When sophisticated parties bargain with each other, they should negotiate terms that work to their mutual benefit. They should prevent bad clauses from entering transactions and rid themselves of those that might cause trouble. Doing anything else leaves money on the table. This line of thought lies at the bedrock of many modern accounts of contract, and we have grown quite comfortable with it. Perhaps too comfortable. Through their exploration of \textit{pari passu} clauses, Professors Mitu Gulati, Robert E. Scott, and their many co-authors have forced us to have second thoughts.\footnote{This revolutionary work is a most happy partnership between Mitu Gulati and Robert E. Scott, respectively, the person whose pioneering work has made sovereign debt a focal point of academic discourse, and the person who has defined the cutting edge of contracts scholarship in each of the last five decades. \textit{See Mitu Gulati & Robert E. Scott, The Three and a Half Minute Transaction: Boilerplate and the Limits of Contract Design} (2012). Gulati and Scott’s excellent paper with Stephen J. Choi is the focal point of this essay. It finds them joined with someone whose empirical skills in law and finance are second to none. \textit{See Stephen J. Choi, Mitu Gulati & Robert E. Scott, The Black Hole Problem in Commercial Boilerplate, 67 Duke L.J. 1 (2017).}} In a market with highly sophisticated players, a clause that serves no apparent purpose and is a source of considerable mischief has persisted for decades.

Of course, there are circumstances in which suboptimal contract terms might emerge. Some markets may have too few sophisticated buyers. Reputational forces do not necessarily prevent advantage-taking, especially if there is little repeat dealing. Sellers may be able to
exploit cognitive biases. But none of these qualifications apply to the trillion-dollar sovereign debt market, a sandbox in which only adults play and in which the dollar amounts are large enough to get anyone’s attention. A pari passu clause is like a clock that strikes thirteen. It is a puzzle in its own right and puts much else in doubt as well.

A natural approach to the pari passu puzzle is to look for the clause’s closest cousins. One might search for other contract terms that persist even though they serve little or no purpose. For example, many contracts contain an “ipso facto” clause. It terminates the contract in the event one of the parties files for bankruptcy. Such clauses have been unenforceable since 1978, but they remain standard boilerplate nevertheless. A catalogue of such clauses might help explain why clauses that serve no apparent function become lodged in commercial boilerplate and remain there.

In this short essay, however, I take a different tack. Before narrowing the focus to contract terms, it is useful to ask whether similar phenomena can be observed with respect to other product attributes. Contract terms are merely one type of product feature. A more generous warranty increases the value of a computer in the same way that a bigger screen does. Every product bundles features like large screens and warranties together. On the face of it, there is nothing special about contract terms. Market forces should work with respect to all product attributes in the same way.

Regardless of whether it is a contract term or something else, it would seem that a product feature that comes at a cost, serves no purpose, and is not even understood by consumers should not take hold and persist, at least not in competitive markets between sophisticated actors. The forces of a competitive market should eradicate such features, regardless of whether they are contract terms or physical attributes. But it turns out that this is not the case. There are many examples outside of contract law and they come in different flavors.

---

4. See DAVID ZARFES & MICHAEL L. BLOOM, CONTRACTS AND COMMERCIAL TRANSACTIONS 299–300 (2011) (discussing prevalence of “ipso facto” clauses that make bankruptcy an event of default and noting that these are commonly included in contracts).
5. For an excellent essay in the same spirit that connects the production of contracts with the production of ordinary goods, see Barak Richman, Contracts Meet Henry Ford, 40 HOFSTRA L. REV. 77, 79 (2011).
A *pari passu* clause is what is known as a “skeuomorph.” A skeuomorph is one of the types of product features that persist even though they serve no function and are potentially costly. A skeuomorph’s defining feature is that it is adapted from a previous version of the product where it did serve a purpose. Examples of skeuomorphs outside the context of contracts are exceedingly well documented and span all of human history. This essay links this literature to *pari passu* clauses. To begin, however, it explores the more general phenomenon of the persistence of undesirable product attributes even in the face of strong competitive forces.

I. IMPERFECT GOODS IN COMPETITIVE MARKETS

Contractual undertakings are one part of the bundle that comes with anything purchased in the marketplace. A personal computer has many different features. It has a screen of a particular size, its battery has a certain life, and the chips have a designated speed. There is also a great deal of software, starting with the code that comes embedded on the chips themselves. And there are various contract terms.

The typical consumer is going to be aware of some of the features of the product she buys, but not of others. The typical consumer knows something about size and resolution of the computer screen, but may know little about the speed of the chips. She may know little or nothing about software and other pieces of intellectual property. The same is true with various promises and undertakings included in the contract. The consumer may know something about the warranty. For example, she might have separately purchased a service contract, which is merely

---

6. The idea that skeuomorphs include contract clauses among their number does not seem to have been noted before. A Westlaw search shows that the term itself has been used only four times in law review articles, in each instance to talk about their use in computer interfaces. See, e.g., Aaron E. Ghirardelli, *Rules of Engagement in the Conflict Between Businesses and Consumers in Online Contracts*, 93 OR. L. REV. 719, 732 (2015) (“Apple gently guided its users to learn how to operate a smartphone with touch screens by using skeuomorphic design.”).

7. A skeuomorph is “[a]n object or feature which imitates the design of a similar artefact made from another material,” or, specifically in the technology context, “[a]n element of a graphical user interface which mimics a physical object.” *Skeuomorph*, OXFORD ENGLISH DICTIONARY (3d ed. 2017).


an extended warranty by another name. But there are going to be other terms that she knows nothing about, such as whether the form contract contains an arbitration clause.

Many of the contract terms that are close to the hearts of law professors—such as mandatory arbitration clauses—may simply be no more important to the typical consumer than the technical details of a computer’s operating system. Neither has an effect on the amount she is willing to pay. But it is a mistake to think that contract terms are immune to competitive pressures merely because most individuals do not know about them.

The typical individual consumer may be insensitive to the presence or absence of particular contract terms just as she is insensitive to many other product features. Nevertheless, when markets are competitive, sellers care intensely about attracting the customer who is just on the cusp of buying somewhere else. The consumer that matters is the one at the margin, and the marginal consumer makes a trade-off. In contrast to the typical consumer, the consumer at the margin weighs the value to her of a particular contract term, a chip with a certain speed, or any other product attribute on the one hand, and the higher price that the seller will demand if she offers it on the other.10

The typical layperson will not notice small changes in price, but such changes matter because of the behavior of the consumer at the margin. Inferior products should sell for a lower price. If a product is being sold with a feature that serves no purpose and is costly, the marginal consumer is likely to notice and lower the price that she is willing to pay accordingly. Someone can make money by offering the same product without that feature and charging the same amount. In a market in which goods have suboptimal product features, opportunity beckons. There are, of course, situations in which markets fail, but when the stakes are high enough and the parties sophisticated enough, product features that serve no function and are costly should not persist. Their existence is an opportunity for someone to make money.11

10. This is not to say, however, that regulation is inappropriate when marginal consumers drive sellers towards clauses that are in consumers’ interests. It may, for example, be important to ban arbitration clauses even when rational consumers would not bargain for that outcome. See id. at 136–40.

A useless product feature in a computer that makes the computer even a little more likely to fail or a little harder to repair should not persist. For the same reason, a clause that serves no purpose should not survive either. For all the reasons that Choi, Gulati, and Scott have suggested, competitive forces should force out pari passu clauses.\textsuperscript{12} Capital markets are global. Someone issuing a bond or any other security who offers suboptimal terms should not be able to raise capital on terms as favorable as she could if she provided better terms.

Issuers of sovereign debt should offer terms that work to the mutual benefit of borrower and lender. Both are interested in ensuring that debt can be restructured when the sovereign encounters financial reverses and finds itself unable to pay what it owes.\textsuperscript{13} A bond that could not be restructured when the creditors as a group wanted it to be restructured should be less attractive and carry a higher interest rate. A sovereign that is not able to repay a debt in full, but that is able to repay 30 cents on the dollar, is more likely to repay something if the debt can be restructured. It is therefore odd that sovereign debt offerings regularly include an obstacle to restructuring such as a pari passu clause that has no offsetting benefit.

To be sure, the costs of a pari passu clause are not large relative to the total amount of sovereign debt. The pari passu clause matters only if there is a default, and rates of default are quite low. Those who buy and sell sovereign bonds are going to spend much more time trying to estimate the risk of default than evaluating the risk of a term that operates only in the wake of a default. Nevertheless, in a trillion-dollar market, even the smallest effects translate into real money. The litigation over pari passu clauses alone has likely consumed tens of millions of dollars in legal fees. All of these are deadweight losses.

But one should not overstate the power of market forces with respect to either pari passu clauses or any other product attribute. To say that the forces of competition push parties towards the Pareto frontier is not to say that they are powerful enough to eliminate all

\textsuperscript{12} See Choi et al., supra note 1, at 58 ("Contract theory predicts that contract drafters will revise standard contract terms when faced with an interpretation adverse to their clients’ interests." (footnote omitted)).

\textsuperscript{13} It is possible to argue that a sovereign might deliberately make restructuring of bonds hard. Although costly ex post, making restructuring hard might serve as a commitment device. By ensuring that difficulties in bad states of the world are costly, the borrower gives itself an incentive to ensure that it never finds itself in them. This is a clever argument. Too clever. As Choi, Gulati, and Scott explain, this potential justification for pari passu clauses is inconsistent with the way pari passu clauses vary across different types of borrowers.
imperfection. To the contrary, if the pressure of competition were so powerful that buyers paid attention to every variation in product quality, markets as we know them could not exist.

Instead of pari passu clauses, consider another environment where the forces of competition are unusually strong—a commodities market. Even here, competition does not ensure uniformity. Indeed, a commodities market depends upon classification and standardization. It is not possible to have a market where commodities sell at a readily ascertainable price if each bag of corn or bushel of wheat comes from a different farmer and varies in quality. Once a system for assessing the quality of corn comes into being, corn from each farm can be graded and then stored with other corn of the same grade. To work effectively, however, buyers and sellers in a commodities market must be willing to buy and sell any corn that is graded No. 2 at the same price. This is possible only if buyers and sellers do not take into account variations in quality within each grade.

There are, however, always variations in quality within each grade, even with respect to ordinary commodities like corn or wheat. Corn, for example, can have anywhere between three percent and four percent broken kernels and foreign matter and still count as No. 2 grade corn. One lot of corn graded No. 2 might contain only 3.3 percent broken kernels and foreign matter, while another might contain 3.8 percent. The first lot of corn is better, but both lots are still graded No. 2 and both trade at the same price. Under conditions of perfect competition, this would not be possible.

Markets are designed to ensure that people in a market cannot exploit variation in the quality of standardized goods. One cannot make money by selling No. 2 corn that is below average quality or buying No. 2 corn that is above average. That some costs exist to prevent perfect sorting in the market for corn is a happy accident. In other markets, more needs to be done.

16. In this case, the costs are those associated with inspecting individual lots and the costs of segregating those that are above (or below) par and buying (or selling) only those lots. Such cherry-picking is costly, and the other parties to the transaction that benefit from standardization have no incentive to make it cheap.
17. In the wholesale diamond market, at least as it existed in the 1980s, favored buyers were
The existence of variations within a grade for standardized products that are traded in well-functioning markets shows that competitive forces are not strong enough to allow even salient variations in product quality (such as the amount of foreign matter in a bushel of corn) to be fully reflected in the price. Commodity markets require standardization, and standardization is not possible if competitive forces worked entirely without friction. The existence of commodity markets illustrates a more general point about the frictions that exist in every market. Just as corn with different amounts of foreign matter can trade at the same price, product features that are suboptimal can persist as long as there are some forces in place that put a brake on change.

The QWERTY keyboard is a good example. This keyboard is tolerably well designed. The mechanical action on early typewriters was subject to jamming. To slow the first typists—most of whom typed with one finger—letters that commonly appear together in English were placed on opposite sides of the keyboard. As it happens, this configuration is a desirable attribute for touch typists. A finger on one hand can reach for a key while a finger on the other hand is striking another, increasing the typist’s speed. In another happy accident, the manufacturer of the first QWERTY keyboards wanted sales people to be able to show the machine to good advantage, and it did this by putting all the letters for a long and salient word on a single row. (The word was “typewriter.”) Hence, many of the most commonly used letters found themselves on a single row. This also enhances speed.

But the QWERTY layout is not optimal. Not all of the most common letters are on the same row, and the row with the most common letters is not the home row where the fingers rest. As a result, a QWERTY keyboard requires the fingers to move more than they need to. This both reduces speed and increases fatigue.

The QWERTY keyboard, however, is good enough such that the forces that push towards change are not sufficient to overcome the inertia of the status quo. Given that alternative keyboards are only a given a box (or “sight”) of diamonds of a particular grade on a take-it-or-leave-it price. A buyer who refused to take the sight she was offered would not be invited to return. Because the wholesaler enjoyed a cartel, it had the ability to pick and choose among potential buyers. This arrangement prevented cherry-picking. No one could buy only sights in which the diamonds were better on average than other sights within the same grade. See Roy W. Kenney & Benjamin Klein, *The Economics of Block Booking*, 26 J.L. & ECON. 497, 500-02 (1983).

little better, it probably does not make sense for someone who already knows how to type to switch. Switching keyboards requires learning to type all over again. Moreover, once one switches keyboards, it is hard to switch back.

Nor is it costless for those learning to type for the first time. In the past, those who learned on a nonstandard keyboard risked finding their skills useless when they found themselves in a workplace that used QWERTY keyboards. They had to bring their own typewriters with them. This particular obstacle has largely disappeared, as the vast majority of typing is now done on computers. Software makes the reconfiguration of keys easy, and touch typists do not need to look at the physical keyboard. But even today, there are costs to being able to type only on a nonstandard keyboard, and these are large enough to deter all but a few people from learning to type on anything but a QWERTY keyboard.

The explanation for the persistence of the QWERTY keyboard is much the same as for any other product feature that has become a standard. If a nonstandard keyboard brought even a small improvement in speed or reduction in fatigue for each individual typist, the benefits across hundreds of millions of typists would be enormous. But the benefits to any individual typist are not large enough to overcome the costs that a person suffers from being an outlier, and no entrepreneur (at least none so far) has figured out a way to make money by disrupting the equilibrium.

The same forces are at work with sovereign bonds. If no frictions stood in the way of change, issuers of bonds that had pari passu clauses would have to offer their investors higher yields. Because such clauses make the bonds harder to restructure, they are offering bonds that are

---

19. Indeed, it may be harder to learn an alternative keyboard once one has already typed on a QWERTY keyboard than if one has never touch-typed before. Things learned by rote are hard to unlearn.

20. Among other things, learning materials for nonstandard keyboards are harder to come by. Moreover, programming nonstandard keyboards for smart phones and the like is not always easy.

21. Some have argued that no empirical case has been made for keyboards such as “Dvorak.” See Liebowitz & Margolis, supra note 18, at 21 (asserting that “claims for the superiority of the Dvorak keyboard are suspect”). But it would seem unlikely that the QWERTY keyboard would be optimal given its design history. Even small marginal improvements that individual typists scarcely noticed could create huge aggregate benefits. Even if an alternative keyboard were not faster, it could be less fatiguing or put less stress on the wrists. The benefits of something as ubiquitous as a typewriter keyboard do not have to be large for each individual for there to be enormous social benefits.
worth less in bad states of the world. But frictions do exist. The issuer will not switch from selling bonds with *pari passu* clauses if switching comes with costs and if individual traders will not fully incorporate the benefits of being free of *pari passu* clauses into the price they are willing to pay.

In pricing a bond, the main event is assessing the likelihood of default. Default rates for sovereign bonds vary enormously, especially among those that are not investment grade, the place where *pari passu* clauses matter the most. To know whether a bond is being sold at a good price, one needs to estimate the probability of default. This probability is clouded in considerable uncertainty. The probability of a sovereign bond default turns on an assessment of geopolitical risks that are extremely hard to assess over a time horizon of more than two or three years. This sort of variation is an order of magnitude greater than any plausible effect of differences among bonds with various types of *pari passu* clauses.

Moreover, those who buy these bonds have expertise in assessing default risk, but considerably less expertise in assessing legal risk. In theory, a *pari passu* clause reduces the value of a bond; but to know by how much, one needs to predict when litigation might arise and how it will be resolved. To understand how puzzling the persistence of *pari passu* clauses has been, one needs to look at the ex ante costs, not the ones incurred ex post. It would be odd to think that bond traders thought this cost especially high when, as Choi, Gulati, and Scott show, legal experts thought the risk low, even after two lower court opinions suggested otherwise. If the experts assessing the likely outcome of litigation in the Southern District of New York were so wrong, then one should not expect that bond traders would gauge it accurately at the time bonds are issued. This is especially true when, by any account, the returns from accurately assessing default risk are so much greater than from accurately assessing the costs of *pari passu* clauses.

It is worth pointing out that, in calculating its sovereign debt ratings, S&P focuses only on the likelihood of default. It ignores the second-order effect—recovery in the event of default. A legal risk that affects this recovery is a third-order effect. Rating agencies care about


23. See Choi et al, *supra* note 1, at 46–50 (providing accounts of sovereign debt lawyers as to why the *pari passu* clause went unmodified despite these court decisions).
what bond buyers care about. If they do not care much about a second-order effect, it should not be surprising that they would ignore a third-order effect. A bond buyer who prices bonds with different sorts of *pari passu* clauses identically is acting the same way as a buyer who treats all No. 2 corn identically.

None of this is to deny that *pari passu* clauses are costly and that they would disappear if nothing counteracted the competitive pressures. But, as Choi, Gulati, and Scott show, there are some forces at work that make changing *pari passu* clauses just costly enough to retard the migration towards better terms. They point first to legacy costs. No one wants to put better language in a new instrument if it will cast a bad light on previous ones from the same issuer.

In addition, the value of a sovereign bond to the issuer turns on the willingness of those in the market to buy it on favorable terms. Two otherwise identical sovereign bonds with different types of *pari passu* clauses are like two batches of No. 2 grade corn with different amounts of foreign matter. It might seem that, with millions or perhaps tens of millions of dollars at stake, someone would demand more for a bond with a better term. This would in turn give everyone an incentive to get rid of terms that did not work. But, as in the case of the QWERTY keyboard, as long as individual traders do not value the change, change will not happen unless someone comes along and pushes the market as a whole to accept a new standard.

There are risks associated with buying something new. Lawyers can explain why it is a good idea, but they are not infallible. After all, these are the same lawyers who thought that there was little risk that judges in the Southern District of New York would misconstrue *pari passu* clauses. Trusting lawyers to draft a new and improved sovereign debt instrument that looks unfamiliar adds a new risk and holds little prospect for additional profit. Successful bond traders can make money trading sovereign bonds with *pari passu* clauses. They have no need to

---

24. See id. at 59–65 (cataloguing reasons why the *pari passu* clause went unmodified in the face of adverse court decisions).

25. See id., at 16 n.43.

26. See U.S. DEP’T OF AGRIC., supra note 15, at 3 (noting that corn qualifies as No. 2 grade as long as the amount of broken kernels and foreign matter ranges between 3 and 4 percent).

27. To use Cass Sunstein’s turn of phrase, a person who brings about such a change is a “norm entrepreneur.” The norm entrepreneur can take several different guises. See Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 909 (1996). In the case of *pari passu* clauses, change came about in part through the efforts of Gulati and Scott themselves. They organized a conference that brought the major players together and eventually allowed them to coalesce jointly around a new standard.
switch. New contract language may be like New Coke. It does not matter how good it tastes if consumers are used to the original.  

Finally, buyers of sovereign debt benefit from trading a product that comes with a set of standard terms. They may resist better terms even if they are better merely because they are different. Different legal terms, even if they are better, make it harder to compare bonds. A buyer who wants to focus on the likelihood of default across different sovereign lenders finds it costly to account for different contract terms at the same time. A commodity trader who is good at predicting movements in the price of No. 2 corn is not interested in spending time looking for corn that might be better than No. 2 corn. It only needs to be different, regardless of whether it is better or worse, for it to be less attractive.

Once the costs of changing a particular practice are greater than the costs of not changing it, an imperfect product feature can persist for a long time. Standards, once established, are hard to change. Until recently, most people associated screw tops on wine with cheap and corked wine bottles with expensive. You could not sell a fine wine with a screw top even though it was a better technology.

In short, as long as recently minted 28-year-old MBAs who know everything have a check list that tells them to ensure that some sort of pari passu clause is in sovereign debt instruments, it will take a lot to make them do anything else. Even when a change makes sense, it is not likely to happen instantaneously. There is always a lag between the time an opportunity arises and when someone takes advantage of it. The technology needed for an overnight package delivery service existed in the early 1960s with the introduction of small jets like the DC-9 and the Boeing 727, but it was not until the 1970s that such services were available. It takes a long time to overcome the forces that resist change.

Contracts cannot be rewritten every time a judge makes a bone-headed decision. That pari passu clauses were a source of trouble was not fully appreciated until the Supreme Court denied certiorari in the

---


29. To be sure, the founder of FedEx had the idea for the business in 1965. But it was not immediately obvious to others. Indeed, he set it out in an undergraduate term paper and received only an average grade. See Connecting People and Possibilities: The History of FedEx, FedEx, http://about.van.fedex.com/our-story/history_TIMELINE/history/ [https://perma.cc/E4DB-C5BY].
Argentinian bond case. Perhaps only at this point were the benefits of overcoming the costs of inertia large enough to justify action. And only a few months passed from the time this happened until the time that major actors came together and agreed on a change. The puzzle may be not that it took so long, but that it took place so quickly.

Even if it is possible to understand why, once pari passu clauses were part of sovereign debt instruments it was so hard to get rid of them, there still remains the question of how useless and potentially costly product features can take root in the first instance. I turn to this question in the next part.

II. SKEUOMORPHS AND CONTRACT TERMS

Contract terms are not like corn. It is hard to harvest corn that does not contain some broken kernels and foreign matter. Not so with legal terms. There is no reason to put pointless provisions into a contract in the first place. Benjamin Chabot and Gulati have speculated about the particular circumstances of pari passu clauses, but it is again useful to connect what they observed to the more general phenomenon of useless features entering products in the first instance.

For thousands of years, new products have replaced old ones. Metal pointed spears replaced ones tipped with flint. Baskets made from straw were replaced by vessels shaped from clay. Stone columns replaced wooden ones. New products, however, often incorporate features from old ones even when they are unnecessary. The first metal spears had ornamentation that mimicked the hide formerly used to bind the flint to the metal. Clay pots had ornamentation that mimicked straw. To this day, Doric columns have triglyphs centered above each column representing the ends of wooden beams that columns once supported when these columns were made of wood, a practice that more or less stopped several thousand years ago. To take a more recent and more quotidian example, maple syrup is often sold in a glass bottle with a small handle that serves no discernable utilitarian purpose. This is a relic of the time when maple syrup came in jugs and the handles were large enough to be useful. This phenomenon—of a product feature persisting when incorporated in a new environment in which it no longer serves a function—is well known and has a name:

A *pari passu* clause in a sovereign debt contract is an instance of this phenomenon. Roman and Anglo-American law have long accepted the principle of pro-rata sharing: whenever creditors act collectively against a common debtor, they divide whatever they collect among themselves in proportion to the size of their claims. Such *pari passu* provisions exist in virtually every bankruptcy statute and have long been standard fare in agreements that creditors reach among themselves when they pursue debtors outside of bankruptcy.

Given that such a clause is utterly common in the context of an ordinary loan, it is not surprising that it entered into the sovereign debt market. As Chabot and Gulati have suggested, lenders from countries with smaller gunboats may have incorporated *pari passu* language when they were writing their contracts. They might have been trying to have the sovereign acknowledge that they should be treated the same as lenders from countries that wielded more military power. That they borrowed a familiar term in debtor-creditor law to serve this end is not particularly surprising. Nor would it be unusual if *pari passu* language entered sovereign debt contracts for an even less compelling reason. Even if sovereign lending is different from ordinary lending, the natural impulse of the lawyer, like any other craftsman, is to draw on the familiar in crafting something new, whether it serves a useful purpose or not.

Consumers (whether buyers of sovereign debt or anything else) expect products to have certain characteristics merely because they have become accustomed to them. Consumers never completely understand the products that they buy. No one in the world today possesses the human capital needed to make something even as simple

32. *See* March, *supra* note 8, at 166; *supra* note 7 and accompanying text.

33. It should be noted, however, that there is nothing magical about pro-rata sharing. Other, equally coherent sharing rules also exist. *See*, e.g., Robert J. Aumann & Michael Maschler, *Game Theoretic Analysis of a Bankruptcy Problem from the Talmud*, 36 J. ECON. THEORY 195, 198–202 (1985) (discussing the “contested-garment” rule and proving its logical coherence).

34. Once an attribute becomes part of a product, it tends to persist. In a discussion of consumer goods, Carpenter and Nakamoto show that “in the early stages of many markets, consumers may know little about the importance of attributes or their ideal combination” and note that “[a] successful early entrant can have a major influence on how attributes are valued and on the ideal attribute combination.” *See* Carpenter & Nakamoto, *supra* note 28, at 286. Hence, consumers value familiar features when a product is made with a new technology or transplanted to a new environment. This logic may be applied to financial instruments to the extent one accepts the idea that those who acquire bonds, because they are usually not lawyers, will not be perfectly informed about all the attributes of what they are buying.
as an ordinary pencil from raw materials. Everyone, including buyers of sovereign debt, must rely on heuristics and what is familiar.

Buyers of maple syrup want to see a small handle on the bottle. It serves no purpose, but it is what consumers have come to expect. Blue jeans are no longer made for working men who carry pocket watches, but buyers of blue jeans want a watch pocket all the same, even though they have no idea of the purpose it serves and have no use for it. Everyone expects Worcestershire Sauce bottles to come wrapped in paper even though the reason for doing this has long disappeared. Tagines took a particular shape for functional reasons when they were made of clay, and they retained this shape when made of aluminum even though there was no longer a functional reason for doing so. Skeuomorphs can be found everywhere on the “desktops” of personal computers.

In short, the idea that a clause could be added to a contract and remain there merely because everyone expected it to be there suggests nothing special about either pari passu clauses in particular or contract terms more generally. The same forces are at work as with ordinary product attributes. Crafting legal prose is hard, and few contracts are ever written from scratch. Lawyers almost always start with a template taken from someplace else. For this reason, those who draft contracts are likely to import features from earlier contracting environments, even when they serve no purpose, merely because they are familiar. To give another example involving financial instruments, the first railway bonds were based on real estate mortgages. They still bear some of the attributes of real estate mortgages, and not always for the better.

We need to ask whether contract terms like pari passu clauses are something more than one more example of a sort of imperfection found across all the types of product attributes. One message at least

35. It was intended to minimize breakage during an era in which it was shipped by sea. See About Us, LEA & PERRINS, http://www.leaperrins.com/History [https://perma.cc/5523-6V8Y].
37. As noted above, this sort of skeuomorph accounts for the only use of the word in the legal literature. See Zachary Rosenberg, Returning to Plato’s Cave: Metadata’s Shadows in the Courtroom, 48 ARIZ. ST. L.J. 439, 443 (2016) (“A skeuomorphic computer interface is designed to emulate the physical world. . . . [T]he ‘desktop’ looks like the top of a desk, replete with scattered files, folders, and a trashcan; word processors mimic typewriters by displaying what you type on a representation of 8½ X 11 inch paper . . . .” (footnote omitted)); supra note 6.
38. This has led the analogy between foreclosure and reorganization to be pressed too hard. See Douglas G. Baird, Priority Matters: Absolute Priority, Relative Priority, and the Costs of Bankruptcy, 165 U. PA. L. REV. 785, 804 n.76 (2017).
implicit in much of the work on pari passu clauses is that their presence in contracts unsettles the conventional understanding of contract law. Black holes, after all, need to be taken seriously. They swallow everything around them, destroy information, and are otherwise major nuisances. But one needs to be careful to make sure that the metaphor is not itself doing the heavy lifting.

_Pari passu_ clauses illustrate how a useless contract term can become part of a standard commercial transaction and remain in place for a long time. Whether one uses the attention-getting, but somewhat imprecise metaphor of “black holes,” or the more precise, but decidedly more pedantic “skeuomorph,” one still needs to establish how much the existence of this phenomenon requires us to reassess our understanding of contracts.

Choi, Gulati, and Scott show that the presence of useless terms in contracts can impose costs. But it is not clear how large these costs are. They point to the municipal bond market as a place where we are likely to find contract terms that are like _pari passu_ clauses in sovereign debt instruments. They are surely correct that many who acquire these bonds have been woefully ill-informed about what will happen in the unlikely event that a municipality files for bankruptcy. They know nothing about what counts as a “special revenue” bond, even though in Chapter 9 the difference between the holder of a special revenue bond and the holder of an ordinary bond is the difference between a secured and an unsecured creditor. In such an environment, it would not be surprising if many of the terms in municipal bonds did not serve their intended purpose or indeed any purpose at all.

But the rate of default on municipal bonds is extraordinarily low. Once the risks—and therefore the costs—are high enough, the dynamics change. Once a municipality is sufficiently distressed, rating agencies and buyers begin to take note. Imperfections in contract terms, like imperfect discrimination between goods of varying quality, can persist only if they are not too costly.

In its latest long-term bond issue, the financially distressed Chicago Public Schools system (CPS) went through enormous effort to craft a bond that would be treated as a special revenue bond in a Chapter 9 bankruptcy. More precisely, CPS went through enormous effort to craft an instrument for which a law firm would write an opinion letter stating that it would be treated as a special revenue bond.

39. Choi et al., _supra_ note 1, at 71.
The existence of the opinion letter drove the rating CPS was able to secure for the bond from a rating agency and this in turn dramatically lowered the interest it had to pay.40 Those at CPS who issued these bonds understood the way the intricate definitional provisions of Chapter 9 operated better than any law professor even though they were not themselves lawyers. The characteristics of special revenue bonds is an obscure area at the intersection between bankruptcy and municipal finance, but once the prospect of default becomes large, the frictions that prevent the migration towards more efficient terms become easier to overcome.

Legal terms that serve no function do present a challenge that other similarly useless product attributes do not. In the case of an ordinary skeuomorph, there is no need, other than academic curiosity, to know why it is there. One can buy a maple syrup jar with a minuscule and pointless handle without having to give it meaning or explain its purpose. Legal terms are different. Judges must interpret contracts.

As a general matter, judges usually ask, in one way or another, what a buyer and seller meant when they entered a particular contract, even though in many cases, the buyer never even read the terms. The inquiry is decidedly counterfactual. The buyer can have no intentions with respect to terms that she never saw. It is useful, however, to maintain this fiction when there are terms that marginal buyers may have seen or that marginal buyers may have known about. Skeuomorphs present a bigger problem. By definition, neither party had any intention with respect to them. The judge is asked to interpret words that the parties themselves did not understand.

It might seem sensible to treat contract terms that serve no purpose simply as noise words. One could read the sovereign debt contract as if the pari passu clause was not there. We do something similar when trying to solve the battle of the forms. When parties enter into a contract by exchanging forms that contain inconsistent boilerplate, the conventional approach is to allow the conflicting terms to knock each other out and to replace them with the default terms that contract law supplies.41

There are difficulties with treating contractual skeuomorphs as

noise, however. First, it is hard to know whether a word is a skeuomorph or whether it serves some purpose.42 It is still possible that the term serves some purpose even if most parties use the term by rote and have no idea what it means. Law firm associates might tinker with *pari passu* clauses without knowing what they mean, but this does not distinguish *pari passu* clauses from other clauses, and many of these do matter. Law firm associates do much, indeed entirely too much, cutting and pasting of terms without knowing what they mean.43

There are many product features that are useful even if the vast majority of people who use them have no idea why they are there. The caps to plastic ballpoint pens have holes in their tops for a reason. Children and even some absent-minded adults chew on and then accidentally swallow them. The hole ensures that they will not suffocate. It is a useful product feature that those who make a new plastic pen might copy without knowing the function the hole served. It is a good thing that such features persist. Even if someone makes a pen without the hole, only that person’s buyer is worse off. Everyone else will still follow the norm, even if they do not know why it makes sense to do so. Just as people can copy useless features without knowing why, they can copy beneficial ones as well.

A judge that dismisses a useful contract term as noise can cause considerable mischief because she is doing more than someone who copies a product feature whose useful purpose she does not understand. A judge can extinguish valuable, but obscure contract terms. If a judge mistakenly accepts a party’s argument that a contract term is just a skeuomorph, she establishes a precedent that makes the clause useless for others, even for the people who used it deliberately and who understand how it affects the contract.

There is another reason for a judge to do her best to give contract terms meaning even when their purpose is hard to discern. As soon as judges treat obscure contract terms as meaningless, there is no pressure

---

42. Some have argued, for example, that ipso facto clauses, even though unenforceable, still serve some purpose. See ZARFES & BLOOM, supra note 4, at 299–300.

43. For example, when a secured loan is paid off, law firm associates typically assemble the required documentation, and this documentation provides for the termination statements associated with the relevant UCC financing filings. Many associates assemble this paperwork without understanding what the termination statement is doing. They never took secured transactions and are simply following a checklist. But it can prove costly if they get it wrong. For a case in which an associate ignored the advice of a paralegal and referenced the wrong termination statement and caused a $1.5 billion loss, see Official Comm. of Unsecured Creditors of Motors Liquidation Co. v. JP Morgan Chase Bank, N.A. (In re Motors Liquidation Co.), 755 F.3d 78 (2d Cir. 2014).
for parties to change them. As soon as courts relieve parties of the fear that keeping useless language in contracts might have consequences, they will have less incentive to fix them. The battle-of-the-forms might never have spawned the vast number of litigated disputes it did if courts had been more willing to insist that language has consequences.

Courts do not need to pretend that they are trying to divine the intentions of the parties when interpreting a contract. They listen to advocates and do their best to capture what the words mean in the relevant merchant community. They might end up doing something that experts do not like, but experts are always free to get together (as they did in the wake of the Argentinian debt case) and draft new language. Judicial efforts to interpret language and give it some meaning are likely to make contract drafters more cautious. Such an interpretative strategy, of course, will prove costly in some instances, but these costs give everyone an incentive to pay more attention to their contracts or suffer the consequences. It is possible that Choi, Gulati, and Scott's exciting discovery, as valuable as it is, does not require a shift in judicial interpretative strategies after all. Small brush fires keep forests healthy. They burn away the undergrowth, add nutrients to the soil, and make sure that large trees flourish.