

**United States v. Marshall, 908 F.3d 1312 (7<sup>th</sup> Cir. 1990) (en banc)**

Defendants were convicted in the United States District Court, Central District of Illinois, [Richard Mills, J., 706 F.Supp. 650](#) and the United States District Court, Western District of Wisconsin, [Barbara B. Crabb](#), Chief Judge, of distributing and selling lysergic acid diethylamide (LSD). On consolidated appeals, the Court of Appeals, [Easterbrook](#), Circuit Judge, held that: (1) statute setting mandatory minimum terms of imprisonment for selling “mixture or substance” containing LSD includes weight of carrier medium; (2) weight tables in Sentencing Guidelines include weight of carrier medium; and (3) statute and guidelines are not unconstitutional for basing their computations on gross weight of drug and carrier medium.

Affirmed.

[Cummings](#), Circuit Judge, filed dissenting opinion in which [Bauer](#), Chief Judge, and [Harlington Wood, Jr.](#), [Cudahy](#) and [Posner](#), Circuit Judges, joined.

[Posner](#), Circuit Judge, filed dissenting opinion in which [Bauer](#), Chief Judge, and [Cummings](#), [Harlington Wood, Jr.](#) and [Cudahy](#), Circuit Judges, joined.

Before [BAUER](#), Chief Judge, and [CUMMINGS](#), [WOOD, Jr.](#), [CUDAHY](#), [POSNER](#), [COFFEY](#), [FLAUM](#), [EASTERBROOK](#), [RIPPLE](#), [MANION](#), and [KANNE](#), Circuit Judges.

[EASTERBROOK](#), Circuit Judge.

Two cases consolidated for decision in banc present three questions concerning the application and constitutionality of the statute and sentencing guidelines that govern sales of lysergic acid diethylamide (LSD). Stanley J. Marshall was convicted after a bench trial and sentenced to 20 years' imprisonment for conspiring to distribute, and distributing, more than ten grams of LSD, enough for 11,751 doses. [706 F.Supp. 650](#). Patrick Brumm, Richard L. Chapman, and John M. Schoenecker were convicted by a jury of selling ten \*1315 sheets (1,000 doses) of paper containing LSD. Because the total weight of the paper and LSD was 5.7 grams, a five-year mandatory minimum applied. The district court sentenced Brumm to 60 months (the minimum), Schoenecker to 63 months, and Chapman to 96 months' imprisonment. All four defendants confine their arguments on appeal to questions concerning their sentences.

The three questions we must resolve are these: (1) Whether [21 U.S.C. § 841\(b\)\(1\)\(A\)\(v\)](#) and (B)(v), which set mandatory minimum terms of imprisonment—five years for selling more than one gram of a “mixture or substance containing a detectable amount” of LSD, ten years for more than ten grams—exclude the weight of a carrier medium. (2) Whether the weight tables in the sentencing guidelines likewise exclude the weight of any carrier. (3) Whether the statute and the guidelines are unconstitutional to the extent their computations are based on anything other than the weight of the pure drug. Marshall presents some additional questions concerning his sentence that are

important only if we get past these three.

## I

According to the Sentencing Commission, the LSD in an average dose weighs 0.05 milligrams. Twenty thousand pure doses are a gram. But 0.05 mg is almost invisible, so LSD is distributed to retail customers in a carrier. Pure LSD is dissolved in a solvent such as alcohol and sprayed on paper or gelatin; alternatively the paper may be dipped in the solution. After the solvent evaporates, the paper or gel is cut into one-dose squares and sold by the square. Users swallow the squares or may drop them into a beverage, releasing the drug. Although the gelatin and paper are light, they weigh much more than the drug. Marshall's 11,751 doses weighed 113.32 grams; the LSD accounted for only 670.72 mg of this, not enough to activate the five-year mandatory minimum sentence, let alone the ten-year minimum. The ten sheets of blotter paper carrying the 1,000 doses Chapman and confederates sold weighed 5.7 grams; the LSD in the paper did not approach the one-gram threshold for a mandatory minimum sentence. This disparity between the weight of the pure LSD and the weight of LSD-plus-carrier underlies the defendants' arguments.

## A

If the carrier counts in the weight of the “mixture or substance containing a detectable amount” of LSD, some odd things may happen. Weight in the hands of distributors may exceed that of manufacturers and wholesalers. Big fish then could receive paltry sentences or small fish draconian ones. Someone who sold 19,999 doses of pure LSD (at 0.05 mg per dose) would escape the five-year mandatory minimum of [§ 841\(b\)\(1\)\(B\)\(v\)](#) and be covered by [§ 841\(b\)\(1\)\(C\)](#), which lacks a minimum term and has a maximum of “only” 20 years. Someone who sold a single hit of LSD dissolved in a tumbler of orange juice could be exposed to a ten-year mandatory minimum. Retailers could fall in or out of the mandatory terms depending not on the number of doses but on the medium: sugar cubes weigh more than paper, which weighs more than gelatin. One way to eliminate the possibility of such consequences is to say that the carrier is not a “mixture or substance containing a detectable amount” of the drug. Defendants ask us to do this.

Defendants' submission starts from the premise that the interaction of the statutory phrase “mixture or substance” with the distribution of LSD by the dose in a carrier creates a unique probability of surprise results. The premise may be unwarranted. The paper used to distribute LSD is light stuff, not the kind used to absorb ink. Chapman's 1,000 doses weighed about 0.16 ounces. More than 6,000 doses, even in blotter paper, weigh less than an ounce. Because the LSD in one dose weighs about 0.05 milligrams, the combination of LSD-plus-paper is about 110 times the weight of the LSD. The impregnated paper could be \*1316 described as “0.9% LSD”.<sup>[FN1](#)</sup> Gelatin carrying LSD could be described as “2.5% LSD”, if the weight for gelatin given in [United States v. McGeehan](#), 824 F.2d 677, 680 (8th Cir.1987), is accurate.

<sup>[FN1](#)</sup>. The 1,000 doses in *Chapman* weighed 5.7 grams, or 0.0057 grams per dose. The 11,751 doses in *Marshall* weighed 113.32 grams, or 0.00964 grams per dose. Marshall apparently sold premium LSD; the forensic chemist concluded that his

11,751 squares of blotter paper contained 670.72 milligrams of LSD, or 0.057 mg per dose—14% more per dose than the Sentencing Commission's norm of 0.05 mg. The substance Marshall sold was 0.59% LSD; the substance the other three sold was 0.877% LSD.

This is by no means an unusual dilution rate for illegal drugs. Heroin sold on the street is 2% to 3% opiate and the rest filler. Jerome J. Platt, *Heroin Addiction: Theory, Research, and Treatment* 48–50 (1986). Sometimes the mixture is even more dilute, approaching the dilution rate for LSD in blotter paper. E.g., *United States v. Buggs*, 904 F.2d 1070, 1072 (7th Cir.1990), (conviction for sale of 9.95 grams of 1.2% heroin). Heroin and crack cocaine, like LSD, are sold on the streets by the dose, although they are sold by weight higher in the distributional chain. All of the “designer drugs” and many of the opiates are sold by the dose, often conveniently packaged in pills. The Sentencing Commission lists MDA, PCP, psilocin, psilocybin, methaqualone, phenmetrazine, and amphetamines (regular and meth-) along with LSD as drugs sold by the dose in very dilute form. 55 Fed.Reg. 19197 (May 8, 1990) (amending Application Note 11 to U.S.S.G. 2D1.1). Other drugs, such as dilaudid and dolophine, are sold by the pill rather than weight, and it is safe to assume that all have far less than 100% active ingredients.

Just as it is hasty to assume that the carrier produces a unique dilution factor for LSD, so it is unwarranted to assume that LSD as it leaves the refinery is pure, and therefore weighs only 0.05 mg per dose. Solid LSD weighs that little, but is it shipped dry? Neither the record nor the sparse literature tells us. LSD is applied to a carrier in a solvent such as alcohol. How dilute is this solution? If we assume that one drop of liquid is applied to each square of blotter paper, then the liquid is only 0.1% LSD. <sup>FN2</sup> We do not know whether one drop per dose is right, but, if it is, the solution weighs 8.5 times as much per dose as blotter paper: a dose of LSD in alcohol weighs 0.0487 grams, while a dose of LSD in blotter paper weighs 0.0057 grams.<sup>FN3</sup> A manufacturer caught with wholesale quantities of LSD solution that had not been applied to blotter paper would face sentences *higher* than those who possess only the paper containing the drug.

<sup>FN2</sup>. One drop is equivalent to one minim, or 0.06161 milliliters. That implies about 16,231 drops per liter. One liter of water weighs a kilogram. Ethyl alcohol has a specific gravity of 0.7893, so a liter of ethyl alcohol weighs 0.7893 kilograms. LSD weighs 0.05 mg per hit. So 16,231 doses of LSD weigh 0.811 grams. A liter of alcohol containing these doses weighs 790.11 grams (the 789.3 grams of alcohol plus the 0.811 grams of LSD). Thus the solution is 0.103% LSD.

<sup>FN3</sup>. In *Chapman*, in which 1,000 doses weighed 5.7 grams. LSD dissolved in alcohol weighs only 5.05 times as much per dose as LSD in Marshall's heavier blotter paper (see note 1 above).

So there may be nothing extraordinary about LSD, no reason to think that the statute operates differently for LSD than for heroin. Heroin comes into this country pure; it is sold diluted on the street, creating the possibility that § 841 will require higher sentences for retailers than for smugglers or refiners. The dilution factor for retail heroin is not

significantly different from the factor for LSD on blotter paper. LSD in solution weighs more than LSD on blotter paper; pure heroin weighs (much) less per dose than the dilute heroin sold on the street. Heroin is sold in different cities at different dilution rates; that implies that the weight of a packet of heroin for a single administration weighs more in some cities than in others. The percentage difference exceeds the gap between paper and gelatin, the common carriers of LSD. Office of Intelligence, Drug Enforcement Administration, *Domestic Monitor Program: Summary Report Fiscal Year 1989*. So although [§ 841](#) creates the possibility of erratic application in LSD cases, it is important to recognize that the \*1317 normal case involves neither extreme weight (LSD in orange juice) nor extreme purity (19,999 doses weighing less than a gram). With this understanding, we turn to the statute.

## B

[1] It is not possible to construe the words of [§ 841](#) to make the penalty turn on the net weight of the drug rather than the gross weight of carrier and drug. The statute speaks of “mixture or substance containing a detectable amount” of a drug. “Detectable amount” is the opposite of “pure”; the point of the statute is that the “mixture” is not to be converted to an equivalent amount of pure drug.

The structure of the statute reinforces this conclusion. The 10–year minimum applies to any person who possesses, with intent to distribute, “100 grams or more of phencyclidine (PCP) or 1 kilogram or more of a mixture or substance containing a detectable amount of phencyclidine (PCP)”, [§ 841\(b\)\(1\)\(A\)\(iv\)](#). Congress distinguished the pure drug from a “mixture or substance containing a detectable amount of” it. All drugs other than PCP are governed exclusively by the “mixture or substance” language. Even brute force cannot turn that language into a reference to pure LSD. Congress used the same “mixture or substance” language to describe heroin, cocaine, amphetamines, and many other drugs that are sold after being cut—sometimes as much as LSD. There is no sound basis on which to treat the words “substance or mixture containing a detectable amount of”, repeated verbatim for every drug mentioned in [§ 841](#) except PCP, as *different* things for LSD and cocaine although the language is identical, while treating the “mixture or substance” language as meaning the *same* as the reference to pure PCP in [21 U.S.C. § 841\(b\)\(1\)\(A\)\(iv\)](#) and (B)(iv).

[2] Although the “mixture or substance” language shows that the statute cannot be limited to pure LSD, it does not necessarily follow that blotter paper *is* a “mixture or substance containing” LSD. That phrase cannot include all “carriers”. One gram of crystalline LSD in a heavy glass bottle is still only one gram of “statutory LSD”. So is a gram of LSD being “carried” in a Boeing 747. How much mingling of the drug with something else is essential to form a “mixture or substance”? The legislative history is silent, but ordinary usage is indicative.

“Substance” may well refer to a chemical compound, or perhaps to a drug in a solvent. LSD does not react chemically with sugar, blotter paper, or gelatin, and none of these is a solvent. “Mixture” is more inclusive. Cocaine often is mixed with [mannitol](#), quinine, or lactose. These white powders do not react, but it is common ground that a

cocaine-mannitol mixture is a statutory “mixture”.

LSD and blotter paper are not commingled in the same way as cocaine and lactose. What is the nature of their association? The possibility most favorable to defendants is that LSD sits on blotter paper as oil floats on water. Immiscible substances may fall outside the statutory definition of “mixture”. The possibility does not assist defendants—not on this record, anyway. LSD is applied to paper in a solvent; after the solvent evaporates, a tiny quantity of LSD remains. Because the fibers absorb the alcohol, the LSD solidifies inside the paper rather than on it. You cannot pick a grain of LSD off the surface of the paper. Ordinary parlance calls the paper containing tiny crystals of LSD a mixture.

[\*United States v. Rose\*, 881 F.2d 386 \(7th Cir.1989\)](#), like every other appellate decision that has addressed the question, concludes\***1318** that the carrier medium for LSD, like the “cut” for heroin and cocaine, is a “mixture or substance containing a detectable amount” of the drug. Although a chemist might be able to offer evidence bearing on the question whether LSD and blotter paper “mix” any more fully than do oil and water, the record contains no such evidence. Without knowing more of the chemistry than this record reveals, we adhere to the unanimous conclusion of the other courts of appeals that blotter paper treated with LSD is a “mixture or substance containing a detectable quantity of” LSD.

## C

Two reasons have been advanced to support a contrary conclusion: that statutes should be construed to avoid constitutional problems, and that some members of the sitting Congress are dissatisfied with basing penalties on the combined weight of LSD and carrier. Neither is persuasive.

[3][4] A preference for giving statutes a constitutional meaning is a reason to construe, not to rewrite or “improve”. E.g., [\*United States v. Monsanto\*, 491 U.S. 600, 109 S.Ct. 2657, 2664, 105 L.Ed.2d 512 \(1989\)](#); [\*United States v. Albertini\*, 472 U.S. 675, 680, 105 S.Ct. 2897, 2902, 86 L.Ed.2d 536 \(1985\)](#). Canons are doubt-resolvers, useful when the language is ambiguous and “a construction of the statute is *fairly possible* by which the question may be avoided”, [\*Crowell v. Benson\*, 285 U.S. 22, 62, 52 S.Ct. 285, 296–97, 76 L.Ed. 598 \(1932\)](#) (emphasis added). “[S]ubstance or mixture containing a detectable quantity” is not ambiguous, avoidance not “fairly possible”. Neither the rule of lenity nor the preference for avoiding constitutional adjudication justifies disregarding unambiguous language.

The canon about avoiding constitutional decisions, in particular, must be used with care, for it is a closer cousin to invalidation than to interpretation. It is a way to enforce the constitutional penumbra, and therefore an aspect of constitutional law proper. Constitutional decisions breed penumbras, which multiply questions. Treating each as justification to construe laws out of existence too greatly enlarges the judicial power. And heroic “construction” is unnecessary, given our conclusion in Part III that Congress

possesses the constitutional power to set penalties on the basis of gross weight.

[5] As for the pending legislation: subsequent debates are not a ground for avoiding the import of enactments. ... Although the views of a subsequent Congress are entitled to respect, ongoing debates do not represent the views of Congress. Judge Wilkins, Chairman of the Sentencing Commission, wrote a letter to Senator Biden, Chairman of the Judiciary Committee, remarking that “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 diluent ingredient in the drug mixture”. The Chairman of the Commission invited the Chairman of the Committee to introduce legislation choosing one or the other explicitly.

Senator Biden introduced an amendment to S. 1711, the Administration's omnibus drug bill, stating in materials read into the Congressional Record that the amendment changes the statute to omit the weight of the carrier. 135 Cong.Rec. S 12748 (daily ed. Oct. 5, 1989). So far as we can determine, the language he actually introduced did not contain the text to which his prepared statement referred. No language of this kind appears in the version the Senate passed. 135 Cong.Rec. S 13433 (daily ed. Oct. 16, 1989) (text of bill that Senate sent to House). The House is yet to act. Senator Kennedy has introduced an amendment to other legislation affecting the criminal code, which, like Senator Biden's, would \*1319 exclude the carrier. Amendment No. 1716 to S.1970, 136 Cong.Rec. S 7069 (daily ed. May 24, 1990). But this proposal, too, awaits enactment. Both Senator Kennedy's proposal and Senator Biden's statement are more naturally understood as suggestions for change than as evidence of today's meaning. At all events, the Senators were speaking for themselves, not for Congress as an institution. See [Quern v. Mandley](#), 436 U.S. 725, 736 n. 10, 98 S.Ct. 2068, 2075 n. 10, 56 L.Ed.2d 658 (1978).

[6] Statements supporting proposals that have not been adopted do not inform our reading of the text an earlier Congress passed and the President signed, see [Firestone Tire & Rubber Co. v. Bruch](#), 489 U.S. 101, 109 S.Ct. 948, 956, 103 L.Ed.2d 80 (1989). We may not, in the name of faithful interpretation of what the political branches enacted, treat as authoritative the statements of legislators supporting change. Opinion polls of Senators are not law. See [Covalt v. Carey Canada Inc.](#), 860 F.2d 1434, 1438–39 (7th Cir.1988). See also [In re Sinclair](#), 870 F.2d 1340 (7th Cir.1989).

## II

[7] Only Brumm received a mandatory minimum sentence. Everyone else could have received the same sentence if all minima were excised from § 841, and if the weights in the statute were read as referring to pure LSD rather than to LSD-plus-carrier. The sentences of Marshall (20 years), Chapman (8 years), and Schoenecker (63 months) are derived largely from the sentencing guidelines. Understandably, these defendants argue that whether or not the statute counts the carrier medium, the quantity table in the guidelines does not.

This is not a strong argument. The guidelines speak of “mixture or substance”, the statutory language. Footnote \* to the quantity table at [U.S.S.G. 2D1.1](#) says that “[u]nless

otherwise specified, the weight of the controlled substance set forth in the table refers to the entire weight of any mixture or substance containing a detectable amount of the controlled substance.” Only PCP and methamphetamine are “otherwise specified”. Application Note 9 reiterates that the footnote allows purity adjustments only for PCP and methamphetamine. Application Note 1 to [§ 2D1.1](#) says that “ ‘Mixture or substance’ as used in this guideline has the same meaning as in [21 U.S.C. § 841](#).” As we observed in [United States v. Pinto, 875 F.2d 143 \(7th Cir.1989\)](#), and [United States v. White, 888 F.2d 490 \(7th Cir.1989\)](#), these notes are taken seriously as contemporaneous explanations by the authors. To conclude that the carrier medium is a statutory “mixture or substance” is to conclude that its weight counts under the guidelines as well.

For what it is worth, the guidelines demonstrate the view of the Sentencing Commission that the statutory weights include dilutents and carriers. None of the references to purity in the guidelines makes sense if the weights in the statute deal with pure drugs to start with. The Commission's most recent words reinforce the conclusion that it understands both the statute and the guidelines to include the weight of the carrier medium for LSD. Recently the Commission transmitted to Congress a proposed amendment to [U.S.S.G. 2D1.1](#) Application Note 11, the conversion table for cases in which only the number of doses is known. See [55 Fed.Reg. 19197 \(May 8, 1990\)](#). This table gives LSD a weight of 0.05 mg per dose (20,000 doses per gram). The amendment specifies that the number of doses is not to be used to derive the weight of the “mixture or substance” if the actual weight is known, a caution necessary only if “mixture or substance” includes the carrier medium. Lest the smallest ambiguity remain, the Commission puts an asterisk after LSD and adds (emphasis added): “[T]he weight per unit shown is the weight of the actual controlled substance, *and not generally the weight of the mixture or substance containing the controlled substance*. Therefore, use of this table provides a very conservative estimate of the total weight.” Couldn't be clearer that the Sentencing Commission believes that the weight of the carrier is part of the total “mixture or **\*1320** substance” under both the statute and the guidelines.

### III

[8] A constitutional question remains, given our construction of the statute and guidelines. The provision of the Constitution reading on sentences is the eighth amendment, forbidding the infliction of “cruel and unusual punishment”. Marshall, alone among the four defendants, invokes the eighth amendment. It offers weak support at best. [Hutto v. Davis, 454 U.S. 370, 102 S.Ct. 703, 70 L.Ed.2d 556 \(1982\)](#), holds that 40 years is not constitutionally excessive for distributing nine ounces of marijuana. Marshall got 20 for a more serious crime. Many federal courts have held that sentences in this range may be imposed for selling similar volumes of LSD. <sup>FN5</sup> Other courts have sustained life without parole for drug offenses. <sup>FN6</sup> LSD causes [psychoses](#), sometimes leading to suicide or violent aggression. Terrence C. Cox, Michael R. Jacobs, A. Eugene LeBlanc & Joan A. Marshman, *Drugs and Drug Abuse: A Reference Text* 311–15 (1983); Albert Hofmann, *LSD: My Problem Child* 67–73 (1979). Society believes that the sale of hallucinogens is a serious crime, and severe sentences constitutionally may attend the crimes troubling to the people.

[FN5](#). Including our own opinion in *Rose*, which held that five years for 472 doses of LSD is consistent with the eighth amendment. See also, e.g., *Bishop* (151 months permissible for possession of 3500 doses).

A

[\[9\]\[10\]](#) Although these defendants received sentences within the limits set by the eighth amendment—the provision of the Bill of Rights expressly addressed to quantum of punishment—they insist that their sentences are unconstitutional under the due process clause of the fifth amendment. Yet defendants received ample “process”. Their complaint is about substance, not process. Substantive due process, a judicial invention, is least applicable when a provision of the Constitution directly addresses the subject. ... This is not an appropriate case for the deployment of that elusive doctrine.

Defendants' arguments are not so much about the sentences handed out for LSD in blotter paper as they are objections to the possibility that other persons will receive sentences much too long (LSD in orange juice) or too short (19,999 doses in pure form). But these are only possibilities, which have nothing to do with these sentences. *Defendants'* sentences bear rational relations to *their* offenses. That is all the Constitution requires, unless criminal defendants are entitled to assert third parties' rights to better sentencing practices—which they are not. ...

[\[11\]](#) That someone else's sentence might be disproportionate to their offenses is no reason for altering these defendants' punishments. Effects of statutes on strangers are in general not sufficient to prevent application to oneself (this is not a first amendment case), and in particular **\*1321** the claim that someone else may not be punished severely enough is not a good objection to one's own punishment. [Wayte v. United States, 470 U.S. 598, 607–10, 105 S.Ct. 1524, 1530–32, 84 L.Ed.2d 547 \(1985\); FTC v. Universal–Rundle Corp., 387 U.S. 244, 87 S.Ct. 1622, 18 L.Ed.2d 749 \(1967\); Falls v. Town of Dyer, 875 F.2d 146 \(7th Cir.1989\)](#). Prosecutors possess the power to excuse the big cheeses while landing on the small fry with hobnail boots. Discretion, even if it ends in grossly unequal treatment according to culpability, does not entitle a guilty defendant to avoid a sentence appropriate to his own crime. So too when the possibility may be attributed to the statute rather than (or in addition) to prosecutorial choice. See [United States v. Batchelder, 442 U.S. 114, 124–26, 99 S.Ct. 2198, 2204–05, 60 L.Ed.2d 755 \(1979\)](#), holding that it does not violate the due process clause to enact two statutes providing different penalties for identical conduct—the mirror image of the claim in this case that the statutes do too little to impose graduated penalties for different conduct. ...

[\[12\]](#) Neither uniform sentences that disregard characteristics of offense and offender, nor sentences so thoroughly discretionary that they are not comparable from one judge to another, violate the due process clause. Both systems have been tried in the United States and deemed constitutional. If they are constitutional, so is [§ 841](#). Maybe Congress ought to make the statute books more rational. Maybe it ought to specify that the sentence increases as a function of the net rather than the gross weight of the drug, but the task of determining how close to make the fit between offense and sentence is legislative.



\*1322 B

[13] Cases such as [McCleskey v. Kemp](#), 481 U.S. 279, 306–08, 107 S.Ct. 1756, 1774–75, 95 L.Ed.2d 262 (1987), hold open the possibility of a constitutional objection under equal protection criteria when the punishment bears no relation whatever to the crime. See also [Marshall v. United States](#), 414 U.S. 417, 94 S.Ct. 700, 38 L.Ed.2d 618 (1974), holding that statutory limits on eligibility for low sentences may be examined, although only under the highly deferential rational basis test. Let us ask, then, whether the pattern of sentences under the drug laws is cockeyed. Other courts do not think so; they have uniformly rebuffed constitutional challenges to statutes that make punishment depend on gross rather than net weight.

Both the statute and the guidelines make the sentence increase with quantity. The greater the quantity, the greater the sentence. This is a rational way to proceed. Whether the potential created by failure to adjust for purity will be realized depends not only on the range of purity that actually occurs but also on what can be done about the extreme cases. Do we see major suppliers of LSD skipping out the courthouse door because their pure drug falls outside the mandatory minima, and the catchall statute ([§ 841\(b\)\(1\)\(C\)](#)) does not allow judges to craft sentences appropriate to their crimes? Do we see people going to jail for ten years because they sold one dose of LSD in a soft drink? If we don't, then the potential for disparity does not require holding statute and guidelines unconstitutional.

We do not see an inverted system of penalties. Counsel have not called to our attention, and we could not find, even one prosecution for selling a single dose of LSD, let alone a single-dose prosecution that ended in a preposterously high sentence. In the broad middle ground of retail and wholesale sales, in which (to judge from recent decisions) LSD almost always is sold in blotter paper, [§ 841](#) and the guidelines work as they should: the more doses, the greater the weight; the greater the weight, the longer the sentence. Marshall, wholesaler of 11,751 doses, gets 20 years; the other three defendants, retailers of 1,000, get five to eight years. As for the high end: any manufacturer or wholesaler who is in the business in a big way will trigger either [§ 841\(b\)\(1\)\(A\)\(v\)](#) {10 years to life for 10 grams or more of LSD} or [§ 841\(b\)\(1\)\(B\)\(v\)](#) {5 to 40 years for 1 gram or more of LSD}. A person who cannot be linked to even one gram is not such a big fish after all.

Even a “minor manufacturer” is covered by [§ 841\(b\)\(1\)\(C\)](#), which authorizes a maximum sentence of 20 years without parole. Although this subsection lacks a mandatory minimum, this is irrelevant to the sentence. Minimum sentences are designed for little fish, the ones judges would throw back if the legislature would let them. That a manufacturer caught with less than a gram of pure LSD would not draw a *mandatory* minimum is of no moment. He could and likely would get the 20 years per count authorized by [§ 841\(b\)\(1\)\(C\)](#), and probably there would be more than one count. A manufacturer or wholesaler will \*1323 be involved in a conspiracy, the sentence for which may be tacked on to the sentence for the amount possessed or sold.

[14] That is not the half of it. The *real* punishment for a manufacturer or a major wholesaler of any drug is not set by § 841. It is set by the Continuing Criminal Enterprise statute, 21 U.S.C. § 848. This law, “a carefully crafted prohibition ... designed to reach the ‘top brass’ in the drug rings”, *Garrett v. United States*, 471 U.S. 773, 781, 105 S.Ct. 2407, 2413, 85 L.Ed.2d 764 (1985), comes into play whenever a person organizes or supervises a criminal enterprise, involving at least five others, from which he earns substantial income. Major distributors fall within the statute, *United States v. Bond*, 847 F.2d 1233 (7th Cir.1988), as do those who aid and abet the drug chieftains, *United States v. Pino–Perez*, 870 F.2d 1230 (7th Cir.1989) (in banc). Persons who escape the jaws of § 841 walk into the maw of § 848. The CCE offense carries a minimum term of 20 years’ imprisonment. If the defendant is “the principal administrator” and the enterprise has gross receipts of \$10 million per year, the mandatory penalty is life without parole, 21 U.S.C. § 848(b). There is in theory little risk, and in practice none, that the major players in the manufacture and distribution of LSD or any other illegal drug will be treated lightly compared with the four middlemen now before us. Defendants might have established that, despite all appearances, sentences are unrelated (or inversely related) to the amount of pure LSD involved. Yet they introduced no evidence to this effect, and none has been published in the social science literature. Persons who want a court to hold a statute unconstitutional need to do more than speculate. *Ogden v. Saunders*, 25 U.S. (12 Wheat.) 212, 270, 6 L.Ed. 606 (1827) (opinion of Washington, J.).

[15] Although the parties say that Congress legislated in ignorance, we lack support for that belief. Congress itself says the opposite, that it selected the weights in the table “after consulting with a number of DEA agents and prosecutors about the distribution patterns for these various drugs”. *H.R.Rep. No. 99–845*, 99th Cong., 2d Sess. 11 (1986). Agents and prosecutors are well-acquainted with the effects of different drugs and the details of their distribution. The numbers in § 841 are not hat sizes. Yet even if we attribute unfamiliarity to Congress, we must recognize our own innocence of data. We do not know whether LSD leaves the factory (a) pure and dry, (b) on blotter paper, or (c) dissolved in alcohol (and, if in solution, at what rate of dilution). The range of weights per dose spans at least three orders of magnitude (see notes 1–3 above). If LSD is shipped in solution, then the higher-ups draw longer sentences per dose than do retailers; if shipped in blotter paper the sentences are the same per dose. We do not know the extent to which blotter paper dominates retail sales; if it holds the lion's share, then the risk of erratic sentences at the retail tier is small. We do not know the actual distribution of sentences. For all we can tell, sentences in LSD cases come *closer* to a smooth upward graduation per dose than do sentences for cocaine and heroin.<sup>FN9</sup> Lacking these facts, we are in no position to condemn this act of Congress as arbitrary\*1324 in operation. Section 841 may work sensibly in practice and so is capable of constitutional application. E.g., *Caplin & Drysdale v. United States*, 491 U.S. 617, 109 S.Ct. 2646, 2657, 105 L.Ed.2d 528 (1989); *Wheat v. United States*, 486 U.S. 153, 163, 108 S.Ct. 1692, 1699, 100 L.Ed.2d 140 (1988); *Salerno*, 481 U.S. at 745, 107 S.Ct. at 2100. Condemning a statute on the basis of a problem that may not exist is an inappropriate use of judicial power. *Schall*, 467 U.S. at 269 n. 18, 104 S.Ct. at 2412 n. 18; *Raines*, 362 U.S. at 21, 80 S.Ct. at 522–23.

[FN9](#). Judge Posner's dissenting opinion contends that the number of doses of LSD accounts for only 16% to 23% of the variance in sentences. This is a hypothetical calculation; data about the lengths of actual sentences (which we do not possess) may put things in better light, or may show that the correlation for LSD is no worse than that for other drugs. Judge Posner's hypothetical cases include many in which LSD is distributed on sugar cubes. Sugar cubes are so heavy compared to blotter paper that one might as well examine the effect on sentences of distributing LSD in bricks. If you remove the sugar cube hypotheticals from Judge Posner's sample (a plausible step, since there has not been even one sugar cube prosecution under [§ 841](#)), the number of doses then explains 59.6% of the variance in sentences.

Contrast heroin, which is sold pure at wholesale and diluted at retail. Assume an average purity in retail sales of 2.5%, and 100% purity in wholesale sales. Assume also that the heroin is sold at retail purity in half of the cases. In this simple model, using the median guideline range, criminal history level I, for quantities from 1 gram to 50 kilograms, the quantity of pure heroin explains only 45% of the variance in sentences. LSD does not come off the worse for the comparison.

## C

[\[16\]](#) The sentencing guidelines do not prevent judges from matching punishment to gravity of offense. The guidelines do nothing to mitigate the lengthy sentences to which the main suppliers are exposed under the CCE act. Nor do they require manufacturers to be treated like retailers even if [§ 841](#) is considered in isolation. Higher-ups receive increases under [U.S.S.G. 3B1.1](#). Departures may follow hard on the increases. The “heartland” of the drug guidelines is distribution of dilute mixtures. Unrepresentative crimes lead to departures. Application Note 9 to [U.S.S.G. 2D1.1](#) makes this clear in saying that “unusually high purity” of a drug may be the basis for upward departure. So sources may be treated in accord with their real culpability, even while the range in the table governs the dilute LSD usually recovered on the street. [United States v. Baker](#), 883 F.2d 13, 15 (5th Cir.1989); [United States v. Diaz-Villafane](#), 874 F.2d 43, 51 (1st Cir.1989).

The possibility of departures in either direction ensures the constitutionality of the guidelines. [United States v. Savage](#), 888 F.2d 528, 529 (7th Cir.), rehearing denied, 894 F.2d 1495 (1989); [United States v. Thomas](#), 884 F.2d 540, 542–43 (10th Cir.1989); [United States v. Allen](#), 873 F.2d 963, 966 (6th Cir.1989). If the LSD is extraordinarily dilute, say in rum and Coca-Cola rather than blotter paper, the judge may depart downward, just as the judge may go up for special purity. Such escape hatches ensure sufficient flexibility to comply with any proportionality requirement in the Constitution. Only the mandatory minimum sentences bind. The Federal Courts Study Committee recommends that these be repealed, *Report of the Federal Courts Study Committee* 133–34 (1990), but this is legislative rather than judicial business.

## D

[17] Although sentences under §§ 841, 846, and 848 together may be proportional to the number of doses sold, it would not matter if they were not. All Congress needs is a rational basis for making the penalties depend on gross rather than net weight. There are at least three.

First, LSD is sold at retail for a low price (a few dollars per dose). Blotter paper apparently has contributed to the renewed success of the drug, making it easy to transport, store, conceal, and sell. Because the carrier medium is an ingredient in the drug distribution business, it is rational to design a schedule of penalties based on that tool of the trade. Congress might choose to penalize drug smugglers according to the value of the property they use rather than the number of doses they distribute. The portions of the statute requiring the forfeiture of property used in connection with the sale of an illegal drug do exactly this, penalizing peddlers without regard to the volume of sales. Similarly, it is rational to make the penalty depend on a carrier that is essential to successful distribution of the drug.

Second, extracting the “pure” drug and debating whether that task has been done properly is unnecessary if, in 99% of all cases, LSD is sold in blotter paper. Why reduce the amount to a pure measure if that almost never spells a difference? No one has been prosecuted for distributing LSD in sugar cubes in the last 20 years. Similarly, no one has been prosecuted for possessing significant quantities of pure LSD in the last decade. Why worry about how to treat manufacturers caught red-handed with pure dry LSD if they are never nabbed? Statutes rationally may be addressed to the main cases rather than \*1325 the exceptions. Congress may count on prosecutorial discretion to take care of the absurd cases (one dose in a quart of lemonade), and it has created the CCE Act to take care of Mr. Big. It need not build into each *section* of the United States Code an apparatus sufficient in itself to produce graduated penalties.

Third, extracting LSD from blotter paper and weighing the drug *accurately* may be difficult. One dose is an exceedingly small quantity of pure LSD. Counsel suggested at oral argument that it takes a specialist in gas chromatography<sup>FN10</sup> to extract the drug, and that this is done only for samples rather than the defendant's entire supply. Figures reported in the cases (including this one) are extrapolations from samples, not actual weights. Congress rationally may decide to avoid a costly and imprecise process.

FN10. So counsel said; more likely a gas chromatograph tells you *whether* LSD is present without verifying the amount. It may take a gas centrifuge to extract and re-purify the drug, and it is very difficult and costly to run a sophisticated gas centrifuge.

[18] Although nothing in the legislative history suggests that Congress went through such a process of reasoning, it need not. Judges assess the validity of legislative decisions; we do not assign grades to legislative deliberations. The Supreme Court tells us that it is enough that a rational basis may be hypothesized, *Vance v. Bradley*, 440 U.S. 93, 110–12, 99 S.Ct. 939, 949–50, 59 L.Ed.2d 171 (1979); *Northside Sanitary Landfill, Inc. v. Indianapolis*, 902 F.2d 521 (7th Cir.1990) (collecting other cases), whether or not

the legislature acted on it. Even laws that resulted from mistakes in the drafting process or ignorance in the halls of Congress survive if a rational basis may be supplied for the result. [\*United States Railroad Retirement Board v. Fritz\*, 449 U.S. 166, 179, 101 S.Ct. 453, 461–62, 66 L.Ed.2d 368 \(1980\)](#); [\*Delaware Tribal Business Committee v. Weeks\*, 430 U.S. 73, 97 S.Ct. 911, 51 L.Ed.2d 173 \(1977\)](#).

## E

[19] What remains is concern that the statute and guidelines discriminate among retailers. Those who distribute LSD in sugar cubes generate higher gross weights (and thus higher sentences) than those who distribute on blotter paper. Some kinds of paper are heavier than others and so yield higher sentences. To say that the difference in weight between sugar and paper (or between brands of paper) condemns the rules with respect to LSD is to damn the rules concerning heroin, cocaine, and all other drugs too. Anyway, these defendants sold LSD on blotter paper and as beneficiaries of any difference in sentencing (compared with sugar cubes) they are in no position to complain.

[20] Any distributor concerned that sugar cubes weigh more than small squares of paper may reduce his exposure by choosing the lightest brand of paper as a medium. Blotter paper seems to be the norm these days. There have been no reported federal prosecutions in 20 years for distributing LSD in sugar cubes, and no state prosecutions in 17 (Michigan, in 1973, is the most recent, see [\*People v. Urban\*, 45 Mich.App. 255, 206 N.W.2d 511 \(1973\)](#)); to hold a law unconstitutional out of concern about something that has not happened in a generation is not sensible. More: Distributors pick their poison. The penalties are plain for all to see. They decide what drug to peddle, on what medium. Marshall liked the cost-benefit ratio for LSD, including its penalty, more than the cost-benefit ratio for cocaine. Perhaps the amount of crack cocaine leading to a 20 year term causes more social harm than the level of LSD that draws this sentence, but a court would not dream of requiring the weight ratios among LSD, heroin, and cocaine to reflect their “true dangerousness”. No more should the court involve itself with the details of dilution ratios and carrier mediums. Retailers who select sugar rather than blotter paper on which to sell LSD must accept their fate.

Political decisions may be harsh yet within the bounds of power. The Constitution does not compel Congress to adopt a criminal code with all possibility for unjust variation\*1326 extirpated. Experience with the guidelines suggests the reverse: Every attempt to make the system of sentences “more rational” carries costs and concealed irrationalities, both loopholes and unanticipated severity. Criminals have neither a moral nor a constitutional claim to equal or entirely proportional treatment. Constitutional law is not a device allowing judges to set the “just price” of crime, to prescribe the ratio of retailers' to manufacturers' sentences. That Congress could have written better laws does not mean that it had to. [\*United States v. Powell\*, 423 U.S. 87, 96 S.Ct. 316, 46 L.Ed.2d 228 \(1975\)](#). Amendments to the criminal code may be in order, but they are not ours to make under the banner of constitutional adjudication. ...

AFFIRMED.

[Cummings, dissenting, omitted]

[POSNER](#), Circuit Judge, joined by [BAUER](#), Chief Judge, and [CUMMINGS](#), [WOOD, Jr.](#), and [CUDAHY](#), Circuit Judges, dissenting.

In each of these cases consolidated for decision en banc (and in a third that is awaiting decision, *United States v. Dean*, No. 89–2786), the district court sentenced sellers of LSD in accordance with an interpretation of [21 U.S.C. § 841](#) that is plausible but that makes the punishment scheme for LSD irrational. It has been assumed that an irrational federal sentencing scheme denies the equal protection of the laws and therefore (*Bolling v. Sharpe*, 347 U.S. 497, 74 S.Ct. 693, 98 L.Ed. 884 (1954)) violates the due process clause of the Fifth Amendment. *Marshall v. United States*, 414 U.S. 417, 94 S.Ct. 700, 38 L.Ed.2d 618 (1974); *McGinnis v. Royster*, 410 U.S. 263, 270, 93 S.Ct. 1055, 1059–60, 35 L.Ed.2d 282 (1973); *United States v. Cyrus*, 890 F.2d 1245, 1248 (D.C.Cir.1989); *United States v. Pineda*, 847 F.2d 64 (2d Cir.1988). The assumption is proper, and in order to avoid having to strike down the statute we are entitled to adopt a reasonable interpretation that cures the constitutional infirmity, even if that interpretation might not be our first choice were there no such infirmity.

The statute fixes the minimum and maximum punishments with respect to each illegal drug on the basis of the weight of the “mixture or substance containing a detectable amount of” the drug. Examples are five years minimum and twenty years maximum for selling a hundred grams of a “mixture or substance containing a detectable amount of” heroin and ten years minimum and forty years maximum for selling a kilogram of such a mixture or substance. The corresponding weights for LSD are one gram and ten grams. The quoted words are critical. Drugs are usually consumed, and therefore often sold, in a diluted form, and the adoption by Congress of the “mixture or substance” method of grading punishment reflected a conscious decision to mete out heavy punishment to large retail dealers, who are likely to possess “substantial street quantities,” which is to say quantities of the diluted drug ready for sale. H.R.Rep. No. 845, 99th Cong., 2d Sess. 11–12 (1986). That decision is well within Congress's constitutional authority even though it may sometimes result in less severe punishment for possessing a purer, and therefore a lighter, form of the illegal drug than a heavier but much less potent form.

The statute fixes only the minimum and maximum punishments and for the actual punishment in a particular case we must go to the Sentencing Guidelines. They proportion punishment to the weight of the mixture or substance, defined as in the statute. [§ 2D1.1](#), Application Note 1; [§ 2D.1](#), Drug Quantity Table, n. \*. They permit an adjustment upward for sales of unusual purity, [§ 2D1.1](#), Application Note 9, but this takes care of the problem identified in the previous paragraph only in part; the statutory mandatory minimum sentences (which, like the Guidelines sentences themselves, are not subject to parole) truncate the effort of the Guidelines' framers to tie the severity of punishment in the particular case to the gravity of the defendant's misconduct.

Based as it is on weight, the system I have described works well for drugs that are sold by weight; and ordinarily the weight quoted to the buyer is the weight of the dilute form, although of course price will vary with purity. The dilute form is the product, and it is as natural to punish its purveyors according to the weight of the product as it is to punish moonshiners by the weight or volume of the moonshine they sell rather than by

the weight of the alcohol contained in it. So, for example, under Florida law it is a felony to possess one or more gallons of moonshine, and a misdemeanor to possess less than one gallon, regardless of the alcoholic content. [Fla.Stat. §§ 561.01, 562.451](#).

LSD, however, is sold to the consumer by the dose; it is not cut, diluted, or mixed with something else. Moreover, it is incredibly light. An average dose of LSD weighs .05 milligrams, which is less than \*1332 two millionths of an ounce. To ingest something that small requires swallowing something much larger. Pure LSD in granular form is first diluted by being dissolved, usually in alcohol, and then a quantity of the solution containing one dose of LSD is sprayed or eyedropped on a sugar cube, or on a cube of gelatin, or, as in the cases before us, on an inch-square section of “blotter” paper. (LSD blotter paper, which is sold typically in sheets ten inches square containing a hundred sections each with one dose of LSD on it, is considerably thinner than the paper used to blot ink but much heavier than the LSD itself.) After the solution is applied to the carrier medium, the alcohol or other solvent evaporates, leaving an invisible (and undiluted) spot of pure LSD on the cube or blotter paper. The consumer drops the cube or the piece of paper into a glass of water, or orange juice, or some other beverage, causing the LSD to dissolve in the beverage, which is then drunk. This is not dilution. It is still one dose that is being imbibed. Two quarts of a 50–proof alcoholic beverage are more than one quart of a 100–proof beverage, though the total alcoholic content is the same. But a quart of orange juice containing one dose of LSD is not more, in any relevant sense, than a pint of juice containing the same one dose, and it would be loony to punish the purveyor of the quart more heavily than the purveyor of the pint. It would be like basing the punishment for selling cocaine on the combined weight of the cocaine and of the vehicle (plane, boat, automobile, or whatever) used to transport it or the syringe used to inject it or the pipe used to smoke it. The blotter paper, sugar cubes, etc. are the vehicles for conveying LSD to the consumer.

The weight of the carrier is vastly greater than that of the LSD, as well as irrelevant to its potency. There is no comparable disparity between the pure and the mixed form (if that is how we should regard LSD on blotter paper or other carrier medium) with respect to the other drugs in [section 841](#), with the illuminating exception of PCP. There Congress specified alternative weights, for the drug itself and for the substance or mixture containing the drug. For example, the five-year minimum sentence for a seller of PCP requires the sale of either ten grams of the drug itself or one hundred grams of a substance or mixture containing the drug. [21 U.S.C. § 841\(b\)\(1\)\(B\)\(iv\)](#).

Ten sheets of blotter paper, containing a thousand doses of LSD, weigh almost six grams. The LSD itself weighs less than a hundredth as much. If the thousand doses are on gelatin cubes instead of sheets of blotter paper, the total weight is less, but it is still more than two grams, [United States v. McGeehan, 824 F.2d 677, 680 \(8th Cir.1987\)](#), which is forty times the weight of the LSD. In both cases, if the carrier plus the LSD constitutes the relevant “substance or mixture” (the crucial “if” in this case), the dealer is subject to the minimum mandatory sentence of five years. One of the defendants before us (Marshall) sold almost 12,000 doses of LSD on blotter paper. This subjected him to the ten-year minimum, and the Guidelines then took over and pushed him up to twenty years.

Since it takes 20,000 doses of LSD to equal a gram, Marshall would not have been subject to even the five-year mandatory minimum had he sold the LSD in its pure form. And a dealer who sold fifteen times the number of doses as Marshall—180,000—would not be subject to the ten-year mandatory minimum sentence if he sold the drug in its pure form, because 180,000 doses is only nine grams.

At the other extreme, if Marshall were not a dealer at all but dropped a square of blotter paper containing a single dose of LSD into a glass of orange juice and sold it to a friend at cost (perhaps 35 cents), he would be subject to the ten-year minimum. The juice with LSD dissolved in it would be the statutory mixture or substance containing a detectable amount of the illegal drug and it would weigh more than ten grams (one ounce is about 35 grams, and the orange juice in a glass of orange juice weighs several ounces). So a person who sold one dose of LSD might be subject to the ten-year mandatory minimum sentence while a dealer who sold 199,999 doses in **\*1333** pure form would be subject only to the five-year minimum. Defendant Dean (in No. 89–2786) sold 198 doses, crowded onto one sheet of blotter paper: this subjected him to the five-year mandatory minimum, too, since the ensemble weighed slightly more than a gram.

There are no reported orange juice cases; for that matter there are no reported *federal* cases in which the carrier is a sugar cube rather than a gelatin cube, although sugar cubes are said to be a common LSD carrier, [United States v. Marshall, 706 F.Supp. 650, 652 \(C.D.Ill.1989\)](#), and in two state cases defendants have been prosecuted for unlawful possession of one and of six LSD-laced sugar cubes, respectively. [People v. Urban, 45 Mich.App. 255, 206 N.W.2d 511 \(1973\)](#); [Commonwealth v. Cohen, 359 Mass. 140, 268 N.E.2d 357 \(1971\)](#). A sugar cube weighs more than two grams, so a seller of a mere six sugar cubes laced with LSD—six doses—would, if prosecuted federally, have bought himself the mandatory minimum ten-year sentence.

All this seems crazy but we must consider whether Congress might have had a reason for wanting to key the severity of punishment for selling LSD to the weight of the carrier rather than to the number of doses or to some reasonable proxy for dosage (as weight is, for many drugs). The only one suggested is that it might be costly to determine the weight of the LSD in the blotter paper, sugar cube, etc., because it is so light! That merely underscores the irrationality of basing the punishment for selling this drug on weight rather than on dosage. But in fact the weight is reported in every case I have seen, so apparently it can be determined readily enough; it *has* to be determined in any event, to permit a purity adjustment under the Guidelines. If the weight of the LSD is difficult to determine, the difficulty is easily overcome by basing punishment on the number of doses, which makes much more sense in any event. To base punishment on the weight of the carrier medium makes about as much sense as basing punishment on the weight of the defendant.

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. The inference is reinforced by the statutory treatment of PCP.

We can actually *measure* the rationality of the punishment scheme for LSD, by **\*1334** regressing the Guidelines sentence on the number of doses sold. The sentence should increase with the number of doses, and the number of doses should explain most of the variance in sentences. Using the different weights of blotter paper disclosed by the cases (including *Dean* ), plus gelatin cubes, sugar cubes, and no carrier (for sales of pure LSD) as additional dosage forms, I have been able to calculate that for sales of between one dose and a thousand, although the average Guidelines sentence does increase with the number of doses, that number explains only 23 percent of the possible sentencing variance for these different methods of selling the drug. For sales of between one dose and 180,000 doses the amount of variance explained falls to 16 percent. Differences in the severity of punishment are determined by differences in the weight of the carrier medium, even though that weight is completely irrelevant to culpability. I have abstracted from criminal history and other personal factors that might influence the sentence of a particular defendant, but I have not abstracted from the mandatory minimum sentencing provisions, because they are a key element in the irrationality of the scheme for punishing LSD offenders.

That irrationality is magnified when we compare the sentences for people who sell other drugs prohibited by [21 U.S.C. § 841](#). Marshall, remember, sold fewer than 12,000 doses and was sentenced to twenty years. Twelve thousand doses sounds like a lot, but to receive a comparable sentence for selling heroin Marshall would have had to sell ten kilograms, which would yield between one and two million doses. Platt, [Heroin](#)

Addiction: Theory, Research, and Treatment 50 (2d ed. 1986); cf. Diamorphine 63, 98 (Scott ed. 1988). To receive a comparable sentence for selling cocaine he would have had to sell fifty kilograms, which would yield anywhere from 325,000 to five million doses. Washton, Cocaine Addiction: Treatment, Recovery and Relapse Prevention 18 (1989); Cocaine Use in America: Epidemiologic and Clinical Perspectives 214 (Kozel & Adams, eds., National Institute on Drug Abuse Pamphlet No. 61, 1985)). While the corresponding weight is lower for crack—half a kilogram—this still translates into 50,000 doses.

LSD is a potentially dangerous drug, especially for psychotics (whom it can drive to suicide). Hoffman, LSD: My Problem Child 67–71 (1983). But many things are dangerous for psychotics. No one believes that LSD is a more dangerous drug than heroin or cocaine (particularly crack cocaine). The general view is that it is *much* less dangerous. Cox, *et al.*, Drugs and Drug Abuse: A Reference Text 313–15 (1983). There is no indication that Congress believes it to be more dangerous, or more difficult to control. The heavy sentences that the law commands for minor traffickers in LSD are the inadvertent result of the interaction among a statutory procedure for measuring weight, adopted without understanding how LSD is sold; a decision to specify harsh mandatory minimum sentences for drug traffickers, based on the weight of the drug sold; and a decision (gratuitous and unreflective, as far as I can see) by the framers of the Guidelines to key punishment to the statutory measure of weight, thereby amplifying Congress's initial error and ensuring that the big dealer who makes or ships the pure drug will indeed receive a shorter sentence than the small dealer who handles the stuff in its street form. As the wholesale value of LSD may be as little as 35 cents a dose (Report 1988: The Supply of Illicit Drugs to the United States 52 (National Narcotics Intelligence Consumers Comm.1989)), a seller of five sugar cubes could be subject to a mandatory minimum prison term of ten years for selling \$2 worth of illegal drugs. Dean received six years (no parole, remember) for selling \$73 worth. The irrationality is quite bad enough if we confine our attention to LSD sold on blotter paper, since the weight of blotter paper varies considerably, making punishment turn on a factor that has no relation to the dosages or market values of LSD.

Well, what if anything can we judges do about this mess? The answer lies in the shadow of a jurisprudential disagreement \*1335 that is not less important by virtue of being unavowed by most judges. It is the disagreement between the severely positivistic view that the content of law is exhausted in clear, explicit, and definite enactments by or under express delegation from legislatures, and the natural lawyer's or legal pragmatist's view that the practice of interpretation and the general terms of the Constitution (such as “equal protection of the laws”) authorize judges to enrich positive law with the moral values and practical concerns of civilized society. Judges who in other respects have seemed quite similar, such as Holmes and Cardozo, have taken opposite sides of this issue. Neither approach is entirely satisfactory. The first buys political neutrality and a type of objectivity at the price of substantive injustice, while the second buys justice in the individual case at the price of considerable uncertainty and, not infrequently, judicial willfulness. It is no wonder that our legal system oscillates between the approaches. The positivist view, applied unflinchingly to this case, commands the affirmance of prison sentences that are exceptionally harsh by the standards of the modern Western world,

dictated by an accidental, unintended scheme of punishment nevertheless implied by the words (taken one by one) of the relevant enactments. The natural law or pragmatist view leads to a freer interpretation, one influenced by norms of equal treatment; and let us explore the interpretive possibilities here. One is to interpret “mixture or substance containing a detectable amount of [LSD]” to exclude the carrier medium—the blotter paper, sugar or gelatin cubes, and orange juice or other beverage. That is the course we rejected in [United States v. Rose, supra, 881 F.2d at 388](#), as have the other circuits. I wrote *Rose*, but I am no longer confident that its literal interpretation of the statute, under which the blotter paper, cubes, etc. are “substances” that “contain” LSD, is inevitable. The blotter paper, etc. are better viewed, I now think, as carriers, like the package in which a kilo of cocaine comes wrapped or the bottle in which a fifth of liquor is sold.

Interpreted to exclude the carrier, the punishment schedule for LSD would make perfectly good sense; it would not warp the statutory design. The comparison with heroin and cocaine is again illuminating. The statute imposes the five-year mandatory minimum sentence on anyone who sells a substance or mixture containing a hundred grams of heroin, equal to 10,000 to 20,000 doses. One gram of pure LSD, which also would trigger the five-year minimum, yields 20,000 doses. The comparable figures for cocaine are 3250 to 50,000 doses, placing LSD in about the middle. So Congress may have wanted to base punishment for the sale of LSD on the weight of the pure drug after all, using one and ten grams of the pure drug to trigger the five-year and ten-year minima (and corresponding maxima—twenty years and forty years). This interpretation leaves “substance or mixture containing” without a referent, so far as LSD is concerned. But we must remember that Congress used the identical term in each subsection that specifies the quantity of a drug that subjects the seller to the designated minimum and maximum punishments. In thus automatically including the same term in each subsection, Congress did not necessarily affirm that, for each and every drug covered by the statute, a substance or mixture containing the drug *must* be found.

The flexible interpretation that I am proposing is decisively strengthened by the constitutional objection to basing punishment of LSD offenders on the weight of the carrier medium rather than on the weight of the LSD. Courts often do interpretive handspings to avoid having even to *decide* a constitutional question. [Gomez v. United States, 490 U.S. 858, 109 S.Ct. 2237, 2241, 104 L.Ed.2d 923 \(1989\)](#). In doing so they expand, very questionably in my view, the effective scope of the Constitution, creating a constitutional penumbra in which statutes wither, shrink, are deformed. A better case for flexible interpretation is presented when the alternative is to nullify Congress's action: when in other words there is not merely a constitutional question about, but a constitutional barrier to, the statute when interpreted \*1336 literally. [Hooper v. California, 155 U.S. 648, 657, 15 S.Ct. 207, 211, 39 L.Ed. 297 \(1895\)](#). This is such a case.

The Supreme Court held in *Bolling v. Sharpe* that action by the federal government which if it were state action would violate the equal protection clause of the Fourteenth Amendment violates the due process clause of the Fifth Amendment (the Fifth Amendment contains no equal protection clause). This, then, is a form of “substantive

due process” expressly approved by the Supreme Court; disparage it—reject it—and you affirm the power of the federal government to practice racial discrimination, since the constitutional prohibition against such discrimination derives from the equal protection clause. Because under *Bolling v. Sharpe* equal protection is a duty of the federal government, it does not matter that, viewed in isolation, the sentences in the cases before us are not so disproportionate to the gravity of the defendants' conduct that they violate the loose principles of proportionality that courts have found in the Eighth Amendment's prohibition of cruel and unusual punishments. Cf. [Hutto v. Davis, 454 U.S. 370, 102 S.Ct. 703, 70 L.Ed.2d 556 \(1982\)](#) (per curiam). The sentences stand condemned under a different principle: that which forbids the unequal treatment of people identically situated. That this principle exists and is potentially applicable to criminal punishment can scarcely be doubted, quite apart from the cases cited at the beginning of this opinion. Suppose that through a draftman's error a statute fixed a two-year minimum sentence for attempted larceny and a one-year minimum for larceny. A person sentenced for attempted larceny could not complain that his punishment was cruel and unusual, but he could complain that he was being punished pursuant to an irrational punishment scheme. And so with the dealer who sells a thousand doses of LSD on heavy blotter paper, the dealer who sells a thousand doses on light blotter paper, the dealer who sells the same number of doses on gelatin cubes, the dealer who sells the same number on sugar cubes, and the dealer who sells the same number in pure form: all these dealers are identically situated, so far as the purposes animating the drug statute are concerned; all can complain, therefore, that they are being sentenced pursuant to an irrational scheme that denies them the equal protection of the laws.

Not all types of dealer are before us in these two cases, it is true; but in challenging a statute as a denial of equal protection a plaintiff will invariably be comparing his situation under the statute with those of persons not before the court. [Arkansas Writers' Project, Inc. v. Ragland, 481 U.S. 221, 107 S.Ct. 1722, 95 L.Ed.2d 209 \(1987\)](#); [Orr v. Orr, 440 U.S. 268, 272–73, 99 S.Ct. 1102, 1108–09, 59 L.Ed.2d 306 \(1979\)](#); [Kucharek v. Hanaway, 902 F.2d 513, 516, 520–21 \(7th Cir.1990\)](#). How could it be otherwise? If a tax statute exempts a class of taxpayers on grounds claimed to be irrational, no member of that class will attack the exemption as a denial of equal protection, yet the challenger must be able to point to the favored class in support of his constitutional challenge. He is permitted to do this without having to drag the members of that class into court. The defendants in the cases before us point to the manufacturer who ships LSD in granular form (the sensible way to ship it, since that is the lightest and most compact form), the dealer who sells LSD on gelatin cubes rather than blotter paper, and the dealer who uses light rather than heavy blotter paper, as persons irrationally exempted from the heavy sentences that the mandatory minimum punishment provisions of [section 841](#), in conjunction with the provisions of the Guidelines, have placed the defendants in our cases under. The defendants have no standing to complain about the hypothetical punishment of the person who sells LSD in sugar cubes or glasses of orange juice, but, as with the use of hypothetical cases in legal reasoning generally, these examples are relevant to exploring the logic behind the scheme of punishment—and show that there is none.

The point is not that the judicial imagination can conjure up anomalous applications of the statute. A statute is not irrational because its draftsmen lacked omniscience. \*1337 The point is that graduating punishment to the weight of the carrier medium produces, in the case of LSD, a systematically, unavoidably bizarre schedule of punishments that no one is able to justify. I would give respectful consideration to *any* rationale for the schedule advanced by the legislators, the framers of the Guidelines, or the Department of Justice. None has been advanced. And such give as there is in the Guidelines (the purity adjustment) is unavailing when defendants are subject to the mandatory minimum sentences in [section 841](#), as all the defendants before us (plus Dean) are.

Granted, when the total system of federal criminal punishment is considered, including prosecutorial discretion and executive clemency, it becomes arguable that the grossest inequities enabled by reading [section 841](#) to base punishment on the weight of the carrier rather than of the LSD are unlikely to occur. Maybe that is why we have seen no recent sugar-cube cases. But this argument is too powerful; it would eliminate or at least greatly curtail the judicial role in protecting criminal defendants from arbitrary statutes, by preventing the defendant from showing that the statute was arbitrary.

Our choice is between ruling that the provisions of [section 841](#) regarding LSD are irrational, hence unconstitutional, and therefore there is no punishment for dealing in LSD—Congress must go back to the drawing boards, and all LSD cases in the pipeline must be dismissed—and ruling that, to preserve so much of the statute as can constitutionally be preserved, the statutory expression “substance or mixture containing a detectable amount of [LSD]” excludes the carrier medium. Given *this* choice, we can be reasonably certain that Congress would have preferred the second course; and this consideration carries the argument for a flexible interpretation over the top.

That interpretation would bring the statute into line with the punishment for other illegal drugs; but this is only an incidental benefit because, as ruled in *Rose* (correctly, as it seems to me and has seemed to the other courts that have considered the question, see [United States v. Elrod](#), 898 F.2d 60 (6th Cir.1990) (per curiam), and other cases cited there), it is not a feasible judicial office to rationalize the thousands of different federal criminal prohibitions, passed at different times in different climates of opinion, that are scattered throughout the United States Code. Cf. [United States v. Batchelder](#), 442 U.S. 114, 99 S.Ct. 2198, 60 L.Ed.2d 755 (1979); [Edwards v. United States](#), 814 F.2d 486, 489 (7th Cir.1987). The relevant irrationality—which was not presented as an issue in *Rose* and which has not received full consideration in any other case either, although there are glancing references to it in [United States v. Bishop](#), 894 F.2d 981, 985–86 (8th Cir.1990), and [United States v. Elrod](#), *supra*, 898 F.2d at 63; cf. [United States v. Bayerle](#), 898 F.2d 28, 31 (4th Cir.1990)—lies in making the punishment of LSD offenders vary by the adventitious and indeed perverse factor of the weight of the carrier. But it is reassuring that in removing this irrationality from [section 841](#) we would create no new disparities between the punishment of sellers of LSD and the punishment of other drug offenders.

The literal interpretation adopted by the majority is not inevitable. All interpretation is contextual. The words of the statute—interpreted against a background that includes a

constitutional norm of equal treatment, a (closely related) constitutional commitment to rationality, an evident failure by both Congress and the Sentencing Commission to consider how LSD is actually produced, distributed, and sold, and an equally evident failure by the same two bodies to consider the interaction between heavy mandatory minimum sentences and the Sentencing Guidelines—will bear an interpretation that distinguishes between the carrier vehicle of the illegal drug and the substance or mixture containing a detectable amount of the drug. The punishment of the crack dealer is not determined by the weight of the glass tube in which he sells the crack; we should not lightly attribute to Congress a purpose of punishing the dealer in LSD according to the weight of \*1338 the LSD carrier. We should not make Congress's handiwork an embarrassment to the members of Congress and to us.