The Value of Accuracy in Contract Interpretation

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*Abstract*

*Contract interpretation is the most contested area of contract law. Rules of interpretation are majoritarian defaults and the prevailing economic view suggests that, because sophisticated parties are risk-neutral, they are indifferent to accuracy in interpretation and would prefer the lower litigation costs of textualism to the greater accuracy attributed to contextualism.*

*In this essay, we revisit and revise the claim that sophisticated parties are indifferent to accuracy. Parties value accuracy because and to the extent it affects the contractual joint surplus. (In)accuracy, we further argue, affects the contractual price and may lead parties to adopt sub-optimal terms. Finally, the value parties attribute to accuracy varies among different contracts and across terms in the same agreement. This research offers new insights into the existing literature on contract design, and explains why parties invest in drafting elaborated and precise terms, but then include in them vague language that requires further investment in litigation.*

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Contract interpretation is the most litigated and contested area of contract law (Gilson, Sabel, and Scott 2014; Ben-Shahar 2009). The debate, at times framed as "the battle between the titans of contract, Samuel Williston and Arthur Corbin," (Gilson, Sabel, and Scott 2014, 25) divides courts and scholars into two main camps: textualists and contextualists (Schwartz and Scott 2010).[[3]](#footnote-4) Textualists suggest that, when interpreting contracts, courts should refrain from considering contextual evidence, such as past dealing, course of performance, and custom.[[4]](#footnote-5) Contextualists advocate the opposite view, arguing that context must be considered. Both styles of interpretation have taken root in American contract law. Today, most jurisdictions follow textualism, whereas the Uniform Commercial Code (U.C.C.), the Restatement (Second) of Contracts, and certain jurisdictions, such as California, adopt contextualism (Gilson, Sabel, and Scott 2014).

For decades, textualists and contextualists largely agreed on the framework of the debate. That is, that the interpreter should determine and enforce the parties’ intended meaning of the disputed term, and that it is for the courts, not the parties, to decide which interpretive style best serves this objective (Hwang and Jennejohn 2022).

This traditional framework was challenged in Alan Schwartz and Robert Scott's (2003) seminal work “Contract Theory and the Limits of Contract Law”. Schwartz and Scott argued that rules of interpretation should apply the parties’ intended interpretive style, not their intended meaning of the disputed term. Thus, Schwartz and Scott claim, parties should be sovereign to choose whether courts apply textualism or contextualism; that rules of contract interpretation are majoritarian defaults; and, that most sophisticated parties prefer textualism.

As we explain below, a crucial part of the analysis and conclusions by Schwartz and Scott (2003) is the claim that as long as courts are unbiased, sophisticated parties are indifferent to (in)accuracy in interpretation, an argument which we refer to as the “Indifference to Accuracy” (ItA) argument.

Schwartz and Scott (2003) begin the analysis by noting that parties’ intentions pertain not only to the commercial structure of the transaction but also to the rules of interpretation applied to their agreement. Commercial parties typically prefer an interpretative style that maximizes their joint surplus. Thus, assuming no externalities, parties would choose the interpretive style that maximizes both their own and social welfare. The alignment of private and social interests further implies that, from both a private and social perspective, it is the agent with greater competence that should decide on the rules of interpretation that apply to the parties’ agreement.

Schwartz and Scott then make the convincing claim that parties’ superior information places them in a better position to determine the objectivesof the interpretive process: for example, whether interpretation should strive for greater accuracy, minimizing the parties’ costs, or enforce the efficient term, irrespective of its intended meaning (Posner 2005; Scott and Triantis 2006). Thus, they claim, parties should determine the rules of interpretation applied to their agreement, and the default rule of contract interpretation should be the one that most parties would prefer.

Schwartz and Scott (2010; 2003) then turn to inquire into the majoritarian preferences of sophisticated parties, beginning with the conventional assumption that, compared to textualism, contextualism is both more accurate and more expensive, and therefore the parties’ preferences reflect a tradeoff between greater accuracy and higher litigation costs. It is here that Schwartz and Scott deploy the ItA argument to claim that, because sophisticated parties are indifferent to accuracy as long as courts are unbiased, they would be unwilling to invest in litigation to increase accuracy in interpretation. Thus, they conclude, most parties would prefer textualism, which should be the majoritarian default.

As one can observe, the ItA argument serves multiple purposes in Schwartz and Scott (2010; 2003): *first*, it allows them to claim that, as long as courts are unbiased, sophisticated parties’ have no preference for greater accuracy; *second*, the parties’ indifference to accuracy implies that most parties would exclude accuracy from their desired interpretive objectives, and would instead set the objective of ensuring an unbiased outcome at minimum cost; *third*, because most parties choose these objectives, no further analysis is needed to conclude that sophisticated parties find no benefit in rules of interpretation that produce greater accuracy, and that therefore most parties prefer textualism.

The ItA argument was extensively taken up in subsequent works as a leading economic argument in support of textualism in particular and of formalism in general.[[5]](#footnote-6) Indeed, even scholars who came to criticize the ItA argument and its conclusions usually accept the argument as correct on its own premises. The argument also has implications for legal research, suggesting that because sophisticated parties are indifferent to accuracy, an inquiry into whether textualism or contextualism yields a more accurate outcome is somewhat irrelevant to determining the default rule of interpretation. Instead, it follows from the ItA argument that the default rule of interpretation should be the one that minimizes litigation cost.

In this essay, we revisit and revise the ItA argument. The ItA argument holds, we show, if all possible interpretations have a purely distributive effect. When the different interpretations affect the contractual surplus, however, sophisticated risk-neutral parties *do* care about accuracy, and would invest to increase it beyond the benchmark of an unbiased outcome.[[6]](#footnote-7)

Parties care about accuracy in interpretation because, and to the extent that, greater accuracy increases their joint surplus. To see why this may be the case, consider a risk-neutral farmer seeking to buy a plot of land. The farmer's ultimate goal is to maximize the overall yield. Thus, the farmer cares about a plot’s mean yield, not its variance. Crops, however, require a certain amount of water to grow, and both over- and under-watering reduce yield. The farmer would therefore care about variance in rainfall because, for example, even if the average rainfall across all fields is optimal, plots with minor variance in rainfall would produce a greater yield than plots with greater variance.

In Part III we show that the same applies to the rule of contract interpretation. Risk-neutral parties care about the mean joint surplus, not its variance. But, like the rainfall in the farmer example, accuracy in interpretation can affect the joint surplus. When this is the case – that is, when the term is surplus-maximizing as opposed to being purely distributive – risk-neutral parties will make cost-effective investments to increase accuracy beyond securing an unbiased outcome.

To illustrate, consider the UN standard for the marketing of citrus fruits (UNECE).[[7]](#footnote-8) Under the UNECE, the highest quality of citrus fruits (“Extra” class) is defined as being of “superior quality”. A delivery of “Extra” class fruits may, however, contain up to 5% of fruits of the lower “Class-I” quality, which allows for “slight” defects.[[8]](#footnote-9) Parties will find this arrangement efficient if, for example, the seller’s cost of ensuring that all citrus fruits are of Extra Class is greater than the buyer’s lost profits from allowing slight defects in up to 5% of them.

Parties who agree on the sale of Extra class citrus fruits may find it prohibitively costly to further define “slight”, and courts may be called upon to interpret the term and may enforce either an over-inclusive or an under-inclusive interpretation. If the parties’ intended meaning of “slight” maximizes their joint surplus,[[9]](#footnote-10) then any interpretations that deviate from their intent would reduce it. For simplicity, assume that if the contract is enforced as intended by the parties their joint surplus is $900,000; but, if either an over-inclusive or under-inclusive interpretation is enforced the joint surplus is only $600,000.

Here, *if* contextualist courts consistently enforce the correct interpretation, the parties' joint surplus would be $900,000. On the other hand, if textualist courts enforce each of the three alternatives with equal probability, the parties' expected joint surplus would be the weighted mean of their joint surplus given each of the different interpretations, and their expected joint surplus would equal $700,000.[[10]](#footnote-11) Risk-neutral parties would therefore prefer greater accuracy in interpretation, and would be willing to invest up to $200,000 in litigation costs to ensure that the courts’ interpretations are always accurate.

(In)accuracy in interpretation also has bearings on the contractual price. Consider the citrus fruits example once more and assume the effects of inaccuracy are asymmetrical. If neither type of error greatly reduces the parties’ joint surplus, they would keep the efficient term. Still, when errors weigh more heavily on the seller (buyer), the contractual price would be higher (lower) than if the interpretation of the contract was always accurate.[[11]](#footnote-12)

After showing the value of accuracy in contract interpretation to sophisticated parties, we discuss two of its major implications in Part IV. *First*, after establishing that (in)accuracy in interpretation affects the parties’ joint surplus and the contractual price, we now add that it may also induce parties to adopt inefficient terms. Consider the citrus fruits example again and assume that the seller’s cost of ensuring that less than 5% of the citrus fruits have no defects is substantial and much greater than the buyer's lost profit from a delivery that contains more than 5% of slightly defected fruits. Here, the parties may prefer to avoid the risk of an under-inclusive interpretation altogether by agreeing that 5% of fruits may have “defects” (as opposed to “slight defects”). That is, when the effects of inaccuracy are asymmetrical, parties may prefer to avoid the more detrimental error by adopting a term other than the one that would maximize their joint surplus if the courts’ interpretation was always accurate.

*Second*, we further show that sophisticated parties’ preference for greater accuracy may be a question of degree rather than binary. In particular, whether, and the extent to which, parties seek greater accuracy may differ among contract types as well as among different terms within the same contract. One application of this proposition is allowing us to offer a novel explanation for the common observation that commercial contracts include a mixture of vague and precise terms.

Existing literature suggests that parties use precise terms to signal their preference for textualism, while vague terms indicate their willingness to increase accuracy in interpretation by investing in litigation (Scott & Triantis, 2005). The existence of vague and precise terms in the same contract, therefore, implies that parties wish for different interpretive styles to be applied to different terms. Present explanations of this phenomenon suggest that parties seek to achieve a certain (similar) level of accuracy throughout the agreement, but the efficient means to do so vary across terms. In particular, using a mixture of precise and vague terms implies that parties find it more cost-effective to reach the desired level of accuracy by making a front-end investment in drafting and applying a textualist style of interpretation for some terms, while for other terms a back-end investment in litigation and a contextualist interpretive style is more cost-effective (Scott & Triantis, 2005; Gilson et al, 2014).

We build on these works and combine them with our claim that parties’ preferred level of accuracy may differ among terms within the same agreement, to suggest that parties use a mixture of precise and vague terms to indicate a desire for greater accuracy for some terms but not for others. Parties are likely to do so, we suggest, when inaccuracy in the interpretation of only some of the contractual terms is both relatively probable and significantly detrimental to their joint surplus. In this type of terms, we expect (and find) that parties invest in both drafting and litigation. Parties do so, for example, by using terms that list a set of possible contingencies (investment in drafting), but then include in that list vague item(s) (i.e., standards) that reflect their desire for greater accuracy in interpretation (compared to other terms) and a willingness to further invest in litigation for that purpose.

# II. Accuracy in Contract Interpretation

Contract interpretation is a response to contractual incompleteness: gaps and ambiguity that may result from lack of foresight, diverse intended audiences, the limits of language, or the cost of drafting a complete contract (Hwang & Jennejohn, 2022). The diversity of reasons for contractual incompleteness suggests that incompleteness persists even in agreements between sophisticated commercial parties. Such agreements, too, may raise interpretive disputes to be resolved by the courts (Scott & Triantis, 2005).

Before commencing the interpretive task, one must first decide on its objective and on whether these objectives are better accomplished via a textualist or a contextualist style of interpretation. Traditionally, both decisions were left to the courts, which sought to accurately determine and enforce the parties' intentions (Schwartz and Scott 2003). Among both courts and scholars, therefore, much of the debate surrounding contract interpretation pertained to whether textualism or contextualism produces a more accurate interpretive outcome.

This traditional framing of the textualist-contextualist debate was challenged by Schwartz and Scott (2003). Schwartz and Scott base their argument on several general assumptions, which we adopt for the purposes of the discussion: *first*, that contract law is the law of commercial contracts between sophisticated parties, to the exclusion of other contract types (e.g., employment and consumer agreements); *second*, that compared to textualism, contextualism produces greater accuracy at higher litigation costs; and *third*, that sophisticated parties seek to maximize their (expected) profits and are therefore risk-neutral.

With these assumptions in mind, Schwartz and Scott (2003) begin their analysis with the common assertion that sophisticated parties hold superior information about their circumstances, and that contract law recognizes this by allowing parties to structure their transactions as they please. But, Schwartz and Scott argue, the same freedom of contracts argument applies equally to the choice of interpretive style. In particular, each party’s best strategy to maximize its own profit is to choose terms that maximize the parties’ joint surplus and then divide it according to their relative bargaining power. Left to their own devices, therefore, parties would choose the interpretive style that maximizes their joint surplus, which, assuming no externalities, would also maximize social welfare.[[12]](#footnote-13)

The alignment of private and public interests suggests the rules of interpretation should be set by the more competent agent, and Schwartz and Scott offer a convincing argument that sophisticated parties’ superior information provides them with an advantage in determining what that interpretive style should be.[[13]](#footnote-14)

To determine the content of the majoritarian default rule of contract interpretation, therefore, Schwartz and Scott (2003) turn to inquire into the majoritarian preference of sophisticated parties. It is here that the ItA argument is first introduced. In particular, the analysis of sophisticated parties’ majoritarian preferences is driven by the claim that, because sophisticated parties are risk-neutral, they would be indifferent to accuracy in interpretation and would find no benefit in an interpretive style that offers greater accuracy at greater (litigation) costs.

The ItA argument allows Schwartz and Scott (2003) to argue that sophisticated parties are only interested in an unbiased interpretation of their agreement. Thus, given the assumption by Schwartz and Scott (2003) that an investment in drafting is the more cost-effective measure to ensure an unbiased interpretive outcome, they can conclude that most parties would prefer textualism. Moreover, because the analysis of the parties’ preference is premised on the ItA argument, the conclusions seem independent of the type of transaction (or term) the parties engage in. Instead, the conclusion that sophisticated prefer textualism is only predicated on the ItA argument and the assumption that drafting is the more cost-effective way to reach an unbiased interpretive outcome.

In the next section, we revisit and refine the ItA argument. Before that, its influence on subsequent scholarship should be noted. Schwartz and Scott (2003) has been described as the leading statement for textualism (Bayern 2009) and as the catalyst for the (renewed) scholarly attention to contract interpretation (Burton 2013). To give some recent examples, Silverstein (2021), surveying the textualism-contextualism debate, offered the ItA argument as supporting risk-neutral parties’ preference for textualism; Jimenez (2021) relied on the ItA argument to substantiate the claim that formalism contributes to markets and economic efficiency, and to suggest that formalist instruments in general increase the joint surplus and are therefore more efficient; and Becher (2007) used the ItA argument to distinguish commercial and consumer contracts, suggesting that the argument applies for the former, but not the latter.

Moreover, even scholars who criticize textualism often accept the ItA argument as correct on its own premises (Klass 2020; Kar and Radin 2019; Palia and Scott 2015; Gilson, Sabel, and Scott 2014; Hermalin, Katz, and Craswell 2007) and are even willing to assume, sometimes to their displeasure, that it is “mathematically and economically impeccable” (Burton 2013, 339). Even scholars who more thoroughly and critically engage with the ItA argument have usually accepted it as “technically” sound and criticize it on other grounds. For example, James Bowers (2005) argued that commercial entities are not necessarily risk-neutral; and Shawn Bayern (2009) suggested that commercial parties may not always seek purely to maximize their joint surplus, both of which critiques were later addressed by Schwartz and Scott (2010).

# III. Updating the Model: The Value of Accuracy Revisited

We now proceed to revisit and revise Schwartz and Scott’s (2010; 2003) model, by closely tracking their assumptions and analysis. Thus, we examine a bespoke agreement between sophisticated, risk-neutral parties and assume that, though the parties agreed on the meaning of the contractual terms at the time of formation, the interpretation of term *I* is now being disputed. Courts resolve the dispute based on the (allowed) evidence pertaining to the meaning of term . In particular, the court’s decision can be based on a minimal evidentiary basis, , (i.e, the contractual text) or on a more extensive evidentiary basis, , that includes contextual evidence (e.g., past dealing and performance).

We further follow Schwartz and Scott’s model in assuming that a broader evidentiary basis produces a more accurate interpretation, but that it is more costly for the parties. Thus, sophisticated parties would only prefer contextualism if the benefits of accuracy are cost justified. Furthermore, within the interpretive space – the possible interpretations supported by – the parties’ payoffs are continuous and monotonic, with a favorable interpretation increasing a party’s payoff and *vice versa*. Sophisticated parties seek to maximize their profit. Thus, each party’s best strategy is to agree on the efficient terms (i.e., maximize the joint surplus) and divide the surplus according to their relative bargaining power via the price term (Schwartz and Scott, 2003).

As in Schwartz and Scott (2003), we denote the correct (i.e., accurate) interpretation of the contract as ; the joint contractual surplus when the correct interpretation is enforced as ; and the buyer’s share of the joint surplus – that is, the difference between the buyer’s valuation given interpretation and the contractual price – as: .

Based on the above assumptions, Schwartz and Scott (2003) argue that, as long as courts are unbiased, sophisticated parties are indifferent to accuracy in interpretation. Schwartz and Scott (2003) define an unbiased interpretive outcome in reference to the buyer’s valuation. Specifically, a court is unbiased when the buyer’s expected payoff is its payoff under the correct interpretation plus an error with zero mean and positive variance:

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By way of symmetry, they argue, when courts are unbiased, the seller’s expected surplus would also be its expected payoff under the correct interpretation , implying that, when both seller and buyer are risk-neutral, neither will care about accuracy in interpretation. We will return to the definition of an unbiased interpretation in the following paragraphs. For now, we show that Schwartz and Scott’s model holds true when the different interpretations of the disputed term do not affect the parties’ joint surplus.

Not all terms affect the joint surplus. For example, if the parties agree on the sale of a machine and both intend to use the same transport service, then the term pertaining to whether delivery will take place on the buyer’s or on the seller’s premises will determine which party has the burden to pay for the delivery, but will not affect the parties’ joint surplus. When considering this type of term, which we call “purely distributive” (Ben-Shahar 2009), then as long as courts are unbiased (as defined by Schwartz and Scott) parties’ have no incentive to invest in further increasing the accuracy of the court’s interpretation.

The intuition behind this conclusion is straightforward. Consider the case of *Continental Eagle Corp. v. Tanner & Co. Ginning*.[[14]](#footnote-15) In *Tanner*, the disputed term pertained to whether sales tax was included in the price in a commercial sale. The debate over the allocation of the tax, as applied to the transaction, had no effect on the overall amount the parties owed. Let’s assume that the parties agreed to an equal division of the tax burden. When interpreting the term, courts may err and, for example, require the buyer to pay a larger (smaller) amount than intended by the parties. But, as long as the courts are correct on average – that is, as long as errors in favor of the buyer are as likely as errors to her detriment – then repeated, risk-neutral buyers will have no incentive to invest resources in reducing variance in interpretation.

Furthermore, as Schwartz and Scott suggest, the above outcome is symmetrical for both buyer and seller. That is, when terms are purely distributive and courts are unbiased, any determinant to the buyer creates an equal benefit to the seller (and *vice versa*), and both will prefer to refrain from incurring the cost of increasing courts’ accuracy by broadening the evidentiary basis. Thus, when applied to purely distributive terms, the ItA argument is sound.

The conclusion is different when the possible interpretations of the disputed term affect the joint surplus. When terms are “surplus maximizing”, as we call them, sophisticated parties will typically value greater accuracy in interpretation. To illustrate the idea of a surplus maximizing term, consider the example given by Schwartz and Scott (2003) of a contract for the sale of a machine, where the disputed term pertains to the seller’s obligation to adjust the machine to the buyer’s intended use. For simplicity, we denote the joint surplus for any interpretation , , as the difference between the buyer’s valuation and the seller’s costs:

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*Example 1. Machine Adjustments*. Buyer and seller negotiate the sale of a machine to be installed in the buyer's factory. The seller offers three types of machines: (a) an unadjusted off-the-shelf machine; (b) an off-the-shelf machine adjusted to the buyer's needs; and (c) a custom-made machine built to the buyer's specifications. The costs and values of each type of machine are described in Table 1. For convenience, we normalized the cost of an off-the-shelf machine to 0, despite the seller’s opportunity costs.[[15]](#footnote-16)

Table 1. Costs and valuations of different machine types

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Performance costs* | *Buyer’s valuation* | *Joint surplus* |
| *Off-the-shelf* | 0 | 40 | 40 |
| *Adjusted* | 100 | 200 | 100 |
| *Custom-made* | 320 | 360 | 40 |

It follows from Table 1 that choosing an adjusted machine maximizes the parties’ joint surplus, and the parties therefore agree to this. It further follows that, if the courts’ interpretations are always accurate, the parties’ expected joint surplus is 100. Here, however, inaccuracy in interpretation decreases the parties’ joint surplus, even when courts are unbiased. For example, if there is a probability of 0.50 that the court will enforce the correct interpretation, and a probability of 0.25 that it will enforce each of the two other interpretations, the parties' expected joint surplus would be reduced to 70.

The example fits the definition by Schwartz and Scott (2003) of an unbiased interpretation as applied to the buyer. If courts are as likely to err in favor of the buyer (i.e., interpret the term as requiring the seller to provide a “custom-made machine”) as they are likely to err to her determinant (i.e., interpret the term as requiring the seller to provide an “off-the-shelf machine”), the buyer’s expected profit will be unaffected by the degree of variance in interpretation.

Nevertheless, the example clearly illustrates the more general argument that sophisticated parties value accuracy in the interpretation of surplus maximizing terms, because it increases the joint surplus and, by extension, each party’s profits. Put differently, parties would invest in increasing courts’ accuracy beyond the unbiased benchmark, as long as the benefits of greater accuracy outweigh its costs.

A further implication of the above is that, because errors in the interpretation of surplus maximizing terms reduce the parties’ joint surplus, the definition of an unbiased interpretive outcome as applied to purely distributive terms no longer holds. We saw earlier that, for purely distributive terms, we can define an unbiased interpretation as one that does not affect the buyer’s (or the seller’s) expected profit. That is because, when the court is unbiased, it is as likely to err in favor of the seller as the buyer, and the interpretive errors are symmetrical, meaning that any gains enjoyed by one party are offset by the detriments suffered by the other party.

When interpretive errors reduce the joint surplus, however, the surplus to be divided between the parties is (by definition) smaller. Therefore, the gains from the mistake enjoyed by one party are necessarily smaller than the determinants suffered by the other party. Thus, if courts are as likely to err on either side, the expected profits of at least one party would be smaller than its profit when courts are always accurate.

A problem arises because, for surplus maximizing terms, inaccuracy in interpretation would either have an asymmetrical effect on the buyer and the seller, or would lead the parties to adjust the contractual price. When the price remains fixed and the buyer’s expected profit equals its profit when interpretation is always accurate but the seller’s expected profit necessarily decreases. To see why, let us return to the numerical example. If the parties’ bargaining power is equal, the price will be the mean of the seller's costs (100) and the buyer's valuation (200) (i.e., 150). Given a fixed price, if, for example, there is a probability of 0.50 that the court’s interpretation is accurate and a probability of 0.25 that it will adopt any of the two other interpretations, the seller’s profit will be the contractual price (150) minus its expected costs . That is, the seller’s profits when courts are always accurate (50) are greater than its expected profits when courts might err (20). Thus, though the outcome is unbiased from the buyer’s perspective, it is biased from the seller’s point of view.

To put things differently, when interpreting surplus maximizing terms, if the possible interpretations do not affect the expected profits of one party and the price remains fixed, the expected profits of the other party necessarily decrease compared to its profit if the courts’ interpretations are always accurate.[[16]](#footnote-17)

It is therefore likely that a sophisticated seller would require a higher price given the variance in interpretation. To consider how the contractual price would be adjusted to reflect the seller’s additional costs from interpretive errors, let’s again assume that there is a probability of 0.5 that the court will enforce the accurate interpretation of the term and a probability of 0.25 that it will enforce one of the other two alternatives. Here, as we saw, the seller’s expected costs are 130 and the buyer's expected valuation is 200. Thus, if the parties’ bargaining power is equal, they will set the price at 165.

Formally, if denotes the buyer’s exogenous bargaining power, and contract interpretation is always accurate, the price would be set at .[[17]](#footnote-18) Introducing inaccuracy changes the parties’ expected costs (or benefits). When parties adjust the contractual price to reflect these changes, the contractual price is set at . Because inaccuracy in interpretation reduces the joint surplus , if the variance in interpretation does not affect the buyer’s valuation , the contractual price would necessarily increase by . That is, the expected profits of both seller and buyer would be reduced compared to their expected profit were courts’ interpretations always accurate.

Thus far we saw that, when it comes to purely distributive terms, we reach similar conclusions to those offered by Schwartz and Scott. Applied to surplus maximizing terms, however, we differ from Schwartz and Scott on three related points: *first*, that their concept of an unbiased interpretive outcome cannot be applied to such term; *second*, that inaccuracy in interpretation would often affect the contractual price; and *third*, that sophisticated, risk-neutral parties have an incentive to invest in increasing the courts’ accuracy in interpretation.

In the next section, we proceed to discuss the implications of these differences. We argue that inaccuracy in interpretation might cause parties to adopt inefficient terms and fail to enter into otherwise efficient transactions, and may require the application of a different interpretive style to different terms in the same contract. We further suggest that, when sophisticated parties care about accuracy, courts may have an advantage in determining the means (i.e., interpretive style) best suited to achieve this goal, and that such concern diminishes, to an extent, the distinction between commercial and consumer agreements.

# IV. Discussion and Implications

Thus far we have offered a revised version of the ItA argument. We showed that, while the argument holds for the interpretation of purely distributive terms, sophisticated parties prefer greater accuracy when it comes to the interpretation of surplus maximizing terms. We further demonstrated that, when parties are confronted with the possibility of inaccuracy in interpretation and when errors weigh more heavily on one party than on the other, the prospect of inaccuracy would lead to a different price to the one the parties would have agreed to if the interpretation of their agreement was always accurate.

In this section, we offer two main implications of the above analysis in terms of the parties’ design of contractual terms. First, we argue that inaccuracy in interpretation may lead parties to adopt inefficient terms and discuss circumstances in which this is likely to occur. Second, we claim that parties’ preference for greater accuracy may vary across contracts and across different terms in the same contract. This, we suggest, allows us to explain why parties use a mixture of precise and vague language in the same contract and, more importantly, to argue that when parties use a mixture of precise and vague language in the wording of the same term, they exhibit a desire for greater accuracy in the interpretation of that term and a willingness to invest in both the drafting and litigation to produce it.

## Adopting Inefficient Terms

An important implication of inaccuracy in interpretation is that it might lead parties to adopt inefficient terms. When errors in interpretation benefitting one party have a disproportionately-larger adverse effect compared to errors benefitting the other party, the parties may adopt an inefficient term to avoid the more detrimental outcome.

To see why, consider a dispute pertaining to the interpretation of “a time of delivery” term in a contract for the sale of goods, as illustrated in Table 2.

Table 2. Changes in the contractual term

|  |  |  |  |
| --- | --- | --- | --- |
| ***Delivery time*** | ***Seller's costs*** | ***Value for buyer*** | ***Joint surplus*** |
| *8 weeks* | *160* | *160* | *0* |
| *10 weeks* | *60* | *120* | *60* |
| *12 weeks* | *30* | *80* | *50* |
| *14 weeks* | *0* | *40* | *40* |

It follows from the table that delivery in 10 weeks is the optimal term. Thus, if interpretation was always accurate, the parties would have agreed accordingly. Given the prospect of inaccuracy in interpretation, however, sophisticated parties may prefer a different (inefficient) term. For example, assume that the parties know that courts may err and enforce a delivery time that is two weeks longer (or shorter) than one they intended - that is, that when courts err they enforce one of the two interpretations on either side of the intended term. Here, if there is a probability of 0.50 that the court will enforce the parties’ intended meaning of the term; a probability of 0.25 of enforcing the longer delivery time; and a similar probability of 0.25 of enforcing the shorter delivery time, the parties’ expected joint surplus from adopting the (otherwise) efficient term of “delivery in 10 weeks” would be 42.5, while adopting the term “delivery in 12 weeks” would produce an expected joint surplus of 50. Thus, sophisticated parties would prefer the latter term, despite the fact that delivery in 10 weeks is the efficient term when the courts’ interpretation is always accurate.

For the reasons above, inaccuracy in interpretation might also drive parties to adopt an inefficient allocation of contractual obligations or a contractual arrangement entirely different from the efficient one (Eggleston, Posner, and Zeckhauser 2000), as opposed to an inefficient term which is (only) quantitively different from the efficient one. Consider the machine example again and assume that, though both parties can adjust the machine, it is more cost-effective for the seller to do so. Here too, if courts are always accurate, sophisticated parties will adopt the efficient arrangement and allocate to the seller the obligation to adjust the machine. But, if agreeing on such a term may lead the courts to err and interpret the agreement as requiring the seller to make any and all adjustments desired by the buyer, the parties may wish to avoid this possibility by agreeing on the sale of an off-the-shelf machine, and allocate to the buyer the responsibility to make any further adjustments.

## Applying a Term-Specific Interpretive Style

The second implication of our analysis is that the value that sophisticated parties attribute to accurate interpretation may vary between different types of transactions and different terms within the same agreement.

This can be readily seen once we recall the distinction between surplus maximizing and purely distributive terms. We saw that parties value accuracy in the interpretation of the former, but not the latter. Thus, given that contracts typically include both types of terms, it immediately follows that parties’ preference for accuracy will vary across terms within the same agreement.

When comparing surplus maximizing and purely distributive terms we find that preferences are binary – parties either value accuracy or they do not. As we explain below, however, variation in the value of accuracy may also be more subtle. In particular, even when considering only surplus maximizing terms, parties attribute greater value to accuracy when interpretive errors are relatively likely and when such errors have a substantially detrimental effect on their joint surplus.

Parties’ preference for accuracy depends, therefore, on the extent to which relatively minor, and therefore more probable, interpretive errors would significantly reduce their joint surplus.[[18]](#footnote-19) Example 2 illustrates this by using two types of contracts: *Type A* contracts, in which slight and probable interpretive errors significantly decrease the joint surplus; and *Type B* contracts, where similar errors only marginally reduce the joint surplus.

*Example 2*. *Choice of a manufacturer*. Buyer seeks to buy an adjusted off-the-shelf machine and considers engaging with either Seller A or Seller B. The customized machine may include from one to three possible adjustments. As detailed in Tables 3 and 4, the buyer’s benefits from each possible adjustment are independent of the seller’s identity, but the costs of making the adjustments vary between sellers.[[19]](#footnote-20)

Tables 3 and 4. Costs and valuations for Type A and Type B contracts

Seller A (Type A contracts)

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Performance costs* | *Buyer's valuation* | *Joint surplus* |
| *Off-the-shelf* | 0 | 15 | 15 |
|  *adjustment* | 35 | 60 | 25 |
|  *adjustments* | 50 | 100 | 50 |
|  *adjustments* | 105 | 130 | 25 |
| *Custom-made* | 160 | 175 | 15 |

Seller B (Type B contracts)

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Performance costs* | *Buyer's valuation* | *Joint surplus* |
| *Off-the-shelf* | 0 | 15 | 15 |
|  *adjustment* | 15 | 60 | 45 |
|  *adjustments* | 50 | 100 | 50 |
|  *adjustments* | 85 | 130 | 45 |
| *Custom-made* | 160 | 175 | 15 |

It follows from tables 3 and 4 that, if interpretation is always accurate, the optimal transaction includes 2 adjustments irrespective of the seller’s identity. Accordingly, when courts never err, the parties will agree on the sale of a machine with two adjustments, the Buyer’s gains, the Sellers’ costs, and the contractual price would be similar in both contract types, and the Buyer will be indifferent between engaging with Seller A or with Seller B.

The conclusion differs when the possibility of inaccuracy is introduced.[[20]](#footnote-21) Because slight errors in interpretation are more probable than major ones, the expected decrease in the parties’ joint surplus due to inaccuracy in interpretation is greater in a Type A contract. Thus, the expected joint surplus under a Type B contract is greater than that in contracts of Type A, and the buyer would prefer to contract with Seller B.

To illustrate, consider the following distribution of possible interpretations: a probability of 0.50 that the court would accurately enforce the parties’ intentions, a probability of 0.20 of requiring the seller to make 1 adjustment, a similar probability of 0.20 of requiring her to make 3 adjustments, and a probability of 0.05 of interpreting the contract as requiring the provision of an off-the-shelf machine and an equal probability of 0.05 of an interpretation requiring the provision of a customized machine. Given this distribution of possible interpretations, the parties expected joint surplus differs between the two contract types. In particular, inaccuracy in interpretation reduces the expected joint surplus by 5.5 in Type B contracts and by almost three times this amount, 13.5, in Type A contracts. Thus, the prospect of errors in interpretation means that the buyer is no longer indifferent between the two types of contract and sellers, and would prefer Seller B.

When the effect of probable errors is significant, sophisticated parties place greater value on accuracy in interpretation. The same also applies to different terms in the same agreement. That is, Type A and Type B can refer to different types of terms just as they refer to different types of contracts in the above example.

Finding that sophisticated parties’ preference for accuracy may vary across terms allows us to shed new light on the common observation that parties use a mixture of vague and precise terms in the same agreement (Scott and Triantis, 2005; Gilson et al, 2014). Existing literature explains this phenomenon as a contract design problem. In particular, Scott and Triantis (2005) and Gilson et al (2014) suggest that parties seek to achieve a certain level of accuracy in interpretation throughout the contract.[[21]](#footnote-22)

Parties may reach the desired level of interpretation by investing in either front-end drafting or back-end litigation, and they design their contract to signal their choice.[[22]](#footnote-23) That is, the use of precise and elaborated language implies an investment in drafting whereas the use of vague language and standards suggest a preference to invest in litigation (Scott and Triantis, 2005). Existing literature therefore suggests that parties use a mixture of precise and vague terms in the same agreement, because the cost-effective way to achieve the desired level of accuracy may vary across terms. For example, for terms off dealing with uncertainties, parties may find it costly to foresee and address all possible contingencies, and are likely to prefer investing in litigation as it is the more efficient way to reach the desired level of accuracy (Gilson et al, 2014).

Our analysis adds several insights to existing explanations. Because parties may prefer different levels of accuracy for different terms, their contract design reflects the relative importance they place on accuracy in the interpretation of each specific term, as well as their preferred way of achieving this level of accuracy. We can therefore predict that, when accuracy in the interpretation of a certain term is of greater importance relative to other terms in the same agreement, and when this level of accuracy cannot be achieved through investment in drafting or litigation alone, parties would use a mixture of precise and vague language to indicate their willingness to invest in both drafting and litigation to further increase accuracy in the interpretation of the term.

Before concluding, we offer two examples of actual contracting practices in which parties use a mixture of vague and precise language in the same term, and that fit our prediction of a preference of greater accuracy: material adverse change (MAC) clauses in merger and acquisition agreements, and acceleration rights terms in loan agreements (Scott & Triantis, 2005; Choi & Triantis, 2010).

Merger and acquisition agreements are typically bespoke agreements between sophisticated commercial parties. MAC clauses allocate the risk posed by changes and events that adversely affect the target company in the time between agreement and closing. That is, they determine what instances and behaviors would allow the buyer to walk away from the deal, thereby incentivizing the seller to manage the target company’s affairs efficiently during that period (Choi & Triantis, 2010). MAC clauses have the characteristics of Type A terms, because slight and probable errors in interpretation produce an over-inclusive (under-inclusive) interpretation that allows (disallows) the buyer to renege on the agreement, against (in accordance with) the original intent of the agreement. Thus, slight errors in interpretation inefficiently allocate the risk of significant implications, suggesting that they can have a significant detrimental effect on the parties’ joint surplus (Choi & Triantis, 2010).[[23]](#footnote-24)

Acceleration rights terms in loan agreements share similar characteristics to MAC terms. Here, too, parties allocate the risk pertaining to events or behavior that increase the likelihood of the borrower’s default (Scott & Triantis, 2005). Accordingly, even relatively slight errors in the interpretation of the term produce a broader (or narrower) interpretation of acceleration rights than intended by the parties, and are likely to inefficiently allocate a significant degree of risk, to the detriment of the parties’ joint surplus.

Based on our analysis, then, parties would seek to achieve greater accuracy in the interpretation of MAC clauses and Acceleration rights terms. One way for parties to do so is by using terms that combine a list of carefully and precisely worded contingencies, and then including in that list vague standards. Such contract design represents a mixture of investment in drafting and litigation, indicating the parties’ preference for greater accuracy in interpretation. And, indeed, this is what we find when looking at how MAC and acceleration rights terms are actually drafted.

MAC clauses typically include the buyer’s right not to complete the transaction in the event of a material adverse change (a standard), but then use precise language to carve out certain events that would not be considered a material adverse change despite their detrimental effect on the target company, such as war, recession, industrial-wide adverse events, and changes in industry related laws and regulations (Choi & Triantis, 2010). Similarly, acceleration rights terms usually include a list of contingencies that would provide the lender with the right to accelerate the loan, but also include in that list broad standards, such as the lender’s good-faith belief that the borrower will be unable to repay the loan (Scott & Triantis, 2005).

When designing MAC and acceleration rights terms, then, parties do not simply decide between investing in drafting or in litigation. Instead, they use a mixture of precise and vague language in the same term to indicate their preference for greater accuracy in interpretation. That is indeed what we find in practice when we anticipate accuracy to be of particular importance to the parties. A recent example comes from the merger agreement between Twitter and Elon Musk’s X Holding I and X Holding II companies. The agreement uses less than 50 words to (vaguely) define material adverse effects as any changes, events or circumstances that “result in a material adverse effect on the business, financial condition or results.” It then spends nine sections and 566 words to carve out exceptions, including: adverse changes that result from political, economic, or industry or market-wide changes; changes in applicable law or accounting principles; pandemics, terrorism, cyberattacks, data breaches, armed hostilities; and even “the identity of Elon Musk.”[[24]](#footnote-25)

The Twitter merger agreement demonstrates the use of a mixture of vague and precise language to indicate the parties’ preference for greater accuracy in interpretation. An alternative explanation to this phenomenon may be that in both MAC and acceleration rights terms, drafting a complete contingent term is prohibitively costly and that therefore the parties find the mixture of investment in drafting and litigation to be the more cost-effective way to achieve the desired level of accuracy, which is similar throughout the agreement.

We do not deny that this may sometimes be the case. But, parties continue to use vague language in MAC and acceleration rights terms, despite the existence of various proxies (EBITA, stock price, revenue, SEC filings, etc.) that would offer a more precise and easily verifiable definition of what a material adverse event is or in which circumstances the lender has acceleration rights (Choi & Triantis, 2010). Thus, the parties’ continued refusal to use precise language cannot be explained merely by the cost of drafting, and their desire for greater accuracy offers a plausible explanation for the contractual practice in these types of terms.[[25]](#footnote-26)

# V. Conclusion

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3. This division is somewhat simplified. In practice courts face a variety of interpretive possibilities (Silverstein 2021; Lifshitz and Finkelstein 2017; Zamir 1997). [↑](#footnote-ref-4)
4. That is, textualists advocate for the application of the parole evidence and plain meaning rules that restrict the interpreter to the written agreement (Schwartz & Scott, 2003). [↑](#footnote-ref-5)
5. *See infra* Part II. [↑](#footnote-ref-6)
6. Note that we treat an unbiased outcome as a benchmark for accuracy because the means of achieving an unbiased outcome (i.e., investment in drafting or litigation) are similar to the means of increasing courts’ accuracy in interpretation, and therefore when parties invest to achieve an unbiased outcome they also invest in increasing courts’ accuracy, even if the increase in accuracy is not their intended outcome and the parties have no preference for greater accuracy *per se*. This is despite the fact that, in principle, an unbiased outcome is unrelated to the degree of variance (i.e., inaccuracy) in interpretations. [↑](#footnote-ref-7)
7. UNECE Standard FFV-14 Concerning the Marketing and Commercial Quality Control of Citrus Fruit (2017) available at <https://unece.org/fileadmin/DAM/trade/agr/standard/standard/fresh/FFV-Std/English/14_CitrusFruit.pdf>. [↑](#footnote-ref-8)
8. *Id*, at IIC(i)&(ii), VIA(i)&(ii). [↑](#footnote-ref-9)
9. More precisely, if it is a global, or at least the relevant local, maximum. [↑](#footnote-ref-10)
10. That is, because if each interpretation is enforced with equal probability the parties expected joint surplus is: . [↑](#footnote-ref-11)
11. *See* infra Part III. [↑](#footnote-ref-12)
12. Understood in these terms, one can find a similar type of argument applied to doctrines on the peripheries of contract interpretation, namely: mutual mistake, frustration, and implacability. Here too, there is a *prima facie* argument to consider such doctrines as policing the agreement to ensure its presumptive efficiency (*see*: Posner, 2004, p. \*). Today, however, the doctrines are more typically understood as majoritarian defaults, as they do not typically pertain to a misalignment of private and public interests (Posner & Rosenfeld, 1977; Rasmusen & Ian Ayres 1993; Triantis, 1992). [↑](#footnote-ref-13)
13. A more accurate description would be as follows: the parties’ superior information provides them with an advantage in determining the *objectives* of the interpretive process. This alone may be insufficient to determine whether the parties are also better positioned to decide on the interpretive style that would best accomplish their objectives. To make this determination, one must inquire who is better positioned to match the interpretive style with the objectives the parties set-out. Answering this question depends on the objectives set-out by the parties themselves. Here too, Schwartz and Scott (2003) uses the ItA argument to conclude that, because parties are indifferent to accuracy, their preferred objective is to achieve an unbiased outcome at minimum cost. It is given *this* objective that Schwartz and Scott (2003) can conclude that the parties should also determine the interpretive style. In principle, however, if, as we suggest, the ItA does not always hold then, when the parties consider accuracy to be their primary objective, the agent who should determine the interpretive style applied to the parties’ agreement is the one who is better positioned to determine whether textualism or contextualism produces greater accuracy. At least intuitively, answer this question seem to require legal, rather than commercial expertise. Nevertheless, once the parties are identified as better positioned to determine the objectives of contract interpretation, it stands to reason that they should also be given the freedom to determine the interpretive style. That is because, for example, if the parties know that when they signal that they seek greater accuracy courts would apply an interpretive style other than the one preferred by them, they would either “lie” about their preferred objectives or use the choice of law terms to reach their desired outcome. Thus, denying sophisticated parties the freedom to choose the interpretive style is likely to only increase transaction costs without generating meaningful benefits. [↑](#footnote-ref-14)
14. 663 So. 2d 204 (La.App. 1995) [↑](#footnote-ref-15)
15. The facts of the example are loosely based on Standard-Knapp Corp. v. United States, 108 Ct. Cl. 270 (1947) (The U.S. Military refused to pay a contractor for automated ammo packing machines, arguing that the machines supplied, and later adjusted, do not comply with the specifications in the contract). *See* also Gresham & Co. Inc. v. United States, 200 Ct. Cl. 97 (1972) (dispute regarding the specifications of dishwasher machines); Seitz v. Brewers’ Refrigerating Machine Co., 41 U.S. 510 (1891) (The parties disputed over the interpretation of a contract for the supply of industrial refrigerating machines.) The example illustrates a symmetric distribution of court errors from the buyer’s perspective, since the buyer’s expected valuation equals the valuation of the correct interpretation, as long as the distribution is symmetrical. The distribution is also unbiased in the sense that errors in both directions reduce the joint surplus to the same extent. [↑](#footnote-ref-16)
16. Note, that there are other possible definitions of an unbiased outcome which we do not consider here, as they do not pertain to our discussion. For example, an unbiased outcome can be defined as an interpretation whose weighted mean is the parties’ intended term. That is, if and are the lower and upper bounds of possible judicial interpretations, and is the probability density function of all interpretations between (and including) and , then . [↑](#footnote-ref-17)
17. We assume that the parties’ bargaining power is unaffected by the accuracy of later interpretation of contract terms. [↑](#footnote-ref-18)
18. Whether the joint surplus curve is steep or flat around the optimal interpretation (). [↑](#footnote-ref-19)
19. In cases illustrated in Tables 3 and 4, the distribution of court errors is symmetric, in the sense that errors in both directions reduce the joint surplus to the same extent. [↑](#footnote-ref-20)
20. Parties may find it difficult to specify the agreed-upon number of adjustments, especially if the need to any adjustments will only become apparent after some initial investment in performance. *See*, *e*.*g*., *Standard-Knapp Corp.*, *supra* note 44 (Both parties agreed that the manufacturer of the ammo packing machine had to make one adjustment but disagreed on the manufacturer’s duty to make further adjustments to the machines to make sure their compatible with the packing paper used by the U.S. military. The court decided that the contract did not require the manufacturer to make any further adjustments.) [↑](#footnote-ref-21)
21. That is, either the level of accuracy that creates efficient incentives for the parties (Scott and Triantis, 2005) or the one that brings about an unbiased interpretive outcome (Gilson et al, 2014). [↑](#footnote-ref-22)
22. A related way for parties to signal their choice to invest in either drafting or litigation is by fully, partially, or not integrating their agreement: *see* Founding Members of the Newport Beach Country Club v. Newport Beach Country Club, Inc., 109 Cal. App. 4th 944, 953 (2003) (“The parties may intend that a writing finally and completely express only certain terms of their agreement rather than the agreement in its entirety. If the agreement is partially integrated, the parol evidence rule applies to the integrated part.”); Haggard v. Kimberly Quality Care, Inc., 39 Cal. App. 4th 508, 517 (1995) (stating that integration may be partial, in which case the parties intend that the writing will be the sole source of interpretation only for certain terms, but not for the entire contract). [↑](#footnote-ref-23)
23. That is, assuming that, given their superior information and expertise, the parties’ allocation of the risk is efficient. [↑](#footnote-ref-24)
24. *See* Definition of “*Company Material Adverse Effect”*, in Agreement and Plan of Merger by and among X Holdings I, Inc., X Holdings II, Inc., and Twitter Inc, <https://www.sec.gov/Archives/edgar/data/1418091/000119312522120461/d310843dex21.htm>. [↑](#footnote-ref-25)
25. Note, moreover, that if the use of vague language was due only to the cost of drafting, rather than the desire for greater accuracy, sophisticated parties would at least sometimes be willing to reduce their litigation cost by lumping together different types of risks and allocating them to one party. Though this solution may sacrifice some accuracy, it is likely that such sacrifice would sometimes be cost-effective (Triantis, 1992). Yet, the use of more precise proxies is rarely if ever found in practice (Choi & Triantis, 2010).

We further note that another alternative explanation for the use of precise and vague language is strategic - that is, parties use broad standards to allow for the transaction to materialize without having to agree on all the details (Choi & Triantis, 2010). The analysis of contract design given the possibility of strategic incompleteness and the question of accuracy in interpretation poses two distinct problems based on irreconcilable factual assumptions. In particular, strategic incompleteness implies that the parties never shared an intended meaning of the disputed term. Accordingly, if accuracy in interpretation is understood in terms of enforcing the parties’ shared intentions, the very idea of accuracy seems inapplicable to instances of strategic incompleteness. Because our analysis of the value of accuracy necessarily assumes that the parties shared a particular meaning of the disputed term at the time of contracting, we do not (and cannot) address the possibility of strategic incompleteness in our analysis, and we accept that this may be an alternative explanation. [↑](#footnote-ref-26)