing alone, are in general strong evidence of the presumed fact, the Court is satisfied that the evidence as a whole clearly negatives the presumed fact; and
- (c) when the issue of the existence of the presumed fact is submitted to the jury, the Court shall charge that while the presumed fact must on all the evidence be proved beyond a reasonable doubt, the law declares that the facts giving rise to the presumption, standing alone, are in general strong evidence of the presumed fact.⁴⁷

It is necessary to analyze the dynamics of the ALI statements, applied in practice, so that we can compare the results likely to be produced with the results of other approaches to the administration of presumptive language. We will use the Thayer approach as our standard of comparison, since it is the most lenient approach which we have thus far analyzed, and is therefore the least suspect constitutionally under the principles we have elaborated.

Let us again consider a crime defined by the elements A, B and C, and the presumption that, "if A and B are proved, C is presumed true." Under the Thayer rule, if the defendant does not overcome the presumption by the introduction of evidence which would support a finding contra, the presumption requires that the proof of A and B beyond a reasonable doubt shall cause C "to be treated as established by proof beyond a reasonable doubt." If, on the other hand, the defendant overcomes the presumption by submitting evidence which would support a finding against the presumption, the presumption drops out of the case, and the prosecution is left to prove C beyond a reasonable doubt as though no presumption had existed.

The application of the ALI minority position reaches exactly the same result as the Thayer rule when no evidence overcoming the presumption is introduced by the defendant. However, the ALI minority

rule is more severe on the criminal defendant than the Thayer rule if such evidence is forthcoming. Under the ALI minority rule, the jury will be charged that "while the presumed fact must on all the evidence be proved beyond a reasonable doubt, the law declares that the facts giving rise to the presumption standing alone are in general strong enough evidence of the presumed fact." Such instructions comment very favorably on the inferential weight of the evidence tending to establish C, and obviously will result in increasing the jury's disposition to find C. Under the Thayer rule, such a comment would not be forthcoming and, indeed, in many jurisdictions would be improper. Since the ALI minority position is the Thayer approach with the additional hardship to the defendant of a comment favorable to the prosecution on its evidence, it will result in a greater number of convictions of innocent defendants than the straight Thayer approach.

Let us now consider the ALI majority position under circumstances where the defendant has not submitted any evidence in opposition to the presumption. Although this position was drafted so as to aid defendants by insuring that all issues get to the jury, we believe that it is harder on defendants than the Thayer approach. It is, therefore, more difficult to sustain under a due process attack when applied to any given presumptive language. Arguably, when the ALI majority approach is used, the standards of rational connection need not be stronger than the barest positive correlation, since the issue of C is not determined automatically, as under the other approaches, but is invariably allowed to go to the jury. At least in theory, the jury is free to find or not to find C. Our lines of reasoning may be inappropriate under such circumstances, since we based our argument on the imprecision produced in guilt determination by a presumption which operates automatically against a defendant who, though otherwise innocent because of the non-existence of C, cannot overcome the presumption. But will the ALI majority rule, taking all cases into account, produce fewer wrongful convictions than the "automatic" rule? To make that assessment, we must undertake some speculation on the effect of the ALI majority rule instructions on the jury.

The ALI instructions are somewhat confusing when analyzed carefully. They contain two distinct propositions: that the jury must be convinced of G beyond a reasonable doubt, and that the law recognizes the facts proved as sufficient to allow the inference of G beyond a reasonable doubt. Jurors want to arrive at a just verdict. Generally they are not certain as to what is meant by certainty "beyond a reasonable doubt." We believe that the very force and value of this term

springs from this uncertainty on the part of jurors. The decisions of fact which most individuals make in everyday life are generally based on what is more likely than not. Will it rain? Will the stock market go up or down? The term "beyond a reasonable doubt" is just difficult enough to comprehend as a concept to break through this everyday behavioral pattern of decision-making standards. More important, it forces the individual juror to ponder the question of how the law wants him to decide, and to examine his own soul, so to speak, to answer the question of whether or not he is as sure as the law requires him to be. It is intended to make even the juror who thinks that the defendant "did it," in everyday terms, think twice.

Under the ALI majority instructions, however, the jury knows one thing for certain that it usually does not know, a factor which may seriously reduce the impact of the requirement of "proof beyond a reasonable doubt." They know that the facts proved constitute sufficient evidence in the eyes of the law to justify a finding of the fact presumed beyond a reasonable doubt. We believe that a jury, having found A and B, and having been informed that a finding of C is correct in the eyes of the law, will quite naturally look to see if there is any reason not to find C. If there is no evidence which tends to show not-C, they will all but inevitably find C. Thus, while it is true that under the instructions the jury must decide that C has been proven beyond a reasonable doubt or else find not-C, the instructions have left no doubt in their minds that C is a correct result. Thus, all things being equal, we do not see how the operation of the ALI majority rule can realistically be expected to convict fewer innocent defendants than the Thayer rule.

Let us now consider the case where the defendant has overcome the presumption by submitting evidence of not-C. As noted, under the Thayer approach the presumption ceases to have any effect on the trial. The prosecution must prove its case beyond a reasonable doubt; no instructions favoring a finding of C are given. Under the ALI rule, however, the same instructions are given as where there is no overcoming evidence, and we believe that the jury experiences the same psychological effect. The majority instructions do not merely favor a finding of C, as do the minority ALI instructions. The minority instruction merely calls the evidence tending to show C "strong evidence"; the majority informs the jury that C is without doubt a correct result. Consequently, we believe that when the defendant can overcome the presumption, the majority position will result in more wrongful convictions than either the Thayer or ALI minority approaches.

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Now let us consider the California approach:

When by statute or rule of law a presumption is available to the prosecution to prove an element of crime in a criminal proceeding, the jury shall be told that, if they believe that the basic facts of the presumption are proved beyond a reasonable doubt, the law permits them to find that the presumed fact has also been proved beyond a reasonable doubt, unless there is contrary evidence which raises in their minds a reasonable doubt of the existence of the presumed fact.48

This approach is quite similar to that of the majority ALI position. Under both rules, the jury is told that a finding of the presumed fact will be proper. In addition, the California instructions state expressly what we intuited would be the result of telling the jury that a finding of C is proper: the jury is to look to the defendant to persuade it to find a result other than that which the law deems proper. Under these express instructions, a burden of persuasion is imposed upon the defendants. In our terms the presumption has been transformed into an assumption. The burden upon the defendant, however, is not so great as to require him to prove that not-C is more likely than not—i.e., to prove not-C to a preponderance of the evidence—but rather only that there is a reasonable doubt as to the truth of C.

But can we really call this a burden of persuasion? Present here, as with the ALI approach, is the strange "permissive" attitude to the jury which has been called a "permissible inference." Let us assume that an issue X is germane to the outcome of a case. Normally, the jury will be instructed that if the party which has the burden of persuasion fails to meet that burden to the required degree of certainty, it is the duty of the jury to find not-X; if the party does sustain the burden of persuasion, it is the duty of the jury to find X. Under the permissible inference doctrine, all reference to duty and related notions mysteriously disappear. Instead, as the California instruction indicates, unless the defendant meets his burden of persuasion, the law permits the jury to find the presumed fact. The same principle is in operation under the ALI rule, where the jury is told that they "may regard the facts giving rise to the presumption as sufficient evidence of the presumed fact." We intuit from the use of such language a libertarian fear

RELATING TO THE UNIFORM RULES OF EVIDENCE 1140 (1964).
49. J. MAGUIRE, J. WEINSTEIN, J. CHADBOURN, & J. MANSFIELD, CASES AND MATERIALS ON EVIDENCE 729 (1965).

^{48.} CALIFORNIA LAW REVISION COMMISSION, TENTATIVE RECOMMENDATION AND A STUDY

of dictating to a jury so as to render its decision automatic, as is the case with a Thayer presumption or the ALI minority report.

But how is the jury supposed to apply such language to the evidence given? Does it mean that, if the defendant submits no counter evidence and no reasonable doubt is raised, the law permits, but does not require, the finding of the presumed fact? The permissible inference doctrine never answers this discomforting question. We do not believe that judges or commentators are prepared to say that, in these circumstances, a jury nevertheless has no duty to find C. Could a defense lawyer argue that although the defendant has given the jury absolutely no reason to doubt the presumed fact, and although the jury does not doubt it, the law permits but does not require them to find C—therefore if they want to acquit the defendant, they may do so? If a defense lawyer cannot so argue (and we believe that this is the case) can we still with honesty employ the term permissible inference? Even if defense counsel is allowed to argue as indicated above, since the "permissible result" will nevertheless be imparted to the jury, the burden imposed on the defendant will amount to a burden of persuasion. We submit that the same dynamics of psychology as were described in the discussion of the ALI majority report would render the jury strongly disposed to find as the law suggests.

In summary, our basic objection to the term "permissible inference" as distinguished from "required inference," is that it can only amount to an alarming invitation to the jury to abandon its role as an honest trier of fact. Until the law is prepared to allow such invitations, the term "permissible" is inappropriate and misleading. The law ought forthrightly to acknowledge that the burden of persuasion operating under a "permissible inference" is no different from any other burden of persuasion. The presumption has been transformed into an assumption, and the tests formulated above should be employed to scrutinize it.

We have laid the ground for the following statements: (1) Because of the traditional protection given to defendants in criminal trials against easy conviction by the state, more stringent standards of validity are necessary to sustain a presumption in a criminal case than in a civil case, where the mere ordering of private relations and property rights is at stake. (2) Presumptive language which operates to shift the burden of persuasion is not distinguishable on any significant ground from the creation of an affirmative defense. Whatever constitutional standards apply to the proper creation of affirmative defenses should

apply to such a "presumption." Whatever those standards are they must be more stringent than those employed where the effect of the presumptive language is merely to shift the burden of producing evidence. (3) Some presumptive language is treated so that it does not technically change the burden of persuasion, but rather simply reduces the applicable standard of proof to a preponderance of the evidence. Since the operational effects of presumptive language applied in this manner are similar to those produced by a change in the burden of persuasion, the applicable standard of review should be nearly as high as that for affirmative defenses. (4) Presumptive language which is applied against a criminal defendant according to the ALI majority rule, the California rule, or similar rules which create a "permissible inference," works as much or more hardship on the criminal defendant as the same presumptive language applied according to the Thayer rule. Therefore, a stronger rational connection and/or a greater ability to produce exonerating evidence should be required than if the language were applied according to the Thayer rule.

One case, as yet unmentioned, required the application of due process standards to presumptive devices. In Leland v. Oregon,50 the Supreme Court considered an Oregon statute which imposed upon those seeking to establish the defense of insanity a standard of proof beyond a reasonable doubt. In upholding this conviction, the Court said that, since the burden of proof was already on the defendant, they could not say that this escalation of the standard of proof violated fundamental notions of due process. They dismissed Tot and any considerations involved therein as inapplicable since, in Leland, no presumption had been created. We would hope that anyone who has read this far would see that the issues raised by Leland were exactly the same as those raised by Tot. The government in each case attempted to place a larger share of the burden onto the defendant in regard to a germane issue. In both cases the relevant issues were whether a threshold interest which would justify the hardship imposed on defendants existed, and whether the probability of innocent conviction created thereby was too high to be tolerable.

We believe that when the state has created an affirmative defense, it has pledged to release those for whom the defense is true. It is difficult to understand how the government interest, when properly confined to its evidentiary hardship, can ever be used to justify requiring the defendant to prove his defense "beyond a reasonable doubt." The only viable rationale for sanctioning a standard greater than "to a preponderance of the evidence," as was done in Leland, runs as follows:

Even though you, the defendant, have made it seem more likely than not that you are innocent, we are going to convict you anyway unless you prove your innocence beyond a reasonable doubt, because too many guilty persons can make it seem more likely than not that they are innocent, and the prosecution has such an evidentiary hardship that it cannot counter such proof.

This rationale remains for us a hollow paradigm with no reference to the real world; we have not been able to think of a single legitimate interest of the state served by a defense entailing a standard of proof higher than proof "to a preponderance of the evidence," which would not also be served by that latter standard. Surely a presumptive or assumptive device is unconstitutional if a less oppressive presumptive or assumptive device would equally fulfill the legitimate interests of the state but would result in fewer innocent individuals being convicted. We can only hope that, in Leland, the Court failed to consider these factors, not because they were found to be irrelevant to considerations of due process, but because they were not recognized.

VII. Some Problems of Wording

Let us now examine a form of presumptive language which has often been employed in federal criminal statutes. In Gainey v. United States,⁵¹ the Court was forced to construe a statute reading:

Whenever on trial for violation of subsection (a)(1) [making it illegal to possess, or control the operation of an unregistered still] defendant is shown to have been at the site or place where, and at the time when, a still or distilling apparatus was set up without having been registered, such presence of the defendant shall be deemed sufficient evidence to authorize conviction, unless the defendant explains such presence to the satisfaction of the jury. . . . ⁵²

A similar statute was encountered by the Court in Leary, but the case was reversed on other grounds, and the questions raised were left unanswered.53 In Gainey, the presumption was attacked on two grounds:

^{51. 380} U.S. 63 (1965). 52. 26 U.S.C. § 5601(b)(1) (1964). 53. 395 U.S. 6 (1969).

that a legislative declaration that the fact proved was sufficient to convict restricted the discretion of the trial judge in directing verdicts and granting judgments *n.o.v.* for defendant so much as to be a denial of due process, and that such a presumption constituted an unconstitutional interference with the right to trial by jury.

The Court in Gainey decided that the presumption allowed the trial judge all normal discretion regarding dismissals, directed verdicts and judgments n.o.v. The second argument was rejected over a strong dissent by Justice Black. We agree with the Court's result on the issues it faced, so long as "sufficient evidence" is construed to mean no more than a "permissible inference" and the effects of the inference are scrutinized as we have indicated above. However, there are two additional important issues raised by this presumptive wording which were not considered in the Gainey opinion.

According to the wording of these devices, the fact proved is declared sufficient for conviction unless "explained to the satisfaction of the jury." Two factors, of great importance to criminal defendants, are not determined: what facts proved in explanation will satisfy the jury, and what standard of proof is required.

An explanation "to the satisfaction of the jury" can be interpreted to mean that the jury is free to be unsatisfied with any explanations offered. Thus in the case of the marihuana statute, a jury, instructed that possession must be explained to their satisfaction, may feel free to convict despite proof of the non-imported status of the marihuana involved. They may feel that the only explanation which will satisfy them is the legality of the possession under state law, or the essential goodness of the defendant, or some other ideal, or none of these. This interpretation of the words "to the satisfaction of the jury" would not cause the device to operate as a presumption or an assumption, but rather would simply free the jury to do as they wish. The possibility of this aberration can only be escaped if the jury is instructed that they must find evidence of the absence of the nominally presumed elements of the crime to be satisfactory.

Even if the jury is instructed as described above, the standard to which the defendant must prove the absence of a presumed element is not stipulated. Must he simply raise a reasonable doubt? Must he make it appear more probable than not that the missing element is not true? The jury is never instructed that they must, as a matter of law, find that the defendant is innocent, if they are convinced that there is a reasonable doubt as to the existence of the presumed fact. They may convict the defendant if the absence of the presumed fact is not proven to a moral certainty.

Trial by jury implies that an impartial jury will address itself to the germane issues of fact presented in a given case and come to an honest conclusion about the existence of those facts to some independent standard of certainty prescribed by law. If, as in the case of the language here discussed, the jury is not told which facts, if established, constitute a satisfactory explanation, if the jury is not instructed as to how certain they must feel in order to treat these facts as established, the jury is not operating as a controlled trier of fact, but rather is being turned loose on the defendant to exercise against him whatever prejudices they may have.

VIII. A Note on Leary v. United States

Most of this article was written before the decision in Leary v. United States⁵⁴ was handed down. The authors looked forward to the decision with anticipation since the statute involved presented in glaring form the violations of due process which can result from the improper drafting and implementation of presumptions. We were prepared to make substantial changes in the text of this article. However, the Leary decision has added very little to the law of presumptions.

After examining numerous research reports and a vast amount of testimony, the Court found that while there was a rational connection between possession of marihuana and its illegal importation, there was no rational connection between possession and *knowledge* of importation. Having found no rational connection between the fact proved and the fact presumed, the Court considered its work done.

As noted above, the Court did for the first time commit itself to the proposition that a rational connection means at least "more likely than not." We have urged acceptance of this proposition, and its adoption at this time may pave the way for the Court to arrive at the type of constitutional analysis which we have presented here. Given this interpretation of rational connection, however, unless the court is willing to inquire into the number of innocent defendants who can overcome a presumption or establish an affirmative defense, statutes may be upheld which wrongly convict up to half of the individuals convicted pursuant to them. This reasoning may explain the Court's suggestion in *Leary* that the standard of "proof beyond a reasonable doubt" may require a correlation stronger than a mere rational con-

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nection. The guery, however, was neatly tucked away in a footnote and left unanswered.⁵⁵ The major thrust of this article has been to urge that such a higher correlation is required by due process.

The Leary opinion is merely another manifestation of the totally inadequate jurisprudence in the area of presumptive and assumptive devices. First the Court affirmed the misguided proposition that the comparative convenience test is a corollary to the rational connection test. Second, in holding the presumption of illegal importation constitutional, the Court was apparently unimpressed by the fact that large numbers of innocent defendants could not have proven their innocence by showing they possessed domestic marihuana. As the Court itself noted, users of marihuana in most instances do not know where a particular batch was grown. Third, the Court apparently did not question the significance of the trial judge's instructions, which imposed a burden of persuasion, in addition to a burden of introducing evidence, upon the defendant, and was not particularly disturbed by the meaning of the phrase "to the satisfaction of the jury."

The opinion, however, does raise two important issues with regard to the role of stare decisis and retroactivity in cases involving presumptions. The Court made it clear that in assessing the existence of a rational connection, courts should use current information and should not restrict themselves to data and findings at the time of enactment of the presumption. We applaud this approach in general, but does it not mean that, in a society such as ours which is always changing, the validity of a court's pronouncements regarding presumptions of fact will become stale in but a few years? For example, if the presumption in the Marihuana Import Act had been sustained in Leary, could a federal court in an appeal ten years from now merely cite Leary as authority for the validity of the presumption? Is not a continual review of the facts giving rise to the rational connection necessary?

Analogous questions arise in regard to retroactivity. In 1969, the Court found no rational connection between possession and knowledge of illegal importation. But was this true in 1967 or 1961? In a habeas corpus proceeding on behalf of a defendant convicted in 1961, may the prosecution prove, notwithstanding Leary, that in 1961 the connection between possession and knowledge of illegal importation was a rational one? In this regard, Leary contains one curious paragraph:

^{55.} Id. at 36 n.64.
56. The Supreme Court seemed to suggest that this might be the case if there was an insubstantial consumption of domestic marihuana. Id. at 37-39.

The Government contends that Yee Hem requires us to read the § 176a presumption as intended to put every marihuana smoker on notice that he must be prepared to show that any marihuana in his possession was not illegally imported, and that since the possessor is the person most likely to know the marihuana's origin it is not unfair to require him to adduce evidence on that point. However, we consider that this approach, which closely resembles the test of comparative convenience in the production of evidence, was implicitly abandoned in Tot v. United States As was noted previously, the Tot Court confronted a presumption which allowed a jury to infer from possession of a firearm that it was received in interstate commerce. Despite evidence that most States prohibited unregistered and unrecorded acquisition of firearms, the Court did not read the statute as notifying possessors that they must be prepared to show that they received their weapons in intrastate transactions, as Yee Hem would seem to dictate. Instead, while recognizing that "the defendants . . . knew better than anyone else whether they acquired the firearms or ammunition in interstate commerce," 319 U.S. at 469, the Court held that because of the danger of overreaching it was incumbent upon the prosecution to demonstrate that the inference was permissible before the burden of coming forward could be placed upon the defendant. This was a matter which the Yee Hem Court either thought it unnecessary to consider or assumed when it described the inference as "natural."57

The implications of this statement are not clear. It may mean merely that any inference from one proposition to another must be established by him who has the burden of persuasion on the latter proposition. If so, the passage hardly deserves lengthy consideration. However, it may mean that the prosecution has the burden of establishing the existence of a rational connection when a presumption is attacked on constitutional grounds. The strongest argument against this interpretation of the passage is that generally, with regard to issues of constitutionality, the party which challenges a statute has the burden of establishing unconstitutionality. The authors feel, however, that at least with regard to presumptions and assumptions, the government should have the burden of establishing the existence of a rational connection. If the prosecution is to be relieved of proving its entire case through the operation of a presumption against the particular defendant, it should at least be required to prove the general validity of the presumption. The Court's position in Leary is unclear, and the opinion in Tot, from which Harlan draws the proposition quoted above, does not discuss this precise point.

Presumptive and assumptive devices are among the most basic elements in the judicial process. They shape, define, and alter how courts and juries reach decisions. They are part of the epistemology of judicial proceedings. The validity of all decisions which involve such devices depends ultimately upon how they are administered. Unless standards similar to those which we have suggested are adopted, the rights of many innocent defendants may be compromised.