The Triangle of Law and the Role of Evidence in Class Action Litigation

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ARTICLE

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Before the case was decided, it was clear that *Tyson Foods, Inc. v. Bouaphakeo* could have hammered a nail in much of class action law. Tyson swung for the fences at the Supreme Court, arguing that the use of statistical evidence in a class action trial that the company had lost violated both the Rules Enabling Act and due process. Had the Court adopted Tyson's argument, it would have greatly restricted the use of the class action device whenever the members of a plaintiff class had any relevant non-commonality. As co-amici and I argued in a brief filed in support of the respondents, Tyson's approach involved a radical view of evidence that would have destabilized numerous areas of the law. While the company struck out at the Court, it remains to be seen whether *Tyson* is game-over for those seeking to narrow Rule 23's reach when statistical evidence is involved. But as I shall argue below, the statistical character of the evidence in *Tyson* should not be regarded as especially important, and in any event, *Tyson* is important for broader reasons than its modest embrace of such evidence in class litigation.

In this Article I review the *Tyson* opinion and provide a relatively deep dive into the appropriate roles that both the evidence in the case and evidence law played. It is my hope that this analysis will be helpful in thinking about how the class action game should be played in an important set of future class certification cases, particularly those involving Rule 23(b)(3). Commentary on *Tyson* has rightly pointed to the role of the substantive law—here, the federal Fair Labor Standards Act (FLSA) and Iowa's Wage Payment Collection Law (IWPCL). The substantive law certainly matters, of course. But I argue that the key to the Supreme Court's proper resolution in *Tyson* involves more than just that, since the Court made important connections between the substantive law, the questions the plaintiffs' evidence sought to

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1 I borrow this metaphor from Justice Kagan's dissent in *American Express Co. v. Italian Colors Restaurant*, 133 S. Ct. 2304, 2320 (2013): “To a hammer, everything looks like a nail. And to a Court bent on diminishing the usefulness of Rule 23, everything looks like a class action, ready to be dismantled.”


answer, and evidence law itself. Evidence law and the character of the evidence in the case were not merely incidental to Tyson—they were integral to it.

Part I provides some basics about the Tyson litigation. Part II develops a view of the kind of evidence that the plaintiff class used in Tyson, which I call counterfactual evidence. Counterfactual evidence is evidence that can answer the question to which it is addressed only under inferential assumptions that themselves cannot be answered with direct evidence. In Tyson, both the representative testimony of named plaintiffs and the time study evidence had this character. Part III shows that a proper view of class certification in Tyson is aided by understanding this counterfactual character of the evidence—rather than anything about the statistical or even representative aspects of the time-study evidence. Part III also shows the comfortable fit of the counterfactual character of the evidence with substantive labor law at issue in Tyson, and it considers the important role of federal evidence law in Tyson.

Finally, Part IV draws together these ideas into what I call the “Triangle of Law” for considering class certification. The vertices of the Triangle represent the substantive law at issue in a case, Rule 23’s provisions, and the Federal Rules of Evidence. Located in the center of the Triangle is the evidence in the particular litigation in question. This visual model is helpful because the three sources of law represented by the Triangle’s vertices are bilaterally interconnected, and the evidence in any case will be connected to all three sources of law. These various links between evidence and sources of law help us visualize the practical connections between the various aspects of class action litigation, connections which the Tyson case and Supreme Court opinion illuminate. Thus the Triangle of Law, with evidence at its center, provides a contemporary reflection of what Steve Burbank and Sean Farhang describe as the 1966 Advisory Committee’s focus on “turn[ing] federal jurisprudence from abstract inquiries to functional analysis that considers the practical as well as the formal legal effects of litigation.” Part IV concludes with a reflection on how greater emphasis on the practicalities of litigation would affect the consideration of two issues that were posed, but not taken up, in Tyson.

I. THE TYSON LITIGATION

The Tyson plaintiffs were employees at the Tyson Foods Storm Lake, Iowa hog processing plant. They did dangerous, dirty, and difficult work on an assembly line that transformed live hogs into commercial meat products. Employees on a shift were paid from the time that the first hog reached their station until the time that

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6 Id.
the last hog left it.7 This system was referred to as the “gang time” system.8 Employees brought suit claiming that the time spent walking to and from their stations and donning and doffing personal protective equipment before and after their shifts and lunch breaks constituted work activities under the FLSA.9

The FLSA mandates that covered employees who work more than forty hours in a week must be paid time-and-a-half for hours worked in excess of forty.10 The plaintiffs in Tyson brought suit under the FLSA and sought to represent other employees at the plant.11 Under the FLSA’s representative action section, § 216(b), they have a right to do so “for and in behalf of . . . themselves and other employees similarly situated,” provided that the other employees provide consent in writing.12 The resulting “opt-in” action, sometimes known as a collective action, ultimately had 444 plaintiffs.13

It appears that the Rule 23 class action device is not available for claims brought directly under the FLSA.14 But Rule 23 was involved in the Tyson litigation anyway. The IWPCl requires timely payment of wages owed.15 Overtime wages owed under the FLSA are also owed under the IWPCl, so the plaintiffs asserted derivative IWPCl claims against Tyson. Because the IWPCl claims arise under state law, § 216(b)’s opt-in requirement does not apply. Plaintiffs bringing such “hybrid” FLSA/state-law claims in federal court may use Rule 23(b)(3) to try to maintain a class action as long as there

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7 Id.
8 Id.
9 Id.
11 136 S. Ct. at 1042.
14 The Supreme Court has not directly addressed this question, though it has stated that “Rule 23 actions are fundamentally different from collective actions under the FLSA.” Genesis Healthcare Corp. v. Symczyk, 133 S. Ct. 1523, 1529 (2013) (citing Hoffmann-La Roche Inc. v. Sperling, 493 U.S. 165, 177-78 (1989) (Scalia, J., dissenting)); see also, e.g., LaChapelle v. Owens-Illinois, Inc., 513 F.2d 286, 289 (5th Cir. 1975) (describing the FLSA collective action and the Rule 23 action as “mutually exclusive and irreconcilable”). Curiously, no case discussing the issue even mentions the supersession clause of the Rules Enabling Act, 28 U.S. C. § 2072(b) (2012) (“All laws in conflict with such rules shall be of no further force or effect after such rules have taken effect.”), much less explains how a 1966 amendment to a Federal Rule of Civil Procedure could be preempted by statutory text enacted in 1938. The best explanation would seem to be found in the advisory committee’s note to the 1966 amendments to Rule 23, which states flatly as to subdivision (b)(3) that “[t]he present provisions of 29 U.S.C. § 216(b) are not intended to be affected by Rule 23, as amended.” While this note predates the 1988 amendments to the Rules Enabling Act requiring explanatory notes, see § 2073(d), there are numerous reasons why “courts should give effect to Advisory Committee Notes unless the Notes conflict with the text of the Rule.” See Catherine T. Struve, The Paradox of Delegation: Interpreting the Federal Rules of Civil Procedure, 150 U. PA. L. REV. 1099, 1169 (2002).
15 IOWA CODE § 91A.3 (2015) (“An employer shall pay all wages due its employees . . . at least in monthly, semimonthly, or biweekly installments on regular paydays which are at consistent intervals from each other . . . .”).
is federal subject matter jurisdiction. This is practically important to
plaintiffs’ attorneys because the opt-out nature of a Rule 23(b)(3) class action
may yield a class size—and thus a damage award—that dwarfs those of the
§ 216(b) opt-in collective action. That is exactly what happened in Tyson, with
the state-law opt-out class including nearly eight times as many plaintiffs as
the FLSA opt-in class.16

Tyson contested the plaintiffs’ motion for certification of both the FLSA
opt-in and the IWPCL opt-out class actions. Rejecting Tyson’s arguments,
the district court certified overlapping classes consisting of all workers at the
plant who were paid on the gang time system over a class period extending
from February 7, 2005 to the “present”—presumably July 3, 2008, the date
of the certification order.17 The district court’s certification order came in a
sixty-four-page memorandum opinion that gave extensive consideration to
whether Rule 23’s preconditions for certification were met.18 In this opinion,
Judge Bennett acknowledged that “Tyson points to numerous factual
differences regarding the clothing and equipment employees wear, even
among those paid on a gang time basis.”19 But, he continued,

the court is not convinced these factual differences defeat commonality
among all employees paid on a gang time basis. All employees paid on a gang
time basis wear some sort of PPE, and all store their PPE in the same lockers,
at the same plant, and all are required to don and doff their PPE. In addition,
most all use some kind of knife, and also a scabbard or steel.20

Further, Judge Bennett concluded that any factual differences were small
enough that they didn’t violate Rule 23(a)’s commonality requirement.21 It does
not appear that Tyson filed an interlocutory appeal pursuant to Rule 23(f).22

To win on the merits, the employees would have to prove both (1) that the
donning, doffing, and walking activities constituted work; and (2) that Tyson
had failed to pay overtime wages as a consequence of its failure to pay for the
time these activities took. In addition, they would have to provide sufficient
evidence to prove (3) the number of minutes of overtime for which Tyson had
failed to pay its employees, such that the amount of unpaid overtime wages
could be fairly calculated.23 As to element (1), plaintiffs offered their own

16 The state-law class contained 3344 plaintiffs; the FLSA class contained 444 plaintiffs. 136 S.
Ct. at 1043.
18 See id. at 901-09 (analyzing the IWCPL class under Rule 23(a) and (b)(3)).
19 Id. at 904.
20 Id.
21 Id.
22 See Trask, supra note 3, at 298 n.78.
23 Bouaphakeo, 564 F. Supp. 2d at 909.
representative testimony as well as the testimony of Tyson managers. To establish elements (2) and (3) they would need to measure the number of minutes each employee should have been paid, but was not, each day he or she worked.

The FLSA requires employers to keep records of employee work time. Because Tyson did not pay employees for the donning, doffing, and walking activities at issue, the company had not kept such records. Thus, the plaintiff class needed a way to estimate the number of minutes these activities took them each day. At trial, they provided two types of evidence to this effect: The first was representative testimony by opt-in plaintiffs and Tyson managers. The second consisted of testimony and demonstrative evidence related to a time study conducted by Dr. Kenneth Mericle. Dr. Mericle made hundreds of video recordings of various Tyson employees conducting the donning and doffing activities in question and “used an industrial engineering technique to estimate the amount of walking time based on the distances that people walked and standard walking speeds.” He then calculated the average time, as exhibited in these recordings, that employees spent walking and donning and doffing personal protective equipment. Dr. Mericle testified as to these averages, which were 18 minutes for employees working in the cut and re-trim departments and 21.25 minutes for those working in the kill department. Various exhibits related to Dr. Mericle’s time study were entered into evidence and available to the jury for review. Plaintiffs also called a statistical expert, Dr. Liesl Fox, who explained that she had taken Dr. Mericle’s averages and used them in tandem with millions of Tyson’s daily records of paid employee work time to estimate each employee’s number of unpaid overtime hours that resulted from Tyson’s failure to pay for donning, doffing, and walking time.

25 29 U.S.C. § 211(c) (2012) (requiring covered employers to “make, keep, and preserve . . . records of the persons employed by him and of the wages, hours, and other conditions and practices of employment”).
26 The exception involved “K code” time. Before 2007, employees in certain departments received credit for four minutes of K code time for donning and doffing activities that Tyson did regard as work under the FLSA. Bouaphakeo, 564 F. Supp. 2d at 879. Thereafter, following IBP, Inc. v. Alvarez, 546 U.S. 21 (2005), Tyson began providing employees variable amounts of K code time, between four and seven minutes.
27 See supra note 24 and accompanying text.
29 Transcript of Record, supra note 24, at 84.
30 Id. at 1182.
31 For example, tables from Dr. Mericle’s expert report were received into evidence. Id. at 849. Various video clips were offered and received as well. See, e.g., id. at 985, 989, 992, 1003, 1008, 1119.
32 Id. at 1265-86. It has been noted that Dr. Fox’s estimation method involved some nonlinearities, meaning that a given change in the number of unpaid minutes of daily work would not necessarily translate into a proportionate increase in the total damages owed. Brief of Civil Procedure Scholars as Amici Curiae in Support of Neither Party at 20, Tyson Foods, 136
Tyson aggressively cross-examined the testifying plaintiffs and their experts. It asked penetrating questions meant to discredit the merits of both Dr. Mericle’s time study and of Dr. Fox’s use of its results to calculate damages. It did not, however, object to the admission of any of the aforementioned evidence. Tyson also did not introduce its own expert to testify about a competing time study—though the company had hired one to do so, had listed him as an expected trial witness, and had told the district court that the question of which expert’s study was superior was a question properly submitted to the jury’s discretion. In sum, Tyson eschewed opportunities both to attack the admissibility of plaintiffs’ evidence on relevance grounds and to offer the jury alternative and more compelling evidence. Its trial strategy was centered on convincing the jury that the plaintiffs’ evidence was flawed and should be disregarded.

Judge Jarvey (who had by now taken the case over from Judge Bennett) gave the jury a verdict form asking specific questions. The jury found that the donning, doffing, and walking activities at issue in the case constituted work, which was a question of fact under the FLSA. The jury found that damages amounted to $2.9 million, less than half the $6.7 million that plaintiffs had requested based on Dr. Fox’s testimony.

Though Tyson did not object at trial to the evidence that it placed in issue at the Supreme Court, the company did avail itself of several procedural mechanisms. First, it moved to decertify the class before trial, following the Supreme Court’s decision in Wal-Mart Stores, Inc. v. Dukes. It also moved for judgment as a matter of law under Rule 50(a) and renewed this motion after the trial under Rule 50(b). It then appealed Judge Jarvey’s denial of the renewed motion to the Eighth Circuit. After losing there, Tyson petitioned the Supreme Court for certiorari, maintaining that the use of Dr. Mericle’s time study evidence in a class action violated the Rules Enabling Act and due process, and that the Supreme Court should order the lower

S. Ct. 1036 (No. 14-1146). For example, reducing the estimated number of minutes of unpaid work time by 10% would not necessarily correspond to a reduction in total damages of 10%. Id.

33 Def.’s Memorandum Supporting Exclusion of Any Reference to Dr. Paul Adams, or His Ops., at Trial at 2-3, Bouaphakeo, 2012 WL 4471119 (No. 5:07-cv-04009).

34 Def.’s Resistance to Plaintiffs’ Omnibus Motion in Limine at 11, Bouaphakeo, 2012 WL 4471119 (No. 5:07-cv-04009).

35 Tyson Foods, 136 S. Ct. at 1044. By contrast, the jury also found that the company-provided lunchtime was a bona fide meal break and thus not work under the FLSA. Id.

36 Id.


38 See Tyson Foods, 136 S. Ct. at 1044; see also FED. R. CIV. P. 50.

39 Tyson Foods, 136 S. Ct. at 1044-45.
courts to decertify the class.\textsuperscript{40} The company’s cert petition did not raise the argument of legal insufficiency of the evidence, and it did not suggest that any evidence was admitted in violation of the Federal Rules of Evidence.

In its merits brief at the Supreme Court, Tyson made a beguiling argument. Tyson stated that the average times drawn from Dr. Mericle’s time study “masked important differences that should have precluded certification.”\textsuperscript{41} By allowing the plaintiffs to use these averages, the district court “impermissibly lessened plaintiffs’ burden of proof and undermined Tyson’s ability to defend itself.”\textsuperscript{42} Allowing this evidence to establish the number of minutes of unpaid work time for all plaintiffs in the Rule 23 class therefore violated the Rules Enabling Act’s admonition that rules promulgated under the Act must not “abridge, enlarge or modify any substantive right,” since the burden of proof is substantive.\textsuperscript{43} Further, it violated Tyson’s due process rights as to both the Rule 23 class and the FLSA collective action.

Tyson provided a pithy summary of the basis for these contentions:

No court would allow an individual employee to meet his burden of proving that he performed work for which he was not properly compensated by submitting evidence of the amount of time worked by other employees who did different activities requiring a different amount of time to perform. Yet that is exactly what happened here. Plaintiffs obtained an aggregate classwide damages award by applying Mericle’s average times to all class members without producing evidence that all class members actually worked overtime for which they were not compensated.\textsuperscript{44}

On its face this argument seems reasonable enough. If the unpaid work time varied across class members, why should a plaintiff class be allowed to use averaged evidence? Shouldn’t every plaintiff seeking damages in a lawsuit have to provide evidence about her own alleged loss? If the burden of proof—understood to be an aspect of substantive law—is thereby lowered, then the Rules Enabling Act is violated.

But if the Supreme Court had endorsed Tyson’s evidentiary principle, it would have unsettled vast areas of law in which courts regularly allow one person to use evidence about another person as to events that are in some respects different from those involving the first person. Gajillions of examples are possible; here I offer three:

\textsuperscript{40} Petition for a Writ of Certiorari at 2-3, \textit{Tyson Foods}, 136 S. Ct. 1036 (No. 14-1146).
\textsuperscript{41} Brief of Petitioner at 36, \textit{Tyson Foods}, 136 S. Ct. 1036 (No. 14-1146).
\textsuperscript{42} Id.
\textsuperscript{43} Id. (quoting 28 U.S.C. § 2072(b) (2012)).
\textsuperscript{44} Id. at 36-37 (footnote, citation, and internal quotation marks omitted).
• Under Mississippi law, there is a rebuttable presumption in favor of using national averages of earnings to calculate lost earnings in an individual wrongful death action. Obviously, that involves using data on the earnings of other people involved in other activities than those engaged in by the plaintiff.

• Texas law allows epidemiological studies to be used to establish general causation in drug liability cases. A plaintiff may use such evidence even if it involves people who took the drug for a different period of time, or in different dosages, from the plaintiff—the key for admissibility is that those in the study and the plaintiff have not taken very different dosages for very different periods of time.

• Although the Supreme Court in Comcast v. Behrend recently ordered the decertification of a class in an antitrust case because the plaintiffs’ proffered damages model wasn’t limited to measuring the proper damages, it did not do so simply because plaintiffs used an econometric model considering information about non-class members. Nothing in Comcast indicates that such information could not be used in a model directed at measuring only the damages at issue in the case.

These examples share the common feature of allowing one person to use evidence about other persons engaged in possibly different activities. As this Article argues in Parts II and III, it is appropriate to allow such evidence when that is the only way to answer a question that is not answerable with direct evidence, as is the case in the above examples and in Tyson. It is impossible to understand the underpinnings of Tyson, or the correct direction for representative—and thus statistical—evidence in class certification without understanding the important and salutary role of counterfactually relevant evidence. It will aid this argument to first discuss the nature of counterfactually relevant evidence itself.

II. COUNTERFACTUAL QUESTIONS REQUIRE COUNTERFACTUALLY RELEVANT EVIDENCE

A counterfactual question is a question that can be answered only with knowledge of events that would have occurred in some state of the world that might not actually have come to pass. For example, any question related to but-for causation has a counterfactual component. To know whether a car

46 See, e.g., Merck & Co. v. Garza, 347 S.W.3d 256, 266 (Tex. 2011) (finding relevant a study examining patients taking a drug at twice the dosage and for nine times as long as plaintiff).
accident, rather than some other factor, was the but-for cause of Carla's sore back would require observing Carla in both the state of the world in which the car accident actually happened and a state in which it did not. To know whether the Vioxx pills Tim ingested were the but-for cause of Tim's heart attack requires knowing whether Tim would have had the heart attack had he not taken Vioxx. Despite the fact that a determined skeptic could insist on the unanswerability of counterfactual questions, many problems in social science, history, and other fields require answering them. As the examples above illustrate, law is no exception. This Part explores the role of counterfactually relevant evidence in answering such counterfactual questions.

A. Counterfactual Evidence

It is useful to recall that evidence can be separated into two traditional categories—direct and circumstantial. For example, if Billy accuses Joe of punching him in the face, then Billy's testimony, "Joe punched me in the face at the bar at midnight," is direct evidence. If Employee sues Business, accusing Business of not paying wages for three hours of work done on January 14, then Employee's time card showing that Employee clocked in at nine and clocked out at noon is direct evidence. Similarly, an audio or video recording of an event is direct evidence about that event. Circumstantial evidence is evidence "based on inference and not on personal knowledge or observation." For example, evidence that Joe wasn't home at midnight,

48 Such counterfactual questions play a pivotal role in contemporary statistical methods directed toward evaluating the effects of policy or other changes. The epistemic challenge in this area, known as the "fundamental evaluation problem," is that "it is impossible to observe what would happen to the same unit of study in multiple mutually exclusive states of the world." Jonah B. Gellbach, Note, Locking the Doors to Discovery? Assessing the Effects of Twombly and Iqbal on Access to Discovery, 121 YALE L.J. 2270, 2296 (2012); see also Jill E. Fisch et al., The Logic and Limits of Event Studies in Securities Fraud Litigation, 96 TEX. L. REV. (forthcoming 2018) (manuscript at 6-27), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2817090 [https://perma.cc/U2MH-EZF8] (discussing the role of a market regression model in estimating daily stock returns in the counterfactual scenario in which no event related to securities fraud had occurred).

49 See supra notes 45–47 and accompanying text. Sergio Campos has noted the important role counterfactual questions sometimes play with respect to the distribution of injuries across individuals within a putative class, arguing that, in at least some important cases, "proving the counterfactual may involve evidence that is common to some or all of the members of the class." Sergio J. Campos, Proof of Classwide Injury, BROOK. J. INT'L L. 751, 757 (2012).

50 Black's Law Dictionary defines direct evidence as evidence "that is based on personal knowledge or observation and that, if true, proves a fact without inference or presumption." Direct evidence, BLACK'S LAW DICTIONARY (10th ed. 2014).

51 Assuming the time card is kept in the ordinary course of Business's business, it will be admissible at trial. See FED. R. EVID. 803(6)(B).

52 Circumstantial evidence, BLACK'S LAW DICTIONARY (10th ed. 2014).
when Billy alleges Joe punched him in the face at the bar, is circumstantial evidence that Joe was, or might have been, in the bar at midnight.

What I call counterfactually relevant evidence is a subcategory of circumstantial evidence. Counterfactual evidence tends to establish or contradict some fact $F$ only under auxiliary assumptions about the world that are not themselves susceptible to complete evaluation via direct evidence.

Suppose $F$ is the claim that Drug caused Patient to suffer a heart attack. Direct evidence as to $F$ would require a way of observing whether Patient would have had the heart attack had Patient not ingested Drug. Such evidence is obviously impossible to obtain, since we cannot observe the state of the world in which Patient did not ingest Drug. Courts often allow plaintiffs to introduce experimental and epidemiological evidence concerning the effects of products on other persons to establish what has become known as general causation. But the evidence as to general causation is relevant only if Patient is assumed to be similar enough to the populations of persons whose reactions to Drug have been systematically studied. There is no way to marshal direct evidence that would completely answer the question of similarity, so the experimental or epidemiological evidence is an instance of counterfactual evidence, with similarity being the necessary assumption.

For another example, suppose that $F$ is the lost future earnings of twenty-year-old Victim, who has been rendered a quadriplegic by admittedly reckless Tortfeasor. It is impossible to obtain direct evidence of Victim's future earnings, since Victim's injury will prevent her from garnering those earnings in the first place. The law might allow Victim to establish the magnitude of lost future earnings by allowing her to introduce evidence of present-day average earnings of older persons with characteristics similar to Victim's. Such evidence tells us something relevant about Victim's lost future earnings if we believe that Victim would have been treated similarly in the future labor market to how present-day older persons are treated in today's labor market. There is no way to fully answer this similarity question with direct evidence alone, so similarity is the type of necessary auxiliary assumption such that the evidence as to lost earnings is counterfactual evidence.

To be sure, not all circumstantial evidence is counterfactual in nature. For example, the circumstantial evidence that Joe wasn't at home is not counterfactual evidence that Joe was in the bar at the alleged time,

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53 See Michael D. Green et al., Reference Guide on Epidemiology, in Reference Manual on Scientific Evidence 549, 551-52 (Fed. Judicial Ctr. & Nat’l Research Council eds., 3d ed. 2011). Patient then has the burden of showing that there is no discernible alternative cause of her specific heart attack besides the fact that she took Drug. Of course, the defendant may be able to rebut this conclusion by showing evidence of alternative causes of this specific heart attack in Patient.
because it would be possible to produce direct evidence that Joe was in the bar at midnight (e.g., via eyewitness testimony).

B. Counterfactual Evidence in the Tyson Case

*Tyson* featured both non-counterfactual and counterfactual evidence. Examples of non-counterfactual evidence included the testimony of employees about the nature of the unpaid donning, doffing, and walking activities they performed; testimony from both workers and members of plant management concerning the number of hours of paid gang time work employees typically completed; and testimony from Dr. Fox concerning Tyson's records of work time for which Tyson did pay each worker in the class. On the other hand, one example of counterfactual evidence included Dr. Mericle's video recordings of workers' donning and doffing activities. This evidence is counterfactual for two reasons. First, it involved only a sample of all possible disputed employee-activity combinations. Second, the video recordings were taken after the dates about which there was a legal dispute.

This latter point illustrates an unappreciated aspect of *Tyson*: No matter what kind of proceeding occurred, no party would have been able to provide non-counterfactual evidence concerning the amount of unpaid work that was done donning, doffing, and walking. Tyson couldn't do it because the company didn't keep records. Workers couldn't do it because they also didn't keep records; because many if not all of them did different jobs in the plant at different times; and—completely ignored by both Tyson and the Supreme Court—because common sense tells us that the amount of time it takes a person to do the same task will not be exactly the same on all days.

It should go without saying that people move more slowly when they are tired, when they are afflicted with the common cold, or when they are hungover, than when they are well rested and chipper. So all an employee could plausibly testify to at trial is that it *typically* takes her a certain amount of time to don and doff particular types of equipment. Such testimony would therefore be counterfactual in nature—just like the video recordings of donning and doffing by sampled employees. Accordingly, the video-recording evidence of sampled employees suffers no qualitative disadvantage relative to testimonial evidence from each individual employee.54

Another example of counterfactual evidence in *Tyson* is Dr. Fox's use of average times from Dr. Mericle's time study. This use was a major flashpoint of the controversy before the Supreme Court. As detailed in Part I, Tyson argued that it was inappropriate for Dr. Fox to assume that

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54 That is not to say that video recording or other time-study evidence is necessarily equal in persuasiveness to testimony—just that all are examples of counterfactual evidence.
each plaintiff worked the same number of unpaid minutes donning and
doffing. At oral argument, Tyson argued that not all employees worked in
the same jobs, so not all of them always used the same equipment. But
without records, any information as to how much work time any
individual employee had done on specific dates could be provided only by
counterfactual evidence. The operative question for the plaintiffs’ evidence is
not whether it precisely answered the collection of questions related to each
individual worker’s daily unpaid work time. Rather, the operative question is
whether the employees’ actual donning, doffing, and walking times could be
assumed to be sufficiently similar so that it would be reasonable to use an
overall measure—such as an average—in place of the unknowable actual
times. In turn, the reasonableness of this auxiliary assumption can be
determined only by reference to the underlying substantive law. Once it is
known what facts are of consequence, the practical litigation questions of
what evidence should be admitted, and what consequences flow from a failure
to object to admission of evidence, hinge on federal evidence law.

C. The Logical Relationship Between Counterfactual and Direct Evidence

Intuition suggests that counterfactual evidence should not always be
admissible. I have explained that, in the absence of records, the time-study
evidence in *Tyson* might be an appropriate substitute for the actual time that
Tyson’s employees spent on unpaid work. But what if Tyson had kept—and
offered into evidence—reliable records of the unpaid work time? Then the
time-study and testimonial evidence the plaintiffs offered would have been
irrelevant. When direct evidence of a fact is available, counterfactual evidence of
the same fact will no longer be useful—at least not if the factual evidence is
credited.

Suppose that factual statement $F$ is true if counterfactual evidence $C$ is
credited and auxiliary assumption $A$ holds. Further, suppose that $F$ is false if
direct evidence $D$ is credited. It is not problematic for a person to credit both $C$
and $D$. Even though direct evidence $D$ compels belief that $F$ is false, counterfactual
evidence $C$ does not by itself compel belief that $F$ is true. Only the combination
of $A$ and $C$ does that. Accordingly, a person who believes both $C$ and $D$ is

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55 That said, there was “testimony that employees frequently rotated between positions[.]”
(No. 14-1146). Thus, employees’ uncompensated work time from donning, doffing, and
walking activities must have been more similar than the separate job titles would indicate.

56 As Sergio Campos points out, such a substitution is quite common in individual actions: “[i]n
individual mass tort actions, for example, plaintiffs often prove injury by analogizing to other cases, in effect
importing the counterfactual [question] from one case to another.” See Campos, supra note 49, at 788.

57 Formally, $(C \& A) \rightarrow F$.

58 Formally, $D \rightarrow \neg F$. 
compelled to believe that $F$ is false—just as is a person who believes $D$ alone. So if the person believes $D$, then counterfactual evidence $C$ must be logically irrelevant. This is the case because the person must believe $F$ is false whether or not she credits the counterfactual evidence. In sum, counterfactual evidence that conflicts with direct evidence a person credits is logically irrelevant. Therefore, the usefulness of counterfactual evidence depends on the broader evidentiary context.

What should happen if the auxiliary assumption necessary for counterfactual evidence to be probative is itself a merits question that would have to be resolved in a jury trial? In other words, what if $C$ isn’t probative unless $A$ is correct, and what if the correctness of $A$ is a jury question? Such a situation involves what has been called the “overlap problem.” A full treatment of the overlap problem is beyond the scope of this Article. But the problem may be resolved by having the judge come to a provisional conclusion about the auxiliary assumption and then allowing the jury to make its own determination (presumably without having the judge inform the jury of the provisional determination). This structure is familiar in class action litigation, in which certification and merits questions “[f]requently” overlap, with the Supreme Court holding that there is no problem with “touching aspects of the merits in order to resolve preliminary matters[.]”

Mapped into the terrain of counterfactual evidence, this approach allows a judge who believes auxiliary assumption $A$ is reasonable to admit both (1) counterfactual evidence $C$, which, together with auxiliary assumption $A$, would establish the truth of factual statement $F$; and (2) direct evidence $D$ that would, if credited, establish that factual statement $F$ is false. This allows the judge to leave it to the jury to decide whether to credit $D$, preserving the usual allocation of duties of judges and juries in the federal trial court system.

III. UNDERSTANDING THE Tyson DECISION: THE TRIANGLE OF LEGAL AUTHORITY AND THE CHARACTER OF THE EVIDENCE

It shouldn’t have especially mattered that the time study averages used in Tyson constituted statistical evidence, nor even that these averages were representative evidence more broadly. Class certification requires a showing adequate to meet the tests raised by Rule 23(a) and (b) in light of the

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59 Since $D$ is credited, it must be the case that not-$F$ is true. By the contrapositive property, we have not-$F \rightarrow$ not-$(C \& A)$, which means that when $D$ is credited at least one of $C$ or $A$ must not be. Since $C$ is credited ex hypothesi, $A$ must not be.

60 See 21A CHARLES A. WRIGHT & KENNETH W. GRAHAM, JR., FEDERAL PRACTICE AND PROCEDURE § 5053.5 (2d ed. 2005)


62 Of course, in handling such issues, the judge should apply Federal Rule of Evidence 104’s framework for deciding preliminary questions as to admissibility. See FED. R. EVID. 104(a).
controlling substantive law that sets liability policy. The evidence in the record will often play a role in determining whether Rule 23(b)(3)’s predominance and superiority requirements are met, especially in light of the Supreme Court’s recent treatment of class certification. But in light of the statutory nature of federal evidence law, and the familiar procedural requirements the Rules Enabling Act (REA) imposes for changing both the Federal Rules of Civil Procedure and of Evidence, the Supreme Court had no warrant to create free-floating common law concerning the use of statistical evidence to certify a class action under Rule 23. To the extent that Rule 23 requires the party seeking certification to provide evidence, substantive liability policies and federal evidence law working together—rather than federal common law interpreting Rule 23—must be the basis for determining the adequacy of the evidence. To suggest otherwise would allow the Supreme Court to use federal common law to overturn rules of evidence enacted by Congress or promulgated through the REA process. Framed that way, Tyson should be seen as a case that required the Supreme Court to clarify that evidentiary questions are not somehow more severely policed simply because class litigation is involved.

The Tyson Court recognized precisely this point. It observed that federal evidence law and the FLSA and IWPCL together would have allowed plaintiffs to use the contested statistical evidence in Tyson in hypothetical individual actions. Therefore, they could also use this evidence in class litigation under Rule 23. In fact, Justice Kennedy’s lucidly written opinion noted Tyson’s REA argument was backward: it would violate the REA if a court determined an evidentiary question raised by Rule 23 differently from how it would have determined that question in individual litigation involving the same underlying substantive law. This is an instance of what Maria Glover has recently referred to as the “symmetry principle.”

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63 See generally Tobias Barrington Wolff, Managerial Judging and Substantive Law, 90 Wash. U. L. Rev. 1027 (2013) for a keen discussion of the appropriate role of substantive law and policy at class certification.

64 See Dukes, 564 U.S. at 350–51 (“Rule 23 does not set forth a mere pleading standard. A party seeking class certification must affirmatively demonstrate his compliance with the Rule—that is, he must be prepared to prove that there are in fact sufficiently numerous parties, common questions of law or fact, etc.”) (emphasis in original).

65 It is true that Federal Rule of Evidence 402 allows for “other rules prescribed by the Supreme Court” to limit the admissibility of relevant evidence. But Rule 23’s sole mention of the word “evidence” states only that a district court “may issue orders that . . . determine the course of proceedings or prescribe measures to prevent undue repetition or complication in presenting evidence or argument.” Fed. R. Civ. P. 23(d)(1). This text provides no basis for the Supreme Court to fabricate a general common law rule determining when evidence is inadmissible.


67 Id. at 1046 (“To so hold would ignore the Rules Enabling Act’s pellucid instruction that use of the class device cannot ‘abridge . . . any substantive right.’” (omission in original) (quoting 28 U.S.C. § 2072(b) (2012))).

68 Glover, supra note 3, at 1657-62.
thought of as jointly embedded in the principle of transsubstantivity announced in Rule 69 and in 28 U.S.C. § 2072(b)’s prohibition on using Rules to “abridge, enlarge or modify any substantive right.”70 If procedure must both be transsubstantive and not change substantive rights, then substance must be transprocedural.

The Tyson Court explained that Dr. Mericle’s time-study evidence would have been admissible in a collection of hypothetical individual actions brought by Tyson’s workers, so it must also be admissible in class litigation. This discussion places the evidentiary focus where it belongs—on the relationship between the time-study evidence and the elements of labor law that plaintiffs sought to prove using that evidence. As the Court noted, Tyson’s litigation choices stuck it with no possible counterargument as to the

69 FED. R. CIV. P. 1 (“These rules govern the procedure in all civil actions and proceedings in the United States district courts . . . .”). Some have argued that the REA’s grant of power to the Supreme Court to prescribe “general rule[s] of practice and procedure” prohibits substance-specific Rules. See Paul D. Carrington, Continuing Work on the Civil Rules: The Summons, 63 NOTRE DAME L. REV. 733, 741 (1988) (quoting 28 U.S.C. § 2072 (2012)). Steve Burbank has challenged this view, arguing that this text in the REA was intended only to require geographic uniformity. See Stephen B. Burbank, The Transformation of American Civil Procedure, 137 U. PA. L. REV. 1925, 1934-35 (1989) (“Professor Carrington would have us believe that . . . the Rules [must] be not only uniform, but also trans-substantive. I know of no support for that proposition . . . .” (footnote omitted)).

70 28 U.S.C. § 2072(b) (2012). Tyson gave only a cursory development of its REA argument in terms of REA doctrine. For example, it did not engage with the line of cases—stretching from Sibbach v. Wilson & Co., 312 U.S. 1, 14 (1941), to Hanna v. Plumer, 380 U.S. 460, 464 (1965), to Shady Grove Orthopedic Assocs., P.A. v. Allstate Ins. Co., 559 U.S. 393, 407 (2010)—stating that a Federal Rule is valid if it “really regulates procedure[,]” Brief of Petitioner, supra note 41, at 36-40 (failing to mention these cases in its section on the REA). The Hanna Court famously suggested that it would be well-nigh impossible for a Rule to violate the REA (or, for that matter, the Constitution) given the process of law development through which Rules travel. 380 U.S. at 473-74. But if Justice Scalia’s plurality opinion taking this position in Shady Grove appears to read § 2072(b) out of the United States Code, Justice Ginsburg was right to point out in dissent that a majority of the Court took the opposite view when one counts Justice Stevens’s position in concurrence. 559 U.S. at 442 n.2. Thus it appeared in Shady Grove that there might exist circumstances under which the substantive rights component of the REA would have real bite. Tyson was sub rosa asking the Court to make this appearance a reality.

While it has received virtually no attention of which I am aware, the Tyson majority did just that, in two simple sentences:

In a case where representative evidence is relevant in proving a plaintiff’s individual claim, that evidence cannot be deemed improper merely because the claim is brought on behalf of a class. To so hold would ignore the Rules Enabling Act’s lucid instruction that use of the class device cannot “abridge . . . any substantive right.”

Tyson Foods, 136 S. Ct. at 1046 (omission in original). The Tyson Court thus agreed with Tyson’s view that the Enabling Act’s “substantive right” language is not a dead letter, but it pointed that language right at Tyson, rather than deploying it on Tyson’s behalf.

It appears that Chief Justice Roberts and Justice Sotomayor have switched sides on this issue (both were in the Shady Grove plurality), joining Justices Ginsburg, Kennedy, and Breyer (Shady Grove dissenters) and Justice Kagan (not yet on the Court in Shady Grove). So there are now six votes, not just five as in Shady Grove, in favor of a robust view of the REA’s “substantive right” language—and these six votes spoke in unison rather than through the muffled tones of a single concurring Justice taking up with four dissenters. This development, if sustained, would be a major one in its own right.
admissibility of the representative evidence in the case. By the time the case reached the Supreme Court, this evidence could only be viewed as both relevant and legally sufficient for a jury verdict that determined damages for the members of the class.\textsuperscript{71} That left no Rule 23 question for the Court to adjudicate. The rest of this Part reviews the role of substantive law at class certification. It then addresses the role of evidence law, which before \textit{Tyson} had not played a starring role in the Supreme Court’s analysis in recent class certification cases.

\textbf{A. Substantive Law and the Counterfactual Character of Evidence}

1. The Statutory Substantive Law in \textit{Tyson}

In \textit{Tyson}, the relevant substantive law setting out liability policy came from both federal and state statutory sources. The FLSA provided the substantive law for claims based on an opt-in collective action brought under 29 U.S.C. § 216. The IWPCL incorporated the substantive rights and obligations created under the FLSA, such that proof Tyson violated the FLSA was necessary and sufficient to establish that Tyson violated the IWPCL.\textsuperscript{72} Since Rule 23(b)(3) opt-out

\textsuperscript{71} The jury was instructed in three relevant ways. First, that “[i]n order for non-testifying members of the class to recover, the evidence must establish that they suffered the same harm as a result of the same unlawful decision or policy.” Final Instructions to Jury at 5, Bouaphakeo v. Tyson Foods, Inc., No. 5:07-cv-04009, 2012 WL 4471119 (N.D. Iowa Sept. 26, 2012). Second, that “the weight to be accorded the evidence is a function not of its quantity, but of its quality—whether the testimony covers similarly situated workers, and is generally consistent.” \textit{Id.} at 6. Third, that “[t]he representative evidence, as a whole, must demonstrate that the class is entitled to recover.” \textit{Id.} Thus an order decertifying the class because of too many dissimilarities might be construable as re-examining factual determinations the jury made after trial. Lurking behind the verdict, then, was the possibility of a serious constitutional question concerning the scope of the Seventh Amendment’s Reexamination Clause. By leaving the class certification order undisturbed for the time being, the Court stealthily avoided this question; for more on stealth avoidance, see generally Anita S. Krishnakumar, Veiled Avoidance (Sept. 26, 2016) (unpublished manuscript) (on file with author).

\textsuperscript{72} That is not to say that certification raises equivalent issues for the federal and derivative state claims. Aside from provisions related to the mechanics of demonstrating consent to opt in, this part of the FLSA explains only that FLSA collective actions “may be maintained . . . by any one or more employees for and in behalf of himself or themselves and other employees similarly situated.” 29 U.S.C. § 216(b) (2012). Thus, where Rule 23(a) and (b) are chock full of conditions to be met before a Rule 23 class action may be maintained, § 216(b) requires only that those in the opt-in class be “similarly situated” to the named plaintiff(s). The Supreme Court has never clarified what showing a plaintiff must make to support a collective action under § 216(b). In a barely developed argument in its merits brief, Tyson asked the Court to declare that the requirements for certification of a collective action under § 216(b) exactly match those necessary to certify a Rule 23 class. Brief of Petitioner, \textit{supra} note 41, at 26-27. The Court declined even to acknowledge this request; instead it simply observed that the parties agreed that § 216(b) requires \textit{no more} than Rule 23, so that its approval of the Rule 23 class was sufficient to also bless the § 216(b) collective action. \textit{Tyson Foods}, 136 S. Ct. at 1045. The proper threshold for certification under § 216(b) was teed up for the Court in a recent cert petition to which the Court responded with a GVR. See \textit{FTS USA}, LLC v. Monroe, 137 S. Ct. 590 (2016); Petition for a Writ of Certiorari at i-ii, \textit{FTS USA}, 137 S. Ct. 590 (No. 16-204). The petition asked the Supreme Court to clarify the requirements for
aggregation is apparently not available for claims brought directly under the FLSA, state law functioned as the ticket into the class action theater.

The elements necessary to establish liability in the case were simple enough. Plaintiffs needed to prove (1) that they did unpaid work, (2) in weeks when they worked more than forty hours. Since the FLSA requires proof of actual damages, workers would need to prove (3) the number of unpaid hours of work they did. To address element (1), the plaintiffs introduced evidence describing several donning, doffing, and walking activities for which they were not paid. As to these activities, the controversy was whether they constituted “work” under the FLSA. The jury did determine that these activities were “work”, bringing elements (2) and (3) into play.

The FLSA requires employers to keep records of the amount of time employees work. Through its gang time system, Tyson did keep such records for those hours of work for which it did pay workers. Given an acceptable way to measure the typical amount of unpaid work time, the plaintiffs would be home free: they had access to Tyson's weekly records through discovery, so all they needed to do was add the appropriate amount of unpaid work time for each employee to the number of hours paid in each week. Unpaid hours exceeding forty in a given week, which are subject to the FLSA's overtime provisions, could then be calculated by subtracting forty from the total weekly work hours for each employee. But not surprisingly, given its position that the activities did not constitute work, the company had kept no records as to the amount of time workers spent engaged in the unpaid activities that the jury determined were work. The plaintiffs also had not kept such records.

The lack of records left the employees with no direct evidence as to the number of hours they worked in each week in the class period. This question could be answered, if at all, only via counterfactual evidence, whether testimonial or statistical in nature. The district court allowed both sorts of counterfactual evidence. Several employees testified as to the amount of time it typically took them to don, doff, and walk. As mentioned previously, Dr. Mericle described his time study and testified as to the average amount of time it took subject employees to do the activities in question. The plaintiffs also entered video recordings of donning and doffing activities and other exhibits.

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73 See supra note 14 and accompanying text.
76 Final Instructions to Jury, supra note 71, at 7.
77 Transcript of Record, supra note 24, at 1818-19.
78 29 U.S.C. § 211(c) (2012).
80 Bouaphakeo, 2012 WL 4471119, at *3.
Here it is worth considering Tyson's argument, described above, that Dr. Mericle's evidence involved different workers taking different amounts of time to do different work. Imagine that a single individual action had been brought by Plaintiff X. It is of course possible Plaintiff X actually took different amounts of time to do the same activity on different days. But to my knowledge, neither party in *Tyson* questioned the idea that a jury could use a single number of minutes to compensate such a plaintiff for unpaid work time spent in a given activity on different days. Thus, it was undisputed that the substantive law did not require plaintiffs to prove the actual unpaid work time as to any employee. A reasonable estimate for any employee would suffice.

Consider next whether the FLSA allows using a single number for multiple employees. While Tyson made much of alleged variances in the amounts of time it took different employees to do the allegedly very different activities, the company itself had previously used time studies to determine how many minutes to pay for donning, doffing, and walking activities with respect to activities not at issue in the litigation. The company surely viewed that approach as lawful under the FLSA, which it would not be if every employee must be paid for the actual amount of time that employee takes each time she does the activity in question.

For purposes of the *Tyson* litigation, then, there is no serious argument that the FLSA requires plaintiffs to prove the individual amounts of time they typically take to do donning, doffing, and walking activities. In other words, for sufficiently similar employees, it should be enough under the FLSA for employee plaintiffs to provide common evidence as to the amount of time they reasonably could be expected to have taken to do the contested activities.

The questions just resolved are questions of substantive labor law. The remaining questions are whether the employees in the *Tyson* class were in fact sufficiently similar, and whether the evidence they provided was adequate to measure reasonable numbers of minutes. These remaining questions turn on the interaction of substantive labor law, federal evidence law, and the character of the evidence in question.


An additional point of substantive law bears mention here. To buttress their reliance on the time study evidence, the *Tyson* plaintiffs pointed to the seven-decades-old precedent in *Anderson v. Mt. Clemens Pottery Co.* In *Mt. Clemens*, workers alleged that they were unlawfully not paid for walking time

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81 Transcript of Record, *supra* note 24, at 1564-1601.
82 328 U.S. 680 (1946).
at the beginning and ending of their shifts. As in *Tyson*, no one had records of the actual time spent in the unpaid activity, and at trial the plaintiffs used representative evidence. Eight plaintiffs testified in front of a special master, who used their testimony to estimate the time spent in unpaid work activities. By the time *Mt. Clemens* reached the Supreme Court, the Sixth Circuit had held, in the words of the Supreme Court, that plaintiffs had failed "to show by evidence rather than conjecture the extent of overtime worked, it being insufficient for them merely to offer an estimated average of overtime worked."  

The Supreme Court reversed, holding that when an employer has failed to keep proper records, "an employee has carried out his burden if he proves that he has in fact performed work for which he was improperly compensated and if he produces sufficient evidence to show the amount and extent of that work as a matter of just and reasonable inference." Pointing to this language in *Mt. Clemens*, and to the factual similarities between the two cases, Justice Kennedy wrote for the *Tyson* Court that the "decision in *Anderson v. Mt. Clemens* explains why . . . [the time study] was permissible in the circumstances of this case."  

Writing in dissent, Justice Thomas took issue with the Court's reliance on *Mt. Clemens* to justify admissibility of the time study as to liability. As he wrote, "*Mt. Clemens* does not hold that employees can use representative evidence in FLSA cases to prove an otherwise uncertain element of liability." Thomas points to language by the *Mt. Clemens* Court stating that the "just and reasonable inference" standard is not to be condemned by the rule that precludes the recovery of uncertain and speculative damages. That rule applies only to situations where the fact of damage is itself uncertain. But here we are assuming that the employee has proved that he has performed work and has not been paid in accordance with the statute. The damage is therefore certain. The uncertainty lies only in the amount of damages arising from the statutory violation by the employer.  

If the apparent *Mt. Clemens* liability–damages distinction were to matter in *Tyson*, the reason would have to do with the definition of the class certified by the district court, which included workers without regard to whether they had ever been paid for working more than forty hours in a week.  

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83 Id. at 682-84.  
85 Mt. Clemens, 328 U.S. at 686.  
86 Id. at 687.  
88 Id. at 1038 (2016) (Thomas, J., dissenting).  
89 Mt. Clemens, 328 U.S. at 687-88.  
90 Bouaphakeo v. Tyson Foods, Inc., 564 F. Supp. 2d 870, 909 (N.D. Iowa 2008) (certifying class including "[a]ll current and former employees of Tyson's Storm Lake, Iowa, processing
liability to some workers would depend on the amount of work time that would be determined to have been unlawfully unpaid. To illustrate, suppose Alphonso and Betty were each plaintiff class members who worked for exactly one week. If Alphonso had been paid for working forty hours, then the jury’s determination that the contested donning, doffing, and walking activities were work under the FLSA makes Tyson liable to Alphonso regardless of the number of minutes of unpaid work time attributable to him. If Betty had been paid for working only thirty-nine hours in the same week, then Tyson would be liable to her under the FLSA’s overtime provisions only if at least sixty minutes of unpaid work time are attributable to Betty. Thus the time study evidence potentially does double duty as to Betty’s claim: (1) it determines whether Tyson is liable to her; and (2) it measures the damages owed her in the event of liability.

According to Justice Thomas’s argument, there is a rule cited in Mt. Clemens that precludes recovery for Betty, since “Tyson’s liability to . . . [Betty would be] uncertain.” Justice Thomas characterized the majority’s use of Mt. Clemens as “creat[ing] a special, relaxed rule authorizing plaintiffs to use otherwise inadequate representative evidence in FLSA-based cases by misreading” Mt. Clemens.

Justice Kennedy’s opinion for the Tyson Court did not engage the liability–damages distinction at all. Instead, Justice Kennedy wrote at a level of generality that erases that distinction by pointing out that, just as in Mt. Clemens, the Tyson plaintiffs “sought to introduce a representative sample to fill an evidentiary gap created by the employer’s failure to keep adequate records.” In a concurrence noting that he joined the Court in full, Chief Justice Roberts did engage Justice Thomas:

I agree with Justice Thomas that our decision in [Mt. Clemens] . . . does not provide a “special, relaxed rule authorizing plaintiffs to use otherwise inadequate representative evidence in FLSA-based cases.” But I do not read the Court’s opinion to be inconsistent with that conclusion. Rather, I take the Court to conclude that Dr. Mericle’s study constituted sufficient proof from which the jury could find “the amount and extent of [each individual respondent’s] work as a matter of just and reasonable inference”—the same standard of proof that would apply in any case.

There are thus three visions of the majority’s basis for admitting the time-study evidence. First, Justice Thomas says the majority created a special rule that relaxes the type of evidence required under the FLSA. Second, Justice

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91 Tyson Foods, 136 S. Ct. at 1058 (Thomas, J., dissenting).
92 Id. at 1056.
93 Id. at 1047.
94 Id. at 1050-51 (second alteration in original) (citation omitted).
Kennedy points to *Mt. Clemens* as an earlier FLSA instance in which the Supreme Court had found representative—and counterfactual—evidence sufficient provided that it met a general “just and reasonable inference” standard when actual records did not exist. And third, Chief Justice Roberts explains that “just and reasonable inference” is the standard “in any case,” regardless of whether the FLSA is involved, though the Chief Justice cites no authority for this proposition.

The language in *Mt. Clemens* appearing to require more exacting evidence to prove liability is actually dictum. The plaintiffs in that case had all claimed to have worked at least forty hours per week, so the number of minutes spent in unlawfully unpaid work time could not affect liability in that case. Therefore the question of whether representative evidence could establish liability was not posed in *Mt. Clemens*.

Further, Supreme Court precedent actually casts doubt on Justice Thomas’s reading of *Mt. Clemens* as to the liability–damages distinction. Because *Mt. Clemens* does not cite any authority for the “rule” in question, I conducted a Westlaw search for the string “recovery of” /1 (uncertain or speculative) /3 “damages” and then restricted attention to cases decided on or before the day *Mt. Clemens* was decided (June 10, 1946).

In the case decided most closely to *Mt. Clemens*, the 1946 antitrust case *Bigelow v. RKO Radio Pictures, Inc.*, a dissenting Justice Frankfurter made the same liability–damages distinction found in the *Mt. Clemens* dicta. The dispute between Justice Frankfurter and the *Bigelow* majority revolved around whether petitioners in particular had been injured by the behavior of respondents. The majority held that, since the jury had found respondents’ action unlawful under the Sherman Act, use of less-than-perfect evidence as to petitioners’ damages was appropriate, and it cited the “just and reasonable inference” standard to boot.

*Bigelow’s* parallels to *Tyson* are striking. In both cases, a jury found the defendant’s actions violated a federal statutory requirement—in *Bigelow*, the Sherman Antitrust Act, and in *Tyson*, the FLSA’s requirement that wages be paid for activities that constitute work. In both cases, the Supreme Court determined that the “wrongdoer shall bear the risk of the uncertainty which his own wrong has created”—approving the victims’ approach to proving the amount of damages using data on actual profits before and after the violations of antitrust laws to measure damages in *Bigelow*, and blessing the use of plaintiffs’ time-study

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95 Id. at 1058 (Thomas, J., dissenting).
96 327 U.S. 251, 268 (1946) (“[P]roof of the legal injury, which is the basis of his suit, is plaintiff’s burden. He does not establish it merely by proving that there was a wrong to the public nor by showing that if he had been injured ascertainment of the exact amount of damages would have had an inevitable speculative element to be left for a jury’s conscientious guess.”).
97 See id. at 264-66 (“The evidence here was ample to support a just and reasonable inference that petitioners were damaged by respondents’ action, whose unlawfulness the jury has found . . . .”).
98 Id. at 265.
evidence to measure the number of minutes of unpaid work time in *Tyson*. In both cases, the tool to measure damages was necessary to establish that there were *any damages at all*, i.e., that the plaintiff had established liability.

As with *Tyson*, then, *Bigelow* would have come out the other way if Justice Thomas’s reading of the “rule” in *Mt. Clemens* were correct. The most reasonable conclusion is that the Court had already rejected any formal distinction of the type Justice Thomas suggested.99 This reading is reinforced by the fact, which co-amici and I pointed out, that the lower courts have, for decades, regularly allowed employees to prove liability under the relevant sections of the FLSA.100

If neither the bound-by–*Mt. Clemens* view of *Tyson* nor Justice Thomas’s view that the majority expanded *Mt. Clemens* is convincing, then Chief Justice Roberts’s cryptic statement suggests a third way to make sense of the *Tyson* Court’s use of the “just and reasonable inference” standard. This standard is simply a broad equitable solution to the problem that arises when direct evidence is impossible to find, so that *only* counterfactual evidence could be used. If counterfactual evidence can fairly be used to provide reasonable inferences, then there is every reason for courts to allow that evidence to establish whatever element is in question. The case for a “principle in favor of counterfactual evidence” is especially keen when direct evidence would be available but for the unclean hands of a party to a lawsuit. Of course, the principle in favor of counterfactual evidence does not, by itself, make any particular chunk of counterfactual evidence admissible; that question must be answered via the usual consideration of federal evidence law. The principle in favor of counterfactual evidence states only that when direct evidence cannot be had, courts should interpret the Federal Rules of Evidence liberally enough so that elements of the substantive law may be met in litigation with otherwise appropriate counterfactual evidence.

Finally, inasmuch as this principle is properly viewed as an aspect of whatever substantive law sets liability policy in a given controversy, the principle should apply regardless of whether the litigation proceeds via individual or class actions. This point has important implications for class certification battles involving representative evidence targeted at counterfactual questions. The proper inquiry in such cases is not whether direct evidence, were it to exist for each plaintiff, would exhibit any differences across plaintiffs. Rather, it is whether such differences could be expected to be so great as to render common counterfactual evidence inappropriate.

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99 Justice Thomas’s view on this issue echoed arguments strenuously made by *Tyson* itself. *See* Brief of Petitioner, supra note 41, at 40–44.

100 *See* Professors’ Brief, supra note 2, at 15–18.
The late Richard Nagareda influentially argued that in Rule 23(b)(3) cases the certification inquiry must police for “fatal dissimilarities.”\textsuperscript{101} The argument above suggests that for some counterfactual questions, at least as much emphasis should be placed on the word “fatal” as on the mere fact of dissimilarity. Of course, what constitutes a great enough dissimilarity to be fatal is the central question. That question is not one that either Tyson or the Tyson dissenters engaged seriously: neither provided any basis for determining whether variations of the magnitude involved in Tyson are enough to be fatal. And having never objected, at any point in the litigation, to admission of any of the representative evidence, Tyson had no serious basis to attack the evidence itself at the Supreme Court.

3. Summary as to Substantive Law

In sum, this section shows the importance of the elements of substantive law in Tyson. It also shows that Tyson’s blessing of the time-study evidence plaintiffs presented should be read as an endorsement by the Court of what I have called “the principle in favor of counterfactual evidence.” It will be left to the lower courts to determine how much variation is too much—how much is “fatal”, in Professor Nagareda’s terms—in future cases. That determination may be susceptible to the formulation of general standards, but it is also likely to be one that is fact-bound and highly contextual, and thus one for which the district court properly should have “broad discretion” in future class certification decisions.\textsuperscript{102}

B. Evidence Law Matters, Too

The issues in Tyson involved time spent in donning, doffing, and walking activities. Since time runs forward only, one cannot later measure the time any employee actually spent in these activities during the class period. One could ask each employee to testify directly as to this time, but since the record showed that employees did various jobs, with varying donning and doffing activities, such testimony would not obviously be more reliable for each employee than would representative evidence—whether testimonial or statistical in nature. Further, because the question at which such evidence is targeted is unanswerable with direct evidence, all these types of evidence are counterfactual evidence anyway. The threshold question for admitting

\textsuperscript{101} See Richard A. Nagareda, Class Certification in the Age of Aggregate Proof, 84 N.Y.U. L. Rev. 97, 107 (2009).

such evidence is therefore not about whether the evidence is statistical or representative more broadly, or even about whether direct evidence, if it existed, would exhibit any differences across plaintiffs. Rather, the threshold question that evidence law poses for any such evidence is whether it is relevant. If evidence is relevant under Rule 401, then under Rule 402 it is presumptively admissible. When the evidence in question involves expert testimony, then Rule 702 and Daubert also come into play.

1. Federal Evidence Law as Applied to the Time-Study Evidence in Tyson

Under Rule 401, evidence concerning a consequential fact is relevant if it has a “tendency to make a fact more or less probable than it would be without the evidence.” Representative evidence about donning and doffing time, whether testimonial or statistical, makes conclusions about a particular worker’s donning and doffing time more probable if and only if those who testify or form the sample used to create statistical evidence are similar enough in relevant ways to reliably measure the time for the worker in question. Whether this similarity holds is the critical question for any representative evidence. The basic framework for considering this question is given by Rule 702 in tandem with the considerations discussed in Daubert v. Merrell Dow Pharmaceuticals, Inc. Despite the “liberal thrust” of the Federal Rules of Evidence, the Daubert Court stated that the Rules require trial courts to make certain that scientific testimony or evidence that has been challenged is “not only relevant, but reliable.”

If evidence law provides the skeletal framework of this inquiry, the rest of the inquiry’s body is animated by substantive law. The time-study and other representative evidence in Tyson is relevant only if it tends to make facts about Tyson’s liability and damages owed to its workers more or less probable. The elements that must be established concerning liability and damages owed are not matters of evidence law, but rather of underlying labor law. Thus, while evidence law sets the basic contours of the inquiry as to admissibility, it is a kind of shell onto which substantive law is embedded.

Critically, the admissibility of the evidence in question turned on a counterfactual question: were the plaintiffs in the case sufficiently similar such that the statistical average of the time it took members of a sample of Tyson’s workers would reasonably represent the time it actually took each worker in the class to do those activities? What makes this question counterfactual is that its answer

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103 But cf. supra note 65 and accompanying text (concerning the authority of the Supreme Court to limit admissibility via any rules prescribed pursuant to the REA process).
104 FED. R. EVID. 401.
106 Id. at 588-89.
depends on facts that cannot be determined with direct evidence, given that no records were kept of the actual time spent in the relevant activities.

In principle, one could record all workers donning, doffing, and walking, and then use statistical measures such as the population standard deviation as a measure of how different the times were. But this approach would have two practical flaws. First, if one did record everyone’s time, there would be no reason to use a common sample in the first place; one might as well just use each individual’s recorded time. Second, and more problematic, the time it takes person X to don, doff, and walk for purposes of our exercise need not equal the time it took X to do so on days covered by the certified class. We would still need to answer the counterfactual question of whether the times recorded ex post for X are similar enough to the legally relevant times for which no records exist. X might have been more tired on the dates at issue in litigation, the hallways might have been less crowded, and so on. Thus, there is no way around the problem that what needs to be answered in Tyson is a counterfactual question. The statistical nature of the evidence at issue isn’t the source of this counterfactual challenge. Only counterfactual evidence was possible in Tyson.

Evidence law comes into play again when determining whether proffered evidence is appropriate when its relevance depends on such counterfactual questions. In evidence law parlance, it is a “preliminary question” whether class members are similar enough for common evidence to be appropriate to answer a counterfactual question of the sort posed in Tyson. Rule 104 explains in pertinent part that a district court “must decide any preliminary question about whether . . . evidence is admissible,” and that “[i]n so deciding, the court is not bound by evidence rules[.].” Class certification is not trial, of course, but the “rigorous analysis” required at class certification should take into account whether evidence would be admissible there. For example, if the district court in Tyson had concluded that there was no way for plaintiffs to provide common evidence as to the amount of unpaid work time, then it might well have determined that a class action trial would be dominated by individualized issues, forcing the conclusion that Rule 23(b)(3)’s predominance requirement could not be satisfied.

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107 This reasoning offers one reason why I disagree with a recent Harvard Law Review case comment that “[w]ith respect to any of the employees that appeared among the study’s 744 videotaped observations, the tape itself would evince that particular employee’s donning and doffing times.” Leading Case, Tyson Foods, Inc. v. Bouaphakeo, 130 HARV. L. REV. 407, 412 (2016). A second reason is that Dr. Mericle did not pick individual employees and follow them around all day, but instead recorded donning and doffing times for many employees doing each of a number of activities. Thus “the tape itself would” not actually “evince” any “particular employee’s” total donning and doffing time.

108 FED. R. EVID. 104(a).


110 The district court might still have certified a class action as to only the issue of whether the donning, doffing, and walking activities at issue in the case were “work” under the FLSA. See FED.
Because Tyson did not object to the admission of any representative evidence, the district court had no occasion to consider formally whether the plaintiffs were sufficiently similar such that common evidence should be admitted. And since the court didn’t decertify the class when Tyson so moved just before trial, it is fair to believe that the court saw no problem with the use of the common evidence as to the number of minutes employees worked.

2. Justice Thomas’s Argument in Dissent

One of the arguments Justice Thomas made in dissent in *Tyson* is directly pertinent to my discussion of counterfactual evidence and evidence law. Justice Thomas agreed with the majority that “representative evidence can be used to prove an individual issue on a classwide basis if each class member, in an individual action, could rely on that evidence to prove his individual claim.” He then pointed to a difference in testimonial evidence and Dr. Mericle’s time study evidence: “Mericle’s study estimated that kill department employees took an average 6.4 minutes to don equipment at their lockers before their shift—but employee Donald Brown testified that this activity took him around 2 minutes. Others also testified to donning and doffing times that diverged markedly from Mericle’s estimates.”

From this recounting Justice Thomas concluded that “Mericle’s study could not sustain a jury verdict in favor of these plaintiffs, had they brought individual suits.” His argument is founded on a failure to apprehend the counterfactual nature of the representative testimony. Here is the testimony of Donald Brown on which Justice Thomas’s “around 2 minutes” figure appears to be based:

Q. Mr. Brown, would you agree that it only takes one or two seconds to put in your earplugs?

A. That’s correct.

Q. And would you agree it only takes one or two seconds to put on your safety glasses?

A. Yeah.

Q. Would you agree it only takes one or two seconds to put on your hard hat?

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R. Civ. P. 23(c)(4). With a victory as to this issue, individual plaintiffs might then have proceeded in individual actions to recover damages, though many of their claims likely would have been negative-value given the usual costs of litigation. The result might have been a game of chicken between plaintiffs’ attorneys and Tyson—with settlement better than litigation for both sides, but with the threat of subsequent litigation by plaintiffs possibly viewed as non-credible by Tyson.

113 *Id.*
114 *Id.*
A. Yes.
Q. And would you agree it only takes about fifteen seconds per boot to put your boots on in the morning?
A. Yes.
Q. Do you think it takes maybe 60 or 90 seconds to put your whites on, your white pants and your shirt?
A. That would be close.
Q. It only takes you a few seconds, maybe three seconds to put your cotton gloves on each hand, would you agree?
A. Yes.
Q. And for your apron, would you agree it only takes you about 15 seconds to put that on?
A. Yes.  

Notice that Brown nowhere is asked whether these were the actual amounts of time he spent in each activity on any particular dates. The times involved are apparently general estimates. Brown’s testimony as to these times is relevant to the actual work time for which he was unpaid only if the times to which he testified in his testimony are typical of his own experience on days when he was actually unpaid for actual work done. That means the Brown testimony that Justice Thomas cites is itself counterfactual evidence. Therefore, in a hypothetical individual action Brown might still have been able to introduce Dr. Mericle’s time study evidence that the activities in question take 6.4 minutes. A jury could reasonably believe that the time study evidence is more accurate than the 2-2.5 minutes implied by Brown’s testimony, or it could conclude the opposite. Or, it could place some amount of weight on each estimate.

This situation is not one in which direct evidence renders counterfactual evidence irrelevant, like those discussed earlier in subsection II.C. Rather, it is one in which each of two forms of counterfactual evidence taken in isolation would yield a different inference. A reasonable person—and thus a reasonable juror—could conclude that the truth might be somewhere in between. On this point, it is notable that Brown testified on direct examination that the activities in question took him four minutes when he previously timed himself undertaking those activities. Brown’s testimony on direct and cross are inconsistent with each other, but no one would suggest that either bit of testimony “could not sustain a jury verdict,” as Justice Thomas suggested of the time-study evidence. Juries in our system are entitled to

115 Transcript of Record, supra note 24, at 708-09. This part of Brown’s testimony is cross-examination.
116 See id. at 1113.
117 Id. at 687.
118 Tyson Foods, 136 S. Ct. at 1057 (Thomas, J., dissenting).
draw their own inferences in the face of conflicting evidence. Thus the presence of Brown’s testimony would not necessarily render the time study non-credible even in an individual action by Brown.

And the Tyson jury in fact found damages were less than the amount implied by Dr. Mericle’s time study. This finding is consistent with a reasonable jury’s determination that the time-study evidence warranted some weight, but that other evidence such as Mr. Brown’s testimony pointed away from placing complete credence in the time study. The grounds for second guessing such a jury determination are extremely narrow in our system.\textsuperscript{119}

In sum, with a proper understanding of the counterfactual character of the time-study evidence in \textit{Tyson}, we can see why Justice Thomas’s position is wrong. The time-study evidence might have been properly admitted in hypothetical individual actions, even if plaintiffs in those actions testified to unpaid work time that differed from the time study averages. Whether the time-study evidence should be admitted would be committed to the discretion of the judge in each individual action, and the weight it should get at trial would be a question for the jury. There is therefore nothing untoward in having a single judge and single jury make these determinations in a single class action.

3. The Critical Implications of Tyson’s Failure to Challenge the Statistical Evidence

An unavoidable aspect of the role of evidence in \textit{Tyson} is that litigation choices matter.\textsuperscript{120}

Tyson’s briefing at the Supreme Court spilled a lot of ink attacking the quality of Dr. Mericle’s time study and Dr. Fox’s use of it to estimate unpaid overtime. This was curious because Tyson chose in two key ways not to challenge this expert evidence. First, while Tyson savaged Dr. Mericle on the witness stand, it allowed his evidence into the record by failing to file a \textit{Daubert} motion challenging it. Second, even though Tyson challenged the legal sufficiency of the evidence via Rule 50(a) and (b) motions for judgment as a matter of law, including at the Court of Appeals level, it did not include this argument in its petition for certiorari at the Supreme Court.

These decisions had three interlocking and critical implications. First, once Tyson failed to mount a \textit{Daubert} challenge or otherwise challenge the

\textsuperscript{119} As Justice Thomas himself recently noted, in our system damages are “a matter so peculiarly within the province of the jury that the Court should not alter it.” Atl. Sounding Co. v. Townsend, 557 U.S. 404, 409 (2009) (quoting Feltner v. Columbia Pictures Television, Inc., 523 U.S. 340, 353 (1998)); accord \textit{Tyson Foods}, 136 S. Ct. at 1049 (2016) (“Reasonable minds may differ as to whether the average time Mericle calculated is probative as to the time actually worked by each employee. Resolving that question, however, is the near-exclusive province of the jury.”).

\textsuperscript{120} For a more detailed discussion of this broad theme, see generally Trask, \textit{supra} note 3.
relevance of the Mericle–Fox evidence, it lost the ability to argue that that
evidence was irrelevant. Inasmuch as the relevance of that evidence is
necessarily lashed to the proposition that class dissimilarities are not too
great, Tyson’s failure to object placed it in a fundamentally weak position to
argue against the use of that evidence. Justice Kennedy raised Tyson’s failure
to make a *Daubert* motion at the very outset of oral argument in the case, and
he also trained attention on this failure in his opinion for the Court.121

The second implication was that, by abandoning its Rule 50 arguments at the
Supreme Court, Tyson forfeited any argument concerning the legal sufficiency
of the plaintiffs’ evidence. Thus, by the time the Supreme Court granted cert, the
posture of the case was such that the plaintiffs’ evidence was not only relevant
but also collectively legally sufficient to sustain the jury’s trial verdict.122

The third implication is one the Supreme Court only winked at, no doubt
because its significance extends beyond even the expansive boundaries of the
case as Tyson presented it. The jury was instructed that “[i]n order for
non-testifying members of the class to recover, the evidence must establish
that they suffered the same harm as a result of the same unlawful decision or
policy,” that “the weight to be accorded the evidence is a function not of its
quantity, but of its quality—whether the testimony covers similarly situated
workers, and is generally consistent,” and that “[t]he representative evidence,
as a whole, must demonstrate that the class is entitled to recover.”123 By
finding for the plaintiffs, the jury must be understood to have determined
that all class members suffered the same harm, that the plaintiffs’ evidence
covered similarly situated workers and is generally consistent, and that the
evidence demonstrates entitlement of the class to recover.

The Seventh Amendment certainly applied to the *Tyson* case, since the
FLSA provisions at issue have been held to involve a legal remedy, and under
*Curtis v. Loether* the Seventh Amendment applies to suits enforcing statutory
rights “if the statute creates legal rights and remedies, enforceable in an action
for damages in the ordinary courts of law.”124 Thus *Tyson Foods* involved a “[s]uit[]
at common law,” and so those “fact[s] tried by a jury” in the case could not be

122 On this score, Justice Thomas’s statement that the time-study evidence could not “sustain a jury
verdict” due to supposedly conflicting testimony at trial is odd. *Tyson Foods*, 136 S. Ct. at 1057 (Thomas, J.,
dissenting). Since the Rule 50 question of evidentiary sufficiency was off the table at the Supreme Court,
Justice Thomas should have instead been arguing that the district court should have realized at the time of
class certification (or of the motion to decertify) that any inconsistency of the time-study evidence and
plaintiffs’ deposition testimony would have prevented a *prospective* jury from using the time-study evidence
to measure the number of minutes of unpaid work time. This argument itself would not carry the day, for
the same reasons I gave in subsection III.B.2, *supra*. But it would at least have had the virtue of aligning
with the evidentiary and procedural posture of the case by the time it reached the Supreme Court.
123 Final Instructions to the Jury, *supra* note 71, at 5-6.
“otherwise re-examined in any Court of the United States,” including the Supreme Court, other “than according to the rules of the common law.”

For the Supreme Court to find that the plaintiffs’ evidence was inappropriate to support class certification, it would have to come to different conclusions from those drawn by the jury on issues necessary to the verdict. Had the Court taken Tyson’s side, then, it would have faced a substantial constitutional issue: if a court decertifies a class on grounds that are flatly inconsistent with a jury verdict, does that constitute an unconstitutional reexamination of facts tried by the jury under the Seventh Amendment?

The Court did not answer this question—or even engage it directly. But Justice Kennedy’s opinion for the *Tyson* majority reflects an appreciation of the appropriate degree of deference due the jury in the *Tyson* litigation:

Once a district court finds evidence to be admissible, its persuasiveness is, in general, a matter for the jury. Reasonable minds may differ as to whether the average time Mericle calculated is probative as to the time actually worked by each employee. Resolving that question, however, is the near-exclusive province of the jury. The District Court could have denied class certification on this ground only if it concluded that no reasonable juror could have believed that the employees spent roughly equal time donning and doffing. The District Court made no such finding, and the record here provides no basis for this Court to second-guess that conclusion.

Here we see the tight link the *Tyson* majority saw between the lawfulness of class certification, the admissibility of the representative evidence, and the deference the Court accorded a jury that had weighed that evidence. Whether the Court saw a Seventh Amendment issue or not, Tyson’s failure to challenge the expert evidence’s admissibility and its decision to drop its challenge to the legal sufficiency of the jury’s verdict planted a thicket into which the Court had no interest in venturing.

**IV. THE TRIANGLE OF LAW, THE ROLE OF EVIDENCE, AND PRACTICAL LITIGATION CHOICES**

Read in its full context and at an appropriate level of generality, *Tyson* stands for the proposition that class certification decisions depend

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125 U.S. CONST. amend. VII.
126 The Second Circuit has suggested as much. *See Mazzei v. Money Store*, 829 F.3d 260, 269 (2d Cir. 2016) (holding “that when a district court considers decertification (or modification) of a class after a jury verdict, the district court must defer to any factual findings the jury necessarily made unless those findings were ‘seriously erroneous,’ a ‘miscarriage of justice,’ or ‘egregious,’” because that “is the standard that a district court applies to a Rule 59 motion for a new trial on weight-of-the-evidence grounds”).
127 *Tyson Foods*, 136 S. Ct. at 1049 (citation omitted).
on what I shall call a “Triangle of Law.” The vertices of this Triangle are: (1) class action law in the form of Rule 23 and associated federal common law; (2) the substantive law that embodies liability and related policies in any given case; and (3) federal evidence law in the form of the Federal Rules of Evidence and associated federal common law.

Figure 1 illustrates the connections between these three sources of law, as well as how the evidence in litigation itself is related to each of the three. One cannot sensibly determine whether to certify a class unless one also knows what the elements of substantive law require, since these elements define the contours of—at least—the relevant commonality and predominance considerations. Nor can one generally determine the facts that are of consequence, the kind of evidence that would tend to drive conclusions about these facts, or the type of evidence that would be admissible, without knowing the substantive law. Finally, the roles of Rule 23 and the Federal Rules of Evidence are connected because the plaintiff, as the party typically moving for class certification, carries the burden to prove with evidence that the Rule 23(a) and (b) prerequisites are satisfied.

I have placed the actual evidence available in the litigation in the middle of the Triangle of Law, because its role in any class litigation is functionally connected to all three sources of law. Evidence must address common questions of fact, or, at least in Rule 23(b)(3) cases, it must not be the case that individual fact questions will dominate common ones. Evidence must be admissible. And evidence must establish the elements of the substantive law.

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128 Surely adequacy of representation under Rule 23(a) is also bound up with substantive law considerations, as, for example, when class actions might implicate other claims of absent class members that fall within the scope of the transactions or occurrences that are the subjects of a proposed class action. For a wide-ranging discussion of such concerns, see generally Tobias Barrington Wolff, Preclusion in Class Action Litigation, 105 COLUM. L. REV. 717 (2005).
I claim no novelty in raising these points individually. Each, operating in isolation, was surely understood before the instant Article's conception. The contribution of my analysis is its focus on the way the three sources of law work together, and the relationship to each of them borne by the actual evidence in class action litigation. The Supreme Court decided

129 Of course, evidence will sometimes be irrelevant for purposes of class certification. Consider Amgen Inc. v. Connecticut Retirement Plans & Trust Funds, 568 U.S. 455 (2013), which involved reliance and materiality in securities litigation. The parties agreed the market for defendant Amgen's stock was efficient and therefore that Basic Inc. v. Levinson's presumption of reliance under the fraud-on-the-market theory would attach. See id. at 465 (citing 485 U.S. 224 (1988)). Amgen argued that plaintiffs cannot legally have relied on alleged fraudulent statements that are themselves not material, because efficient markets would not respond to immaterial statements. Thus, Amgen argued, its evidence of immateriality should have been considered by the district court before it certified the class. See id. at 464-65. This argument implicates the substantive law vertex of my Triangle. But it fails to connect adequately to the Rule 23 vertex.

Justice Ginsburg's opinion for the Amgen majority explained that though materiality "indisputably" is "an essential predicate of the fraud-on-the-market theory," what mattered for purposes of class certification is "whether proof of materiality is needed to ensure that the questions of law or fact common to the class will 'predominate over any questions affecting only individual members' as the litigation progresses." Id. at 467 (quoting FED. R. CIV. P. 23(b)(3)). She went on to explain that materiality itself "can be proved through evidence common to the class" and that plaintiffs' failure to prove materiality would lead not to the predominance of individual questions over common ones, but rather to the court's answer—common to the entire class—that the defendant is not liable. Id. at 467-68.
Tyson on the strength of the role played by the actual evidence, rather than by imposing free-floating federal common law regarding Rule 23. This is a salutary development in a field that has recently had its share of formalism detached from the practical realities of litigation.\textsuperscript{130}

Indeed, Tyson shows just how critical the on-the-ground litigation choices that counsel make are—and should be—to class certification determinations. Tyson chose to direct its attacks on time-study evidence to the jury, rather than objecting to its admissibility under Daubert. A Daubert objection would have triggered the trial court's obligation to determine, under Rule 104(a), whether the time study evidence smoothed over too many differences to adequately make the connection between Federal Rule of Civil Procedure 23 and the Federal Rules of Evidence—with the possible consequence of leaving the plaintiffs with no way to meet the demands of substantive law. The Supreme Court quite properly fed Tyson the bitter fruit of the company's own litigation choices. Tyson allowed the case to reach a jury verdict without any challenge to the admissibility of the evidence as to the number of minutes Tyson failed to compensate plaintiffs, and it also allowed the case to reach the Supreme Court in a posture that foreclosed any challenge to the sufficiency of that evidence. With this evidence treated as both relevant and sufficient, Tyson had forfeited any basis for attacking the quality of that evidence for purposes of class certification.

On this front, Tyson may be a watershed moment. In Andrew Trask's recent description, it

undercuts one of the key assumptions commentators had made about the Roberts Court and class actions—that it is the Court, rather than the litigants, that determines the outcome of cases. No one doubts that the Supreme Court does more than just—in Chief Justice Roberts's famous words—calling balls and strikes. But in an age of increasing access to court documents and increasing sophistication of analysis, it is foolish to try to comprehend the game solely by watching the umpires. If you want to know why some calls are balls and others strikes, you have to watch the pitcher and the batter, too.\textsuperscript{131}

In sum, Justice Kennedy's opinion in Tyson delivers a welcome dose of realism about the relationships between evidence, evidence law, litigation

\textsuperscript{130} Concerning the role of formalism and substantive law in recent Supreme Court class action jurisprudence, see Glover, supra note 3, at 1651-53, and generally Wolff, supra note 63.

\textsuperscript{131} Trask, supra note 3, at 312 (footnote omitted).
choices, and class certification.  It is notable that neither the representative nor the statistical nature of the evidence in *Tyson* played any special role in Justice Kennedy’s opinion. To the contrary:

A representative or statistical sample, *like all evidence*, is a means to establish or defend against liability. Its permissibility turns not on the form a proceeding takes—be it a class or individual action—but on the degree to which the evidence is reliable in proving or disproving the elements of the relevant cause of action. [citing FED. RULES EVID. 401, 403, and 702.]

It follows that the Court would reach too far were it to establish general rules governing the use of statistical evidence, or so-called representative evidence, in all class-action cases. Evidence of this type is used in various substantive realms of the law. Whether and when statistical evidence can be used to establish classwide liability will depend on the purpose for which the evidence is being introduced and on the elements of the underlying cause of action. \(^{133}\)

This was the right approach to the evidence in *Tyson*, and it is the right approach moving forward. We can hope that *Tyson* will turn into a trend, and that the Court will handle practical questions practically in future class certification battles. Two such practical questions might have been addressed, but were not, in *Tyson*. Space constraints prevent me from developing these issues in depth, but they warrant a bit of discussion here. The first concerns the scope of jury discretion in using representative evidence to determine damages, and the possibility that damages might be paid to plaintiff class members who were actually uninjured. Justice Kennedy properly punted on this question in *Tyson* because the trial court had not yet entered an order as to how damages would be distributed. He noted that the plaintiffs argued that

by working backwards from the damages award, and assuming each employee donned and doffed for an identical amount of time (an assumption that follows from the jury’s finding that the employees suffered equivalent harm under the policy), it may be possible to calculate the average donning and doffing time the jury necessarily must have found, and then apply this figure to each employee’s known gang time hours to determine which employees worked more than 40 hours. \(^{134}\)

This is a reasonable and practical idea, and it appears to be what the trial court has recently ordered—with the proviso of two conditions intended to

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\(^{132}\) That is not to say that Justice Kennedy belabored the point; he mentioned the Federal Rules of Evidence only twice. See *Tyson Foods*, 136 S. Ct. at 1046 (citing FED. R. EVID. 401, 403, 702); id. at 1049 (citing FED. R. EVID. 401, 702).

\(^{133}\) Id. at 1046 (emphasis added) (internal quotation marks & citation omitted).

\(^{134}\) Id. at 1050.
ensure that no uninjured worker receives any damages.\textsuperscript{135} Writing in concurrence in \textit{Tyson}, Chief Justice Roberts suggested a more muscular degree of jury policing. He points to the “problem” that the $2.9 million jury verdict was for an amount less than plaintiffs’ expert testimony suggested. The Chief Justice argued that “[i]f we knew that the jury had accepted the plaintiffs’ proposed average donning and doffing times in calculating the verdict, we could easily overcome this problem. But we know the jury did no such thing.”\textsuperscript{136} This is a problem, according to Chief Justice Roberts, because Dr. Mericle’s evidence involved two separate groups of employees, each having different numbers of minutes of uncompensated donning, doffing, and walking time. “And there’s the rub,” he wrote:

We know that the jury must have found at least one of Dr. Mericle’s two averages to be too high. And we know, as Dr. Fox testified, that if Dr. Mericle’s averages were even slightly too high, hundreds of class members would fall short of the 40-hour workweek threshold that would entitle them to damages. But because we do not know how much donning and doffing time the jury found to have occurred in each department, we have no way of knowing which plaintiffs failed to cross that 40-hour threshold.\textsuperscript{137}

Chief Justice Roberts went on to argue, similar to an argument Tyson had made in its cert petition and then largely abandoned in merits briefing, that this issue implicates Article III standing concerns.\textsuperscript{138} But if there is a problem here, it is not one that implicates any interest of Tyson’s. Nowhere does Chief Justice Roberts suggest that the jury’s verdict should be treated as awarding damages to uninjured plaintiffs. And even if it were possible that the jury did so, deference to jury fact determinations requires drawing any reasonable inference in favor of a verdict’s lawfulness. Chief Justice Roberts’s own examples show that a lawful verdict is possible here. There is no legitimate reason to go rooting around for a speculative Article III problem with the \textit{Tyson} verdict.

But there is a potentially real issue with the distribution of the damage award in \textit{Tyson} that implicates a common Rule 23 concern involving adequacy of representation. On remand, the district court eliminated from consideration for damages any employee who was not paid by Tyson for at least forty hours in a week, as well as those workers with calculated damages less than $50. In so doing, the court favored some class members over others. Because the damage award is fixed, those who will be paid damages benefit at

\textsuperscript{135} See generally Bouaphakeo v. Tyson Foods, Inc., No. 5:07-cv-04009-JAJ, 2016 WL 5868081 (N.D. Iowa Oct. 6, 2016). As of May 8, 2017, no notice of appeal has appeared in the case docket that would indicate Tyson is appealing this order.

\textsuperscript{136} \textit{Tyson Foods}, 136 S. Ct. at 1051 (Roberts, C.J., concurring).

\textsuperscript{137} Id. at 1052 (citation omitted).

\textsuperscript{138} Id. at 1053; see also Petition for a Writ of Certiorari, supra note 40, at 25-30.
the expense of those who will not. But it is difficult to see what injury is caused Tyson, which must pay the same amount of money however it is distributed. Ironically, it is Tyson, not any uninjured employees, that seems to lack the kind of interest required for Article III standing. But employees who do not receive damages might have a legitimate beef with the district court’s order, whether under Rule 23(a) or the Due Process Clause. Should any plaintiffs object, the trial court—and possibly the Supreme Court—will have to weigh the interests of uncompensated slightly injured workers against the interests of those who were more substantially injured. My hope is that the law on this issue develops in a way that appropriately takes into account the competing interests of the different plaintiffs.

That is a nice jumping-off point for the second future practical question left unaddressed in Tyson: how should due process concerns be weighed? This issue came up in Tyson thanks to Tyson’s citation of the by-now infamous “Trial by Formula” language in Dukes. Tyson claimed that determining its liability and damages based on statistical averages from time study evidence violated its right to raise individualized defenses because “[i]t is not feasible to call hundreds or thousands of class members at trial.” The Supreme Court did not take up Tyson’s due process arguments; the phrase “due process” appears nowhere in any of the case’s three opinions. That is not surprising, given the number of ways in which Tyson shot itself in the foot with its own litigation choices. But due process concerns arise frequently in class action disputes, and it is time for the Court to provide clearer and better guidance about the framework in which due process should be evaluated. The Court would do well to adopt the Mathews v. Eldridge balancing framework in the class action theater. As co-amici and I pointed out, the Supreme Court has a decades-long tradition of using Mathews to evaluate even the most fundamental due process interests.

Tyson had access to many procedural protections before, during, and after trial. It chose to forego some of them. Those it did use included the opportunity to attack via cross examination both the statistical evidence and the representative testimony that the plaintiff class offered. These challenges vindicated Tyson’s interest in raising individual defenses, even if Tyson did not thereby raise each defense as to each individual issue raised by each individual plaintiff’s claim.

139 Compare with Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 805 (1985) (noting a party has a “distinct and personal interest” as to absent class members’ rights due to the party’s interest “in seeing the entire plaintiff class bound by res judicata just as [the party] is bound”).
141 Brief of Petitioner, supra note 41, at 37.
142 424 U.S. 319, 334-35 (1976) (holding that “identification of the specific dictates of due process” is based on three factors: (1) the “private interest that will be effected by the government action”; (2) “the risk of erroneous deprivation of such interest”; and (3) “the Government’s interest, including” its interest in limiting its “fiscal and administrative burdens”).
143 See Professors’ Brief, supra note 2, at 19-21 (citing 424 U.S. at 332-34).
On any reasonable weighing of the three Mathews factors, class litigation in *Tyson* would meet the Court’s test. Tyson’s due process interest in avoiding aggregate litigation with the included statistical evidence was small, since applicable substantive law, evidence law, and Tyson’s own litigation choices together would have made the statistical evidence in question admissible in individual actions. The risk of error from aggregate litigation was small in light of Tyson’s ability to raise its defenses by cross-examining not only the plaintiffs’ two expert witnesses, which it did with gusto, but also numerous testimonial representatives. Tyson also might have called its own time-study expert to further undermine the plaintiff’s time-study evidence, but it chose not to. The actual litigation process gave Tyson numerous ways to vindicate its interests.

And the burden of requiring individual litigation would have been severe for the judicial system, the plaintiffs, or both. According to the *Tyson* plaintiffs, no plaintiff was entitled to as much as ten thousand dollars of damages. Suppose an initial plaintiff or group of them joined under Rule 20 were to have obtained a liability judgment against Tyson. Even armed with the issue-preclusive value of such a judgment, subsequent plaintiffs likely would not have found it worth their while to sue for such slight damages. And if they did, the burden on these plaintiffs of disallowing aggregate litigation with the statistical evidence would have been thousands of time-consuming individual actions clogging a single United States district court, in which substantially similar evidence would be offered seriatim. Arguably, then, disallowing aggregate litigation in this case would indeed have imposed a severe burden on the judicial system, plaintiffs, or both.

The Federal Rules of Civil Procedure and judges’ own decisions limit and shape parties’ abilities to litigate as they might like. Unless these Rules and decisions facially violate due process—a preposterous suggestion—then it is within the bounds of due process to trade off litigants’ interests against the exigencies posed by the need to provide a “just, speedy, and inexpensive

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144 Moreover, an important provision of the FLSA, and decades of practice, have made clear that representative litigation is appropriate under § 216 of the FLSA. With due regard to the frailties of the substance–procedure dichotomy, § 216 is more than just a form of joinder—it is a congressionally offered invitation to representative litigation. Inasmuch as the FLSA and the IWPC (derivatively) allow plaintiffs to use representative evidence, one might argue that there isn’t even any risk of error related to aggregate litigation with that evidence. I will not press that argument here; I mean only to point out that it exists.

145 On this point, see Connecticut v. Doehr, 501 U.S. 1, 11 (1991), which extends the Mathews test to situations in which the third prong requires “principal attention to the interest of” a private party, “with, nonetheless, due regard for any ancillary interest the government may have in providing the procedure or forgoing the added burden of providing greater protections.”

146 Appellant’s Appendix at 904–72, Bouaphakeo v. Tyson Foods, Inc., 765 F.3d 791 (8th Cir. 2014) (No. 12-3753).
determination” of civil actions and proceedings. The use of the class action device to litigate cases with similarly situated class members using appropriately representative common evidence fits within the balancing framework established by Mathews. Rather than viewing due process interests as Dworkinian trumps, the Supreme Court should begin taking advantage of the pragmatic and functional Mathews approach in sorting through due process arguments at class certification—whether these arguments are made by defendants or on behalf of those claiming that critical conflicts exist within a class definition.

CONCLUSION

Tyson raised numerous big-ticket questions concerning the contours of class actions. Had the case come out the other way, there might have been substantial damage, or at least confusion, concerning the admissibility of statistical and other forms of representative evidence, as well as major new limits on Rule 23(b)(3) class actions involving any differences in plaintiff class members. But after taking cert on a potential hurricane of a case, the Supreme Court conjured instead a gentle breeze, emphasizing the role of prosaic litigation choices and bread-and-butter evidence law principles. Even the Court’s apparent addition of new bite to the Rules Enabling Act came sotto voce.

Still, Tyson may be a big case. It may herald a more pragmatic approach in Supreme Court assessments of class certification. It opens up space for trial courts to do what they are supposed to do in class actions: exercise discretion on fact-bound questions tied to the specific contexts of the complex litigation in front of them. And that is a good thing.


148 See generally Ronald Dworkin, Taking Rights Seriously 184-205 (1977) (arguing rights protect individual interests by excluding appeals to the common good as a justification for limiting rights).

149 One implication of adopting the Mathews framework is that some approaches to class litigation will violate due process because the impingement on the defendant’s interests is especially great by comparison to the comparative burdens on plaintiffs and the judiciary of alternative litigation models. A plausible example is the Dukes trial court’s use of what Professor Robert Bone has called statistical adjudication—adjudicating cases “based not on the facts of the specific case, but on statistical extrapolations from outcomes in a sample of other cases.” Robert G. Bone, Tyson Foods and the Future of Statistical Adjudication, 95 N.C. L. REV. (forthcoming 2017) (manuscript at 2). In Dukes, the defendant might not have been able to raise some defenses at all; in light of the Supreme Court’s determination that Title VII required case-by-case determinations of unlawful employment practices, this feature of the trial plan would raise serious problems under the Mathews framework. By contrast, Tyson was able to raise all the defenses in the class trial—it just had to do so in a representative way. When successful, this might benefit Tyson writ large against the class as a whole.