A story has been told. It has been told again and again in the hope that the retelling would make it so. Out of darkness would come light, if only we could see. Out of ignorance would come knowledge, if only we could understand. Out of mastery would come progress, if only we placed our faith in the future. This was a tragic but ultimately hopeful tale, full of heartbreak and distraction, setbacks and frustration. Each chastening episode made the will stronger until, eventually, uncertainty itself could be managed by powerful instruments for anticipating and acting on what might come to pass. While it was possible that events might overtake these models, such unexpected occurrences were rare and unlikely. Knowledge, focused through expertise and formalized through models, crafted a world of its own design in which thought was translated into action and departures from expectation could be tamed through the precision of mathematical prediction. But the highly unlikely has become increasingly familiar, the perfect storm a normal weather pattern.

This, at least, is the new ode to disaster. The methods of forecasting meant to render the world safe increased volatility and fomented overwhelming danger. In the multiple travesties of financial markets, the quantitative models devised to insure against unactionable risk succumbed to the interlocking debt instruments of their own creation. On April 20, 2010, the Deepwater Horizon well in the Gulf of Mexico exploded and leaked uncontrollably when the layered systems of engineers, the output demands of executives, and the safety protocols on-site suffered a mas-
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The earthquake and tsunami that struck northern Japan on March 20, 2011, breached the myriad warning and protective devices that would prevent and contain a nuclear accident. In New Orleans in the wake of the landfall of Hurricane Katrina on August 29, 2005, the levees broke, left unfortified by the engineering corps charged with their management yet discharged from the means of their maintenance. Wars against terror, in the aftermath of the hijacking of four jets-turned-suicide bombs on September 11, 2001, were ushered in based on unrivaled technologies of command, control, communication, and computation, only to become ensnared in the most forthright failure of intelligence regarding the presumed predicates for intervention.

While it may seem tendentious at best to link these various episodes together, and while their particular stories remain distinct, they each report on a limit to knowledge with catastrophic consequences where refined modes of expertise were most assiduously applied. Beyond the anxiety that the exceptional has become commonplace, apocalyptic terms applied to various instances of crisis, such as “meltdown,” “tsunami,” “bailout,” and “disaster,” blur the sacred and profane, the natural and artificial, to suggest a scale of problem that transcends human efforts of comprehension, let alone containment or redress. In each case, a question recurs: “If they were the smartest ones in the room, how could their intelligence have failed them so?” If the behavior was as extreme as the events they fomented and confronted were supposed to be unlikely, then the villains could be readily punished and the outliers banished. The normal order of things would be restored, and crisis would be put behind us, at least until the next installment of extreme occurrences converged on an unsuspecting public. What are we to make of so many rare occurrences that pile on top of one another? How are we to respond to extreme behavior that, on closer inspection, appears as a professional norm? Certainly, knowledge has always had its limits. The unknown has served as the beckoning call of inquiry. But what happens when that horizon of the unknown no longer looks approachable? How are we to orient to knowledge when the unknown threatens to overwhelm its very efficacy and reasonableness?

For centuries, the horizon of the unknown was a beacon to further discovery. Expertise, while subject to skepticism from within and without, was generally taken to be in short supply. The knowledge economy was predicated on a scarcity of labor even if knowledge itself was potentially infinite. The credentials and offices through which it was formalized and bequeathed were jealously kept as perquisites of rule. Credentials remain expensive for many, but by historical measure they have never been more
plentiful. Just as enclosure and dispossession provided the hands for bountiful industrialization, now kindred processes operate across those once autonomous fields of the professions. As with the prior proletarianization, this amalgamation and association of the work of expertise has been part and parcel of the expansion of what is now referred to as a knowledge economy. As we now live it, this ascent of capitalism generated vast surplus, some of it in the form of further wealth and another share that went to waste, whether as externalities, byproducts, and such, or the ruination of the very inputs on which it had so relied.

Can a similar story be told of the industrialization of knowledge and proletarianization of its production? Despite the best efforts of current rationalizers, gains in knowledge-based productivity are notoriously difficult to measure. Yet clearly more realms of human endeavor—more aspects of the planet and cosmos, whether large or small—are objects of knowledge. More people, more time, more space is dedicated to an expansive share of such materializations. But if knowledge presents its own challenges of measure, it is above all in what are the corresponding realms of surplus or excess, not simply of what remains to be put to use, but of what lies beyond utility. The unknown is the equivalent domain of waste in knowledge production.

The strong constructivist version of this argument would be that the myriad protocols of risk management evident across professional fields, from financial to energy engineering and from public health to homeland security, generate, foment, and constitute the very volatility they seek to master and profit from. A cursory glance at the revenue streams of hedge funds, energy companies, and security firms would seem to confirm this speculation. But if knowledge were so straightforward a translation from other modes of industrial production, then the challenges of accounting for its products might present no more than a minor conceptual nuisance. For the social and political observers of the prior great transformation, it was the shift in the very process by which life was lived—the forms of solidarity, the logics of rationalization, the character of association and interdependence—that was the most profound and abiding aspect of a new order devoted to maximizing the expansion of wealth, not simply how much gilt was created or who most attended its commandments. After all, from proletarianization sprang potent movements to lay claim to the very end of history; to craft the organizational means by which society might be fashioned; to imbue daily life with endowments of leisure, pleasure, and inventiveness.

And now, if knowledge itself is abundant—excessively, even dangerously, so—how might we understand the commensurate forms of solidarity,
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rationalization, and association? If the prior expression was that of a growing mass, occupying ever more space and accelerating forward in time (in a neat logarithm of progress and development), what social principles of space and time now obtain? More difficultly still, what if knowledge is now produced in such abundance that it cannot all be used, absorbed, applied, that its excess can generate crisis, catastrophe, disaster? What if the aggregated surplus of knowledge, the unknown, acts as a force of its own beyond the particular domains of requisite expertise? Just as the various forms of waste force an awareness of our planetary co-presence, the excesses of knowledge impose a sense of mutual indebtedness beyond the separate spheres of specialization in a neatly ordered division of labor. Regardless of whether the unknown that is the consequent surplus of knowledge production eludes measure, how might we understand the ways it shapes, connects, distributes our habits of being together?

Knowledge may be extended as a kind of credit, a promise of what is to come, but the unknown circulates as a type of debt, a way in which we are implicated in the works and lives of one another. My project here is to rethink the relation between contemporary ways of making wealth and rendering society, to pick up from what has been widely observed as a crisis of knowledge in an economy based on making it serviceable. As a consequence, the very architecture by which knowledge of the social has been made legible—the grand trinity that partitions economy, polity and culture—has come undone, and from these ruins issue all manner of challenge and possibility. I take seriously the approach laid out by Karl Marx in his critique of capital, where he opens his critique of political economy by asking what capital would say if it could indeed speak.

But capital today is not merely attributed the power to speak; it is presented as something that senses, touches, feels, embodies. Thus, a knowledge society is not simply about knowing. It also engenders ways of being that are key to the manners of affective, embodied, kinesthetic association. Much important work has now been done to bring these other materialities into the domain of politics, to demonstrate that what was once considered private is deeply implicated in what we realize as the public. But these contributions to a politics of value have been in scant communication with the value forms made familiar through the conventions of political economy. I want to think about this double relation of value as ways of knowing and being, thinking and embodied, indebted and associated, through what I take to be the current edge of capital and the contemporary transformation of the commodity relation—namely, that of the derivative.
More so than the commodity of the nineteenth century, the derivative appears as a magical or fictitious object, an ephemeral, chimerical specter that references a world that has become unmoored from underlying value, that cannot orient itself to what is real, that is obsessed with all that is spectacular and speculative. Yet as a means of bundling together attributes from disparate values, the derivative holds the key to the most salient mode of sociality of our moment, one that makes the future actionable in the present, that connects what is near and far, that assembles bits and moments together for appreciable gain, that melds circulation with production, that hedges knowledge against the unknown in ever more intricate indices of risk, that enables movement together from what is already in motion without first insisting on unity. Derivatives, the instruments of risk management that generated unmanageable risk, have been pinned with the blame for the puncture in our knowledge economy. Across an ideological spectrum, calls for returning to the real, to underlying value, can be heard. But lost in this din is a consideration of the principles of sociality that this pervasive derivative logic now visits upon us. If the derivative as the quintessential expression of commodified knowledge can bring us to the brink of disaster, can it also disclose what might rise from these very ruins, what is being assembled in our midst, what sensibilities and socialities it moves through and makes this life we know? Therein lies the aim in this book to press against the limits of knowledge, to divine in its excesses otherwise illegible principles of sociality that can be discerned and disclosed by tracing certain social logics of the derivative.

This book is in some ways the summa of the work I have undertaken over the past twenty-five years. It draws together the analytic approach I developed in my first three books to employ the performing arts (dance and theater specifically) as an optic or analytic lens to engage the inner movement of politics that is not readily detectable by standard social science frameworks and my subsequent effort to negotiate the aporias and divides through a rereading of Marx with interest in the operations of finance and knowledge as a feature of daily life, global reach, and higher education that I have considered in my last three books. *Knowledge LTD* treats as its point of departure the predicates and entailments of a series of disasters that have come to prominence since the massive bailout of the U.S. banking sector in 2008. There have been the subprime meltdown, the storms and tsunamis, but also the sovereign debt crisis of Europe, the impasse of governability in the United States, the seeming cancellation of the American dream for so many, the imperial retreats in Iraq and Afghanistan—all of which would
seem to point to not only the limits of knowledge to master its conditions but also a waywardness with respect to mastery as such.

Many have been harmed by these events, and more doubtless will be placed in danger as the prevailing frameworks for devising and applying knowledge come to ruin. This is not to say that all is new or different, that all is ruptured, and there are no continuities. Quite the contrary: Old historical forces never seem to fully disappear. Rather, their intensities vary, with their efficacies rearranged. Some three billion people work the land as peasants and nearly an equal number undertake wage labor, while those engaging emergent forms of value creation and circulation—networked, independent, do-it-yourselfers—are but a small slice of the global population, even as the fates of these constituencies are entangled in unprecedented ways. So much of disaster and crisis is told as a story of rescue and recovery, an orientation that yields a desired return to normalcy, even as the underlying norms and references shift. Divining what is different and what can be made of those differences is the greater analytic challenge. Hence, while not ignoring the disastrous events, the focus here is on the effects those events have on architectures of knowledge as such.

Rather than assuming that the levees can be repaired and rebuilt, this book explores what the terrain of the social looks like when the waters have over-spilled their banks. This, it should be noted, is the etymological root of derivative—from the French de-ri
e— for the flow of water to exceed the limits of its embankments. After the waters have receded, the ground has stopped shaking, the winds have abated, and the leaks have been plugged, the landscape is certainly changed. More pointedly, our access to the social, our way of giving it shape and design as an object of knowledge of our actual and imagined condition of being together, of being an “us” or “we” that is oriented and orients activity at scales both too small and too large to see, may also have become dramatically reconfigured. The relation of how to what we know that enables us to know ourselves in our interconnections, interdependancies, and mutualities of debt describes what is meant here by a social logic.

Treating the derivative as a social logic invites an approach to knowledge after its boundaries have been breached, its means of enclosure violated. It is in this regard that we can inquire into what the state of affairs is after economy, polity, and culture—not that activities of production and circulation have disappeared, or that power no longer exists, or that there are no more expressive means for making sense of the world. Instead, there is an abundance of wealth amid a scarcity of generalizing its availability; political sovereignty appears stymied and occluded against a mobilization
of myriad critical dispositions, a fracturing of shared values and common norms in the face of a proliferation of means for making sense and creating forms and flows of life.

Giving a name to these dynamics and the conjuncture that forms the present is always unwieldy and never unproblematic. On the one hand, if knowledge always has limits, how can we understand the consequences for politics and society today? In terms of conjuncture, of an assemblage of factors and forces that slice through the present with connections to larger processes of social transformation, finance as we know it emerges from the ruins of the financial arrangements that came undone in the early 1970s. In terms of rationalizing economic activity, finance has been ascendant over these past forty years, and derivatives themselves are taken as financial instruments used to manage risks to enhance return on investments. During this time, not only corporate strategy but also domestic and foreign policy and cultural and creative innovation have been oriented around various approaches to rendering risk generative and productive. In this respect, daily life seems to have undergone a process of financialization, where what once belonged to bankers’ boardrooms now seems to have escaped and colonized the rest of the world.

Yet derivatives as ways to hedge against variable future economic outcomes have antecedents that extend back thousands of years. The term itself is used in many fields, from mathematics and music to medicine, with various meanings. But if derivatives at their root have to do with some kind of overflow, with the disassembly of some whole into parts and the bundling together of those attributes into something that moves away from or independently of its source, then finance may turn out to be less the originator of this social logic than a particularly prominent expression of derivative principles at work. Careful scrutiny of finance, just like Marx’s attention to capital itself, yields this double session. Finance not only focuses, articulates, and disseminates a social logic of the derivative but also achieves its potency as a consequence of that very sociality. The social logic of the derivative is therefore a kind of epistemological hedge against the claim that a form of capital is the first cause of all social life, but that it rests on and discloses a mutual indebtedness, a sociality that it requires but that it can neither abide nor sustain.

In the subprime mortgage debacle, hitherto excluded populations—especially women and minorities—would be enlisted in debt relations and then abandoned to foreclosure when their participation no longer proved profitable. This flight of capital from where once it nested and propagated is a persistent feature of its history of accumulation and expansion. The
migration is usually activated by some demands or contestation from those enlisted in the wealth-making scheme—be it slavery, industrial manufacture, or debt bondage. It is surely too soon to assay the political ramifications of these precarious and debt-distressed populations, but it is evident that the problems of credit and debt—of who can demand it, of who deserves it, of what purposes it can serve—are now features of the political horizon.

The most common way to understand these changes has been through the critique of neoliberalism, a triumphant ideology that replaces state with markets, public with private values, and a liberal consensus with a conservative hegemony. While the critique has been potent in naming a wholesale shift of political and economic culture that has spread from Anglophone roots to global dominance, it has frequently proved a tragic narrative. Neoliberalism laminates together an ideological formulation, a means for its institutional accomplishment (deregulation and privatization), and a capture of the popular imagination. For this reason, it has proved impervious to recognizing the very alternative and oppositional currents it seeks or to see such politics as always insufficient to its conditions and predicaments. By seeing in capitalism only disaster and crisis, this analysis, while compelling and comprehensive, has suffered its own crisis of value in thinking through the difference it might make to the existing state of affairs.

My concern is not to ignore these contributions to political thought but to engage a reenergized critique of capital in its derivative form to generate a view of the immanence of association and political potentiality that the present knowledge economy posits as its own limit.

The presentation of the book operates on these limits. Three long, perhaps excessively so, chapters stage a scene (set in the United States but gazing out at the rest of the world) by which the conceptual and practical integrity and autonomy of economy, polity, and culture is complicated and, in certain aspects, undone by forces unleashed through the social logic of the derivative. Chapter 1, “After Economy?” takes the architects of the financial bailout at their word, that what they knew to be the economy was on the verge of disappearing. By “economy,” they meant a means by which price making and profit taking—the inner life of the market—was self-regulating, separate, and distinct from the political realm of which they were the presumptive delegates. Of course, the very need for a bailout belied this claim, but the apparent restriction of the benefits of collateralizing tax coffers to the private interests who held fiduciary claims on depreciated corporate holdings compromised the notion that economy integrates and aligns the interests and activities of the whole population—across the
divide of labor and capital. From this perspective, the bailout is not a rescue of the economy, but an escape from it for those who once reaped its greatest rewards. Derivatives were at once the unmaking of this unity called economy and the means through which cardinal relations of price making and profit taking, information and regulation, wealth and population would be reconfigured.

Rather than its origin, the financial bailout could be taken as the apotheosis of the scrambling of public and private interest. No doubt, the effacement of the clear boundary that separates general will from particular need—if, indeed, it was ever intact—has been decades in the making. Winning presidential candidates were promising to end government as we know it long before they woke up to the horror that this dream had come true. If the political had rested on the distinctiveness of a public domain, then it has become increasingly evident that the public is a quandary. Chapter 2, “Public Quandary,” considers three quandaries that are in common but also contrary use across economy, culture, and polity. The public is a kind of good made in a certain place, the nonprofit sector. It is a perspective on the people that situates a way of knowing all through the measure of a few (either at the volatile center or the shifting outlier). It is also, in its political expression, an interest, a value given to gathering, a capacity for critique.

The public in many ways is now a derivative of private values. Yet what is called private relies on and crafts all manner of public presence, whether to expand markets, maintain a healthy business climate, or enlist further participation in the glistening malls of subjectivity. The institutional expression of public goods, the so-called third sector situated between state and market, lies in nonprofit organizations. Yet on closer inspection, much of this autonomy for nonprofits belies the very manner in which they articulate a relation between government and business and, by means of tax-exempt philanthropy, place citizens in the situation of acting in judgment as to what merits public attention. A similar antinomy is evident in the evocation of the people through means of ongoing assessment and measure through such devices as public opinion polling. While such devices purportedly aggregate populations into the central tendencies of their common dispositions, the suffusion of the public sphere with these technologies of measure has yielded an emphasis on outliers, exception, and celebrity. This effacement of public opinion in favor of an orientation toward celebrity does not quell critical dispositions or render the populace quiescent. Rather, incessant measure without reference to underlying value yields a volatility of public opinion, the profusion of voices that noisily occupy our deliberative domains, and fueled by manifold claims to expertise, to means
of representing and generating voices to be heard, the contours of this public body are manifest as a kind of excess criticality. Rather than seeing the public imagination truncated in defeat through what has been called the culture wars, I want to treat the surplus of knowledge production as generating a form of excess criticality. Making sense of this critical presence is full of traps and perils. Here too, the standard measures of public voice, statistical measures from opinion polls, still what is otherwise critical or excessive in the very voicing of the public.

Finally, I show that these alternative sensibilities are legible in embodied movement-based practice but not restricted to it. To do so, I turn to a related range of movement practices that emerges with the destruction of the old financial architecture in the early 1970s. I play on the shift between lost currency sovereignty and new forms of distributed sovereignty that derivatives make concrete. These movement practices—postmodern dance, boarding culture, hip-hop—do not share an aesthetic or genealogical link. Instead, they are connected in derivative fashion through what I term a “de-centered social kinesthetic.” In privileging a dance analytics to sketch the terms of a historical conjuncture, Chapter 3, “De-centered Social Kinesthetics,” examines what I call a social kinesthetic that emanates from a decolonization of the body. Western concert dance incorporated features of sovereignty; King Louis XIV formalized ballet steps by commanding his vassals to imitate his very moves as a descendant of God. Martha Graham fashioned a modernist esthetic based on a technique, the contraction that signaled an infinite depth in her self-making genius. In both cases, verticality ruled as a universalist conception of bodily sovereignty was promulgated.

The decolonization movements that swept north and south in the long sixties (1956–1975) were palpable in a range of innovative movement practices as well. Postmodern dance flourished amid abandoned industrial loft spaces of lower Manhattan; hip-hop emerged from decaying social housing and infrastructure in the Bronx; boarding culture moved from the collapsed beachfront play lands and precincts of Santa Monica and Venice (California) suburbia. Finance as we now live it also emerged from the ruin of the colonial order, not simply the loss of currency sovereignty in the form of the dollar with the breakup of what had been the international financial architecture (1971–1973), but also the creation of options-based revenue streams, mutual funds, and other financial instruments. The financial and movement practices responded to the collapsed verticality with an emphasis on lateral mobility, which is particularly evident in the three movement practices named earlier.
Rather than sharing a style or influence, these movement forms are derived from other practices (the pedestrian, slave dances, and the indigenous Hawaiian practice of surfing), but they are also connected and animated in derivative fashion through their bundled attributes of flying low, reversibility (on hands and feet), ensemble-distributed esthetics, and an embrace of risk as reward. This non-probabalistic, non-stochastic conception of risk, grounded in other notions of self-appreciation, mutual indebtedness, and distributed possession, makes legible a range of outcomes for this social logic of the derivative that differs from the ones that take finance itself as its only means of account. I trace the ways in which this other way to make value through movement emerges from the ruins of the old financial order, one that also, in the cases of these particular practices, affects urban space in the form of deindustrialization, suburban decay, and the collapse of social housing.

Finance has as its root the French word *fin*, the end, or to bring a trans-action to an end. Its history has been one of ruin, of persistent and recurrent crisis from which the provenance of wealth is restored. From these ruins have arisen not only species of precarity and human misery as populations have been cleaved from their means of social life but also new means of association in which population might emerge as sovereign in its own right. The etymology of the word “population” bears meanings of both “to ruin” and “to people.” This book aims to derive the value of the latter from the unwanted conditions of the unknown that accompany the former.