its central or valuable members in this way. The fact that De Varon filled the role of swallower in the importation scheme cannot be totally ignored in considering whether she was a minor player.

For all the foregoing reasons, I would reverse the district court's denial of De Varon's request for a § 3B1.2 minor participant reduction, and remand for the court to consider whether De Varon met her burden of demonstrating that she was less culpable than most other participants in the offense.

Because sentencing schemes vary from state to state, the extent to which factors other than drug type and quantity are considered at sentencing is different in every state. In general, however, the type and quantity of drugs involved in the offense plays a central role in state drug sentencing laws.

The United States is not alone in emphasizing drug type and quantity in sentencing. In the United Kingdom, for example, "the weight and class of drug captured [also] largely determine the sentence." Jennifer Fleetwood, *Five Kilos*, 51 Brit. J. Criminology 375 (2011). Although drug type and quantity may play a similar role for sentencing in other countries, the United States often imposes longer sentences than other countries for comparable drug amounts. *See, e.g.,* MaryBeth Lipp, *A New Perspective on the "War on Drugs": Comparing the Consequences of Sentencing Policies in the United States and England,* 37 Loy. L.A. L. Rev. 979 (2004).

2. Measuring Drug Quantity

a. Carrier Mediums and Cutting Agents

Chapman v. United States

Supreme Court of the United States
500 U.S. 453 (1991)

Chief Justice Rehnquist delivered the opinion of the Court.

Section 841(b)(1)(B)(v) of Title 21 of the United States Code calls for a mandatory minimum sentence of five years for the offense of distributing more than one gram of a "mixture or substance containing a detectable amount of lysergic acid diethylamide (LSD)." We hold that it is the weight of the blotter paper containing LSD, and not the weight of the pure LSD, which determines eligibility for the minimum sentence.

Petitioners Richard L. Chapman, John M. Schoenecker, and Patrick Brumm were convicted of selling 10 sheets (1,000 doses) of blotter paper containing LSD, in violation of § 841(a). The District Court included the total weight of the paper and LSD in determining the weight of the drug to be used in calculating petitioners' sentences. Accordingly, although the weight of the LSD alone was approximately 50 milligrams, the 5.7 grams combined weight of LSD and blotter paper resulted in the

imposition of the mandatory minimum sentence of five years required by § 841(b)(1)(B)(v) for distributing more than 1 gram of a mixture or substance containing a detectable amount of LSD. The entire 5.7 grams was also used to determine the base offense level under the United States Sentencing Commission, Guidelines Manual (1990) (Sentencing Guidelines). Petitioners appealed, claiming that the blotter paper is only a carrier medium, and that its weight should not be included in the weight of the drug for sentencing purposes. Alternatively, they argued that if the statute and Sentencing Guidelines were construed so as to require inclusion of the blotter paper or other carrier medium when calculating the weight of the drug, this would violate the right to equal protection incorporated in the Due Process Clause of the Fifth Amendment.

Title 21 U. S. C. § 841(b)(1)(B) provides that

> "any person who violates subsection (a) of this section [making it unlawful to knowingly or intentionally manufacture, distribute, dispense, or possess with intent to manufacture, distribute, or dispense, a controlled substance] shall be sentenced as follows:
>
> . . . .
>
> "(1)(B) In the case of a violation of subsection (a) of this section involving—
>
> . . . .
>
> "(v) 1 gram or more of a mixture or substance containing a detectable amount of lysergic acid diethylamide (LSD);
>
> . . . .
>
> "such person shall be sentenced to a term of imprisonment which may not be less than 5 years. . . ."

Section 841(b)(1)(A)(v) provides for a mandatory minimum of 10 years' imprisonment for a violation of subsection (a) involving "10 grams or more of a mixture or substance containing a detectable amount of [LSD]." Section 2D1.1(c) of the United States Sentencing Commission, Guidelines Manual parallels the statutory language and requires the base offense level to be determined based upon the weight of a "mixture or substance containing a detectable amount of" LSD.

According to the Sentencing Commission, the LSD in an average dose weighs 0.05 milligrams; there are therefore 20,000 pure doses in a gram. The pure dose is such an infinitesimal amount that it must be sold to retail customers in a "carrier." Pure LSD is dissolved in a solvent such as alcohol, and either the solution is sprayed on paper or gelatin, or paper is dipped in the solution. The solvent evaporates, leaving minute amounts of LSD trapped in the paper or gel. Then the paper or gel is cut into "one-dose" squares and sold by the dose. Users either swallow the squares, lick them until the drug is released, or drop them into a beverage, thereby releasing the drug. Although gelatin and paper are light, they weigh much more than the LSD. The ten sheets of blotter paper carrying the 1,000 doses sold by petitioners weighed 5.7 grams; the LSD by itself weighed only about 50 milligrams, not

even close to the one gram necessary to trigger the 5-year mandatory minimum of § 841(b)(1)(B)(v).

Petitioners argue that § 841(b) should not require that the weight of the carrier be included when computing the appropriate sentence for LSD distribution, for the words "mixture or substance" are ambiguous and should not be construed to reach an illogical result. Because LSD is sold by dose, rather than by weight, the weight of the LSD carrier should not be included when determining a defendant's sentence because it is irrelevant to culpability. They argue that including the weight of the carrier leads to anomalous results, viz: a major wholesaler caught with 19,999 doses of pure LSD would not be subject to the 5-year mandatory minimum sentence, while a minor pusher with 200 doses on blotter paper, or even one dose on a sugar cube, would be subject to the mandatory minimum sentence.[2] Thus, they contend, the weight of the carrier should be excluded, the weight of the pure LSD should be determined, and that weight should be used to set the appropriate sentence.

We think that petitioners' reading of the statute — a reading that makes the penalty turn on the net weight of the drug rather than the gross weight of the carrier and drug together — is not a plausible one. The statute refers to a "mixture or substance containing a detectable amount." So long as it contains a detectable amount, the entire mixture or substance is to be weighed when calculating the sentence.

This reading is confirmed by the structure of the statute. With respect to various drugs, including heroin, cocaine, and LSD, it provides for mandatory minimum sentences for crimes involving certain weights of a "mixture or substance containing a detectable amount" of the drugs. With respect to other drugs, however, namely phencyclidine (PCP) or methamphetamine, it provides for a mandatory minimum sentence based *either* on the weight of a *mixture or substance* containing a detectable amount of the drug, *or* on lower weights of *pure* PCP or methamphetamine. For example, § 841(b)(1)(A)(iv) provides for a mandatory 10-year minimum sentence for any person who distributes "100 grams or more of . . . PCP . . . or 1 kilogram or more of a mixture or substance containing a detectable amount of . . . PCP. . . ." Thus, with respect to these two drugs, Congress clearly distinguished between the pure drug and a "mixture or substance containing a detectable amount of" the pure drug. But with respect to drugs such as LSD, which petitioners distributed,

2. Likewise, under the Sentencing Guidelines, those selling the same number of doses would be subject to widely varying sentences depending upon which carrier medium was used. For example, those selling 100 doses would receive the following disparate sentences:

Carrier	Weight of 100 doses	Base offense level	Guidelines range (months)
Sugar cube	227 gr.	36	188–235
Blotter paper	1.4 gr.	26	63–78
Gelatin capsule	225 mg.	18	27–33
[Pure LSD]	5 mg.	12	10–16

Congress declared that sentences should be based exclusively on the weight of the "mixture or substance." Congress knew how to indicate that the weight of the pure drug was to be used to determine the sentence, and did not make that distinction with respect to LSD.

Petitioners maintain that Congress could not have intended to include the weight of an LSD carrier for sentencing purposes because the carrier will constitute nearly all of the weight of the entire unit, and the sentence will, therefore, be based on the weight of the carrier, rather than the drug. The same point can be made about drugs like heroin and cocaine, however, and Congress clearly intended the dilutant, cutting agent, or carrier medium to be included in the weight of those drugs for sentencing purposes. Inactive ingredients are combined with pure heroin or cocaine, and the mixture is then sold to consumers as a heavily diluted form of the drug. In some cases, the concentration of the drug in the mixture is very low. *E.g., United States v. Buggs,* 904 F.2d 1070 (CA7 1990) (1.2% heroin); *United States v. Dorsey,* 192 U.S. App. D.C. 313, 591 F.2d 922 (1978) (2% heroin); *United States v. Smith,* 601 F.2d 972 (CA8) (2.7% and 8.5% heroin) (1979). But, if the carrier is a "mixture or substance containing a detectable amount of the drug," then under the language of the statute the weight of the mixture or substance, and not the weight of the pure drug, is controlling.

The history of Congress' attempts to control illegal drug distribution shows why Congress chose the course that it did with respect to sentencing. The Comprehensive Drug Abuse Prevention and Control Act of 1970 divided drugs by schedules according to potential for abuse. LSD was listed in schedule I(c), which listed "any material, compound, mixture, or preparation, which contains any quantity of the following hallucinogenic substances," including LSD. That law did not link penalties to the quantity of the drug possessed; penalties instead depended upon whether the drug was classified as a narcotic or not.

The Controlled Substances Penalties Amendments Act of 1984, which was a chapter of the Comprehensive Crime Control Act of 1984, first made punishment dependent upon the quantity of the controlled substance involved. The maximum sentence for distribution of five grams or more of LSD was set at 20 years. The 1984 amendments were intended "to provide a more rational penalty structure for the major drug trafficking offenses" by eliminating sentencing disparities caused by classifying drugs as narcotic and nonnarcotic. Penalties were based instead upon the weight of the pure drug involved.

The current penalties for LSD distribution originated in the Anti-Drug Abuse Act of 1986, Congress adopted a "market-oriented" approach to punishing drug trafficking, under which the total quantity of what is distributed, rather than the amount of pure drug involved, is used to determine the length of the sentence. To implement that principle, Congress set mandatory minimum sentences corresponding to the weight of a "mixture or substance containing a detectable amount of" the various controlled substances, including LSD. It intended the penalties for drug trafficking to be graduated according to the weight of the drugs in whatever

form they were found—cut or uncut, pure or impure, ready for wholesale or ready for distribution at the retail level. Congress did not want to punish retail traffickers less severely, even though they deal in smaller quantities of the pure drug, because such traffickers keep the street markets going.

We think that the blotter paper used in this case, and blotter paper customarily used to distribute LSD, is a "mixture or substance containing a detectable amount" of LSD. Neither the statute nor the Sentencing Guidelines define the terms "mixture" and "substance," nor do they have any established common law meaning. Those terms, therefore, must be given their ordinary meaning. A "mixture" is defined to include "a portion of matter consisting of two or more components that do not bear a fixed proportion to one another and that however thoroughly commingled are regarded as retaining a separate existence." Webster's Third New International Dictionary 1449 (1986). A "mixture" may also consist of two substances blended together so that the particles of one are diffused among the particles of the other. 9 Oxford English Dictionary 921 (2d ed. 1989). LSD is applied to blotter paper in a solvent, which is absorbed into the paper and ultimately evaporates. After the solvent evaporates, the LSD is left behind in a form that can be said to "mix" with the paper. The LSD crystals are inside of the paper, so that they are commingled with it, but the LSD does not chemically combine with the paper. Thus, it retains a separate existence and can be released by dropping the paper into a liquid or by swallowing the paper itself. The LSD is diffused among the fibers of the paper. Like heroin or cocaine mixed with cutting agents, the LSD cannot be distinguished from the blotter paper, nor easily separated from it. Like cutting agents used with other drugs that are ingested, the blotter paper, gel, or sugar cube carrying LSD can be and often is ingested with the drug.

Petitioners argue that the terms "mixture" or "substance" cannot be given their dictionary meaning because then the clause could be interpreted to include carriers like a glass vial or an automobile in which the drugs are being transported, thus making the phrase nonsensical. But such nonsense is not the necessary result of giving the term "mixture" its dictionary meaning. The term does not include LSD in a bottle, or LSD in a car, because the drug is easily distinguished from, and separated from, such a "container." The drug is clearly not mixed with a glass vial or automobile; nor has the drug chemically bonded with the vial or car. It may be true that the weights of containers and packaging materials generally are not included in determining a sentence for drug distribution, but that is because those items are also clearly not mixed or otherwise combined with the drug.

Petitioners argue that the due process of law guaranteed them by the Fifth Amendment is violated by determining the lengths of their sentences in accordance with the weight of the LSD "carrier," a factor which they insist is arbitrary. They argue preliminarily that the right to be free from deprivations of liberty as a result of arbitrary sentences is fundamental, and therefore the statutory provision at issue may be upheld only if the Government has a compelling interest in the classification in question. But we have never subjected the criminal process to this sort of

truncated analysis, and we decline to do so now. Every person has a fundamental right to liberty in the sense that the Government may not punish him unless and until it proves his guilt beyond a reasonable doubt at a criminal trial conducted in accordance with the relevant constitutional guarantees. But a person who *has* been so convicted is eligible for, and the court may impose, whatever punishment is authorized by statute for his offense, so long as that penalty is not cruel and unusual and so long as the penalty is not based on an arbitrary distinction that would violate the Due Process Clause of the Fifth Amendment.

We find that Congress had a rational basis for its choice of penalties for LSD distribution. The penalty scheme set out in the Anti-Drug Abuse Act of 1986 is intended to punish severely large-volume drug traffickers at any level. It assigns more severe penalties to the distribution of larger quantities of drugs. By measuring the quantity of the drugs according to the "street weight" of the drugs in the diluted form in which they are sold, rather than according to the net weight of the active component, the statute and the Sentencing Guidelines increase the penalty for persons who possess large quantities of drugs, regardless of their purity. That is a rational sentencing scheme.

This is as true with respect to LSD as it is with respect to other drugs. Although LSD is not sold by weight, but by dose, and a carrier medium is not, strictly speaking, used to "dilute" the drug, that medium is used to facilitate the distribution of the drug. Blotter paper makes LSD easier to transport, store, conceal, and sell. It is a tool of the trade for those who traffic in the drug, and therefore it was rational for Congress to set penalties based on this chosen tool. Congress was also justified in seeking to avoid arguments about the accurate weight of pure drugs which might have been extracted from blotter paper had it chosen to calibrate sentences according to that weight.

Petitioners do not claim that the sentencing scheme at issue here has actually produced an arbitrary array of sentences, nor did their motions in District Court contain any proof of actual disparities in sentencing. Rather, they challenge the Act on its face on the ground that it will inevitably lead to arbitrary punishments. While hypothetical cases can be imagined involving very heavy carriers and very little LSD, those cases are of no import in considering a claim by persons such as petitioners, who used a standard LSD carrier. Blotter paper seems to be the carrier of choice, and the vast majority of cases will therefore do exactly what the sentencing scheme was designed to do — punish more heavily those who deal in larger amounts of drugs.

Petitioners argue that those selling different numbers of doses, and, therefore, with different degrees of culpability, will be subject to the same minimum sentence because of choosing different carriers.[6] The same objection could be made to a stat-

6. We note that distributors of LSD make their own choice of carrier and could act to minimize their potential sentences. As it is, almost all distributors choose blotter paper, rather than the heavier and bulkier sugar cubes.

ute that imposed a fixed sentence for distributing any quantity of LSD, in any form, with any carrier. Such a sentencing scheme—not considering individual degrees of culpability—would clearly be constitutional. Congress has the power to define criminal punishments without giving the courts any sentencing discretion. Determinate sentences were found in this country's penal codes from its inception and some have remained until the present. A sentencing scheme providing for "individualized sentences rests not on constitutional commands, but on public policy enacted into statutes." That distributors of varying degrees of culpability might be subject to the same sentence does not mean that the penalty system for LSD distribution is unconstitutional.

We hold that the statute requires the weight of the carrier medium to be included when determining the appropriate sentence for trafficking in LSD. Accordingly, the judgment of the Court of Appeals is

Affirmed.

Justice Stevens, with whom Justice Marshall joins, dissenting.

The consequences of the majority's construction of 21 U. S. C. § 841 are so bizarre that I cannot believe they were intended by Congress. Neither the ambiguous language of the statute nor its sparse legislative history supports the interpretation reached by the majority today. Indeed, the majority's construction of the statute will necessarily produce sentences that are so anomalous that they will undermine the very uniformity that Congress sought to achieve when it authorized the Sentencing Guidelines.

This was the conclusion reached by five Circuit Judges in their two opinions dissenting from the holding of the majority of the Court of Appeals for the Seventh Circuit sitting en banc in this case. In one of the dissenting opinions, Judge Cummings pointed out that there is no evidence that Congress intended the weight of the carrier to be considered in the sentence determination in LSD cases, and that there is good reason to believe Congress was unaware of the inequitable consequences of the Court's interpretation of the statute. *United States v. Marshall*, 908 F.2d 1312, 1327–1328 (CA7 1990). As Judge Posner noted in the other dissenting opinion, the severity of the sentences in LSD cases would be comparable to those in other drug cases only if the weight of the LSD carrier were disregarded.

If we begin with the language of the statute, as did those judges who dissented from the Seventh Circuit's en banc decision, it becomes immediately apparent that the phrase "mixture or substance" is far from clear. As the majority notes, neither the statute nor the Sentencing Guidelines define the terms "mixture" or "substance." The majority initially resists identifying the LSD and carrier as either a mixture or a substance; instead, it simply refers to the combination, using the language of the statute, as a "mixture or substance containing a detectable amount" of the drug. Eventually, however, the majority does identify the combination as a mixture: "After the solvent evaporates, the LSD is left behind in a form that can be said to 'mix' with the paper. The LSD crystals are inside of the paper, so that they

are commingled with it, but the LSD does not chemically combine with the paper." Although it is true that ink which is absorbed by a blotter "can be said to 'mix' with the paper," I would not describe a used blotter as a "mixture" of ink and paper. So here, I do not believe the word "mixture" comfortably describes the relatively large blotter which carries the grains of LSD that adhere to its surface.

Because I do not believe that the term "mixture" encompasses the LSD and carrier at issue here, and because I, like the majority, do not think that the term "substance" describes the combination any more accurately, I turn to the legislative history to see if it provides any guidance as to congressional intent or purpose. As the Seventh Circuit observed, the legislative history is sparse, and the only reference to LSD in the debates preceding the passage of the 1986 amendments to § 841 was a reference that addresses neither quantities nor weights of drugs.

Perhaps more telling in this case is the subsequent legislative history. In a letter to Senator Joseph R. Biden, Jr., dated April 26, 1989, the Chairman of the Sentencing Commission, William W. Wilkens, Jr., commented on the ambiguity of the statute:

> "'With respect to LSD, it is unclear whether Congress intended the carrier to be considered as a packaging material, or, since it is commonly consumed along with the illicit drug, as a dilutant ingredient in the drug mixture. . . . The Commission suggests that Congress may wish to further consider the LSD carrier issue in order to clarify legislative intent as to whether the weight of the carrier should or should not be considered in determining the quantity of LSD mixture for punishment purposes.'"

Presumably in response, Senator Biden offered a technical amendment, the purpose of which was to correct an inequity that had become apparent from several recent court decisions. According to Senator Biden: "The amendment remedies this inequity by removing the weight of the carrier from the calculation of the weight of the mixture or substance." Although Senator Biden's amendment was adopted as part of Amendment No. 976 to S. 1711, the bill never passed the House of Representatives. Senator Kennedy also tried to clarify the language of 21 U.S.C. § 841. He proposed the following amendment:

> "CLARIFICATION OF 'MIXTURE OR SUBSTANCE.'
>
> "Section 841(b)(1) of title 21, United States Code, is amended by inserting the following new subsection at the end thereof:
>
> "'(E) In determining the weight of a "mixture or substance" under this section, the court shall not include the weight of the carrier upon which the controlled substance is placed, or by which it is transported.'" 136 Cong. Rec. 12454 (1990).

Although such subsequent legislation must be approached with circumspection because it can neither clarify what the enacting Congress had contemplated nor speak to whether the clarifications will ever be passed, the amendments, at the very least, indicate that the language of the statute is far from clear or plain.

In light of the ambiguity of the phrase "mixture or substance" and the lack of legislative history to guide us, it is necessary to examine the congressional purpose behind the statute and to determine whether the majority's reading of the statute leads to results that Congress clearly could not have intended. The figures [contained] in [the table in footnote 2] of the Court's opinion are sufficient to show that the majority's construction will lead to anomalous sentences that are contrary to one of the central purposes of the Sentencing Guidelines, which was to eliminate disparity in sentencing. As the majority's chart makes clear, widely divergent sentences may be imposed for the sale of identical amounts of a controlled substance simply because of the nature of the carrier. If 100 doses of LSD were sold on sugar cubes, the sentence would range from 188–235 months, whereas if the same dosage were sold in its pure liquid form, the sentence would range only from 10–16 months. The absurdity and inequity of this result is emphasized in Judge Posner's dissent:

> "A person who sells LSD on blotter paper is not a worse criminal than one who sells the same number of doses on gelatin cubes, but he is subject to a heavier punishment. A person who sells five doses of LSD on sugar cubes is not a worse person than a manufacturer of LSD who is caught with 19,999 doses in pure form, but the former is subject to a ten-year mandatory minimum no-parole sentence while the latter is not even subject to the five-year minimum. If defendant Chapman, who received five years for selling a thousand doses of LSD on blotter paper, had sold the same number of doses in pure form, his Guidelines sentence would have been fourteen months. And defendant Marshall's sentence for selling almost 12,000 doses would have been four years rather than twenty. The defendant in *United States v. Rose,* 881 F.2d 386, 387 (7th Cir. 1989), must have bought an unusually heavy blotter paper, for he sold only 472 doses, yet his blotter paper weighed 7.3 grams — more than Chapman's, although Chapman sold more than twice as many doses. Depending on the weight of the carrier medium (zero when the stuff is sold in pure form), and excluding the orange juice case, the Guidelines range for selling 198 doses (the amount in *Dean*) or 472 doses (the amount in *Rose*) stretches from ten months to 365 months; for selling a thousand doses (*Chapman*), from fifteen to 365 months; and for selling 11,751 doses (*Marshall*), from 33 months to life. In none of these computations, by the way, does the weight of the LSD itself make a difference — so slight is its weight relative to that of the carrier — except of course when it is sold in pure form. Congress might as well have said: if there is a carrier, weigh the carrier and forget the LSD.
>
> "This is a quilt the pattern whereof no one has been able to discern. The legislative history is silent, and since even the Justice Department cannot explain the why of the punishment scheme that it is defending, the most plausible inference is that Congress simply did not realize how LSD is sold."

Sentencing disparities that have been described as "crazy," and "loony" could well be avoided if the majority did not insist upon stretching the definition of "mixture"

to include the carrier along with the LSD. It does not make sense to include a carrier in calculating the weight of the LSD because LSD, unlike drugs such as cocaine or marijuana, is sold by dosage rather than by weight. Thus, whether one dose of LSD is added to a glass of orange juice or to a pitcher of orange juice, it is still only one dose that has been added. But if the weight of the orange juice is to be added to the calculation, then the person who sells the single dose of LSD in a pitcher rather than in a glass will receive a substantially higher sentence. If the weight of the carrier is included in the calculation not only does it lead to huge disparities in sentences among LSD offenders, but also it leads to disparities when LSD sentences are compared to sentences for other drugs.

There is nothing in our jurisprudence that compels us to interpret an ambiguous statute to reach such an absurd result. In construing a statute, Learned Hand wisely counseled us to look first to the words of the statute, but "not to make a fortress out of the dictionary; but to remember that statutes always have some purpose or object to accomplish, whose sympathetic and imaginative discovery is the surest guide to their meaning." In the past, we have recognized that "frequently words of general meaning are used in a statute, words broad enough to include an act in question, and yet a consideration of . . . the absurd results which follow from giving such broad meaning to the words, makes it unreasonable to believe that the legislator intended to include the particular act."

Undoubtedly, Congress intended to punish drug traffickers severely, and in particular, Congress intended to punish those who sell large quantities of drugs more severely than those who sell small quantities. But it did not express any intention to treat those who sell LSD differently from those who sell other dangerous drugs. The majority's construction of the statute fails to embody these legitimate goals of Congress. Instead of punishing more severely those who sell large quantities of LSD, the Court would punish more severely those who sell small quantities of LSD in weighty carriers, and instead of sentencing in comparable ways those who sell different types of drugs, the Court would sentence those who sell LSD to longer terms than those who sell proportionately equivalent quantities of other equally dangerous drugs. The Court today shows little respect for Congress' handiwork when it construes a statute to undermine the very goals that Congress sought to achieve.

I respectfully dissent.

Most states follow the federal approach and measure quantity based on the weight of the total "mixture or substance" rather than the pure controlled substance alone. *Chapman* presents a hard question about how far to extend this principle. Where "cutting agents" are used (such as in the sale of heroin or cocaine), however, application of the rule is straightforward and relatively uncontroversial. In dissent in *Chapman*, Justice Stevens argues that "[t]he consequences of the majority's construction of 21 U.S.C. §841 are so bizarre that I cannot believe they were intended by Congress." But if cutting agents are included in the measurement of heroin

or cocaine, what makes including the weight of the carrier paper (or sugar cube) when weighing LSD bizarre? If the weight of the carrier relative to the weight of the LSD is the answer, what is the response to the case referenced by Justice Rehnquist where the amount of heroin in the overall mixture was only 1.2%? Is the difference between carrier paper and cutting agents simply one of degree?

Not all are in agreement with *Chapman*'s application of "mixture or substance" in the context of carrier mediums. Most notably, the federal Sentencing Commission has taken a different approach, instructing that "[i]n the case of LSD on a carrier medium (e.g., a sheet of blotter paper), do not use the weight of the LSD/carrier medium. Instead, treat each dose of LSD on the carrier medium as equal to 0.4 mg of LSD for the purposes of the [Guidelines'] Drug Quantity Table." U.S.S.G. § 2D1.1(c) note g. *Chapman* remains good law, however, for purposes of mandatory minimum sentencing. The result is somewhat peculiar and cumbersome: the weight of an LSD carrier medium is included when applying federal mandatory minimum sentencing provisions but not when applying the federal sentencing guidelines. *See* United States v. Morgan, 292 F.3d 460, 465 (5th Cir. 2002) (explaining that the "[a]mendments to the Guidelines do not override *Chapman* for the purpose of statutory mandatory minimums").

How far should the definition of "mixture or substance" extend? In *Minnesota v. Peck*, 773 N.W.2d 768 (2009), the Minnesota Supreme Court held that bong water that contains a controlled substance should be included in drug quantity calculations. In *Peck*, the police searched the defendant's home and found a "glass water bong" with 37.17 grams of liquid inside of it that "tested positive for the presence of methamphetamine." In a strident dissent, Justice Paul H. Anderson argued that "permit[ting] bong water to be used to support a first-degree felony controlled-substance charge runs counter to the legislative structure of our drug laws, does not make common sense, and borders on the absurd." The Minnesota legislature partially abrogated the decision in *Peck* by amending its drug laws to provide that "the weight of fluid used in a water pipe may not be considered in measuring the weight of a mixture except in cases where the mixture contains four or more fluid ounces of fluid." Minn. Stat. §§ 152.021, subd. 2(b).

b. Counting Marijuana Plants

Counting the number of plants involved in a marijuana case can be an important, and surprisingly difficult, task. Federal law ties marijuana sentences to either weight or the number of plants involved in an offense. Many states follow this same approach. In non-manufacture cases, sentences are usually based on the weight of marijuana, whereas manufacture cases more often rely on the number of plants. In addition, some states that have legalized marijuana allow residents to cultivate marijuana for personal use but cap the number of plants they may legally grow. As a result, the number of marijuana plants a person is growing can matter a great deal in the eyes of the law.

So, what qualifies as a marijuana "plant"?

Kansas v. Holsted

Court of Appeals of Kansas
52 Kan. App. 2d 655 (2016)

Hill, J.

There is a difference between what might be and what is. In this appeal, we must decide whether marijuana clippings are plants as the term is used in Kansas' statute defining the crime of cultivation of marijuana. Because the clippings here had no roots, we hold the 29 cuttings found by the police were not plants and, therefore, the State failed to prove Steven Holsted was cultivating 5 or more marijuana plants as required by law.

The State charged Holsted with cultivation of marijuana, possession of drug paraphernalia, and possession of marijuana. After the court denied his motion to suppress the evidence based on his allegations of coerced consent to search, Holsted pled guilty to all counts but later withdrew his plea to the cultivation of marijuana charge. The court took up the matter on stipulated facts. We summarize the parties' stipulations:

The Narcotics Unit of the Kansas City, Kansas, Police Department received an anonymous tip advising that there was a strong odor of marijuana coming from a house on 39th Street in Kansas City, Wyandotte County, Kansas. The anonymous tip also described the color of the house and stated that it had a chain link fence.

On March 1, 2013, Kansas City, Kansas, police officers responded to the area and discovered the description of the house actually matched the house next door. Officers knocked on the front door of the house and showed police identification and badges to Holsted. The officers told Holsted that there was a drug complaint regarding his residence. Holsted invited officers inside the residence. Once they were inside, the officers noticed a strong odor of raw marijuana. Holsted admitted to having 2.1 grams of marijuana for personal use, which officers found on the stove in the kitchen.

The officers asked Holsted for permission to search the residence. After that, Holsted signed a consent to search form. Holsted was not under arrest at this time, and he walked around freely and cared for his 3-year-old son.

In the attic of the residence, officers found an apparent marijuana-growing operation. The police found:

- 29 small marijuana plants (marijuana cuttings) with no visible roots in an aeroponic/hydroponic growing system;
- one large marijuana plant with a complete root system;
- one white horticultural 100-watt lighting ballast;
- one four-bulb grow light; and
- one white Sun Leaves grow light.

Additionally, the officers found the 2.1 grams of marijuana in a box on the kitchen stove that Holsted had told them about.

The parties agreed that a marijuana cutting will grow roots in approximately 1 to 3 weeks if kept properly in an aeroponic/hydroponic grow system. Because the 29 smaller marijuana cuttings or clippings came from the larger mother plant, the small marijuana cuttings or clippings would become almost a perfect clone of the mother plant.

In making its ruling, the district court spoke of intent and expectations but not about the cuttings themselves:

> "I suppose if the defendant had snipped these pieces of marijuana from the healthy mother plant and tossed them aside, we wouldn't be here. . . . There's no question the defendant intended and was in the process of cultivating the clippings, the cuttings, from the main plant so that they would propagate and grow stronger: The lights, the water. . . . When you take a clipping from a mature healthy plant and you put it in an environment to propagate and cultivate, then that is indeed a plant, smaller plant, but you have the same expectations."

Thus, the issue is framed. Are 29 marijuana clippings with no roots sitting in a growing medium marijuana plants as contemplated in our cultivation of marijuana law?

We turn first to the charging statute. "Cultivate" means "the planting or promotion of growth of five or more plants which contain or can produce controlled substances." K.S.A. 2015 Supp. 21–5701(c). The term "plants" is not defined. The parties take opposing positions on the issue.

Holsted contends that cuttings or clippings taken from a mother plant are not plants until there is visible root formation. The State contends that clippings or cuttings constitute plants at least when they have been transplanted into an aeroponic/hydroponic grow system, as here.

The Cambridge English Dictionary defines "plant" as "a living thing that usually produces seeds and typically has a stem, leaves, roots, and sometimes flowers." Merriam-Webster defines "plant" as "a living thing that grows in the ground, usually has leaves or flowers, and needs sun and water to survive." A plant includes "a young tree, vine, shrub, or herb planted or suitable for planting." Merriam-Webster The Oxford English dictionary defines "plant" as "[a] living organism of the kind exemplified by trees, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site, absorbing water and inorganic substances through its roots, and synthesizing nutrients in its leaves by photosynthesis using the green pigment chlorophyll." These definitions contemplate that a plant is marked by leaves and roots, growth, and the taking in of sun and water.

The clippings found by the police here were just that—clippings. They may have been on the way to becoming plants, but with no roots they could not sustain life by absorbing water and inorganic substances through their roots. The test thus becomes manifest. Does the cutting have some visible root formation? There is a

utility to this test. If the clippings have roots, they are plants. If they have no roots, they are not plants and cannot be the basis for a criminal charge of cultivating marijuana under the statute as it is now written.

After all, the statute speaks to what *is* five or more plants, not what the accused *intends* to grow. We have no doubt that Holsted went to all of this trouble of clipping portions of the mother plant and putting them into the growing medium in the hope that they would develop roots. But Holsted's intent does not make a useful definition of what a plant is.

We have found no Kansas cases on the subject. But at least seven federal circuit courts have defined "plant" in the context of the federal sentencing guidelines. Under the guidelines, the number of plants determines the mandatory minimum sentence for the manufacture, distribution, or possession with intent to manufacture or distribute marijuana when the marijuana is seized in plant form.

The federal circuit courts have uniformly held that a marijuana cutting is not a plant until there is "'some readily observable evidence of root formation.'" *United States v. Foree,* 43 F.3d 1572, 1574, 1581 (11th Cir.1995) (marijuana plants have three characteristics: roots, stems, and leaves); *United States v. Delaporte,* 42 F.3d 1118, 1120–21 (7th Cir.1994) (a cutting that has sprouted roots, even if only rudimentary ones, is a plant); *United States v. Robinson,* 35 F.3d 442, 446 (9th Cir.1994) ("Until a cutting develops roots of its own, it is not a plant itself but a mere piece of some other plant."); *United States v. Burke,* 999 F.2d 596, 600–01 (1st Cir.1993) (a plant exists "at the first sign of roots"); *United States v. Edge,* 989 F.2d 871, 877–79 (6th Cir.1993) (a cutting with callus tissue that formed after the cutting was taken from a mature plant, without more, is not a plant); *United States v. Bechtol,* 939 F.2d 603, 604–05 (8th Cir.1991) (a cutting that has developed root hairs is a plant); *United States v. Eves,* 932 F.2d 856, 859–60 (10th Cir.) (a cutting that has developed a root ball is a plant), *cert. denied* 502 U.S. 884, 112 S.Ct. 236, 116 L.Ed.2d 192 (1991). Later, the federal Sentencing Commission adopted that definition. U.S.S.G. §2D1.1, cmt. 2 (2015); see *United States v. Fletcher,* 74 F.3d 49, 55 (4th Cir.1996).

Additionally, two state appellate courts have adopted the root requirement in the context of their state's marijuana laws. The Idaho Court of Appeals said it best. "In common parlance, one plant does not immediately become many plants as soon as it is cut into pieces, even if those pieces have been placed in soil or a growing medium." *State v. Schumacher,* 136 Idaho 509, 519–20, 37 P.3d 6 (Ct.App.2001), *rev. denied* December 19, 2001; see *Com. v. Burnsworth,* 543 Pa. 18, 25–27, 669 A.2d 883 (1995). The State cited no cases that have defined the term "plant" differently.

The State contends that Holsted's reliance on the 10th Circuit's holding in *Eves* is misplaced because while the court held that root formation is an indication that a cutting is a plant, it did not hold that root formation is necessary for a cutting to be a plant. To the contrary, in *Eves,* the 10th Circuit was clear that "plant" meant there was some visible root formation, rejecting a more involved scientific inquiry. 932 F.2d at 858, 860. The 10th Circuit affirmed the district court's definition:

> "[A] marijuana 'plant' includes those cuttings accompanied by root balls. Whether the plant could survive on its own would not be an issue; if it looks like a 'plant'—that is, if it has a reasonable root system—it will be considered a 'plant.' No expert need testify, no experiments with instrumentation to monitor whether gaseous exchange is occurring need be conducted, no elaborate trimester or viability system need be established. If a cutting has a root ball attached it will be considered a plant." 932 F.2d at 860.

Additionally, other circuits have squarely held that a cutting without some visible root formation is not a plant. A root must be "readily apparent to the unaided layperson's eye." This root test is a "clear, easily[ ]implemented standard rather than one requiring extensive litigation and expert botanical testimony."

The 10th Circuit reasoned that "[t]o distinguish [two] plants from one plant cut into two pieces, there must be evidence of individual growth after the severance, such as growing of roots, from a cutting." *Eves,* 932 F.2d at 859. A cutting or clipping without roots is not a plant because there is no evidence of individual growth on its own. Once a cutting/clipping has become a plant, *i.e.,* developed roots, then we count it. It does not make a difference whether the plant has newly formed roots or is a fully grown "mother" plant—in other words, it counts at "any level of growth."

The State does not offer any compelling reason to rule in a fashion that differs from the federal courts. Holsted did not possess 29 individual marijuana plants—he possessed 29 freshly cut pieces of his mother plant.

The State contends that the "clear legislative intent is to punish the cultivation of marijuana, and there is no question in this case that the defendant intended for these cuttings to be cultivated and intended and expected these cuttings to become almost exact replicas of the mother plant from which they came." We have no doubt that Holsted's clippings were not only cut from the mother plant but had already been transplanted into an aeroponic/hydroponic grow system such that he was certainly promoting the growth of the clippings into distinct plants.

Indeed, the parties stipulated that *the clippings would grow* roots in approximately 1 to 3 weeks' time if kept properly. We note the future tense of that statement. The clippings here did not yet constitute plants when they were seized by the police.

And, even though Holsted had placed his clippings into a growing medium, that fact does not make his case unlike other cases. For example, in *Edge,* marijuana cuttings were found in a growing medium, saturated with a rooting hormone. Some of the cuttings had developed callus tissue, which is formed after a cutting is clipped from a mature plant and is the marker of the beginning of the development of a root. It is from this callus tissue that roots will come. But, the cuttings did not yet have any visible roots or root hairs. The court adopted the commonly accepted root test and held that those cuttings were not plants.

The legislature set the minimum plant requirement at five. If defendants have only cultivated four plants, they can be punished for the possession of the plants

under, but they would not have a sufficiently large enough operation for a cultivation charge. The legislature emphasized the importance of properly counting the plants; the number of plants determines the severity of the crime.

By not defining the term "plants," it is presumed that the common, widely used definition was contemplated. There is a consensus among other courts that the common meaning of "plant" contemplates observable root formation. We share their view.

Here, the parties stipulated that Holsted's clippings had no root formation. Therefore, there was insufficient evidence that Holsted cultivated five marijuana plants in violation of K.S.A. 2012 Supp. 21–5705(c).

Reversed.

c. Calculating Drug Quantity in Conspiracy Cases

As discussed in Chapter 3, federal drug conspiracy convictions can sometimes result in lengthy sentences for peripheral participants in drug operations (such as in the so-called "girlfriend cases"). Part of the reason for this is the method for determining drug quantity in a conspiracy, under which a drug conspirator is sentenced based on the drug quantity that was reasonably foreseeable and in furtherance of the conspiracy rather than the amount of drugs with which she was directly involved.

Weighing the Evidence: Drug Quantity Issues in Mandatory Minimum Cases

Kyle O'Dowd

24 Champion 43 (2000)

Federal drug offenders sentenced in 1998 will spend almost three times as much time in prison as did offenders in 1984. There are three conspicuous causes for this threefold increase in sentence severity: (1) the Anti-Drug Abuse Act of 1986, which established most of the mandatory minimum penalties for drug trafficking; (2) the Omnibus Anti-Drug Abuse Act of 1988, which extended the mandatory minimums to conspiracy cases; and (3) the U.S. Sentencing Guidelines, which incorporate the mandatory minimums for drug offenses. Because the federal sentencing guideline for drug trafficking is invariably applied in roughly 40 percent of all cases the last 15 years have witnessed a sea change in the composition of the federal prison population. In 1984, drug law violators constituted 30 percent of the federal prisoner population—a figure which swelled to 60 percent by the end of 1998. This translates to approximately 60,000 federal prisoners who are confined for drug law violations—many of whom are low-level, first-time offenders.

For all their structural and functional differences, federal mandatory minimums and the Sentencing Guidelines have one thing in common: under both schemes, drug quantity is the most significant determinant of sentences for drug trafficking.

The Omnibus Anti-Drug Abuse Act of 1988 amended 21 U.S.C. § 846 to provide that "any person who attempts or conspires to commit any offense defined in this

subchapter shall be subject to the same penalties as those" set forth for the object offenses.[28] Prescribing mandatory minimums for drug offenses charged as conspiracies — "that elastic, sprawling and pervasive offense" — greatly increased the risk of low-level defendants receiving the same sentences as defendants with greater roles.

Exacerbating this risk and carrying the new language to its untenable extreme, prosecutors argued that all the defendants in a drug conspiracy should be held accountable for the entire weight distributed by the conspiracy as a whole. According to this interpretation, which no circuit abided, a defendant who helps a large-volume dealer in completing a single, small sale of drugs is liable for the dealer's prior and subsequent activities. The first published decision on point was *Jones v. United States*, in which the Eighth Circuit held that, with respect to a conviction for conspiracy, a mandatory minimum is triggered by the amount of drugs that was reasonably foreseeable to the defendant and within the scope of the defendant's agreement with the other conspirators.

This two-pronged analysis is also employed by the Sentencing Guidelines, a fact which some courts of appeals have claimed is the basis for adopting the approach. A better rationale — one that does not overstate the influence of the guidelines on interpretation of the mandatory minimum statutes — is that "there is nothing to indicate that Congress intended to abandon the theory of conspiratorial liability that has descended from *Pinkerton*." Regardless of which source the decisions identify, all the circuits to have decided the issue require an assessment of each defendant's level of responsibility.

Drug quantity calculations for defendants who are convicted of conspiracy charges often present particularly difficult challenges for courts. In cases where the conspiracy was still in the planning stages at the time of arrest, the amount of drugs that were actually involved may be zero. At the opposite end of the spectrum, a large-scale ongoing drug operation may involve significant quantities of drugs but it is likely that most members of the group are personally involved with only a small portion of the total amount. *United States v. Hickman* provides one example of some of the issues that can arise when calculating drug quantity in a conspiracy prosecution.

United States v. Hickman

United States Court of Appeals for the Fourth Circuit 626 F.3d 756 (2010)

Davis, J.

The evidence offered by the Government in this prosecution resulted from the confluence of two distinct investigations by federal and local law enforcement

28. Prior to this change, § 846 provided that the sentence "may not exceed the maximum punishment prescribed for the . . . object of the attempt or conspiracy." 21 U.S.C.A. § 846 (West 1981).

agencies into heroin distribution activities in Baltimore. In the course of the federal component of the investigation, agents of the Drug Enforcement Administration obtained wiretaps on the phones of Hickman's co-defendants James Jones (also known as "Fat Cat") and James Henderson, among others, and instituted surveillance of an inner-city store known as Fat Cat's Variety Store, run by Jones.

The wiretaps intercepted calls between Tony Caldwell (who was also a co-defendant) and Jones on April 24, 2007, in which Caldwell informed Jones he had found a buyer for him, whom he called "Hookie" (Hickman). Agents then set up surveillance at Fat Cat's Variety Store. Special Agent Bennet Strickland observed Hickman's car arrive at Fat Cat's Variety Store, and the wiretap confirmed that Hickman and Henderson spoke by phone only minutes before.

A few minutes after Hickman's arrival, Jones called Caldwell to ask if the person named "Kevin" at his store was, in fact, "Hookie," and was told that he was. Jones also told Caldwell that he had five more grams of heroin than Hickman could pay for, and asked whether he should give Hickman the extra five; Caldwell instructed him to deliver only "what he [was] supposed to get". Shortly afterward, Caldwell asked Jones, "You all know each other?" and Jones confirmed, "Yeah, yeah, yeah, I know him, I know him. Definitely yeah." Caldwell then told Jones that Hickman was "my co-defendant," (apparently alluding to an earlier drug prosecution in state court). Just after leaving the store, Hickman spoke with Henderson by phone; Henderson asked if he "ever ma[d]e it to the store" and Hickman confirmed that he had.

The investigators directed city police to stop Hickman, and after allowing Hickman to drive a few blocks away from the store so as not to raise suspicion, Baltimore Police Officer Keith Sokolowski stopped Hickman's vehicle for a traffic violation. Hickman was driving and his girlfriend, Claudia Lake, was in the front passenger seat. Officer Sokolowski testified that he discovered and seized 32.14 grams of heroin in the passenger area of the car, which Lake had tried to hide. Subsequent analysis revealed that the heroin was 38% pure. Sokolowski also found 17 gold-topped vials of heroin hidden under the gas cap of the vehicle, though the heroin in the vials was never weighed.

Hickman was arrested and then released on bail. The day of his release, he called Henderson about arranging an additional purchase from Jones. Over the next few days, the two spoke several times about it; though Hickman told Henderson that he had spoken with Jones and was simply waiting on him, the Government produced no evidence that this plan was ever consummated.

Meanwhile, in a search of Caldwell's house on May 8, 2007 arising from a separate investigation, local law enforcement officers seized 139 grams of heroin, later found to be 29% pure. In a subsequent search of Fat Cat's Variety Store on June 7, 2007, federal agents seized more than 25,000 vials and a variety of colored tops, packaged by the hundred. The evidence showed that the vials were of the sort customarily employed to package street-level quantities of heroin (one-tenth of a gram).

Hickman was charged with seven others in an 11-count superseding indictment. He was named in two counts; count one alleged a "conspir[acy] . . . to distribute, and possess with intent to distribute, one kilogram or more of . . . heroin," and count six alleged "possess[ion] with the intent to distribute a quantity . . . of heroin." Although all of Hickman's co-defendants pled guilty, none of them testified at trial, nor did the Government call as a witness any other participant in the overall conspiracy. Rather, the Government adduced the testimony of the following witnesses: Special Agent Strickland, who was conducting surveillance outside of Fat Cat's Variety Store at the time of Hickman's purchase; Officers Sokolowski and Michael Woodlon, who took part in the traffic stop of Hickman; Detective Constantine Passamichalis, who assisted in the raid on Caldwell's residence; and criminologists Anthony Rumber and Theodis Warnick, Jr., who tested the narcotics seized from Hickman and Caldwell.

Perhaps most significant for purposes of this appeal was extensive testimony from Special Agent Brendan O'Meara, who monitored the Jones wiretap and who was accepted by the court as an expert in narcotics investigations. The Government relied heavily on the content of the wiretap recordings, and it was Agent O'Meara who interpreted them for the jury, explaining the vague and coded terminology used by drug dealers. In its effort to prove that the conspiracy (which the indictment alleged subsisted for only four months, from February 2007 through May 2007) involved more than one kilogram of heroin, the Government asked Agent O'Meara to explain how heroin is typically cut down from its raw, high-purity state to user-strength level of approximately 8% via mixture with mannite and quinine. Critical to the Government's theory of the case was O'Meara's opinion that the 25,000 vials seized from Fat Cat's Variety Store would be enough to hold one kilogram of user-strength heroin.

After the Government rested, the defense moved for a judgment of acquittal, which the district court denied. The defense at no time specifically argued that the Government's proof established only a conspiracy involving a lesser amount than one kilogram, and the defense never requested a lesser included offense instruction. Nor did the defense call any witnesses.

The jury found Hickman guilty on both the conspiracy and possession with intent to distribute counts. The jury was asked on the verdict form to determine whether the amount of heroin involved in the conspiracy and reasonably foreseeable to Hickman was (1) one kilogram or more, (2) less than one kilogram but greater than or equal to one hundred grams, or (3) less than one hundred grams. It found the conspiracy involved one kilogram or more and that such amount was foreseeable to Hickman. Because Hickman had two predicate felony drug convictions which the Government had noticed pursuant to 21 U.S.C. §851, he was sentenced to life imprisonment on the conspiracy count and to a concurrent sentence of 360 months for possession with intent to distribute.

Overwhelming evidence supports the jury's finding that Hickman was a knowing member of the basic conspiracy alleged in Count I of the superseding indictment.

Conviction for conspiracy to distribute narcotics under 21 U.S.C. § 846 requires proof beyond a reasonable doubt of three elements: (1) "an agreement between two or more persons to engage in conduct that violates a federal drug law"—here, to distribute or possess narcotics with intent to distribute; "(2) the defendant's knowledge of the conspiracy; and (3) the defendant's knowing and voluntary participation in the conspiracy." Proof of a conspiratorial agreement need not be by direct evidence, and rather may "be proven inferentially and by circumstantial evidence."

Given the plethora of direct evidence, including but not limited to the content of the telephone communications and the circumstances surrounding the traffic stop of Hickman, only very modest inferences, if any, were required here to show the existence of a conspiratorial agreement and Hickman's knowing membership in a heroin conspiracy. The damning wiretap recordings reveal Hickman and Henderson's coordination before and after Hickman purchased 32 grams of heroin from Jones; Henderson discussing his stake in the transaction;[3] and later exchanges between Hickman and Henderson concerning the possibility of a subsequent transaction after the police seized the heroin initially purchased. Moreover, agents observed Hickman entering and exiting Jones's store; in the interim, wiretaps record Jones discussing the Hickman sale with Caldwell; and a police stop some minutes later found Hickman in possession of those 32 grams. In the face of this mountain of evidence of Hickman's knowing participation in a heroin distribution conspiracy, Hickman's broader challenge to the sufficiency of the evidence is plainly unavailing.[8]

Although there is overwhelming evidence of Hickman's knowing membership in a heroin distribution conspiracy, his challenge to the jury's finding that the conspiracy of which he became a member involved at least one kilogram of heroin has merit. Sufficient evidence supported a finding that Hickman knowingly became a member of a large-scale heroin distribution conspiracy which involved, at the least Jones, Henderson, and Caldwell, and that many of the acts of the co-conspirators were reasonably foreseeable to Hickman. Yet, no matter how generously we indulge the available *reasonable* inferences in favor of the Government, adding the post-dilution weight of heroin from all known and reasonably inferable transactions—whether completed, attempted, or merely agreed upon by any of Hickman's co-conspirators—to reach a sum of one kilogram, if not a mathematical

3. *See* J.A. 426–27 (an hour after the buy, having just learned of Hickman's arrest, Henderson telling an unidentified man that Hickman "had my fucking bread yo" and complains "I ain't even get to get that [i.e., retrieve the narcotics] from him yo").

8. We pause to acknowledge the practical conundrum faced by counsel for Hickman. Rare is the lawyer who wants to make an argument to a jury that, "My client was not involved in a conspiracy, but if you disagree, it was at most a conspiracy involving less than one kilogram of heroin." Thus, in his arguments on the motion for judgment of acquittal, in his request for jury instructions, and in his closing argument to the jury, counsel largely sought to cast Hickman as involved merely in one or more buy-sell transactions rather than in a conspiracy, and that argument is pressed on us in this appeal. Nonetheless, we have no doubt that Hickman's argument on the motion for judgment of acquittal was adequate to alert the district court to the deficiency in the Government's proof of *drug quantity* and to preserve the sufficiency of evidence issue for purposes of this appeal.

impossibility, would require reasoning so attenuated as to provide insufficient support for the jury's verdict on the one-kilogram verdict.

The jury heard evidence of the amounts and purity of heroin seized during the traffic stop of Hickman and the raid on Caldwell's home; evidence of discussion between Hickman and Henderson of an attempt in the days after Hickman's initial arrest to "do the same thing [transaction] again," presumably with Jones; and a vague statement the defense itself elicited on recross-examination of a Government witness concerning the "recover[y] [of] heroin . . . the week prior" from someone exiting Jones's store.

The indictment alleged a four-month conspiracy. The only definite amounts of heroin established by the Government were the 32.14 grams of 38% pure heroin recovered during the stop of Hickman's vehicle; 17 gold-topped vials also recovered during the traffic stop, the contents of which were never weighed; the 5 grams of heroin Jones kept from Hickman; and 139 grams of 29% pure heroin seized from the raid on Caldwell's apartment. Expert testimony from Agent O'Meara provided a basis for inferring that the coconspirators intended that the heroin be substantially diluted before reaching end-users. To "step on" or "cut down" the heroin, a dealer would mix one part raw heroin with one, two, or three parts of "cut"—the solvent used to dilute the heroin, often mannite or quinine—to reach a concentration fit for most users, which Agent O'Meara estimated to be 8%.

Agent O'Meara's discussion of the dilution process was the jury's only basis for inflating the weight of the recovered heroin, and as such the method of dilution he described must constrain the trier of fact's reasonable inferences. As Agent O'Meara described, raw heroin is said, in the "slang vernacular," to "take[ ] a one, two, or a three" depending on how many parts of solvent are mixed with each part of heroin; because "the drug dealers on the street don't have a laboratory" they are limited to this simple mixing process. Agent O'Meara's lengthy discussion, and the vernacular terms he cites, indicate that this mixing of heroin with "cut" is always in the ratio of 1:n, where n is a natural number. This, of course, would bound the maximum dilution of heroin of a given purity: without "a laboratory" capable of more precise measurements and mixtures, dilution to precisely 8% will ordinarily be impossible. Thus the 38% pure heroin recovered from Hickman would only "take a four"—be mixed 1:4 with solvent—since a 1:5 mixture would decrease the purity below 8%; similarly, the heroin seized from Caldwell, 29% pure, would "take a three."[9] These

9. We note that 8%, though Agent O'Meara gave it as a "rough" estimate of the "average" for lowest-purity "scramble" heroin in Baltimore City, was the lowest purity discussed at trial. The Government's criminologist, who had worked for the Baltimore City Police Department for eleven years and tested "thousands" of samples for the presence of controlled dangerous substances put the weakest heroin submitted to the crime lab for testing at "around 9 to about 11" percent. (In fact, Government counsel pegged "[w]hat's on the street" at "10%" during a colloquy with the district judge and defense counsel, in which he went on to explain to the judge that the Government's theory was that the seized heroin would have been "cut down further . . . [d]own to 10%.") As we view the facts in the light most favorable to the Government, we assume 8% purity was the conspiracy's

dilutions would result in 128.56 grams of 9.5% purity and 417 grams of 9 2/3% purity—together, approximately 546 grams of heroin. But we will assume, *arguendo*, that the Hickman conspiracy would have diluted this heroin precisely to 8% purity, generating 153 grams and 504 grams for Hickman and Caldwell, respectively. Together with the 5 grams Jones kept from Hickman—which, assuming it was of the same purity as the 32 grams Jones sold him, would add another 23.75 grams—the Government would have established a total of 681 grams.

As for the 17 gold-top vials recovered during the traffic stop of Hickman, their contents were never weighed. Rumber, one of the Government's two criminologists at trial, testified that the gross weight of the vials was 24.30 grams, and confirmed that the net weight—the weight of the heroin itself—was never measured. The only testimony on point is from Agent O'Meara, who explained that a vial of heroin typically contains 0.1 grams. Thus the 17 vials support an additional 1.7 grams of heroin. Added to the 681 grams assumed above, this would support a finding of no more than 683 grams.

Evidence concerning the remaining two potential transactions is scant, to say the least. During the week after Hickman's initial arrest and release, he and Henderson spoke about attempting to "do the *same thing again*" and Hickman claimed he had made several telephone calls to a potential narcotics supplier, apparently Jones. Though Hickman remained free until his arrest in August 2007, no evidence of this transaction was offered. Aside from Henderson's reference to "do[ing] the *same thing again*," there is no evidence concerning the amount of heroin Hickman and Henderson sought. Attributing any more than another 32.14 grams to this potential transaction—like the earlier purchase from Jones—would be purely speculative; thus, at a maximum, the jury could find that the conspiracy involved another 153 grams of "cut" heroin, giving them a hypothetical sum of 836 grams.

Evidence of the final alleged transaction—a brief statement on recross-examination by Agent O'Meara about the seizure of some amount of heroin from some individual exiting Jones's store a week before Hickman's purchase—is extremely vague:

> Q. How many people did you stop coming out of Fat Cat's and recover heroin from?
>
> A. We recovered heroin out of—the week prior. I think it was April 17th.
>
> Q. And you recovered it in terms of the stop of Hickman; is that right?
>
> A. Yes, sir.

There is no evidence that this seizure had anything to do with Hickman, Henderson, or Caldwell. Moreover, given that Jones was in the business of selling drug paraphernalia and so would likely be visited by those who had recently bought (or

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intended target. But finding, beyond a reasonable doubt, even higher weights via speculation as to a lower purity target would be wholly unreasonable on this record.

intended to buy) narcotics elsewhere, there is little reason to believe that the seized heroin had just been sold through Jones's store. That the month-long surveillance of Jones's store bore no more fruit than this single drug seizure further undermines the circumstantial evidence of drug quantity implicating Jones. Even if, squinting our eyes, it were to appear nonspeculative to attach an amount to this earlier seizure and link it to the Count I conspiracy, the evidence could by no means bear any more than the "stepped on" amount of Hickman's purchase from Jones, 153 grams. And even with this final amount, the sum would fall short of one kilogram.

To reach its finding that the Count I conspiracy involved at least one kilogram, the jury would have had to rely on either or both of two grounds: (1) that Hickman was criminally liable for the distribution of heroin by buyers of paraphernalia from Jones — a theory that fails as a matter of law; or that, (2) on account of the conspirators' apparent familiarity with the drug trade, they must have undertaken to distribute some amount beyond the amounts involved in the evidenced transactions. Neither theory can sustain Hickman's conviction on the one-kilogram conspiracy.

The Government told jurors during closing argument that Jones "basically runs a one-stop shop[ ] for heroin," with "thousands and thousands of vials that heroin goes in." Indeed, the evidence well supports the inference that Jones was in the business of selling drug paraphernalia. As Agent O'Meara testified, a raid on Jones's store produced bins containing more than 25,000 glass vials of the sort used to distribute heroin, packaged in groups of one hundred, in various sizes and with variously colored tops, also packaged in groups of one hundred; customers were apprised of the merchandise by a three-ring binder on the counter.

Yet there is absolutely no evidence to support a finding that Hickman is liable for heroin distributions by those who had purchased empty vials from Jones. Indeed, it strains credulity even to think that, on the evidence in the record, Jones himself could be convicted of a widespread conspiracy to distribute heroin on the mere fact that he sells drug paraphernalia and had such packaged merchandise at his store. Finding such conspiracy liability for Jones would have required the trier of fact to find beyond a reasonable doubt that Jones's purchase of paraphernalia for resale evidenced a conspiracy to conspire with future paraphernalia buyers concerning subsequent distribution. While paraphernalia vendors can certainly become parties to the distribution conspiracies of their buyers, such cases present substantial evidence of the vendor's involvement in and/or knowing facilitation of, a distributor's operations.

Tellingly, Agent O'Meara testified that law enforcement "did not stop a lot of people coming out of [Jones's store]" because they knew that Jones was "also selling paraphernalia, like vials, and . . . we're not going to go out and arrest a particular person just for having the actual vials . . . empty vials." "Unless there is a specific reason, [and] we know that a drug deal is taking place," he testified, "we're not just stopping everybody that's coming out of there and . . . trying to pull a bunch of empty vials off the street." In fact, the jury was told that in more than a month of surveillance of Jones's store, only a single patron other than Hickman was found with narcotics

on his person. Where the Government failed to present evidence about even a single buyer of the paraphernalia or any plans on the part of Jones to involve himself in the distribution activities of his paraphernalia customers, it would be mere speculation to find that Jones's own distribution activities were coextensive with his paraphernalia business.[11] On this paltry evidence, no reasonable inference as to the scope of Jones's conspiracy to distribute narcotics could be drawn from the amount of paraphernalia merchandise he hoped to sell.

Furthermore, even if the evidence had supported widespread conspiracy liability for Jones on the basis of his trafficking in drug paraphernalia, this liability could not be transferred to Hickman on this record. As an initial matter, while we have assumed that Hickman and Jones conspired together with respect to the distribution chain that included Henderson and Caldwell, no evidence was presented to suggest that the selling of paraphernalia entered into this agreement. Moreover, as there was no evidence that Hickman had or planned to have any involvement with (or even any knowledge of) Jones's paraphernalia buyers, such a conspiracy (having Jones at the center) would have been a classic "rimless," "hub-and-spokes" conspiracy, which has long been held to make out multiple, distinct conspiracies and not a single, large one. Thus evidence of the number of packaged, empty vials in Jones's store is not a sufficient basis for further inflating the amount of heroin ascribable to the Count I conspiracy.

Nor could the jury properly convict Hickman of the one-kilogram conspiracy in reliance on the Government's repeated assertions during closing argument that the four-month Count I conspiracy encompassed far more drug distribution activity (and that Hickman could reasonably foresee such quantity) than that of which the Government could produce competent evidence. The Government strenuously urged jurors to draw such an inference, claiming that the evidence presented was only "a window into the conspiracy," merely "part of something larger"; that the evidenced transactions were simply "two brief episodes . . . in the life of this conspiracy" or "a few days in the life of a heroin conspiracy"; that "this [was] an ongoing course of business," an "ongoing thing." "[I]t's clear," said the prosecutor, "that this is a regular course of business for these gentlemen. It's clear that this isn't the first time they've done this before [sic]. It's clear that this wasn't going to be the last time. . . . [Hickman] would have continued to [seek out drug transactions]."

This line of argument is troubling, not just because it seems to urge jurors to convict the defendant for what he "would have continued to do" which, to the extent

11. Even where co-conspirators have had no connection to paraphernalia sales, and thus any packaging materials would presumably be used for their own distribution, some circuit courts have been skeptical of relying on unused drug packaging materials to increase drug amounts charged to a conspiracy. *See United States v. Henderson,* 58 F.3d 1145 (7th Cir. 1995) (explaining that the court "question[ed] whether multiple boxes of unused baggies present the same degree of reliability [as the used baggies relied on in an earlier case]" and declining to rely upon them to support lower court's finding as to amount of narcotics within the scope of the conspiracy, where lower court's methodology appeared to lack sufficient indicia of reliability).

these hypothesized future bad acts were not captured by an agreement within the charged period, is clearly improper, but also because it invites the jury to speculate as to the amount of heroin involved in the conspiracy.

Where no evidence exists to guide the trier of fact in determining the outer scope of a conspiracy, the trier may not simply guess at the magnitude or frequency of unknown criminal activity. Unbridled speculation is an impermissible basis for conviction beyond a reasonable doubt.

Under more than two decades of federal law, it is impermissible to enhance drug amounts without particularized evidence of narcotics transactions. Federal district courts have long struggled with extrapolating drug amounts under the U.S. Sentencing Guidelines, which instruct that, "[w]here . . . the amount [of narcotics] seized does not reflect the scale of the offense, the court shall approximate the quantity of the controlled substance." U.S.S.G. §2D1.1 n.12. In reviewing district courts' findings, the courts of appeals have developed a sizable body of case law narrowing the range of permissible inferences. Its teachings are instructive here.

As the First Circuit has explained, "[w]here drug-quantity extrapolations have been upheld, the Government managed to demonstrate an adequate basis in fact and that the drug quantities were determined in a manner consistent with the accepted standards of reasonable reliability." Concerned about the methodologies district courts employ to calculate their extrapolations, courts have cautioned against using small sample sizes.

To be sure, where courts have evidence of a number of transactions, they have been permitted to multiply that number by an average weight-per-transaction to reach an estimate, *see, e.g., United States v. Correa-Alicea,* 585 F.3d 484 (1st Cir. 2009) (upholding such a calculation using "highly conservative" estimates), though the circuit courts have urged district courts to "make conservative approximations," *United States v. Sklar,* 920 F.2d 107 (1st Cir. 1990) ("[W]hen choosing between a number of plausible estimates of drug quantity . . . a court must err on the side of caution.").

Such conservative extrapolation as to the amount sold in *evidenced* transactions is perfectly proper; but the courts of appeals have refused to allow a trier of fact to extend this extrapolation so far as to fabricate transactions of which there is no evidence. Thus the First Circuit has held that evidence that a drug conspiracy "did a substantial amount of narcotics business" was insufficient, "[i]n the absence of *particularized findings*," to support a determination by a preponderance of the evidence of an amount of narcotics that "seem[ed] attainable given the appellant's role in the conspiracy," explaining that a court "cannot uphold a drug quantity calculation on the basis of hunch or intuition."

Here the Government contends, unpersuasively, that Hickman's use of "vague and coded language" establishes "familiar[ity] with drug trafficking" and that "only someone heavily involved in repeated drug trafficking would be so brazen and unrepentant to return almost immediately to trying to find more heroin to sell." In a case like Hickman's, where a lack of evidence would make particularized

findings impossible, courts would have reversed a sentencing court's finding—made by a mere preponderance of the evidence—that Hickman's conspiracy involved one kilogram or more of heroin. And if such an inference would have been too speculative to satisfy the Sentencing Guidelines, which merely require an "approximat[ion]," U.S.S.G. § 2D1.1 n.12, based on evidence with "sufficient indicia of reliability to support a conclusion that they are probably accurate," U.S.S.G. § 6A1.3, then a *fortiori* it would fail to satisfy a rational trier of fact tasked with making findings beyond a reasonable doubt.

In this case, where evidence of unknown transactions was meager and offered virtually no guide as to the amounts that may have been involved, we hold that the jury verdict finding the heroin conspiracy involved one kilogram or more was not supported by sufficient evidence.

Yet it is within our power to direct entry of judgment on a lesser included offense when vacating a greater offense for insufficient evidence.

Because we conclude that the record contains sufficient evidence to persuade a rational fact finder beyond a reasonable doubt of Hickman's guilt on the lesser included offense of conspiracy to distribute one hundred grams or more of heroin, we direct entry of judgment against Hickman under Count I of the indictment for conspiracy to distribute and to possess with intent to distribute heroin in the amount of one hundred grams or more.[12]

Hickman's second contention, that the trial judge erred in rejecting his proposed instructions regarding the amount of heroin attributable to him, is without merit.

At trial, defense counsel requested that the judge instruct the jury that Hickman could only be held responsible for the "amount of drugs that were foreseeable to the Defendant and within the scope of his agreement."

The trial court repeatedly instructed the jury that coconspirators' actual or intended distribution of narcotics could only be charged to Hickman "so long as it was reasonably foreseeable to [him] that such a type and quantity of drugs would be involved in the conspiracy which he joined."

These instructions accord with the principles of *Pinkerton v. United States,* 328 U.S. 640, 66 S. Ct. 1180, 90 L. Ed. 1489 (1946).

To the extent that defendant's proposed instruction differs from the instructions given, it misstates the law. It is true that Hickman is responsible only for the amount of drugs "within the scope of his agreement," if this "scope" is properly understood as encompassing any co-conspirators' conduct in furtherance of the conspiracy and reasonably foreseeable to him; but the trial court instructions adequately covered

12. Because Hickman had been convicted of two prior felony drug offenses, the Government filed a notice of enhanced punishment mandating a minimum mandatory sentence for the one-kilogram conspiracy of life imprisonment. We of course express no view as to what might be an appropriate sentence after further proceedings.

this. If the requested instruction is taken to mean that Hickman is responsible only for an amount of drugs he personally knew of and explicitly agreed to distribute or have distributed, then it mistakes a basic tenet of our conspiracy law, *see Pinkerton,* 328 U.S. at 647. There was no abuse of discretion in the district court's rejection of Hickman's proposed instruction.

For the reasons explained, we conclude that the evidence was insufficient to establish beyond a reasonable doubt that Hickman knowingly became a member of a conspiracy to distribute or to possess with the intent to distribute more than one kilogram of heroin. On the other hand, there is overwhelming evidence in the record to show, beyond a reasonable doubt, that Hickman knowingly became a member of a lesser included conspiracy involving 100 grams or more of heroin, and that such amount was reasonably foreseeable to Hickman. Accordingly, we vacate the conviction for conspiracy to distribute heroin in the amount of one kilogram or more and the life sentence imposed thereon, and we remand the case to the district court with directions to enter a judgment of sentence as to the lesser offense and to resentence accordingly. In all other respects, the judgment is affirmed.

AFFIRMED IN PART, VACATED IN PART, AND REMANDED WITH INSTRUCTIONS

C. Issues in Federal Drug Sentencing

1. Mandatory Minimum Penalties

Competing Sentencing Policies in a "War on Drugs" Era

Hon. William W. Wilkins, Jr., Phyllis J. Newton and John R. Steer

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In the 1970s, members of the public and Congress denounced the ineffectiveness of the "revolving-door" criminal justice system. Offenders often were incarcerated, deemed rehabilitated, and released only to start the cycle anew. At the same time, the combination of unwarranted disparity in the sentencing of similarly situated offenders and deficiencies in the parole process caused many to question the system's certainty and fairness. Still other critics argued that the disparity problem had an even uglier side, with some defendants being treated by the criminal justice system in a discriminatory manner for reasons unrelated to their offense or offender characteristics properly bearing upon punishment.

In response to these concerns and after more than a decade of study and debate, a bipartisan Congress enacted the most far-reaching reform of federal sentencing in this country's history—the Sentencing Reform Act of 1984 (SRA). This legislation directed the creation of a permanent, bipartisan commission to develop and, over time, refine sentencing guidelines to further the basic purposes of criminal