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de Goede, M.

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Marieke de Goede

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Cog in the Machine

In August 2013, a nine-member jury found Fabrice Tourre liable for securities fraud at the Southern District of Manhattan Courthouse. Former Goldman Sachs employee Tourre was tried by the US Securities and Exchange Committee (SEC) for fraud for his role in his construction, sale, and marketing of a complex collateralized debt obligation (CDO) called ABACUS 2007-AC1,[1] which, according to prosecutors, "maximize[d] the potential it would fail" (quoted in Craig, Protess, and Stevenson 2013). This verdict was the first—and so far the only—of its kind in relation to the 2008 financial crisis and one that the jury did not deliver lightly. As jury member and priest Beth Glover told the *International Herald Tribune*: "It is a shame lower-level employees get pulled in. . . . [The defense] portrayed [Tourre] as a cog, but in the end a machine is made up of cogs and he was a willing part of that" (quoted in Craig, Protess, and Stevenson 2013).

The question of how to anchor critique and where to locate responsibility in the face of the destructive but dispersed apparatus of modern finance is not unique to the 2008 credit crisis and

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its fallout. The difficulty of critique is partly to do with the complex and distributed nature of contemporary financial markets, which are tied to everyday lives in innumerable ways (Langley 2008; Ho 2009). But there are two further points to emphasize. First, speculative critiques often seek to reanchor themselves in a preexisting *real* economy, or contestable notion of real value (Hardt 2012: 362; Konings, this issue). It is no coincidence that, historically, speculative critiques were intimately tied to conservative agendas anchored in the fundamentals of land, labor, or nation (Ott 2011). A profound nostalgia pervades the work of many who have spoken out against speculation. As Melinda Cooper (this issue: 418) argues, for example, a "truly ambitious anticapitalist critique . . . cannot limit itself to the task of reconstituting labor as the foundation of value."

Second, generating responsibility vis-à-vis billions' worth of speculative contracts gone bad is virtually impossible in light of the inherent contestability of (speculative) valuation. For example, in a revelatory and slightly sensationalist postcrisis German documentary, Rainer Voss, a former trader with Deutsche Bank, emphasizes the complexity of unraveling bank balance sheets in the wake of a crisis or a takeover. "People think that this is quite simple," Voss says, as he roams the empty building of the Frankfurt bank where he used to work. "We'll just enter the bank and settle the business. But it is not that simple. We might be dealing with millions of pages of trades. . . . Those trades might refer to one another in their conditionality for resale. Just imagine how many permutations are possible. They grow exponentially." What happens in such cases, according to Voss, is that a final determination of value is never made but that a decision is made under uncertainty. "People often say 'stupid bank, bad transaction,'" says Voss, "but the reality is, it is impossible to generate certainty concerning such complexities of transactions. You just have to decide under uncertainty" (*De Biecht van de Bankier* 2014; my translation). If, as Dick Bryan and Michael Rafferty (2007) have argued, derivatives function as a computational benchmark for valuation across time and space, then it follows that their own value is inherently contestable and continually in flux. How can speculative contracts be critiqued and judged to be worthless if they are the very expression of value-in-flux? Is it even possible, retrospectively, to now hold that some positions were valueless at the time they were traded and when the financial system is one of interconnected self-referentiality? How can we generate responsibility if "there is no final determination to the value of value" (Cooper 2010: 179)?

This article examines postcrisis financial litigation as a potential site of politics and responsibility. It asks what it means to hold Tourre individually liable amid the complex human-technological assemblage of derivatives valuation and how the court performatively drew the boundary between legitimate speculation and illegitimate fraud in the case of novel speculative vehicles like CDOs, which operate on the cutting edge of regulation. The central question of the ABACUS litigation and similar SEC cases is whether financial instruments that later became considered "toxic assets" were legitimate and valuable at the time of trading or whether they were destined to fail. Here the legal decision has to generate a definitive pronunciation on speculative value and an otherwise fragile and continually contested "market apprehension" (Lenglet 2011: 58). For Bruno Latour (2010: 204) the legal process entails, on the one hand, an effort to sustain doubt as long as possible and to continually reactivate it and, on the other, a final moment of *arrêt* (or "arrest") in which the flow of deliberation and interpretation is stopped and judgment is rendered. The prolonged practice of deliberation and doubt in litigation entails a "slow and cumbersome" piecing together of the details of complex trades and financial networks, which stands in contrast to a fast politics of blame and rescue (Campbell 2002). In this sense, the time of the trial entails a profound clash with financial time, and the time of speculation in particular, which entails a short-term focus on continuous "decision and action" (Opitz and Tellmann, 2014: 6). In this clash of temporalities, trials can function as sites of account, in the sense that they generate detailed public narratives on otherwise arcane and technical securities contracts. Further, the moment of judgment or *arrêt* (stopping) is important not so much because it finalizes the discussion but because it generates an alternative benchmark for valuation. It halts the continuous flow of valuation and plays a role in performatively constituting the boundaries between normality and excess in financial practice. Unlike historical cases, the boundary drawn in the Tourre case did not hinge on notions of illegitimate gambling. Instead, the court judged ABACUS to be a bad derivative, not because it entailed a gamble but because of the *absence* of a fair bet. The court found that Tourre traded probable default rather than a possibilistic bet on an open, contestable future.

What is important is that Tourre's is *not* a case of a "rogue" or wayward trader—accused of acting without institutional consent as illustrious financial rogues including Nick Leeson, Jérôme Kerviel, or Kweku Adoboli did. What makes the Tourre trial so interesting is that it pivots on the contractual assembly of a CDO contract, called ABACUS, as representative of a particular class of instruments whose—financial and social—value is being questioned within the larger context of the financial crisis. The SEC sought to hold financial institutions responsible for marketing the kinds of instruments that were understood to have precipitated and exacerbated the crisis (FCIC 2011; Lewis

2010). These instruments included so-called synthetic CDOs, which derive their value from a portfolio of underlying residential mortgage-backed securities (RMBSs), which in turn consist of bundles of individual household mortgages across multiple US states, repackaged as investment vehicles (mortgage-backed securities).[2] Synthetic CDOs reference a selection of RMBSs and provide "insurance" against losses and defaults of those mortgage pools. Thus they allow speculation on the performance of the mortgage loans, without purchasing or trading the underlying securities (or, indeed, the under-underlying mortgages). Investors in a CDO receive regular payments as long as the referenced assets perform well, but they have to pay out if the referenced assets experience "credit events" such as default. In this sense, CDOs have been characterized as "bets," with some experts having called the CDO market "a casino" (FCIC 2011: 146; Lowenstein 2010).

The focus of this litigation, then, was less on the individual trader than on the concrete practice of assembling, valuing, and marketing CDOs. The SEC complaint alleged that Tourre engaged in "materially misleading statements and omissions" when marketing ABACUS (*SEC v. Fabrice Tourre*, 2010, No. 10-CV-3229, S.D. N.Y., "Amended Complaint," §1). According to the SEC, the hedge fund betting against ABACUS (the short party, being Paulson and Co. Inc.) played an important role in the selection of the reference RMBSs of ABACUS and expressly included securities that were "expected to experience credit events in the near future" (*SEC v. Tourre*, "Amended Complaint," §§2, 26). However, Tourre marketed ABACUS to institutional European clients, including Dutch bank ABN AMRO and German bank IKB, without disclosing Paulson's involvement in the portfolio selection. Within one year, 99 percent of the ABACUS portfolio had been downgraded, investors lost over $1 billion (*SEC v. Tourre*, "Amended Complaint," §4), and ABN AMRO had to be bailed out by the government. This article is interested in cases in which not so much the individual trader but the speculative contract itself took center stage. The legal cases surrounding complex derivatives exotically named—for example, ABACUS, NORMA, and SQUARED—show them to be hybrid objects with their own networks (Strathern 1996: 525), stretching from Nevada mortgages to Dutch pensions. Through following the contract, these cases prize open a space for responsibility, though one that will always fall short of justice.

Contested Values and the Politics of Critique

From a Foucauldian point of view, the inherent contestability of financial valuation and the absence of the final determination of value can function as a site of critique. "My optimism would consist in saying that so many things can be changed," Michel Foucault ([1983] 1988: 156) said in a 1981 interview, "fragile as they are, bound up more with circumstances than necessities, more arbitrary than self-evident, more a matter of complex, but temporary, historical circumstances than with inevitable anthropological constants." A genealogical approach to modern technical rationalities for Foucault requires exposing the fragility of institutions by revisiting their doubtful beginnings, daily contestations, and insecure enactments. In such a Foucauldian tradition, a rich body of literature revisits the fragile beginnings and insecure enactments of modern financial practice. Against the grain of a "global finance" that appears secure, hegemonic, and fully felicitous, these authors have emphasized the contingent histories and contested rationalities of corporate capitalism (Barkan 2013), financial calculation (Callon 1998; Langley 2010; MacKenzie 2008), and speculative markets (Aitken 2007; de Goede 2005; Langley 2008; MacKenzie and Millo 2005).

Performativity is a key conceptual anchor in these critical approaches (Butler 1997, 2010; Callon 1998, 2010). This lens helps us move beyond the now-commonplace observation that markets are socially embedded and draws attention to the concrete materialization of market rationalities that are taken to be both historically contingent and written through processes of subjectification. The notion of performativity emphasized that prices are not discovered but *produced*. According to Michel Callon and Fabian Muniesa (2005: 1242), among others, pricing is performative in the sense that it is written through "technical and organizational material devices" and "embodied competences."

This is especially relevant to the study of derivative pricing: derivatives buy and sell the possibilities of fluctuations in the value of certain "referenced" securities without trading those securities themselves. As such, they hinge on notions of futurity that are inherently contestable. Derivatives consist of present enactments of possible futures: their objective is not to *predict* the future but to generate a multiplicity of possible futures that are rendered liquid (and thus tradable) in the present (Amoore 2011; Arnoldi 2004; Cooper 2010). Such "politics of possibility" for Louise Amoore (2013) differs in important ways from notions of probability and prediction. For Amoore (2013: 61), "the significance of the temporal register of risk lies not in a speeding up but in an algorithmic 'framing of time and space' that has a distinctive orientation to the unknown." Or, as one of the "fathers" of option pricing theory himself explains the reasoning behind his models for derivative valuation: "The future is uncertain . . . and in an uncertain environment, having the flexibility to decide what to do after some of that uncertainty is resolved definitely has value. Option-pricing theory provides the means for assessing that value" (Merton 1998: 339).

In this sense, Bryan and Rafferty have argued that derivatives entail the commercialization of *contestability*: financial instruments like options render it possible to trade on uncertainty, not by predicting futures and eliminating uncertainty but, on the contrary, by *prolonging* uncertainty and assigning value to that prolongation. For them, derivatives are a technique of computation in the sense that they render it possible to measure "different forms of assets . . . against each other on an on-going basis" (Bryan and Rafferty 2007: 142; see also Bryan and Rafferty, this issue). However, if derivatives function as the computational benchmark for valuation across time and space, then it follows that their own value is inherently contestable and continually in flux. According to Randy Martin (2013: 95), the value of derivatives "eludes consistent quantification; the relation between the worth of a given hedge and the notional value it is attached to is slippery." Hence the importance of historically situated calculative devices in pricing and marketing speculative contracts: these instruments do not calculate a preexisting price or fair value, but they *write* price (Ayache 2010). Moreover, calculative devices remain opaque as well as contingent. The contestability of derivative price is not just a theoretical issue but was of vital importance in the making of the crisis. For example, the report of the US Senate investigations subcommittee on the financial crisis notes how investment banks deliberately surrounded the calculative procedures underlying their CDOs with mystery. In some cases, Goldman Sachs actively refrained from informing clients how mortgage securities were valued and instructed salespersons to offer "no additional assistance to potential investors trying to evaluate the [thousands of] underlying assets" (US Senate 2011: 394).

Read through the work of Callon and Butler, the notion of performativity is profoundly *political*. Performativity is political precisely because outcomes are uncertain: if the social world is reproduced at the point of articulation, this also opens multiple possibilities for misperforming, misfiring, and rearticulation (Butler 1997: 19). This is less a question of the felicity of any concrete performative utterance than of the making and remaking of "an ongoing situation" (Butler 2010: 151). As Butler (2010: 152–53) has put it in a direct response to the way her work has been appropriated to study economic practice: "The possibility of 'misfire' [is] at the basis of performativity itself. . . . [W]e can only ask 'how things are made' or 'how are we to join in the making of what is already underway,' [and] then it becomes clear that we accept the ongoing making of economic realities and only seek to intervene in them to redirect or further a certain pattern of making." In this sense, performativity cannot be thought of in terms of success or failure (of an economic model), because it entails an ongoing structuring of the world at the site of articulation.

One interesting aspect of the Tourre trial is that it offers a glimpse of the writing subject as he performs the structuring of the derivative and the writing of price. The set of e-mails written by Tourre to his girlfriends from his Goldman Sachs account was released to cast him in a bad light and aid the accusatory case that Tourre knowingly misled his clients.[3] However, an alternative reading of the e-mails suggests that they function more like a diary written by a person who struggles with the performative nature of derivative valuation and seeks to relate it to an ethical anchoring point *outside* market practice. While continuing his professional duties, Tourre's candid reflections to his girlfriends (and to himself) demonstrate his struggle to justify and maintain his own performativities. "Work is still as laborious, it's bizarre," he wrote in one message, "when I think that I had some input into the creation of this product . . . the type of thing which you invent telling yourself: 'Well, what if we created a "thing," which has no purpose, which is absolutely conceptual and highly theoretical and *which nobody knows how to price*?' . . . It's a little like Frankenstein turning against his own inventor" (Tourre to Fatiha Boukhtouche, January 29, 2007 [*New York Times* 2013]; emphasis added). Tourre's reflections, then, offer a glimpse of the performing subject as he writes price and struggles with the boundaries of intelligibility in his own professional practice.

A notion of performativity is not a theory of revolution or radical change: it recognizes that there is no safe space outside the edifice of finance that offers a privileged site of critique (through, for example, appeal to land or labor). As much as continuous reproduction of finance takes place through everyday practice, so critique and change are to be located within the unpredictable but "ongoing" making of economic realities, which entails the continuous possibility of remaking, misfiring, and rearticulation (see also Callon 2010). Butler (2010: 155) conceives of the subject who reroutes his or her daily practice to make a claim that breaks with existing "loyalty and power": "Such a subject breaks out of the established framework within which public politics proceeds, facilitating a certain crisis in the framework, posing anew the question of what can and cannot intelligibly take place within that framework." Clearly, in relation to financial market rationality, it has been shown time and again that critical claims that aim to confound the framework, even by authoritative voices such as George Soros's or Warren Buffett's, have done little to reorient the question of intelligibility in the markets. In Tourre's e-mails, we see that he poses the question of intelligibility and ethicality of the financial frame, though he fails to reroute his practice. Thus it is precisely in relation to the question of misfiring or rerouting the daily performativity of finance that litigation offers an interesting site of analysis.

Speculative Legitimacy in the Courts: Clashing Temporalities

How might we practice criticism in the wake of the financial crisis and develop what Ute Tellmann (2009) calls a "critical visibility" of speculation? Admittedly, litigation and trials are unlikely sites to search for responsibility for systemic catastrophe: trials of individual traders can entail a measure of scapegoating whereby larger systemic inequities remain invisible and unquestioned. In Tourre's case, the successful conviction of a lone mid-level employee is generally thought to be a poor harvest "in the aftermath of a financial mess that generated hundreds of billions in losses" (Morgenson and Story 2011). More generally, the identification of wayward traders or excessive speculation can work as a politics of blame through which normality is restored with a minimum of systemic change (Sinclair 2010).

At the same time, however, US courts have historically played an immensely important role in contesting speculation, debating its moral legitimacy, and regulating its boundaries. Courts were frequently sympathetic to cases brought by plaintiffs who lost out in the speculative trade, and there are many historical precedents whereby speculative contracts were declared gambling and thus rendered unenforceable (de Goede 2005; Fabian [1990] 1999; Kreitner 2000). In such trials, courts did not just pronounce on individual cases but performed, stretched, and regulated the boundaries between abnormality (often understood as gambling) and normality (often understood as professional risk bearing) in speculative finance. In this sense, juridical cases themselves are sites where financial value is performatively debated, enacted, or denied (de Goede and de Graaf 2013). The legal judgment performs the boundary between legitimate and illegitimate practice for instruments like CDOs that operate at the limits of law and enacts a (temporary) pronunciation on derivative value.

It bears repeating that, analytically, it remains impossible to make a definitive distinction between (illegitimate) gambling and (legitimate) speculation. Roy Kreitner (2000: 1127) discusses a number of juridical cases in detail and shows how courts enacted "a set of distinguishing maneuvers" to stabilize this distinction, which remains ultimately a matter of politics and policy, rather than a "technical legal test." These maneuvers enacted the notions of "intent" (did the parties to derivatives contact have the intent to gamble?) and of "good faith" (were insurance contracts entered into in good faith?). In this manner, issues of temporality and intent became "legal placeholders" that allow the law to act *as if* the continuing "ambiguity" was "already revolved" (Riles 2011: 176; Alessandrini 2011). The Tourre trial has to be understood in this historical context, though the issue of gambling did not come up explicitly. While everyone seemed to agree that synthetic CDOs (such as ABACUS) constitute a bet, financial institutions emphasized their "social utility" as offering tailored risk exposure, and regulators have been extremely hesitant to engage the question of the moral legitimacy of CDOs (FCIC 2011: 146). However, the Tourre trial did focus explicitly on futurity and intent, specifically by raising the question whether Tourre had the intent to defraud his investors and whether the failure of ABACUS was foreseeable—as I discuss further below.

In a wider sense, the juridical test of speculative value involves not just a contestation *over* temporality but also a clash *of* temporalities. Here the temporality of the courtroom, which is classically oriented toward past offense and probabilistic assessment, meets the temporarily of speculation, which is increasingly geared toward the possibilistic enactment of a multiplicity of futures. In contrast to what Sven Opitz and Ute Tellmann (2014: 17) call the emergency time of the derivative, "law appears more obstinate. . . . While the next emergency imposes itself as a reference point for present action, law normally decides on past behavior. . . . While the expected catastrophe calls for urgent action, law sticks to its time-consuming routines." Similarly, Latour (2010: 220) understands the essence of the legal proceeding as generating and prolonging "hesitation and doubt" "so as not to rush to blindingly obvious truths." Instead of a transparent truth, the process of litigation produces "precarious" iterations within a slow and layered textual process (Latour 2010: 225). In this sense, then, the "slowness" of law is mobilized against the urgent temporality of the derivative (Opitz and Tellmann 2014: 17). This prolonged space of articulating and (re)iterating sides of a case, weighing the elements, contesting the experts, plays a role in the ability to establish a narrative and hold to account. The stakes here are not just to render judgment and decide the individual case but to produce a public account (Rakoff 2014). The Tourre trial took more than four years to conclude, from the 2010 settlement between Goldman Sachs and the SEC, until the March 2014 decision on the damages payable by Tourre. By contrast, ABACUS lost 99 percent of its value *within one year* of being issued.

Moreover, in the clash of temporalities of the Tourre trial, the possibilistic and future-oriented nature of the derivative was put to a probabilistic and past-oriented legal test. Because this was a civil trial, the applicable standard of evidence was one of "preponderance of credible evidence," meaning that "the evidence of the SEC must be more convincing and persuasive to [the jury] than that opposed to it." In addition, the SEC had the burden of proof for "each element of each of its claims" (*SEC v. Tourre*, 2013, "Jury Charges," p. 3). Though this standard of evidence is lower than it would be at a criminal trial, it is still a standard oriented toward assessing past events on the basis of *probable* truth and accuracy. It raises the question of how possibilistic speculative knowledges can be put to a probabilistic test of accuracy.

Finally, the legal judgment or *arrêt* offers a pronouncement on value that is anchored not in an implicit fundamental value or social model but in a notion of justice. Marilyn Strathern (drawing on Jacques Derrida) understands the force of the legal decision as a "cut" into potentially infinite networks of agency and interpretative meaning. Such a cut entails a moment of interpretation and a production of stability that is indispensable for rendering justice: "'Cutting' is used as a metaphor by Derrida . . . for the way one phenomenon stops the flow of others. Thus the force of 'law' cuts into a limitless expanse of 'justice,' *reducing it and rendering it expressible*" (Strathern 1996: 522; emphasis added). Thus the trial is an important site of justice because it renders it "expressible": in the ABACUS litigation, derivative value was deliberated, contested, and ultimately rejected. The case resulted in a pronunciation of the worthlessness of the CDO, not just in terms of financial value but also in terms of social value. Thus it performs anew the boundaries between legitimate speculation and fraudulent trade. However, the trial is an insufficient site of justice because it is inevitably reductive: it risks scapegoating and enacts individual responsibility for systemic inequities. Judgment cuts into the prolonged space of doubt and hesitation in a way that is always reductive of the full complexity of the case. Remember jury member Glover's acknowledgment of the difficulty of her decision in the Tourre case, as she found him to be a cog in the machine but still agreed to hold him liable. The juridical decision, then, offers a pronunciation on the value of the contract and an enactment of responsibility, which necessarily falls short of justice.

Litigating the Crisis: Inside ABACUS

In the historical context of courts' adjudication of the legitimacy of speculative contracts, and in relation to the clash of temporalities between derivative trading and the trial, I now look more closely at the points of contestation in the Tourre trial. The trial offers a window onto the mundane performativities that make up speculative markets, through the detailed and patient contestation of a legal case and through a slow puzzling together of the elements. If derivative value is contested and performed, the ABACUS litigation helps render visible the contingent process of assembling such instruments and connecting buyers to sellers at a particular price.

The legal battle in the Tourre trial was prolonged and complex and included contestations over the jurisdictionality of derivatives (involving the question whether ABACUS was subject to New York security law) as well as over the admissibility of expert testimony (with both parties heavily contesting each other's submitted expert evidence). The central allegation was that Tourre knew of Paulson's expectation that the referenced RMBSs would "experience significant losses and, under certain circumstances . . . would become worthless" (*SEC v. Tourre*, "Amended Complaint," §15) but that he marketed ABACUS nonetheless without disclosing Paulson's role in the portfolio selection.[4] For the purposes of this article, the main relevant axes of contestation in the case were (1) the question whether Tourre made "materially misleading statements" in the ABACUS marketing materials and thus intentionally defrauded investors by not disclosing the role that the Paulson hedge fund played in the selection of the referenced mortgage securities; (2) the question whether ABACUS was "designed to fail" by Paulson or whether it performed no worse than average than other CDOs within the given time frame, in which *all* housing-related derivatives performed badly; and (3) the question whether investors in ABACUS were capable of producing their own evaluation of the value of ABACUS or whether they were reliant on the reputation of the so-called portfolio selection agent (a financial company called ACA) for their trust in this instrument. The "legal placeholder" to adjudicate the boundary between legitimate speculation and fraud was no longer the intention to wager or the question of good faith, as in Kreitner's historical cases, but revolved around the question whether Tourre acted with *scienter*, or the intention to defraud. However, Tourre's *scienter* was inextricably tied to temporal issues and the question of the foreseeability of the ABACUS default.

To generate "new questions" from the crisis fallout, Martin (2013: 95–97) suggests that we need to understand derivatives not as "something firmly tethered to [the] economy that then got away" but as a "dissonant social relation" that "cuts across the global and the intimate, spheres of production and circulation, future and present, knowledge and nonknowledge." Drawing on Martin's formulations, I tease out three elements that were central to the Tourre trial: (1) ABACUS as a social relation assembled the "real" and the "speculative" in very specific ways and across localities; (2) the value of ABACUS was written not just through calculative instruments but also through institutional practice and notions of reputation; and (3) ABACUS cut across present and future in particular ways by trading on uncertainty. Interestingly, the trial proceedings largely deny the notion that ABACUS traded in uncertainty and consider the future failure of ABACUS as probabilistic, secure knowledge at the time of trading.

First, then, rather than a dichotomy between the real and the speculative economies (LiPuma and Lee 2005), the Tourre trial offers intimate detail on the *work* that went into creating ABACUS and fostering the precise intersections between, for example, Nevada mortgage applicants and Dutch pension holders. The debate on the social value of speculation cannot be adjudicated purely through the realm of market ideology, which understands derivatives either as gambling (e.g., Lowenstein 2010) or as fair risk management (e.g., Cohn 2010). We need to come to an understanding of derivatives as a "set of material practices of document production, filing, and exchange" (Riles 2011: 52), including the ways specific CDO offerings are assembled, selected, marketed, and priced.

Though perhaps a synthetic CDO is "fictitious" in the sense that it speculates on the performance of a particular loan portfolio without trading the underlying bonds (or under-underlying mortgage loans), it is very *real* in the connections it fosters, not just between speculators on both sides of the deal but also between the broader financial constituencies whose fates it attaches. The details of such connections often remain obscured—financial journalist Michael Lewis (2010: 130–31) in his account of the "CDO machine" recounts the difficulty investors had in finding out precisely *what* individual loans underpinned specific securities. By digging into the portfolio selection process, the ABACUS litigation laid bare some of these connections with remarkable precision. We now know that Paulson was interested in speculating on mortgage pools with a high proportion of adjustable rate mortgages, with a specific concentration in California and Florida, and with a high proportion of second-home loans (*SEC v. Tourre*, 2012, "Rebuttal Report of Andrew Davidson," §22). Paulson believed that housing prices were most inflated in California and Florida but was also interested in betting against bonds that included mortgages in Arizona and Nevada "that had recently experienced high rates of home price appreciation" (US Senate 2011: 565). On the other side of the ABACUS trade were German and Dutch institutional investors including German bank IKB, which "specialized in lending to small and medium-sized companies" (*SEC v. Tourre*, "Amended Complaint," §53), and, through a series of intermediaries, Dutch bank ABN AMRO, which was "one of the largest banks in Europe" at the time and which assumed the credit risk of US$909 million worth of mortgage bonds referenced in ABACUS (*SEC v. Tourre*, "Amended Complaint," §69). In fact, the Goldman sales force was instructed to target CDO sales in Europe and Asia because clients there were not involved in US housing markets and were "not feeling pain" (US Senate 2011: 493). ABN AMRO was bailed out by the Dutch government at the end of 2008 for nearly US$17 billion, because its potential collapse threatened financial stability in the Netherlands, Belgium, and beyond.

The chain of securitization rendered visible in the ABACUS litigation thus stretched from Nevada and Florida mortgage borrowers—sometimes borrowing amounts as little as US$200,000, sometimes refinancing to be able to make the payments—through their mortgage lending firms, to investment banks like Goldman that securitized thousands of individual loans into investment pools, to CDO desks and hedge funds like Paulson that selected mortgage pools to be gambled on, to clients in mainland Europe whose primary tasks of managing pensions and business credit were all but forgotten in their desire to participate in global finance. Within this chain of complex and distributed responsibility, Tourre was the only one to be held individually liable (though there was a rather tame public inquiry into the Dutch bank nationalizations, no individual managers were held to account in the Netherlands). However unsatisfying that may be, Tourre's position in the chain was crucial in terms of connecting distant parties in specific ways, while projecting a public face of neutrality and calculative rationality. In this sense, the litigation procedure refrained from taking sides in the question whether the CDOs entailed irresponsible bets on teetering markets and suffering home owners or whether they helped end the housing bubble and irresponsible lending practices (FCIC 2011: 95). Instead, the litigation was directed at the institutional hubs and practices that made the CDO deals possible and sought to hold these to account.

Second, the ABACUS litigation offers insight into the generation of derivative value as a *process*: it unearths the documentary practices through which Paulson's gamble on mortgage defaults became written into a legitimate investment opportunity for European institutions. Though recent literature has emphasized the calculative practices (MacKenzie 2011) and legal technologies (Riles 2011) of derivative valuation, it should not be forgotten that this also remains a *social*, *affective* process in which trust is generated in specific ways (Langley 2013). Indeed, Bryan and Rafferty (2007: 147) emphasize that, while derivatives commercialize contestability, their own "redeemability" depends less on correct valuation than on "the *reliability* of parties to [the] derivative contracts" (emphasis added). Ultimately, then, it is this private system of producing and maintaining reliability, including credit rating and reputation management, that underpins the continued circulation of derivate value (Bryan and Rafferty 2007: 148). The Tourre trial partly hinged on the question of *where* and *how* derivative valuation takes place in practice. Tourre himself argued that the investors who purchased ABACUS were experienced and sophisticated, perfectly capable of assessing and evaluating the mortgage pools underlying ABACUS, which were fully listed in the formal paperwork of the CDO (*SEC v. Tourre*, 2011, "Answer of Defendant Fabrice Tourre to the Amended Complaint," §§42, 53). The 196-page circular offering of ABACUS includes the list of the ninety referenced mortgage securities, their ratings by various rating agencies, their average remaining life spans, and their mortgage issuers (including Option One, AmeriQuest, and Wells Fargo) (Goldman Sachs 2007: Schedule A).

However, expert testimony during the Tourre trial emphasized that "even large and sophisticated investors" do not have access to the "information or the expertise and the facilities" to undertake financial evaluations of such portfolios themselves. Therefore, they rely on the "skill and expertise" of portfolio selection agents, who supposedly act independently to select reference collateral for complex derivative products (in the ABACUS case, the company ACA) (*SEC v. Tourre*, 2012, "Expert Witness Report of Dwight M. Jaffee, PhD," §24). According to this line of reasoning, ACA was of key importance to the ABACUS transaction because CDO investors rely on the "track record" of independent portfolio managers when deciding to invest (*SEC v. Tourre*, "Expert Witness Report of Dwight M. Jaffee, PhD," §24). We could say that the place and process of derivative valuation itself was at stake in the Tourre trial. The court's judgment eventually supported the reading that experts and institutions play a material role, not just in structuring the transactions but also in underpinning their value. In this sense, the ABACUS litigation testifies to the complex way derivative value is institutionally and reputationally "written" and produced. Tourre's crime, in this sense, consisted not just of the failure to disclose the nature of Paulson's gamble with ABACUS but, more fundamentally, of the damage done to the delicate system of reputation management that ultimately underpins the circulation of derivative value.

Third, and perhaps most important, the ABACUS litigation shows how derivatives cut across present and future. We have seen that derivatives tie present to future not in a probabilistic way that *reduces* uncertainty but in a possibilistic way (Amoore 2011, 2013) that *prolongs* uncertainty and trades on it. The court case hinged precisely on a contestation over the question whether ABACUS sold possibility or probability. According to Tourre, there was nothing unusual about ABACUS: investors knew that such instruments always had two sides to the bet, and expert testimony in Tourre's defense argued that ABACUS may have performed badly but did not do worse than comparable instruments in the context of the broader financial downturn. Tourre emphasized that ACA exercised its own judgment accepting or rejecting referenced mortgage securities and that Goldman Sachs itself lost a considerable sum of money in the deal (*SEC v. Tourre,* "Answer of Defendant Fabrice Tourre to the Amended Complaint"). In Tourre's reading, then, ABACUS sold possibility, in the sense that the future of its referenced mortgage pools was open and that either investing side would entail a fair bet on the basis of differential assessments of the characteristics of the underlying mortgages. The SEC, however, argued—and the court ultimately accepted—that ABACUS was "destined to fail" and that Tourre and Paulson *knew* for a fact that the value of the securities referenced in ABACUS was about to plummet. According to the SEC, ABACUS was designed to "produce results that are worse than average," and expert testimony confirmed that the selection process "was intended to produce worse collateral performance than the universe of deals" (*SEC v. Tourre,* "Rebuttal Report of Andrew Davidson," §§7, 9). In the SEC's reading, then, ABACUS sold *probability,* not possibility—namely, a calculated and calculable bet on the imminent failure of the referenced mortgage pools that was statistically knowable.

For the court, the problem with ABACUS, then, was not that its value was slippery but that its value was *insufficiently slippery.* ABACUS was a bad derivative because the future it commodified was insufficiently contestable: the court accepted that ABACUS peddled probable and calculable default instead of a truly open and contestable future. In this sense, it was considered proved that Tourre acted with *scienter,* or fraudulent *intent,* when marketing ABACUS without full disclosure (*SEC v. Tourre,* "Jury Charges"). Unlike in historical cases, the intent to wager was not what was at stake in the Tourre trial: the fact that a CDO entails a wager on the direction of asset price development was not seen as problematic. The question instead was whether Tourre acted with "intent to defraud," and the judgment had to be "based on what was known in 2006 and 2007, not based on hindsight" (*SEC v. Tourre,* "Jury Charges," p. 7). Ultimately, the court's judgment—or interpretative cut—pronounced ABACUS to be valueless, not just in hindsight but also at the time of trading. Mobilizing a paradigm of probability against the possibilistic knowledge of the derivative, the court held that ABACUS was destined to fail and accepted that Tourre *knew* that his "exotic trades . . . would collapse anytime now (*SEC v. Tourre*, 2013, "SEC's Consolidated Response to Tourre's Motions in Limine concerning the Financial Crisis and the Collapse of ACA and ABN," n. 2). While rendering the chain of securitization open to knowledge and contestation in many ways, the court thus eventually rescued and affirmed the fundamental structure of the derivative as a trade in contestability.

In July 2010, Goldman Sachs settled with the SEC and paid US$550 million in damages over ABACUS, some of which went to compensate the ABACUS investors including IKB. The settlement agreement neither admits nor denies the allegations, but it does acknowledge that "the marketing materials for the ABACUS transaction contained incomplete information" (*SEC v. Goldman, Sachs and Co. and Fabrice Tourre*, 2010, "Consent of Defendant Goldman, Sachs and Co," p. 2). This was the first of a series of settlements between the SEC and major investment banks that in various ways centered on the fairness and the quality of derivative products. In November 2013, JP Morgan Chase settled with the SEC for a record US$13 billion for its alleged practice of disregarding its own due diligence department and including poor-quality loans into derivative securitizations. Part of the money from this settlement takes the form of financial aid to suffering mortgage holders. Such legal agreements have incurred substantial criticism for settling without rendering public the detail of cases and for refraining from producing individual responsibility for what has been called a " 'systemic breakdown' . . . in accountability [and] . . . in ethical behavior" (Rakoff 2014). Still, they look fairly enviable from a European point of view, where major bank defaults have been narrowly avoided and where the credit crisis continues to divide the continent—yet where very little effort has been made to produce individual or even institutional accountability through inquiries or court actions.

To date, as noted, Tourre was the only one held *individually* accountable. He was held personally liable for securities fraud and was ordered in March 2014 to pay a fine of US$825,000. In the wake of the verdict, the SEC announced that it would "sharpen" its focus on "individual wrongdoers" through pursuing them for fraud or negligence (ElBoghdady 2013). Clearly, Tourre was made an "example" or a scapegoat for a crisis related to complex calculations and distributed agency—and, in this sense, his case is a very limited example of justice. However, if we understand financial markets as performative in a Butlerian sense—in others words, as produced and reproduced through daily enactments and (re)iterative practice—then Tourre's example is an interesting one. From this point of view, the main issue at stake is less that of intentional fraud than of why Tourre failed to "misperform," reorient, or challenge the parameters of the deal he was asked to structure. E-mails released during the trial show that Tourre had substantial misgivings about the ABACUS deal and that he had to work hard to convince himself that his work was "ethical." "Anyway, not feeling too guilty about [these leveraged, exotic trades]," he wrote in one message to his girlfriend. "The real purpose of my job is to make capital markets more efficient and ultimately provide the US consumer with more efficient ways to leverage and finance himself, so there is a humble, noble and ethical reason for my job ;)" (Tourre to Marine Serres, January 23, 2007 [*New York Times* 2013]). In another message, he wrote, "I'[ve] managed to sell a few abacus bonds to widows and orphans that I ran into at the airport, apparently these Belgians adore synthetic [CDOs]" (Tourre to Serres, June 13, 2007 [*New York Times* 2013]). Despite these privately voiced misgivings, Tourre oddly negated his own role and responsibility in structuring ABACUS and apparently saw no scope to reroute or challenge the CDO practice. In Butler's (2010: 155) terms, Tourre did not break out of the "established framework" of the banking practice into which he was initiated and failed to enact an "ethic of doing" that would challenge institutional routine. That he did neither indicates perhaps less his conscious effort to defraud than his particular and apparently powerful subjectification into a culture of investment banking and derivative structuration that he saw no scope to challenge despite his apparent misgivings (e.g., Ho 2009).

In this sense, the Tourre trial can be seen as an invitation or indeed obligation to mid-level professionals to continue to reflect critically on their own role in systemic finance and to enact ethics in practice despite substantial institutional constraints. Indeed, various investigations including the JP Morgan Chase settlement reveal that a number of financial professionals did challenge their superiors and their institutional structures and criticized derivative constructions and valuations from within. Though they were often institutionally overridden, their records and testimony have become important bases for postcrisis inquiries and litigation. Understood as a call to performative ethics, the Tourre judgment enacts financial critique *without* anchoring it in a prior articulation of fundamental value proper social structures. Instead, it produces a legal placeholder as a fictional boundary between legitimate speculation and illegitimate fraud. The boundary can only ever be navigated through an ongoing ethics of practice that renders all financial professionals responsible.

Conclusion: Subtle Sins

Commenting on *The Wolf of Wall Street*, one journalist compared the film to the ABACUS deal and argued that, in contrast to Jordan Belfort's blatant scams, usually "Wall Street's sins are subtler." This journalist concluded, "The selling of a synthetic collateralized debt obligation is nearly impossible to convey on screen" (Nocera 2013). In this article I have examined the trial of Tourre and the ABACUS litigation as one site where "the selling of a synthetic collateralized debt obligation" is conveyed and where postcrisis responsibility is anchored. The ABACUS litigation and the Tourre trial prolonged hesitation and doubt concerning the legitimacy of CDOs: they teased apart the materiality of the deal, rendered visible its chain of securitization, and enabled critical reflection on the process of trust underpinning the derivative. I have argued that this is both an important and insufficient site of critique. The importance of the litigation in my reading depends less on its demonstration of individual fraud and instead lies in its visualization of the "subtle sins" of Wall Street and the insight it provides into the precise ways CDO transactions depend on institutional practice and the management of reputation. The verdict on Tourre's individual liability can be read as an injunction to an ethics of practice that calls on mid-level employees to challenge and change everyday performativities. It seeks to reopen a "space for interpretation and correction" by human traders and market participants—contra automated market decision making (Lenglet 2011: 60).

Understood in the historical tradition of litigating speculation, the significance of the Tourre trial lies in the ways it (re)draws the boundaries between legitimate trading and illegitimate fraud. On the one hand, the trial mobilizes a slow and probabilistic test contra the possibilistic nature of the derivative. The clash of temporalities enacted in and through the trial revalue a slow and probabilistic mode of knowledge contra the continuous value-influx of what Opitz and Tellmann call "emergency time." On the other hand, it is significant that the issue of gambling did not come up explicitly in the trial. The SEC—and the wider response to the crisis—has been reluctant to question CDO speculation in principle and steered away from the question whether CDOs entail illegitimate gambling or legitimate market making. If the legitimacy of CDOs is not questioned on principle, however, the litigation does suggest that there is a point at which a legitimate possibilistic trade morphs into a probabilistic, even predetermined, failure. There is a boundary beyond which CDOs no longer offer legitimate tailored risk exposure and are thought to become manipulative of unsuspecting investors, who do not have the proper tools or knowledge to evaluate the offerings. Rather than try to carve out a technical legal test or principled distinction between legitimate trade and manipulative deceit, the trial seems to suggest that this boundary is only ever enacted in practice. It is not gambling but *the absence* of an even gamble or "fair bet" that is seen as problematic here. In this sense, the verdict underwrites the social value of the derivative as a mode of infinitely trading on uncertainty and liquidating the uncertain future.

Notes

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1 In the remainder of this article, I abbreviate ABACUS 2007-AC1 to ABACUS. However, Goldman structured and marketed sixteen previous ABACUS instruments before the contested 2007-AC1 version. All subsequent citations of *SEC v. Tourre* refer to case No. 10-CV-3229, S.D. N.Y.

2 For the culture of mortgage securitization, see Langley 2008; for the valuation practices of RMBSs and CDOs, see MacKenzie 2011; for a readable (but somewhat problematic) account of mortgage securitization and CDOs, see Lewis 2010.

3 Released by Goldman Sachs.

4 In these particular contestations, the ABACUS case is similar to a number of other cases brought by the SEC in recent years, including the litigation of JP Morgan Chase for its assembly of a CDO called "Squared" and a complaint against Citigroup for its role in structuring a CDO deal called "Class V III." However, the ABACUS case is unique in producing both a settlement (between Goldman Sachs and the SEC) and a verdict of civil liability for Tourre.

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