

In the
United States Court of Appeals
For the Seventh Circuit

No. 21-2309

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

v.

DANNY TURNER,

Defendant-Appellant.

Appeal from the United States District Court for the
Western District of Wisconsin.
No. 3:20-cr-00038-jdp-1 — **James D. Peterson**, *Chief Judge*.

ARGUED APRIL 8, 2022 — DECIDED AUGUST 25, 2022

Before WOOD, HAMILTON, and JACKSON-AKIWUMI, *Circuit Judges*.

HAMILTON, *Circuit Judge*. This appeal presents a new variation on the familiar “categorical approach” to a defendant’s prior criminal convictions under the Armed Career Criminal Act (ACCA), 18 U.S.C. § 924(e). The question is whether a categorical mismatch between a state criminal statute and the federal recidivist statute can be based on physically impossible conduct. Defendant Danny Turner was sentenced under

the ACCA based in part on two prior convictions under a Wisconsin drug trafficking statute. He contends that the Wisconsin statute sweeps more broadly than the definition of a “serious drug offense” under the ACCA because the state law makes it a crime to deal in substances that the federal law does not reach. The evidence before the district court shows, however, that the supposed overbreadth concerns only substances that, as a matter of chemistry, do not exist and cannot possibly exist.

Like the Ninth Circuit in a similar case, “we opt for scientific reality over abstract legal doctrine.” *United States v. Rodriguez-Gamboa*, 972 F.3d 1148, 1150 (9th Cir. 2020). Under the ACCA, a categorical mismatch cannot be based on truly impossible conduct. Wisconsin’s drug statute does not expand the scope of conduct actually treated as criminal beyond the definition in the ACCA, despite superficial textual differences. We therefore affirm Turner’s sentence as an armed career criminal.

I. Factual and Procedural Background

Defendant Turner was arrested after making four sales of cocaine and one sale of heroin to an undercover police officer. The arresting officers found a loaded handgun in Turner’s waistband. A federal grand jury indicted Turner on eight counts: six counts for distributing and possessing controlled substances in violation of 21 U.S.C. § 841(a)(1); one for being a felon in possession of a firearm in violation of 18 U.S.C. § 922(g)(1); and one for possessing a firearm in furtherance of a drug trafficking crime in violation of 18 U.S.C. § 924(c). At trial, Turner was convicted on all eight counts.

Turner's conviction for being a felon in possession of a firearm would ordinarily carry a maximum sentence of ten years. See § 924(a)(2). The district court found, however, that Turner qualified as an armed career criminal under the ACCA, so he faced a mandatory minimum sentence of fifteen years and a maximum of life in prison. See § 924(e)(1). A defendant meets that classification if his "prior criminal record includes at least three convictions for 'serious drug offense[s]' or 'violent felon[ies].'" *Shular v. United States*, 140 S. Ct. 779, 783 (2020) (alterations in original), quoting § 924(e)(1). The ACCA defines a "serious drug offense" to include an offense under state law "involving manufacturing, distributing, or possessing with intent to manufacture or distribute, a controlled substance [as defined in 21 U.S.C. § 802], for which a maximum term of imprisonment of ten years or more is prescribed by law." 18 U.S.C. § 924(e)(2)(A)(ii).

To determine whether a prior conviction qualifies as a serious drug offense or a violent felony under the ACCA, courts apply what is known as the "categorical approach," which stems from *Taylor v. United States*, 495 U.S. 575 (1990). See *Johnson v. United States*, 24 F.4th 1110, 1116 (7th Cir. 2022). The categorical approach "focuses only on the elements of the crime of conviction, not the actual facts of the defendant's conviction." *United States v. Williams*, 931 F.3d 570, 575 (7th Cir. 2019). If the elements of the crime of conviction sweep more broadly than the definition of a "serious drug offense" in the ACCA, "so that *it is possible* to violate the underlying statute without committing a 'serious drug offense' within the meaning of the ACCA, then a conviction under the statute cannot serve as a predicate 'serious drug offense' under the ACCA." *Id.* (emphasis added).

Before sentencing in this case, the presentence report recommended that Turner be deemed an armed career criminal under § 924(e) based on three prior drug convictions: two state convictions related to trafficking cocaine and one federal conviction for distributing crack cocaine. See Wis. Stat. §§ 961.41(1)(cm)1 & (1m)(cm)1 (1997–98); 21 U.S.C. § 841(a)(1). Turner objected. He asserted that the state convictions could not qualify as predicate offenses because the Wisconsin drug statute is categorically broader than the ACCA’s definition of a “serious drug offense.”

Turner identified two apparent mismatches between the ACCA definition and the Wisconsin drug laws under which he was convicted. The Wisconsin statute extends to dealing in (1) narcotic analogs of cocaine and (2) esters and salts of esters of cocaine. The government acknowledged the apparent textual mismatches, but it argued the mismatches were “in name only” because the allegedly overbroad conduct is factually impossible. Relying on two declarations from expert chemists, the government explained that it is chemically impossible for cocaine to have a “narcotic” effect and impossible to create an ester or a salt of an ester of cocaine. Also, one of the government’s experts testified in his declaration that a “narcotic effect” is a type of “depressant effect.” If that is correct, then even if cocaine could have a narcotic effect, federal law would still apply to trafficking in it since federal law covers cocaine analogs with depressant effects. See 21 U.S.C. § 802(32). The government argued that the state statute’s nominal inclusion of narcotic analogs and esters of cocaine thus did not actually

broaden the scope of prohibited conduct beyond the scope of the ACCA definition of a serious drug offense.¹

Our case law has expressly left the door open to just these sorts of arguments of factual impossibility under the categorical approach. See *United States v. Ruth*, 966 F.3d 642, 648 (7th Cir. 2020) (“There may be an occasion where a state statute covers unquestionably nonexistent conduct, but we do not need to predetermine how that analysis will look.”); see also *United States v. De La Torre*, 940 F.3d 938, 952 n.5 (7th Cir. 2019) (“Our opinion takes no position on the scientific merits, nor should it be read as limiting the government’s ability to present [factual impossibility] argument[s] in future proceedings.”). The government relied on this point in *Ruth* in making its arguments in the district court.

Turner responded by twice asking for time to consult an expert in hopes of refuting the government’s experts in an evidentiary hearing. The district court granted both of his extension requests and scheduled a hearing. Two months after his first request, though, Turner changed course. He told the district court that he did not plan to call witnesses or present evidence related to factual impossibility. The parties then filed a joint motion to vacate the evidentiary hearing, which the court granted.

In a written opinion prior to sentencing, the district court overruled Turner’s objection to his classification as an armed career criminal. Relying on the unrebutted testimony from the

¹ In the district court, Turner also argued that the inclusion of analogs of cocaine in the Wisconsin statute created a categorical mismatch, but the court rejected that argument. On appeal, Turner has not challenged that aspect of the court’s decision.

government's experts, the court found that esters of cocaine and narcotic analogs of cocaine simply do not exist. The court also found that even if a narcotic analog of cocaine could exist, the ACCA definition of a serious drug offense would reach it under the Controlled Substances Act, 21 U.S.C. § 802, because a narcotic effect is a type of depressant effect. Because the two apparent mismatches did not actually expand the scope of criminalized conduct under state law beyond the ACCA definition, Turner's state convictions qualified as serious drug offenses under the ACCA. The district court then imposed a total sentence of 20 years for Turner's convictions. Turner has appealed.²

II. *Analysis*

We review de novo the district court's legal determination that Turner had three prior serious drug offenses and therefore qualified as an armed career criminal. *United States v. Lockett*, 782 F.3d 349, 352 (7th Cir. 2015). The district court's factual findings related to esters and narcotic analogs of cocaine are subject to review for clear error, *id.*, though the evidence before the court was not disputed.

Turner's two prior state drug convictions were under Wisconsin Statutes §§ 961.41(1)(cm)1 & (1m)(cm)1.³ As explained,

² The ACCA's mandatory minimum made up the first fifteen years, and Turner's § 924(c) conviction required a five-year consecutive mandatory minimum. The court imposed a 97-month sentence on each of the six drug counts to run concurrently with each other and with the other two sentences.

³ Section 961.41(1)(cm)1 bars possession with the intent to traffic cocaine or a controlled substance analog of cocaine. Section 961.41(1m)(cm)1 bars trafficking cocaine or a controlled substance analog of cocaine. For our purposes, the relevant parts of the Wisconsin statute are the

we apply the categorical approach here, focusing only on the elements of the Wisconsin drug law—not the actual facts of Turner’s prior convictions—to determine if those elements sweep more broadly than the definition of a “serious drug offense” in the ACCA. *Williams*, 931 F.3d at 575. Turner identifies two apparent textual mismatches between that statute and the ACCA definition: (1) narcotic analogs of cocaine and (2) esters and salts of esters of cocaine. Factual impossibility is dispositive for only one of those apparent mismatches.⁴

definitions of cocaine and its analogs, see §§ 961.16(2)(b) & 961.01(4m), not the differences between possessing with the intent to distribute and actually distributing. If there is an apparent mismatch between the definition of cocaine or controlled substance analog in the state statute as compared to the ACCA definition, that mismatch would apply equally to each of Turner’s prior state convictions. As a result, we adopt the parties’ approaches and focus on the provision that bars trafficking cocaine rather than the provision that prohibits possession with intent to distribute.

⁴ In his opening brief on appeal, Turner also raised an apparent mismatch based on the Wisconsin statute’s inclusion of “any salt, compound, derivative or preparation of coca leaves.” Wis. Stat. § 961.16(2)(b). But federal law covers those substances. Compare *id.* with 21 U.S.C. §§ 812(c) n.1 & 811 (authorizing attorney general to promulgate regulations identifying controlled substances), and 21 C.F.R. § 1308.12(b)(4) (identifying “any salt, compound, derivative or preparation of coca leaves” as a Schedule II controlled substance). Turner conceded this point in his reply brief.

For the first time on appeal, Turner offers an additional apparent mismatch related to narcotic analogs of cocaine. Wisconsin law defines analogs to include those in which the defendant “represents or intends” the substance as having a narcotic effect. Wis. Stat. § 961.01(4m)(a)2. The ACCA definition does not. Turner did not raise this argument in the district court. Even assuming for the sake of our analysis that this argument was not waived and that Turner can invoke plain-error review, he cannot meet that demanding standard. See *United States v. Jones*, 22 F.4th 667, 675 (7th Cir. 2022) (“To prevail on plain error review, [a defendant] must show

We proceed as follows. First, we analyze the apparent textual mismatches between the Wisconsin drug statute and the ACCA's definition of a serious drug offense. We conclude that the district court's factual findings related to narcotic analogs and esters of cocaine were not clearly erroneous. Then, we turn to factual impossibility under the categorical approach. We conclude that categorical mismatches cannot be based on impossible conduct. Finally, we deny Turner's alternative request that we order a limited remand for an evidentiary hearing in which he could challenge the government's evidence of factual impossibility. The district court was prepared to hold such a hearing, but Turner deliberately chose not to pursue it.

A. Cocaine Analog with a "Narcotic" Effect

The first apparent mismatch applies to a cocaine analog with a supposedly "narcotic" effect. The Wisconsin drug law criminalizes dealing in an analog of cocaine, defined as a chemically similar substance that has a "stimulant, depressant, narcotic or hallucinogenic effect." Wis. Stat. § 961.01(4m)(a)1. Under the federal definition used in the ACCA, by comparison, a "controlled substance analogue" includes a chemically similar substance with a "stimulant, depressant, or hallucinogenic effect." 21 U.S.C. § 802(32). Turner

(1) an error, (2) that was plain, (3) that affected his substantial rights, and (4) that seriously affected the fairness, integrity, or public reputation of the proceedings."). First, it is not clear that the district court even committed an error. A defendant could represent an analog of cocaine as having a narcotic effect in a street sale—even if that is factually impossible—and still be convicted under federal or Wisconsin law since, as we explain below, a narcotic effect is a type of depressant effect. Second, even if there was an error, it could not qualify as "plain" because of the debate about whether a narcotic effect should be deemed a subset of depressant effects.

argues that the state law's application to a cocaine analog with a "narcotic" effect creates a textual mismatch because a defendant could be convicted for distributing such drugs under Wisconsin state law, but not under federal law.

The district court rejected that argument, and we do too. The court relied on the government's expert to reach its conclusion. As a preliminary matter, there is a pharmacological question of whether cocaine or a cocaine analog can produce a "narcotic" effect at all. According to the government's expert testimony, "cocaine is not a narcotic." Narcotics are defined to have depressant effects on the central nervous system. Cocaine, by contrast, is classified as a stimulant and produces a "stimulatory" effect on the central nervous system. It is therefore chemically impossible for cocaine to have a truly narcotic effect.

We need not decide that issue on that basis, however. As the district court explained, "there is a more fundamental problem with Turner's argument." According to the undisputed expert testimony, a narcotic effect is a type of depressant effect. That means that even if cocaine could have a "narcotic effect," it would be a subset of "depressant effects." In that sense, a defendant could be convicted in federal court of distributing an analog of cocaine that had a supposedly narcotic effect because that conduct would fall under the classification of distributing a cocaine analog with a depressant effect, which is treated as criminal under federal law.

Turner argues that we should not deem a narcotic effect a subset of depressant effects. He relies on the text of the Wisconsin statute, arguing that since the state legislature chose to list "depressant" and "narcotic" separately, the two terms must have different meanings and capture distinct types of

conduct. This textual argument has its roots in the anti-surplusage canon, under which courts read statutory text with an eye toward avoiding rendering any language superfluous. See, e.g., *In re Southwest Airlines Voucher Litig.*, 799 F.3d 701, 710 (7th Cir. 2015).

There are two problems with this argument. First, Turner has not articulated an interpretation of narcotic effect that would not also be considered a depressant effect from a pharmacological standpoint. In that sense, he has failed to supply a plausible interpretation of “narcotic” and “depressant” that would separate the two terms and avoid redundancy. Second, the anti-surplusage canon “is not an absolute rule.” *Marx v. General Revenue Corp.*, 568 U.S. 371, 385 (2013). As we have explained, “drafters of legislation often ‘intentionally err on the side of redundancy’ as a precautionary measure and as a response to political demands.” *Schutte v. Ciox Health, LLC*, 28 F.4th 850, 862 (7th Cir. 2022), quoting Abbe R. Gluck & Lisa Schultz Bressman, *Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons: Part I*, 65 Stan. L. Rev. 901, 934 (2013); see also *Schutte*, 28 F.4th at 862–63 (collecting sources discussing why strict application of the anti-surplusage canon is often misguided and unwarranted). The most natural reading of the Wisconsin drug law fits that description. The district court’s finding that a narcotic effect is a type of depressant effect was not clearly erroneous. There is no overbreadth due to this apparent textual mismatch.

B. *Salts and Esters of Cocaine—Factual Impossibility*

The second apparent textual mismatch squarely presents the problem of factual impossibility. Wisconsin’s definition of cocaine includes “any of [its] salts, esters, isomers and salts of

esters and isomers that are theoretically possible within the specific chemical designation.” Wis. Stat. § 961.16(2)(b). The parties agree that the ACCA definition of a serious drug offense does not reach dealing in esters and salts of esters of cocaine.⁵

As one of the government experts explained, esters and salts of esters of cocaine simply do not exist as a matter of chemistry. Cocaine itself is an ester of a compound called ecgonine, and a cocaine molecule contains two functional groups that are classified as esters. Because of this chemical structure, there “are no functional groups ... that can form any additional esters,” which means “there are no esters of cocaine.” And since it is not chemically possible to have an ester of cocaine, it also is not possible to have a salt of an ester of cocaine.

The district court relied on this expert’s declaration to conclude that esters and salts of esters of cocaine are factually impossible. Turner did not offer any evidence to dispute that finding, and it was not clearly erroneous. The district court

⁵ According to one of the government experts, “Esters are a chemical functional group where an acyl group (carbon double bonded to an oxygen, C=O) joins an alkyl or aryl group (R-) to an alkoxy or aryloxy group (-OR’), often written as RCOOR’ or RCO₂R’.” See also *Esters*, IUPAC Compendium of Chemical Terminology Online, <https://goldbook.iupac.org/terms/view/E02219> (last visited August 24, 2022) (defining esters as “Compounds formally derived from an oxoacid R_kE(=O)_l(OH)_m, (l ≠ 0) and an alcohol, phenol, heteroarenol, or enol by linking with formal loss of water from an acidic hydroxy group of the former and a hydroxy group of the latter”). Salt, in this context, is a “chemical compound consisting of an assembly of cations and anions.” *Salt*, IUPAC Compendium of Chemical Terminology Online, <https://goldbook.iupac.org/terms/view/S05447> (last visited August 24, 2022).

then concluded that a categorical mismatch cannot be based on impossible conduct. Unlike the court’s factual findings, that legal determination does not receive deference. *Lockett*, 782 F.3d at 352. We turn to that legal issue now.

The central legal question in this appeal is whether a defendant can avoid being deemed an armed career criminal by showing that he could have been convicted under a state statute for conduct that is factually impossible because the state statute treats as criminal impossible conduct that the federal definition does not reach. That question may strike at least a casual reader as strange. It may not seem so surprising to those familiar with the categorical approach and its sometimes-maddening abstract exercises. See, e.g., Rachel E. Barkow, *Categorical Mistakes: The Flawed Framework of the Armed Career Criminal Act and Mandatory Minimum Sentencing*, 133 Harv. L. Rev. 200, 202–08, 206 n.66, 207 n.69 (2019) (describing how the ACCA and various categorical approaches have created “chaos” in federal courts, leading judges and commentators to decry outcomes as “unsatisfying and counterintuitive” and “not based in reality” (citations omitted)); *Alfred v. Garland*, 13 F.4th 980, 987 n.1, 988 & n.3 (9th Cir. 2021) (England, J., specially concurring) (collecting cases and explaining that “as we have seen countless times, the categorical approach is untethered from common sense,” and “[a]bsurd results are far from an anomaly”), rehearing en banc granted, 35 F.4th 1218 (9th Cir. 2022); see also *United States v. Taylor*, 142 S. Ct. 2015, 2026 (2022) (Thomas, J., dissenting) (“This holding exemplifies just how this Court’s ‘categorical approach’ has led the Federal Judiciary on a ‘journey Through the Looking

Glass,’ during which we have found many ‘strange things.’” (citation omitted)).⁶

The Wisconsin statute’s inclusion of esters and salts of esters of cocaine creates an apparent textual mismatch with the ACCA definition here. In the government’s view, when the conduct that creates the mismatch is factually impossible, the mismatch is “in name only” and there is no overbreadth. Turner argues that this inquiry into factual impossibility is not permitted under the conduct-based categorical approach, asserting that this court has already rejected such “‘theoretical challenges’ to state-statute overbreadth.” We have done no such thing. As explained next, we have expressly left open the question whether a categorical mismatch can be based on “unquestionably nonexistent conduct.” *United States v. Ruth*, 966 F.3d 642, 648 (7th Cir. 2020).

1. *Seventh Circuit Case Law*

In the past few years, we have been asked twice to address factual impossibility under the categorical approach. Each time we declined the invitation. First, in *United States v. De La*

⁶ The categorical method is firmly in place under the ACCA as a matter of statute and Supreme Court precedent. The advisory Sentencing Guidelines now in effect also use the categorical method, particularly in the career-offender guidelines. In 2018 the Sentencing Commission proposed amendments to the Guidelines that would free courts from rigid adherence to the categorical method and allow them to consider reliable information about the defendant’s actual conduct leading to an earlier conviction. Sentencing Guidelines for United States Courts, 83 Fed. Reg. 65400, 65407–11 (Dec. 20, 2018). While action was pending on those proposals, however, the Sentencing Commission lost its quorum. Earlier this month, the United States Senate confirmed nominations needed to restore a quorum to the Commission.

Torre, the state statute in question was categorically broader than the applicable federal definition because the state law made it a crime to deal in geometric isomers of methamphetamine while federal law did not. 940 F.3d 938, 951 (7th Cir. 2019). The government argued that the two “statutes actually mirror[ed] each other” because geometric isomers of methamphetamine did not exist. *Id.* The issue had not been raised in the district court, however, so the government had (understandably) not presented evidence in the district court as to the factual impossibility of geometric isomers of methamphetamine. In applying plain-error review, we refused to resolve the factual issue by taking judicial notice on appeal of two expert declarations from other cases.

In *De La Torre* we said that the government’s argument regarding impossibility was not “pertinent ... when the plain language chosen by the [state] legislature dictates that the [state] statute is categorically broader than the federal definition of felony drug offense.” 940 F.3d at 952. Relying on this language, Turner argues that *De La Torre* expressly rejected factual impossibility arguments under the categorical approach.

That sentence cannot carry the weight Turner gives it. First, in rejecting the government’s attempt to rely on evidence presented in other cases because the issue had not been raised before the appeal, we explained: “Our opinion takes no position on the scientific merits, nor should it be read as limiting the government’s ability to present [factual impossibility] argument[s] in future proceedings.” 940 F.3d at 952 n.5. Second, *De La Torre* itself acknowledged that the issue of impossibility did not make a difference in the outcome since the decision was not “solely dependent on the definition of

methamphetamine and which of its isomers do or do not exist.” *Id.* at 952. The state statute was overbroad in other respects. Third, in *Ruth*—decided less than a year later—the government again argued that an apparent mismatch between a state and federal statute was based on factually impossible conduct (dealing in positional isomers of cocaine). *Ruth*, 966 F.3d at 648. In *Ruth* we recognized that *De La Torre* had “left the door ajar for future science based arguments.” *Id.*

In *Ruth*, the government’s factual impossibility argument ultimately fell short because the evidence was deficient. As in *De La Torre*, the government failed to supply convincing evidence that positional isomers of cocaine did not exist. The expert declaration in *Ruth* asserted that the expert had never detected positional isomers in analyzing over 50,000 samples of cocaine. That is not quite the same as declaring that certain compounds *cannot* exist. And contrary to Turner’s assertions, *Ruth* did not shut the door to factual impossibility arguments in rejecting this evidence: “There may be an occasion where a state statute covers unquestionably nonexistent conduct, but we do not need to predetermine how that analysis will look.” 966 F.3d at 648.⁷

⁷ Turner quotes one sentence in *Ruth* as foreclosing theoretical challenges to apparent textual mismatches:

It is enough for us to say that where, as here, the state statute of conviction is plain and intentional, our job is straightforward: we compare the state statute to the federal recidivism statute at issue and ask only if the state law is the same as or narrower than federal law.

966 F.3d at 648. If this sentence were read in isolation, it would tend to support his argument. But read with the rest of *Ruth* in mind, this

Nor did *Aguirre-Zuniga v. Garland*, 37 F.4th 446 (7th Cir. 2022), a case decided after oral argument in this appeal, close the door that *Ruth* and *De La Torre* left open. The state statute in *Aguirre-Zuniga* criminalized dealing in optical and positional isomers of methamphetamine. Federal law, by contrast, criminalized only optical isomers of methamphetamine. We observed that positional isomers exist as a matter of chemistry: “Methamphetamine *has* optical and positional isomers, and methamphetamine itself *exists* in two isomeric forms, *l*-methamphetamine and *d*-methamphetamine, which themselves *can be* combined into a potential third iteration known as a ‘racemic mixture,’ *dl*-methamphetamine.” *Id.* at 452 (emphases added and citation omitted). Since the statute criminalized this real conduct, the government could not defeat the mismatch by arguing that there was no realistic probability that someone would be prosecuted for such conduct. Like *Ruth* and *De La Torre*, however, *Aguirre-Zuniga* did not deal with truly “unquestionably nonexistent conduct.” *Ruth*, 966 F.3d at 648 (declining to “predetermine” the analysis for state statute overbreadth from “unquestionably nonexistent conduct”). Accordingly, factual impossibility under the categorical approach has remained an open question in our circuit. This case requires us to answer it.

2. *Impossible Conduct*

Unlike in *Ruth*, *De La Torre*, and *Aguirre-Zuniga*, the district court here made an express factual finding that the conduct—dealing in esters and salts of esters of cocaine—that creates

argument fails to persuade. The sentence did not trump everything else in the opinion, which expressly left open the question of genuine factual impossibility.

the apparent mismatch cannot occur. As noted, that finding was not clearly erroneous; it was based on unchallenged expert testimony. Thus, whether Turner qualifies as an armed career criminal under the ACCA turns on whether state statute overbreadth can stem from conduct that is factually impossible. It cannot.

Every Supreme Court decision applying the categorical approach has contemplated real rather than imaginary discrepancies between the elements of state and federal statutes. Starting with *Taylor v. United States*, the Court instructed lower courts to evaluate prior state court convictions for “burglary” to see whether the “statutory definition *substantially corresponds* to ‘generic’ burglary,” or if “the charging paper and jury instructions *actually required* the jury to find all the elements of generic burglary in order to convict the defendant.” 495 U.S. 575, 602 (1990) (emphases added). That analysis is “abstract” in the sense that it directs courts to evaluate the elements of a prior offense, not the actual underlying facts of the defendant’s prior conviction. But *Taylor* cautioned against invoking “technical definitions and labels under state law” to create faux mismatches. *Id.* at 590. Asking whether the elements “substantially correspond” or if a jury was “actually required” to find certain elements was designed to keep the objective inquiry at least tethered to reality.

As noted above, since *Taylor* the categorical approach has been criticized as not sufficiently tethered to reality. See also, e.g., *United States v. Doctor*, 842 F.3d 306, 312–13 (4th Cir. 2016) (Wilkinson, J., concurring) (explaining that the categorical approach has moved “beyond what the Supreme Court originally anticipated” and “has pushed criminal sentencing to the very last place that sentencing ought to be, that is at an

untenable remove from facts on the ground”). But at least one reality check remains. In *Gonzales v. Duenas-Alvarez*, the Supreme Court offered a significant clarification:

[T]o find that a state statute creates a crime outside the generic definition of a listed crime in a federal statute requires more than the application of *legal imagination* to a state statute’s language. It requires a *realistic probability, not a theoretical possibility*, that the State would apply its statute to conduct that falls outside the generic definition of a crime.

549 U.S. 183, 193 (2007) (emphases added); see also *Moncrieffe v. Holder*, 569 U.S. 184, 191 (2013) (“[O]ur focus on the minimum conduct criminalized by the state statute is not an invitation to apply ‘legal imagination’ to the state offense....” (citation omitted)). The *Duenas-Alvarez* reality check focuses the inquiry on real—not imaginary—state statute overbreadth. It also supports the rejection of any approach that would require courts to wade into such imaginative waters. Turner’s approach, however, would have us dive in.

We decline Turner’s invitation to ignore this general lesson from *Duenas-Alvarez*. We also reject his argument that *Duenas-Alvarez* does not apply here because it concerned only the generic-offense branch of the categorical approach, as distinct from a conduct-based test.

To explain this difference, the Supreme Court recently clarified that the categorical approach differs slightly based on the federal statutory language at issue. *Shular*, 140 S. Ct. at 783. Where the federal recidivist statute lists covered offenses, courts must identify “generic” versions of the crimes with the

elements of “the offense as commonly understood,” and then compare those generic elements to the elements of the crime of the prior conviction. *Id.* We have described that approach as the “generic-offense method.” *Ruth*, 966 F.3d at 646. The second approach, and the one *Shular* directed courts to use in cases like *Turner*’s, is the “conduct-based method.” *Id.* As explained, that requires us to ask “only whether [Turner’s] prior conviction’s elements necessarily entail the conduct identified” in the ACCA’s definition of a serious drug offense. *Id.* at 647; see 18 U.S.C. § 924(e)(2)(A)(ii).

In *Ruth* we said that rules derived from cases applying the generic-offense method did “not apply equally under the conduct-based method at play” in that case. 966 F.3d at 648. And as mentioned, *Duenas-Alvarez* applied the offense-based method. This language in *Ruth*, *Turner* says, prevents any consideration of *Duenas-Alvarez* or cases like it because his case also concerns only the conduct-based method. We disagree. *Ruth* explained that offense-based method precedents do “not apply *equally*” to conduct-based method cases, not that they do not apply *at all*. *Id.* (emphasis added). The warning from *Duenas-Alvarez* to avoid imaginative inquiries reaches beyond the case’s categorization. Accord, *United States v. Rodriguez-Gamboa*, 972 F.3d 1148, 1153–54 (9th Cir. 2020) (“teaching of *Duenas-Alvarez*” is not limited to cases involving generic offenses). We do not read *Shular* or *Ruth* as barring courts from distinguishing between possible and impossible conduct when applying either method.

To be clear, asking about genuine factual *impossibility* is not the “realistic probability” test stated in different terms. Factual impossibility is distinct and comes one step before such an inquiry into realistic probabilities, if any. See *Aguirre-*

Zuniga, 37 F.4th at 450 (explaining that courts apply the realistic probability test only when the statutory language is ambiguous or has an indeterminate reach).

After identifying an apparent mismatch, the next logical question—though one that rarely needs to be asked out loud—is whether that supposedly overbroad conduct can actually occur. If it cannot, then there is plainly no overbreadth. The reason is simple. Where a state criminal statute seems to apply to conduct that would be factually impossible while the federal statute does not, the state statute does not actually make criminal any conduct that its federal counterpart does not. The conduct that the federal statute would not reach simply cannot happen. Factual impossibility prevents courts from venturing into the land of the imaginary and reaching absurd outcomes.

The point that overbreadth must concern conduct that can actually occur is so basic that decisions applying the categorical approach have arguably already incorporated it, at least implicitly. Consider *United States v. Taylor*, 142 S. Ct. 2015 (2022), the Supreme Court’s most recent case concerning the categorical approach. The question before the Court was whether attempted Hobbs Act robbery qualified as a “crime of violence” under the ACCA. The Act defines “crime of violence” to include an offense that is a felony and that “has as an element the use, attempted use, or threatened use of physical force against the person or property of another.” 18 U.S.C. § 924(c)(3)(A).

“Without question,” the Court said, “many who commit the crime of attempted Hobbs Act robbery do use, attempt to use, or threaten to use force.” *Taylor*, 142 S. Ct. at 2022. But “some cases are not all cases.” *Id.* As the court explained,

individuals arrested “before they can threaten anyone may be convicted too.” *Id.* Since people could commit attempted Hobbs Act robbery without actually threatening force, the Court held that the offense swept more broadly than the ACCA definition and could not qualify as a predicate. The key point for purposes of this case is that it was actually possible to commit the overbroad conduct. *Id.* at 2035 (Alito, J., dissenting) (“[T]he Court infers that attempted Hobbs Act robbery is not a ‘crime of violence’ under § 924(c)(3)(A) because it is *possible* to commit that offense without attempting to use force.”); cf. *Lopez-Aguilar v. Barr*, 948 F.3d 1143, 1148 (9th Cir. 2020) (“Because it is *possible* to commit theft by deception with the consent of the owner, Oregon’s theft statute expressly includes conduct outside of the generic definition.” (emphasis added)).

In Turner’s case, by contrast, it simply is *not possible* to deal in esters or salts of esters of cocaine—since esters and salts of esters cannot exist chemically—so Wisconsin’s drug law does not sweep in more conduct than the ACCA’s definition of a “serious drug offense.”⁸

⁸ We have not forgotten that the ACCA imposes heavy penalties on defendants who qualify as armed career criminals. The categorical approach requires an objective analysis that may well be underinclusive in terms of the Act’s purposes, but which conforms to the Act’s text, which focuses on prior convictions rather than prior conduct. The categorical approach bars judges from *potentially* imposing a mandatory minimum sentence based on conduct that could not have landed a defendant in federal court. Accord, *Rodriguez-Gamboa*, 972 F.3d at 1153 (“The purpose of the categorical approach is to ascertain whether the defendant was necessarily convicted in state court of conduct that would also violate the relevant federal law.”). But when the overbroad conduct cannot possibly occur,

The Ninth Circuit has agreed. In *Rodriguez-Gamboa*, the court opted for “scientific reality over abstract legal doctrine” in considering a factual impossibility rebuttal to an overbreadth challenge. 972 F.3d at 1150. The state statute at issue there criminalized dealing in geometric isomers of methamphetamine while the federal counterpart did not, creating a similar apparent mismatch. As the district court in that case found, however, geometric isomers of methamphetamine do not exist as a matter of chemistry. In a persuasive opinion, the Ninth Circuit held that a categorical mismatch cannot be based on nonexistent conduct. *Id.* at 1152–54. As the court put it:

Because we know as a scientific fact that dragons have never existed, we would not find overbroad a state statute criminalizing the possession of dangerous animals, defined to include dragons, if the relevant federal comparator outlawed possession of the same animals but did not include dragons. We see no reason to reach a different result here.

Id. at 1155. We agree.

If we had doubts on this score, they would be assuaged because the Wisconsin statute here acknowledges the question of factual impossibility. The statute defines cocaine as “any of [its] salts, esters, isomers and salts of esters and isomers that are *theoretically possible* within the specific chemical designation.” Wis. Stat. § 961.16(2)(b) (emphasis added). This language invites consideration of factual impossibility. It

there is no risk that a defendant convicted under the state statute committed conduct that federal law does not also criminalize.

extends the definition of cocaine to include variants that are “theoretically possible” within cocaine’s “specific chemical designation.” That language does not reach variants that are not theoretically possible. By including esters and salts of esters in its definition of cocaine, the state legislature was plainly using a catch-all approach rather than vouching (incorrectly) for a scientific fact.

To avoid this result, Turner would have us end the analysis after identifying one type of conduct that is not in the federal counterpart, even if that conduct could not possibly occur and the plain language of the state statute indicated that the state legislature did not intend to convey that it thought such conduct occurs. It is easy to think of some resulting absurdities from this approach. The Ninth Circuit, for its part, hypothesized a state statute outlawing possession of dangerous animals defined to include dragons. *Rodriguez-Gamboa*, 972 F.3d at 1155. We hypothesized at argument here a statute making it a crime to assault human beings, leprechauns, and zombies. The mismatch based on a theoretically possible assault on a leprechaun or zombie would not reach beyond the actual scope of a violent felony under the ACCA. The categorical approach does not require courts to ignore whether mismatched “conduct” is actually impossible as a matter of scientific fact.

3. *Turner’s Additional Arguments*

Turner offers two additional arguments. First, he asserts that a factual impossibility inquiry violates the Sixth Amendment. It does not. The Sixth Amendment prohibits judges from making factual findings at sentencing that increase a defendant’s minimum or maximum penalty other than a prior conviction. See *Apprendi v. New Jersey*, 530 U.S. 466, 490 (2000);

Alleyne v. United States, 570 U.S. 99, 115–16 (2013). By finding that Turner could not have been convicted under the Wisconsin statute for possessing cocaine esters, Turner argues, the district court explored the facts of his particular prior offense, which *Apprendi* and *Alleyne* should bar. We disagree.

Apprendi and *Alleyne* bar courts from going “beyond identifying the crime of conviction to explore the manner in which the defendant committed that offense.” *Mathis v. United States*, 579 U.S. 500, 511 (2016). A judge cannot “mak[e] a disputed determination about ‘what the defendant and state judge must have understood as the factual basis of the prior plea’ or ‘what the jury in a prior trial must have accepted as the theory of the crime.’” *Id.*, first quoting *Shepard v. United States*, 544 U.S. 13, 25 (2005) (plurality opinion), and then quoting *Descamps v. United States*, 570 U.S. 254, 269 (2013). Such findings address adjudicative facts related to the specific manner in which a defendant committed his prior offense or how a jury and/or judge might have viewed his conduct. Adjudicative facts are typically left to a jury to find. The Supreme Court has long understood the Sixth Amendment to bar adjudicative fact-finding under the categorical approach. See *Mathis*, 579 U.S. at 510-11.

The type of fact-finding required to understand whether conduct included in statutory language can possibly occur is different. The district court here was not making findings about Turner’s individual conduct. Instead, it was finding what amounts to a legislative fact: that cocaine esters do not exist *and cannot exist*, so neither Turner nor anyone else could be convicted for trafficking in them. This is a type of legislative fact-finding that judges conduct regularly in challenges to legislation. “The concept of a legislative fact comes into its

own when there is no reason to believe that certain facts pertinent to a case vary from locality to locality, or from person to person....” *Frank v. Walker*, 773 F.3d 783, 795 (7th Cir. 2014) (Posner, J., dissenting from denial of rehearing en banc). Legislative facts “are not unique to a particular case and provide therefore an appropriate basis for legislation of general application.” *Id.* Asbestosis, for example, either is a progressive disease or it is not. Nothing supports the idea that it is progressive in some cases but not in others. Similarly here, we see no risk that cocaine esters could exist in Illinois but not Wisconsin. The question of factual impossibility in this case presents a legislative fact that applies broadly to the state of the world; it does not require making a finding specific to Turner’s prior convictions. *Apprendi* and *Alleyne* concern the latter.

In addition, courts regularly engage in analogous fact-finding under the categorical approach. Consider the “realistic probability” test. See *Duenas-Alvarez*, 549 U.S. at 193. That test asks whether there is “a realistic probability ... that the State would apply its statute to conduct that falls outside the generic definition of a crime.” *Id.*; see also *Portee v. United States*, 941 F.3d 263, 271–73 (7th Cir. 2019) (applying the realistic probability test to Indiana’s “felony intimidation” statute). While ultimately a legal determination, this analysis requires courts to determine a fact about the world: whether “State A” realistically prosecutes “Conduct B.” It could not be the case that, for one defendant, State A would realistically apply its statute to Conduct B, but for another defendant, it would not. *Apprendi* and *Alleyne* do not bar judges from making such a “factual” determination related to state prosecutorial practices. The Supreme Court has expressly endorsed such an inquiry. Following that guidance, determining

whether overbroad conduct actually exists must be permissible fact-finding under the Sixth Amendment.

Finally, Turner argues that a factual impossibility approach will lead to inconsistent outcomes, which the categorical approach was designed in part to prevent. We are not convinced. If district courts split over whether it is factually possible to create esters of cocaine, we will resolve the issues on appeal. That possible future challenge does not convince us that we should make a decision here by assuming that a scientific impossibility is real, just as we would not base a decision on the assumption that leprechauns or zombies are real.

To sum up, a categorical mismatch cannot be based on factually impossible conduct. Since esters of cocaine cannot exist chemically, there is no genuine mismatch between the Wisconsin statute under which Turner was convicted and the ACCA's definition of a "serious drug offense." Turner was properly classified as an armed career criminal based on his three predicate convictions for serious drug offenses.

C. Evidentiary Hearing?

There is one issue left. In his appellate briefs, Turner asserts that if we reject his arguments against considering factual impossibility, we should order a limited remand for an evidentiary hearing on the chemistry question of factual impossibility. We deny this request. After the government presented its evidence of factual impossibility in the district court, Turner twice asked for more time to consult an expert. He also suggested that an evidentiary hearing might be necessary to address the government's evidence. The district court granted his requests and scheduled a hearing. Two months after his first request for more time, Turner changed

his mind and together with the government asked the court to vacate the hearing since he did not plan on presenting evidence to rebut the government's evidence of factual impossibility. That's textbook waiver. *United States v. Jaimes-Jaimes*, 406 F.3d 845, 848 (7th Cir. 2005) ("The touchstone of waiver is a knowing and intentional decision.").

As we have explained: "To waive an argument on appeal, a defendant must have had some strategic reason for waiving the argument in the trial court." *United States v. Hammond*, 996 F.3d 374, 399 (7th Cir. 2021). *Ruth* and *De La Torre* put Turner on notice that the government could argue factual impossibility. After having been allowed ample time to track down contrary evidence, Turner chose not to dispute the factual impossibility of esters of cocaine in the district court (or on appeal) and chose to rely instead on the legal arguments we have rejected above. Turner cannot now assert that we should give him the evidentiary hearing that he forwent because he "had no reason to rebut the government's evidence." Turner was not entitled first to try out his legal theory to block consideration of facts and then, upon the failure of that strategy on appeal, start again in the district court with a different strategy. Forgoing the promised evidentiary hearing was a strategic choice, not an inadvertent one.

AFFIRMED.

JACKSON-AKIWUMI, *Circuit Judge*, concurring. I agree with the majority opinion regarding Turner’s argument about the “narcotic effect” of cocaine: The plain meaning of the Wisconsin statute, as confirmed by the record before us, shows that narcotic effects are a subset of depressant effects. So, the Wisconsin statute is not categorically broader than its federal counterpart in this way.

As for Turner’s esters and salts of esters of cocaine argument, I agree with the majority opinion that the Wisconsin statute explicitly contemplates the question of “theoretical possibility.” As I see it, that statutory language permits us to decide this case using the traditional categorical approach. After doing so, I, like my colleagues, conclude that the Wisconsin statute does not sweep more broadly than its federal counterpart on this axis either.

I concur only in the judgment because I worry that the majority opinion’s approach of adding a new inquiry to the analysis—determining whether there is a factual impossibility before reaching the realistic probability test—risks plunging trial courts into fact-intensive inquiries and risks appellate courts creating binding precedent on rapidly changing scientific developments.

Before I explain these two concerns, I briefly summarize how, in my view, this case can be resolved using the traditional categorical approach: When comparing a state statute to its federal counterpart under the categorical approach, first we determine whether there is any facial mismatch. *Aguirre-Zuniga v. Garland*, 37 F.4th 446, 450 (7th Cir. 2022). Only if we find that our comparison is hindered because the language of the state statute is ambiguous or has indeterminate reach, do we move to the second step to determine whether there is a

“realistic probability” of prosecution.¹ *Id.* Here, Wisconsin defines cocaine to include “salts, esters, isomers, and salts of esters and isomers *that are theoretically possible* within the specific chemical designation.” Wis. Stat. § 961.16(2)(b) (emphasis added). The phrase “theoretically possible” circumscribes all the different iterations of cocaine the statute lists. Therefore, the statute is ambiguous because it is not clear whether the

¹ The reasoning in the Supreme Court’s recent decision in *United States v. Taylor*, 142 S. Ct. 2015 (2022), could change the contours of the realistic probability test. The Court began its discussion by noting “the oddity of placing a burden on the defendant to present empirical evidence about the government’s own prosecutorial habits” and “the practical challenges [the realistic probability test] present[s] in a world where most cases end in plea agreements, and not all of those cases make their way into easily accessible commercial databases.” *Id.* at 2024 (citations omitted). The Court then rejected the government’s argument to use the realistic probability test in *Taylor* for two core reasons: (1) *Duenas-Alvarez* involved a state statute, while the statute at issue in *Taylor* was federal, so there was no federalism rationale “to consult how a state court would interpret its own State’s laws”; and (2) “the elements of the relevant state and federal offenses [in *Duenas-Alvarez*] clearly overlapped,” while the statutes in *Taylor* had “no overlap to begin with.” *Id.* at 2025 (citations omitted).

Taylor suggests that the realistic probability test applies when a state statute “clearly overlap[s]” with its federal counterpart and does not apply when two federal statutes have “no overlap to begin with.” But it is unclear how *Taylor*’s logic affects the realistic probability test in situations where two federal statutes “clearly overlap” or where a state statute and its federal counterpart have “no overlap to begin with.” We need not parse these nuanced situations today. Neither Turner nor the government believe *Taylor* is of any consequence—neither side offered any explanation of the case’s relevance in a letter pursuant to Federal Rule of Appellate Procedure 28(j) or other filing. Instead, the parties chose to stake their claims solely on the issue of factual impossibility, a question *Taylor* does not touch. Whether *Taylor* has changed the landscape of the categorical approach in other ways, therefore, is left for another day.

Wisconsin statute is facially broader than federal law—it could be broader, or not. Without clarity in the statute (or in other statutes that inform the statute of conviction) on how to determine theoretical possibility under the statute, I turn to the realistic probability test. Turner does not point to any cases where someone was prosecuted for esters or salts of esters of cocaine (because, as best as we know right now, esters of cocaine do not exist). Thus, there is no realistic probability that the state would prosecute someone for esters or salts of esters of cocaine. Consequently, the Wisconsin statute does not criminalize more conduct than its federal counterpart and Turner’s prior convictions under the Wisconsin statute qualify as ACCA predicates. See *Gonzales v. Duenas-Alvarez*, 549 U.S. 183, 193 (2007).

The majority opinion does not travel this road. Instead, the majority develops an intermediary step where “[a]fter identifying an apparent mismatch,” a court must determine “whether that supposedly overbroad conduct can actually occur.” This rule invites two practical problems that courts may now face: (1) categorical approach cases can turn into full-blown battle-of-the-expert mini-trials over chemistry concepts at the district court level; and (2) this case and future appellate decisions will act as precedent on scientific facts, despite the fact that chemistry is an ever-evolving field of study.

As for the first potential problem, one of the core reasons the Supreme Court adopted the categorical approach was to avoid “the practical difficulties and potential unfairness of a factual approach.” *Taylor v. United States*, 495 U.S. 575, 601 (1990). The Court was concerned that trial courts would have to sift through the charging papers, review trial evidence, and even present additional witnesses—all to show that an

underlying conviction qualified, in the case of *Taylor*, as generic burglary. *Id.* This concern, among others, is why the Supreme Court declined to apply the modified categorical approach to indivisible statutes. See *Descamps v. United States*, 570 U.S. 254, 270–71 (2013). Although today’s decision does not deal with the papers and evidence underlying a prior state conviction, it nonetheless welcomes a factual inquiry into categorical approach cases. This seems as if it will result in parties presenting competing expert testimony as to whether an ester, isomer, or salt of cocaine, methamphetamine, fentanyl, or another illegal drug exists. In turn, the parties will file *Daubert* motions or otherwise attempt to undermine the other side’s view. All in all, district courts at sentencing will now have to engage in lengthy, drawn-out factual discussions of the chemistry of these substances. This did not happen in *Turner*’s case, but it easily could in another case. Such a result undermines the spirit of the categorical approach.²

As for the second potential problem, the majority opinion states that “[t]he question of factual impossibility in this case presents a legislative fact that applies broadly to the state of the world,” and that “[i]f district courts split over whether it is factually possible to create esters of cocaine, we will resolve the issues on appeal.” This pledge turns issues of evolving science into precedent. If we as an appellate court determine that, as a matter of law, there are no esters of cocaine or

² The majority opinion emphasizes that it is not applying the realistic probability test in this new step. And while the analytical process the majority proposes differs from *Duenas-Alvarez*, it is still a rule that undermines the categorical approach’s focus on the statutory language and invites extraneous facts, ultimately turning a pure legal question into a fight over who has the better expert.

whatever the substance at issue is, we fail to account for the constant efforts of drug manufacturers to iterate and develop their products. Take, for example, the history of fentanyl analogues. Just between 2012 and 2016, “seventeen fentanyl analogues were reported to the UNODC ... [but] only one of them, acetylfentanyl, has been placed under international control.” United Nations Office on Drugs & Crime, *Global SMART Update: Fentanyl and its Analogues – 50 Years On*, at 4 (Mar. 2017), <https://tinyurl.com/8efp6wck>; see also Harold E. Schueler, *Emerging Synthetic Fentanyl Analogs*, *Academic Forensic Pathology* 36, 38 (2017) (listing six fentanyl analogues developed over two years). In UNODC’s view, “[t]he countless possibilities to create new compounds by small changes in chemical structures pose a growing challenge to international control of the opioid trade.” United Nations Office on Drugs & Crime, *Global SMART Update: Fentanyl and its Analogues – 50 Years On*, at 4. The rapid development of fentanyl analogues highlights how the scientific methods involved in these illicit substances are ever-changing. Therefore, I worry that our caselaw will ossify these “legislative facts” of chemistry in a way that may not comport with the near-future’s reality.

Because I would resolve this case using the classic application of the categorical approach, and the majority’s new rule potentially presents two applicability problems, I concur only in the judgment.