

CONTENTS

PREFACE TO THE ENGLISH EDITION 9

INTRODUCTION: THE ENIGMA OF THE MARKET 15

From the Streets of London . . .

. . . to the Strip in Las Vegas

I FROM INTERFACE MARKETS TO MARKET AGENCEMENTS 31

What Is a Market?

The Interface Market Model

Toward the Model of Market Agencements

Chapter Summaries: Understanding Markets as Framings

II THE PROCESS OF MAKING GOODS MOBILE AND ALIENABLE 63

I THE PROCESS OF MARKET PASSIVA(C)TION

Spaces of Circulation and the Careers of Goods

Disentangling Things from a Density of Associations

Framing Reentanglement: Passiva(c)tion

Nonmarket-Oriented Passiva(c)tion: Keeping while Giving

Market-Oriented Passiva(c)tion: Disentanglement with Detachment

The Problem of Property Rights

**II MARKET-ORIENTED PASSIVA(C)TION IS A NEVER-ENDING ODYSSEY:
THE TELLING EXAMPLE OF COMMODITIES DEEMED FICTITIOUS**

Human Labor

Land

Money and Its Derivatives

The Passiva(c)tion of Certain Living Beings

Some Final Remarks on Overcoming Trials of Strength in Passiva(c)tion

- III AGENCIES AND THEIR QUALCULATIVE EQUIPMENT 149**
- There Are a Multitude of Agents with Different Equipment
 - Enriching Our Description of Agents and Their Equipment
 - From Calculation to Qualculation
 - Qualculative Agencies
 - Some Examples of Diverse Agencies and Their Equipment
 - Power Dynamics between Agencies
 - Qualculation Devices Are the Equipment of a Habitus
- IV ORGANIZING MARKET ENCOUNTERS 201**
- Encounters Create Value
 - Encountering Platforms and Their Networks
 - Platforms as Exploratoriums
 - Singular Multitudes
 - Matters of Concern
- V AFFECTIO MERCATUS: ATTACHMENTS AND DETACHMENTS 245**
- Searching for *Affectio Mercatus*
 - How Goods Get Attached and Detached
 - Three Attachment Devices for Engaging Goods
 - More and More Attaching Attachments?
- VI PRICE FORMULATION 287**
- Theories of Pricing in Interface Markets
 - Price Formulation
 - Price Formulation Singularizes Goods

Why Price Competition and Nonprice Competition Is a False Distinction
How Price Becomes a Tool for Ranking
Formulations Are Everywhere
The Power of Formulas
Confronting Formulas
How Problems Can Incite Demands for Reformulation
What about Morality?

VII HOW DO MARKET AGENCEMENTS EVOLVE? 355

Why the Term Market “Agencements” and Not “Dispositifs”?
An Agencement Acts
There Are No Market Agencements without Nonmarket Agencements
The Dynamics of Concerns

VIII THE ROLE OF THEORIZATION IN TRANSFORMING MARKETS 387

Theory as Contribution to the Expression of Concerns: Reopening the Debate
about Financial Markets and Their Design
Avoiding the Worst: Climate Change Policies and Theoretical Realism
How Market Agencements Coexist: The Case of Genetically Modified Crops

NOTES 427

INDEX 499

INTRODUCTION

The Enigma of the Market

La coutume, en faisant un livre, c'est de commencer
Par un petit préambule et en voilà un.
—Marivaux, *Le paysan parvenu*

FROM THE STREETS OF LONDON . . .

“Dolls that THINK together, dolls that LAUGH together, dolls that CRY together, dolls that DRINK together. NOT sixty—I’ll give you your bus fare home if it helps you. NOT fifty, NOT forty, THIRTY-FIVE IS CHEAP, NOT thirty-two fifty, ’ere, an’ to CLEAR ’EM, I won’t even charge you thirty. HALF THAT [BANG] FIFTEEN POUND THE PAIR.”¹

The streets of London, mid-1980s. Science and technology studies scholar Trevor Pinch is there to try to understand the mechanisms of an activity almost as old as human societies. The British call it “pitching.” How do you convince a random person lost in thought—it could be you, it could be me—to develop a sudden enthusiasm for perfumes with unfamiliar names or an avid interest in Chinese porcelain seen a million times before? How do you get them to be attracted to ordinary bath towels, to feel a sudden emotion at the sight of banal kitchen utensils, or to be drawn by compositions of freshly cut flowers? In short, the activity involves producing *cupido emprix*, the passion, the fever to acquire, in this passerby. Not only to interest them, attract their attention, divert them from their trajectory, persuade them that all this is good for them, that they need it, that they are in a state of lack, but above all (because at that point, the outcome might be theft, barter, or gift) to convince them to shell out cash. If that does not happen, the pitcher will have pitched in vain.

The seller's ultimate objective, his holy grail, is to lead a stranger to engage in a market transaction. Whether this challenge is taken up by the pitchers on the streets of London or the engineers and sales representatives of Renault, Fiat, Samsung, Apple, or the French telecom company Orange does not make any difference: the nature of the solutions they must invent are the same. What is true for the street vendor is even truer for high-tech companies that have to create demand for products no one had yet dared to imagine. The questions a street seller must answer every morning are the same ones that any multinational company has to face daily. The former merely does so with a great economy of means, counting only on himself, like a magician with nothing in his hands, nothing in his pockets. As Pinch understood perfectly, street sales make more easily visible what complex modern organizations tend instead to render opaque and difficult to decipher.

The pitcher experiments, observes, interprets, and transforms his practices. He has to make a living off this work and live by its daily repetitions. If the quality of his observations leaves something to be desired, if the lessons he draws from the experiments he attempts turn out to be irrelevant, if the actions he decides on are inappropriate, he faces failure and finds himself at a loss, helpless in front of a crowd that evaporates in an instant. Pitching is a full-fledged trade and it needs to be learned. There are, indeed, training courses for beginners. Neophytes start by learning by heart a spiel drilled into them by an elder. They also train at organizing the material space in which they will operate. They practice the scenario they will follow. Experienced pitchers can be spotted by their capacity to adapt, their talent for improvising, but above all, by their way of structuring the action, which, as Pinch describes, runs through four successive stages.

The first stage aims at constituting an audience, or, better, an interested public. Pitchers speak of "building the edge," alluding to a Cockney expression that plays on words to refer to the English expression "hedge and ditch," designating the practice of limiting a terrain by hedges and ditches in order to ensure one has a hold on it. Once this is accomplished, the anonymous flow of a lonely crowd gives way instead to an agglutination, a limited space occupied by those who have been diverted and grouped together, set aside from the current, extracted from the continuous flux. This space, which is circumscribed by a sort of invisible border, porous, but not too porous, will become

the pitcher's field for maneuvering. Creating the *clinamen*, the diversion that allows for a first coalescing, is neither obvious nor natural. As Pinch observes, inducing the first person to stop is a delicate venture.

Multiple strategies are elaborated to facilitate this first diversion, the first stepping aside. The pitcher can, for instance, call on an accomplice to stand ostentatiously in front of the stall, or he can sacrifice goods, giving them away to those just passing by, who then play the part of a fixation abscess. Once the first potential clients have been stopped in their blind rush, they must not be lost, since they will serve as bait, or *réclame*, to use a French word from falconry that refers to the lure that induces the bird of prey to return, but equally refers to an advertisement. "Closer to me, closer to heaven," says the hawker. Humor plays a crucial role in the whole process, capturing and fixing attention. And price figures early on in this process of catching people's attention because, as Pinch underlines, the customer's mind must be prepared. No tricks or false hopes. No pretense that any favors are being done. "Look at the prices, you'll never believe them. They're the lowest ever seen." The stakes are established immediately: not only is one there to buy, one is there to buy not goods, but a price.

This is therefore the first point the street seller must make, and since what is for sale has not been mentioned yet, he explains why it is so inexpensive. "These jewels belong to a guy who took off for Spain with my wife; since he's taking care of my wife, I've decided to take care of his things." The scene grows more crowded. Henceforth the seller, his assistants, and the customers are no longer alone. New characters have invited themselves in: the seller's wife, her lover, and the jewels, which the seller—who can blame him?—has decided to get rid of, since he cannot get rid of the lover. When it comes to clothes for sale whose price needs to be justified, the pitcher invokes the London department store that went bankrupt and was forced to sell off luxury items at bargain prices. Each good is thus inscribed in a story that explains why it is a good deal—and the story does not matter much because no one quite believes it. When in the market in Sarcelles it is said, with a little smile, that the pair of Ray-Bans or the Hermès scarf being sold at rock-bottom prices fell off the truck, highlighting in a striking phrase that the good's career is complicated, that it followed an exceptional path, is it not that career that, making it unique, determines its value? The good, even if it looks like a thousand others, even if

it is only one copy, is actually different because of this history, which has led it to this particular stall on this particular day. It has been made particular, or, as I would put it, *singularized*. Extracted from the anonymous crowd by the twists of a plot, it, in turn, contributes to extracting from the anonymous flow those particular customers whose attention is caught and who begin to take an interest in this particular good, rather than any other.

Price is proof of this singularity, sometimes the only proof: “Look at this garment. It’s not even worth thirty pence, not even twenty pence. When I tell you the price, it will knock you over!” This dress, which looks like so many other dresses, is made different by the simple fact that it is offered at a different price. The pitcher turns things around, going against the grain of everything that is generally said about markets. It is not the case that there is the dress, on the one hand, with its intrinsic properties (color, style, and so on), and the price on the other, external to the dress and determining its value. The price is attached to the dress; it is one of its qualities. The dress is red, has a plunging neckline, and is not . . . expensive. The customer did not get interested in *a* dress but in *that* dress, the one that is not expensive. And that is no doubt the reason he let himself be roped in, the low price of the dress being a result of its singular story, a story he does not yet know, but that he guesses between the lines of the pitcher’s speech. No dress is quite like any other; this unique character helps put the customer and the dress in a singular relationship to one another, a singularity that hails the gawker, saying, “This one’s for you.” Throughout the warm-up that leads to the transaction, the singularity of this relation will be maintained and developed by the third actor in this event: the pitcher.

After the first framing operation and the constitution of a gathering in which each person expects to get a personal deal and already knows they will have to pay to make good on the deal, the second step can begin. Speeches are one thing: they can convince, excite curiosity, pave the way for a positive decision. But then there are also the things themselves. A relation is not just a matter of intelligence, reason, and calculation. It supposes a physical attachment. To get the customer to shell out money, he must be touched deep down, and for him to be touched, the simplest thing is to invite him to . . . touch, test, feel, stroke, so that all his senses are solicited and solicit him to ensure that the good enters his life, to become an integral part of himself, to transform and constitute his new identity. The customer must be affected. The pitchers

in the streets of London call this the “flash” and, they add, “Flash means cash.” The pitcher strokes the necklaces and earrings, offers a whiff of perfume to a lady whose age makes one surmise she has smelled and inhaled many others over the course of her existence; he invites an onlooker to manipulate the towels, crease the materials so they reveal their softness to the onlooker’s expert fingers; he demonstrates the exquisite delicacy of the china by placing behind it a candle that the customer discerns through the transparency of the material. The goods’ qualities (or at least some of them, since some must be hidden in order to put others forward) are made evident, palpable, graspable, and thus add to the promise of rock-bottom prices, the first quality around which the others gravitate.

The better to showcase, put forth, or make explicit the qualities of their wares, pitchers attend to the presentation, playing with different dispositions, piling up towels on this side so as to make obvious how soft and supple the fabric is or composing on that side pyramids of bracelets that set off one another’s value, just as a book’s value is drawn from the collection it belongs to, from which it is detached with an exlibris proudly underlining the connection. Singularity is formed from comparisons and the groupings that are suggested and materialized on the seller’s stall. To insist on the importance of the material demonstration of qualities, pitchers claim that “what cannot speak cannot lie.” It is not enough to state the facts. Rather, just as in laboratory research, facts must be shown, demonstrated, tried through an experiment that tests the properties and reactions of the substances or entities involved. The vendor may thus efface himself behind the mixer that “does everything by itself,” and he proves it by showing it. Or throws the plates in the air to show off how robust they are.

Henceforth, these goods have been rendered desirable, their qualities have been demonstrated over the course of a series of trials that involve the body and the five senses of the customer and have in the end (perhaps) affected him so strongly that he no longer can contemplate breaking the links already established between himself and some of these goods. He agrees to pay to obtain them. All that is left is for the price, which none but the vendor knows, to be affixed.

The formulation of a price, that is to say, the determination of a number that the customer knows at this stage to be the lowest found in the market (the

market thus appears in the background, a décor to highlight and contextualize the action), is set by going down the price ladder, step by step. Hawkers refer to this descending movement during which prices are broken one after another as “ramping.” First, prices as set by competitors are announced, either by the pitcher, by a customer, or by a carefully primed accomplice. The pitcher also brings in the prices quoted in catalogs he shows or passes around. Remember the twin dolls at the beginning of this prologue and the final price—fifteen pounds for the pair—that the pitcher reached after having gone through all the prices that would have been reasonable, but that he swept aside. Each time a price is announced, the pitcher hits the table in front of him with a large stick that looks like a baseball bat. When he reaches the price he has chosen, the bang is even louder than the previous ones, putting an end to the batting process. Prices are knocked down, literally as well as figuratively. Each time a new and lower price is announced, the pitcher asks who is interested. Hands are raised. More and more hands go up as the beating (produced by the blows) and the beat (as in a musical beat) of the prices progress. In order to transform the interest (evidenced by raised hands) into a firm commitment (consenting to pay and paying), the pitcher announces a new lowering, which further heats up the crowd. The beating and the beat ring out like a military march that brooks no retreat and pushes the gawker to pull bills from his pocket as though that were an inevitable gesture, the logical conclusion of a gradual and collective commitment. Turning back would be to abandon one’s word or to contradict oneself. Having agreed to a higher price, he can only accept to pay a lower price.

The customer feels compelled to buy. It is hard to find an adequate expression for this process, an expression that captures its intimate logic. The pitcher holds out the bag into which he has placed the clothes or the china, or even the dolls, with their tinned laughter. An onlooker grabs it, and it is passed from hand to hand until it reaches the person whose hand had been up throughout the price batting. Did he decide, or was he made to decide by the *dispositif*—the staging and the devices?² Obviously it was both. Were he to go back on his word, he would lose face; he does not want to go back on his word. The deal is sealed, in the bag. The will to buy belongs to him, but it belongs just as much to the assembled crowd that passes the bag along until it reaches him or to the showman and his demonstrations, his know-how [*savoir faire*], and

his knowing how to induce [*savoir faire faire*]. It is clear how impoverished the usual representation of the transaction is when it presents this transaction in terms of a supply and a demand, elaborated and constituted independently of one another, external to one another, simply meeting in such a way as to produce an agreement.

How insufficient is the idea that the price measures a value, when it in fact participates in the constitution of value? (I will return to this point at length because I know it may be hard to grasp.) We all remember the syllogism our philosophy teachers presented with a sly smile: everything that is rare is expensive, a cheap horse is rare, so a cheap horse is expensive. But what if the economy of markets actually rests entirely on that syllogism, which seems lame only to those who have understood nothing of the ways markets function? Transforming a dress, twin dolls, or a china plate into a unique and singular piece destined for that particular customer or setting up a device that makes the meetings between each of these goods and a client extracted from the anonymous crowd into a unique event, is that not to create a rarity, an extreme rarity? And when that singularity, when the uniqueness, is largely (although obviously not only) the price, a price below what can even be imagined, the miracle happens: what is cheap is dear to me. The pitcher knows what all merchants the world over know, but that those who theorize about markets sometimes forget. The price is on sale, no more, but no less, than the china's delicacy, the fabric's softness, or the dolls' performances. The formulation of the price, the ramping that runs all the other market prices before our eyes, is an attempt to make the good as dear as possible in both senses of the term: cherished and expensive.

The pitcher's commercial activity does not end with this first purchase. For the activity to be profitable, other clients must come forward while the logic of singularization that produces the aforementioned rarity is preserved. This is the fourth step. The vendor faces a daunting dilemma: how to reconcile a mass market—he must reach a certain sales volume to hope for a profit—with goods and transactions that he so successfully singularized? To refer to the solution they devised, street sellers speak of “twirling the edge.”

This twirling allows the pitcher to catch the attention of those who are still on the far side of the border between the general public and those onlookers who are already interested. It aims to recruit new customers, to push farther

into the clustering of people and to transform them into customers. This requires competence, know-how, and a specific type of work. The whirlwind of the sale chalks up sales so as to increase the quantity of goods sold without compromising the singular dimension of each transaction. The pitcher shows us the most fundamental of strategies, the one that includes all the others. He moves about through the proxy of assistants. While he takes care of one buyer, he shouts, "Over there!" to his assistant, pointing to an onlooker who seems ready to join the audience assembled around his stall. The assistant flits among the gawkers, twirling to induce them to join the ongoing demonstration. Meanwhile, the pitcher, ready to welcome the newcomer, must not lose those he has already begun to ease toward a commercial transaction.

The twirling of the sale makes it clear that there are not, on the one hand, personalized markets, and on the other hand, anonymous mass markets where everything is alike and simply adds up to create sale volumes. Mass markets should always be perceived as juxtapositions of a myriad of bilateral transactions. The challenge facing all those who live by commercial transactions and give life to markets is to produce the mass from singularization without losing the latter in the process.

This reveals market dynamics clearly. A supply is not a given, preconstituted block that faces an equally set block, that of a demand. Supply and demand emerge and express themselves over the course of a continuous process. They are constantly in motion. They are inscribed in a space, delimited by the borders of the audience traced out by the vendor; they unfurl over time, the time that unfolds through the eddies of the sale. These eddies give a form to the deployment of the sale that can overcome the apparent contradiction between quality and quantity, between, on the one hand, bilateral transactions and the singularization they require and, on the other hand, their aggregation and massification. The clients were not already there, defined as such, waiting to respond to the pitcher's call. Their number is not a given. Working simultaneously on the clustered crowd and conquering new clients by twirling: this is the program for any seller worthy of the name.

Over the course of the quest for the transaction, the importance of the material framework becomes clear. The pitcher, set up behind his stall and raised on a stage that gives him an overview, sees everything; he supervises the sale space. He dominates the battalions of pedestrians flowing by, and he

identifies, a bit like profilers at the entrance of nightclubs, those whose pace slackens or whose head turns; he sees the hand go up and the commitments of potential buyers; he delegates to his assistant the mechanics of the transaction and money collection, but he also sends him to the front to attract those pedestrians who are hesitating. With his loudspeaker, he imposes his speech and masters the sonic space. He sets up his word as the dominant discourse, relaying and amplifying customer questions and the answers provided.

This is how one sells what, to a hurried observer, may look like hundreds, thousands, or millions of copies of the same object, but that from the point of view of the sellers and, let it be added, the buyers, is a succession: a multitude of separate transactions, each distinct and different, are juxtaposed in time and space. The fiction of supply and demand curves crossing in the single plane of a sheet of paper, collapsing time and space, does not hold up in front of the reality of the devices required to produce this intersection—I should say these many intersections—by deploying, unfolding, both *space* and *time*.

... TO THE STRIP IN LAS VEGAS

The bilateral transaction is at the very core of markets, their ways of functioning, and their developments. The constantly renewed challenge to which markets find practical solutions is to singularize, ensure payment, and multiply the number of transactions. The solutions imagined by street hawkers have general value. The four steps Pinch describes, which are recognized by the sellers themselves (building the edge, flashing, ramping and batting, twirling the edge) can be found in every sector of market activity. To be convinced of that, one need only take off for Las Vegas and its topography of addiction.

Gone are the pitcher's china cups and dolls afflicted with pathological empathy. Here is Las Vegas, shimmering like a mirage in the middle of the desert, with its casinos, its rooms in which slot machines unfurl as far as the eye can see, lined up next to one another, all alike to untrained eyes, but to untrained eyes only. Let us listen to anthropologist Natasha Schüll, who surveyed those game rooms for months, followed and interviewed dozens of gamblers, from the occasional gambler to those who lose body and soul to it, met the architects who designed these sites so as to trap the customers, the computer scientists who assemble microprocessors and write the

algorithms that get better and better at capturing gamblers and their money. It is a game of cat and mouse in which the mouse knows it is a mouse and is happy to be one, and the cat is a cat that knows it is a cat and sees in the mouse nothing other than prey that should be captured under other cats' very whiskers.³

What do Pinch's London and Schüll's Las Vegas have in common? At first glance, nothing, or almost nothing, except that money is exchanged for good or services. One is a primal scene, the other modernity in its tackiest, most cynical, most elaborate, and as some people denounce, most amoral version. Yet there is no qualitative leap between the two. The same obsessions dominate on both sides of the Atlantic: deflect, capture, attach, make pay by singularizing goods and, with them, those who will be their beneficiaries, and then multiply bilateral transactions to build up sales volume. The street sellers in London help us understand Las Vegas; Las Vegas helps us understand both the street sellers and capitalist markets.

First step. What Las Vegas, its casinos, and its slot machines attempt to deflect is not the flow of pedestrians hurrying toward their daily occupations. If one took a bird's-eye perspective, one would see the masses rushing to travel agencies, checking out tour operators, buying cheap plane tickets on flights specially chartered by Las Vegas casinos that offer them slash-priced rooms; one would see crowds, hypnotized by the Strip's lights, in procession from the whole world toward gambling's Mecca, letting themselves be swallowed by the majestic entrances to Caesars Palace, Excalibur, or Paris Las Vegas, letting themselves be carried along through the labyrinths that lead them to the slot machine rooms, allowing themselves to be caught by one of them in order to take possession of the place that has been saved for them, specially designed for them. Here they are now, finally crossing the threshold to heaven... or hell. Here they are now in the "zone," as gamblers call the space around the machine, cut off from the rest of the world, a space that becomes their habitat, their ecological niche. Building the edge. The mouse is now within reach of the cat's claws, already consenting, open to being played with by the cat through the slot machines. The machine's virtual rollers slide over each other in a digital-mechanical din; the ruthless face-off, the dance, can start. The choreography of this dance has been practiced hundreds and thousands of times. The space has been rarified, folded back on itself. All that is left is a

singular point, the point of contact between two agencies, the one that plays and the one that makes play.

Molly is in the “zone.” She’s fed up with turning in circles, dragging her existence like a ball chained to her ankle from one slot machine to another. She draws a map. She starts in the top left-hand corner of a sheet of paper with the MGM Grand, the casino where she works. A little lower to the right she draws the 7-Eleven, the gas station where she refuels and where, when she’s filled her tank, she plays the slot machine lined up there like a reminder, just to relax a little and take the edge off her impatience. A little lower down, the Palace Station crops up, her neighborhood casino, where she gambles in the evenings and on weekends. Next comes the supermarket where she shops on weekends and gambles for a handful of minutes, just so as not to lose the touch. Then her clumsy fingers, more accustomed to pushing the button that allows her to sever contact with the world than to hold a pen, draw the clinic from which she gets the medication for her anxiety. Finally, in the bottom left-hand corner, the last step before the loop closes back on itself and another circuit begins through the same steps, is the building where she goes to Gamblers Anonymous meetings every Wednesday evening. Molly then traces the path, or one should say the bumpy route, that connects all these sites. Finally she finishes the map by drawing herself in the middle of the space she has delimited, sitting in front of a slot machine. No exit—she doesn’t want one; what she wants is an absolutely closed-off space, the space of compulsive consumption in which she gives herself over to what she knows is a vice and that she struggles to fight with molecules and collective expiation practices. As we will see, the casinos have calculated that a gambler who pursues her path, from remission to relapse, is more profitable than one who lets out all the blood in a single session. Casinos prod users they way a cat prods a mouse with its paw to ensure the latter is still alive. When it becomes clear the user has somewhat revived, the casino brings out its claws. From this perspective, therapy is not necessarily an antidote to addiction; it is one of its essential components, financed by the casinos. One goes back and forth between one and the other the way one can go from mall to mall, run from one errand to the next, or go into debt from one loan to another while giving oneself breaks, allowing oneself the pleasure of a cup of coffee while sitting at a terrace to catch one’s breath for a few minutes before diving back into the crowd that is

going in circles, rushing, and from which one is extracted for a moment, but only for a moment.

The capture of a gambler who delights in staying in the “zone,” a sort of black hole where forces are reversed and keep her prisoner, has been calculated precisely. Organizing the tracking and the catch requires sophisticated devices: a group of human and nonhuman beaters far more complex than the hawk’s assistant, but carrying out the same tasks. Once attracted into the “zone,” the customer has to be kept there so that she doesn’t escape, at least while she can still be used. When they describe this capture, gamblers talk about being hooked, caught, harpooned, bewitched, or about becoming junkies. As in the streets of London, the capture is effected by gaining hold of bodies and minds. There, to touch the customer, to attach him, he had to be allowed to touch the cloth, encouraged to finger it. Here, the task is a little more complicated: one does not fall in love with a slot machine as one does with a smiling doll or a piece of lingerie whose crazy story and silky texture get the better of you. To ensure the hold and to make it as active as wished require more preparatory work, studies, behavioral observations, brain imagery. It requires starting from the observation that all slot machine experts now share as though it were obvious, although there is nothing self-evident about it. What Molly, like all her fellow gamblers, is looking for is not only or even mostly the pleasure of the bet, the frisson that runs up her spine for the few seconds before the virtual rollers come to a stop. None of that is what she desperately seeks. Rather, she is looking for escape, for being able to cut herself off from the rest of the world, detach from her life and her environment. “You who enter here, abandon all hope.” As Molly puts it, “No exit, no escape.”

Once gamblers are in the “zone,” once their territory has been circumscribed and the borders traced out, the gambler has to be kept, has to be attached to the machine; in other words, things must be managed so that she becomes attached to it. The flashing—a little more complicated than in London with china and cloth that can be touched. Here there is none of that. But for a good engineer, a good psychologist, a good architect-designer, a good computer scientist, no challenge is too daunting. It is worth rising to this one. What needs to be done especially is to carefully define the profiles of a good candidate for addiction in order to attract and attach her and then to take care of everything from the music to the smells, to compose an atmosphere that

provides a bubble for the gambler, providing all the nourishment she might require and protecting her from the rest of the world. Carefully eliminate every perturbation, any parasites. Casino design professionals think of everything. For instance, it often happens that a gambler does not hold up to the pressure and succumbs to a heart attack. What has to happen at that point—and many studies, as well as lucrative contracts for those researchers who landed them, were required to figure out how to set this up—is for the unconscious guest to be whisked away immediately without upsetting other players. Cameras, control centers, nurses, stretchers and defibrillators that can be reached within seconds, dexterity at eliminating the body without a sound. And it works. You can watch it on the screens: the other gamblers do not notice a thing. Lost in their machines, it is as if they have been disconnected from everything around them. Like the one who fell beside them, they are cut off from their environment; unlike him, they are lucky enough to be able to continue.

The observation systems for behavior and the great amount of accumulated data make it possible to singularize the attachment; it is made to measure. One can figure out the pain threshold for a particular gambler, whose name one might not know, but to whom the facial recognition software has assigned a number in order to be able to track him. When the threshold beyond which he may not be able to withstand the pressure is reached, the algorithms pull back, the sequences of gains and losses are recalculated to bring down the pressure without thereby giving up on siphoning off the bank accounts. The state of equilibrium, what ensures the most regular and systematic withdrawals, is achieved in full with the customer's complete cooperation when the user who cannot calculate anything any longer gives himself over to the machine and, rather than regularly pushing the button that sets off the rollers' infernal cycle, delegates that last action by opting for autoplay. This abandonment is even more impressive with the poker games. The machine has learned the gambler's favorite strategies, the risks they like to take, the rate of their gains, and it becomes such a good substitute, such a faithful lieutenant, that the gambler does not even have to play anymore to enjoy the benefits of the anesthesia the game provides. The machine plays against itself, the gambler being so deactivated, so cut off from everything, that there is no source of greater pleasure for him than these automatic plays. To reach this abandon, the relationship and the service had to be personalized. "Tell me

how you play, and I promise to play in your stead as you would have liked to play,” says the machine. “I know, better than even you do, what you like and what binds you to me. I will relieve you even of the burden of playing. Relax. Enjoy life—enjoy your life! I have your back, I am thinking of you constantly. I know, for instance, that you have natural needs to satisfy. Take the time to get a meal at the casino restaurant where you can win free games. Take the time for a bathroom break.” The gambler, however, is not always credulous. There are limits to trust. What if the machine went off the rails? What if it were slyly disguising its treachery, taking advantage of these interruptions to change its mind and accelerate the player’s bankruptcy? Some gamblers, fearing such betrayal (they do not fear losing all their money, but they do fear not being able to go on playing at their own rhythm and for as long as possible before they’re broke for good), pull on several pairs of pants or diapers in order to be able to pee as much as they need to without taking their eyes off the machine as it plays in their stead and takes all their money.

By way of the machine, the casino has attached the customer, pinned him down, holding him in its claws. All that is left is to get him to pay. Let us not, however, imagine for a second that the sequence of affixing a price and its payment begins after the harpooning, the way a ransom is requested after the hostage is captured. To imagine that prices are external to the processes of attachment and singularization would be to understand nothing about market mechanisms. As in London, the price is a quality, or rather an essential component, of the service. In Las Vegas, that is so much the case that it is by affixing the price and getting the gambler to pay it that attachment is obtained, that the deal is sealed. The pleasure that payment produces, that the repeated pressing of the button provides, attaches the gambler, somewhat as in a psychoanalytic cure, the money given over to the therapist ensuring that one is attached to him; the transfer of money paves the way for affective transfer. What a pleasure to be able to pay to forget, to not owe anyone anything, to wipe oneself out. Ah, *cupido empatrix*, when you have a hold on us, it is a powerful one. Slot machine designers and computer experts have understood that so well that they offer the gambler the sequences of gains and losses that provide maximal pleasure for him. These sequences and relative volumes, activated by pressing on a button, are part of the game. To formulate the price is to formulate the good. Read for its economic significance, what Schüll’s discomfoting

ethnography demonstrates is that in machine gambling, the price is one of the good's qualities, no more, no less. Price is both the supply and the demand; it is not the result of a meeting, a confrontation, between preconstituted supplies and demands.

The hawker's problem of capturing the attention of passing traffic is but one kind of challenge. Casinos further face the problem of constantly increasing the number of visitors flocking to Las Vegas so they can multiply bilateral transactions and grow sales revenue. What is the point of managing to get crowds of onlookers to come from the other end of the world if one fails to capture them as they cover the last few yards that separate them from open slot machines? In order to manage this capture, casinos design devices that combine the traditional and tested know-how that pitchers and their assistants have with high-tech tools. Twirling the edge? As in London, street beaters harpoon anonymous onlookers, seduce them with attractive propositions, and take them on, as soon as they hit the Strip, so as to lead them to the machine. To boost revenues, however, the best strategy is to establish and maintain a state of addiction; one must not let slip between one's fingers someone who has already come, who has tried a game of poker and left traces and a profile (here is how I play and react) in one of the centers of big data, someone to whom the machine can offer the games he likes and his favorite sequences as soon as he is within range of screens. One day it will be possible to reach him at home through an app. Each gambler is a person whom the casino addresses and to whom it sends its propositions. There is no contradiction between quantity and quality; quantity is not antithetical to a bespoke service and the singularization of goods and agents. Datafication makes this even more obvious.

You might think it a strange idea to open a book devoted to the markets, and more precisely to the most recent and complex types of markets, with street vendors, who seem of another age. Isn't it even stranger to establish a parallel between that primitive form of commerce and the gambling industry, which so skillfully deploys the glitzy resources of modern technology? By bringing together these two very extreme situations, I want to suggest the problems that have to be solved have not changed: the point is to tie supplies and demands together around goods whose characteristics are constantly evolving, the only aim being to set up a transaction that takes place in exchange for payment.

Market activities always face the same questions: Who is ready to pay, how much, and for what? But what does change between situations are the mechanisms of solving these problems.

This book sets out a hypothesis, namely, that when confronted with the enigma of the market, actors constantly invent new devices that are repeatedly modified and transformed. But these changes are not random or arbitrary. In order to be successful (sometimes), commercial activities must be organized (*agencées*) in a certain way. One cannot rely on chance to lead a man wandering down the street without a care or rushing toward an important business meeting to take a sudden interest in a pair of dolls he did not know existed a few minutes earlier or to fight to be able to take advantage of the exceptional opportunity given to him to be one of the lucky few to have a chance to acquire this rare good. It is not by chance that you lead a homemaker to take an avid interest in laundry detergent that promises the most dazzling white, an adolescent to go broke for flavored vaping products, or a senior executive to no longer be able to disconnect from screens he used to do very well without. None of these results could be obtained without the design and implementation of rigorously structured *agencements*.⁴ This book is devoted to exploring and analyzing those structures. Before getting to the heart of the matter, however, we need to rid ourselves of a number of mistaken assumptions and common notions—such as the concepts of supply and demand—that contribute to obscuring, rather than illuminating the enigma of the market.

Index

- ABRAHAM, YVES-MARIE, 108.
- Actor-network theory, 358.
- “Acts of God,” 183.
- Addiction, 23, 25, 29, 249, 253–55, 258, 259, 269, 278–83, 285, 378, 402.
See also gambling.
- Adopteunmec, 245, 268.
- Advertising, 216–17, 378.
- Aéroville, 215–16, 222, 225.
- Affectation, 247, 257, 262–65, 268, 278, 279–80, 321.
- Affectio mercatus*, 246–47, 257–59, 284, 321, 416.
- Affectio societatis*, 246.
- Affects, 256–59, 262–63.
- Agamben, Giorgio, 355–57.
- Agencement, 358–59, 361, 428 n.4.
- Agencies, 166–67.
- Agents, 35–41, 48–49, 151–52, 153–54, 155–57, 159, 166–67. *See also* singularization.
- Agnew, Jean-Christophe, 250.
- Agribusiness, 377, 418–19.
- Agriculture, 33, 52, 111, 128, 231, 340, 376, 418–21, 423–26.
- AIDS, 139.
- Air France, 319.
- Airline industry, 313, 316, 319.
- Akrich, Madeleine, 78–79.
- Alberti, Leon Battista, 170.
- Allais, Maurice, 36, 39–40, 42, 308–309.
- Alpers, Svetlana, 274, 275.
- AMAP, *see* Associations pour le maintien d’une agriculture paysanne.
- Amazon, 38, 99–100, 143, 181–82, 190, 196–200, 221–22, 229, 233, 234, 235, 238, 319.
- American Apparel, 276–77.
- American Match Group, 208.
- Amoco Cadiz*, 146.
- Anglo-Saxon law, 63.
- Anthropology, 65, 74–75, 142, 161, 178, 204, 242–43, 250, 252, 352, 437 n.3, 444 n.51.
- Anzalone, Guilhem, 302, 306, 329.
- Appadurai, Arjun, 69, 71–72, 74.
- Apuleius, 122.
- Aramco, 338.
- Araujo, Luis, 377.
- Aristophanes, 122.
- Aristotle, 113, 126.
- Arrow, Kenneth, 251.
- Artificial intelligence, 64.
- Art market, 328–29.
- Assemblages, *dispositifs* and, 358–60.
- Assemblages, material, 48.
- Associated milieu (Simondon), 75–77, 91–94, 96–97; money, 116–17, 119, 120; slavery, 106.
- Associations pour le maintien d’une agriculture paysanne, 52.
- Atmospheric marketing, 213, 216.
- Attachment, 86, 261–66, 268, 269–70, 280, 284–85, 339.

- Auctions, 236, 352.
Automobiles, 75–76, 77, 140.
Azimont, Frank, 377.
- BABBAGE, CHARLES, 163.
Baker, Wayne, 35, 210, 292.
Baldwin, Carliss, 368–69, 371.
Barrey, Sandrine, 328.
Baruya people, 83.
Bastin, Gilles, 240.
Baumol, William, 291, 301.
Beaumarchais, Pierre Augustin
 Caron de, 92.
Beauvoir, Simone de, 34.
Bécaud, Gilbert, 34.
Beckert, Jens, 291, 297–99.
Behavioral economics, 154–55.
Benveniste, Émile, 163.
Beunza, Daniel, 181–82.
Bilateral transactions, 23–24, 47; and
 price formulation, 289–91, 293,
 296, 312, 317, 333–35, 350; proliferation
 of, 50, 51, 60; singularization of,
 50, 52, 319.
Binarism (Guyer), 68.
Biobanking and Biomolecular Resources
 Research Infrastructure, 240.
Biobanks, 240–41.
Biomedicine, 140, 226–28, 229–30,
 238–39.
Biotechnology, 93, 98, 100, 136, 176,
 178, 217, 358, 363.
Blackpills, 281.
Black-Sholes model, 396.
Bloch, Maurice, 67.
Blockchains, 125, 251.
Blood donation, 370–71.
Bloomberg, 400.
Bloomberg Terminal, 395, 400.
Bohannon, Paul, 66, 68, 71.
Boiteux, Marcel, 348–49, 407–408.
Boltanski, Luc, 109, 348.
Bonfire of the Vanities (Wolfe), 122.
Boston Consulting Group, 171.
Bourdieu, Pierre, 187, 195, 257, 293, 322.
Boyd, Andrew, 312–13.
Brahe, Tycho, 400.
Branding, 276–77, 378.
Braudel, Fernand, 39.
Breast International Group, 227.
Broda, Christian, 207.
Bruni, Carla, 266, 268.
Budgetary equilibrium, 408.
Bundle-of-rights theory, 83, 87, 91.
Buñuel, Luis, 111.
Business models, 177, 178.
Butor, Michel, 288.
- CALCULATION, SPACE OF, 162–64.
Calculation operations, 160–61.
Çalışkan, Koray, 333.
Cambrosio, Alberto, 226, 230, 274.
Canada, 415.
Capital in the Twenty-First Century
 (Piketty), 196.
Capitalism, 32, 104, 253, 283; rise of,
 167–71.
Capitalization processes, 194.
Carbon Democracy (Mitchell), 236.
Carbon emissions, *see* Greenhouse
 gas emissions.
Career (Appadurai), 69–72.
Carruthers, Bruce, 124.
Cassini, Sandrine, 231.
Castel, Robert, 339.
Central banks, 117, 125, 335.
Certificat d'Obtention Végétale, 137, 419.
Chamberlin, Edward, 50, 54.
Chemical industry, 133–34, 144.
Chesbrough, Henry, 274.
Chiapello, Ève, 109, 170.
Chicago Stock Exchange, 129.
Chile, 415.
China, 407, 415.
Christie's, 328–29.
Climate change, 200, 334, 343, 403–404,
 406, 409, 411, 413, 416, 420, 421,
 426. *See also* energy transition; green-
 house gas emissions.
Cloud services, 212.

- Clubcard (Tesco), 222–24.
Cochoy, Franck, 161, 214, 265, 266, 276, 378, 460 n.47.
Coffee market, 343, 371–72.
Cognitive bias, 155.
Cognitive prostheses, 156–57, 232, 392–93.
 See also sociocognitive prostheses.
Collateralized debt obligations, 347.
Commodification, 103; goods resisting, 67, 69, 72, 104, 339; of living beings, 98; of services, 94.
Commodity Futures Trading Commission, 129.
Commons, John Roger, 433 n.35.
Companies, evaluation of, 179.
Competition, 48; and bilateral transactions, 49–50; as consociation, 56; and emerging technologies, 384; in evolutionary economics, 40–41; and innovation, 41–42, 51; and market agencements, 42, 49–51, 318, 341, 351, 418; market as, 38–39; in neoclassical economics, 39–40; and price, 319–21, 336, 353; regulation of, 45, 250, 294, 313, 342; for services, 380–83; socio-biology analogy, 41. *See also* monopoly.
Competitive monopolism, 50.
Conseil d'État, 240.
Consociation (Weber), 56.
Conspiracy of Claudius Civilis, The (Rembrandt), 275.
Consumer credit, 323–27, 335, 344.
Consumer groups, 341, 377.
Consumer research, 271–72.
Contestable markets, 291.
Continuous relations, 42.
Copernican Revolution, 400.
Coprofiling, 52, 53, 210, 221, 228, 230, 231, 237, 243, 245, 261, 380, 381.
Copyleft, 376.
Coriat, Benjamin, 42.
Cotton market, 333–34.
Cournot, Antoine-Augustin, 39.
Cours d'économie générale (Allais), 36.
COVID-19 pandemic, 213.
Creative Commons, 376.
Credit, 113, 282, 284; access to, 343–44; market, 343–44. *See also* FICO.
Credit bureaus, 324.
Credit cards, 37, 124, 282, 325.
Credit default swap, 396.
Credit score, *see* FICO.
Crick, Francis, 92, 345.
Critique of Dialectical Reason (Sartre), 242.
Cross elasticity, 161.
Cross externality, 346.
Crowdfunding, 218.
Crozier, Michel, 256.
Cryptocurrencies, 125.
Cultural systems, 66.
Cupido emprix, 15.
Customer, association with purchases, 223–24.
Customer relationship marketing, 222, 224.
Cyanobacteria, 79.

DATAFICATION, 37.
Data warehouses, 231.
Dating platforms, 202, 217, 245, 265–66, 268, 461 n.2. *See also* Meetic.
De Landa, Manuel, 359.
Deleuze, Gilles, 359, 360–61, 366.
Demarking, 88–89.
Density, 72–75, 80.
Depeyre, Colette, 33.
Derivatives, *see* Forward contracts (derivatives).
Desforges, Bernard, 228.
Despentes, Virginie, 221.
Detachment, 81–84, 86, 89.
Devices: facilitating framing, 57, 60; nature and role of, 59.
Deville, Joe, 281, 282.
Dewey, John, 196.
Dialogue, 270–73, 278.
Diamond, Peter, 204, 206–207.
Diderot, Denis, 92.
Diesel, Rudolf, 92.

- Digital technologies, 51, 76, 93, 182, 240, 378.
- Discipline and Punish* (Foucault), 361.
- Discovery, vs innovation, 93, 98.
- Discriminatoire, 240, 298, 343-45, 347.
- Disentanglement, 75, 77, 84-88, 142.
- Dispositifs, 20, 355-61, 376, 410, 427 n.2.
- Doganova, Liliana, 177, 178, 218, 363.
- Double-entry bookkeeping, 168-69, 170-71.
- Dove, 277.
- Dumez, Hervé, 33.
- Duopoly, 291.
- Durkheim, Émile, 255-56.
- EARMARKING, 85-86, 89, 123.
- École des Mines, Paris, 173, 308.
- Ecological damage, 146-47, 376.
- Economic anthropology, 43, 65, 66, 71, 81, 255.
- Economics, industrial, 294.
- Economic theory, 152, 156, 192, 249, 295, 297, 346, 365, 391, 406, 407-408, 415.
- Economization, inverted process of, 413-18.
- EDF, 193, 319, 348, 407-408.
- Edison, Thomas, 76, 92.
- Efficiency, reframing, 405, 407-409, 412-13, 415, 418, 421-22.
- Einstein, Albert, 165.
- Electricity market, 336, 348.
- Electronic auction markets, 216.
- Electronic commerce, 190, 212-13.
- Elias, Norbert, 256.
- Elyachar, Julia, 250.
- Embedding, 291-94.
- Emotional work, 256-57.
- Encountering platforms, 203, 219-22, 224, 225, 229, 232, 325, 466 n.46.
- Energy transition, 413-15.
- Environmental Charter, 421.
- Equipped serendipity, 214-15, 216.
- European Currency Unit, 118.
- European Patent Office, Enlarged Board of Appeal, 97.
- European Union, 240.
- Evolutionary economics, 158.
- Exploratoriums, *see* Encountering platforms.
- Exxon Valdez*, 146.
- Eyquem-Renault, Marie, 177.
- FACEBOOK, 271.
- Fair trade, 90.
- Family, 67.
- Farchy, Joëlle, 346.
- Faulhaber, Gerald, 301.
- Federal Trade Commission, 117.
- Fédération nationale des collectivités concédantes et régies, 348-49.
- Feynman, Richard, 89.
- Fiat money, 119, 131.
- FICO, 324-27, 343, 344, 396, 484 n.65.
- Fictitious goods, 103-104, 109, 145, 338-39.
- Financial agencies, 179.
- Financial crisis of 2008, 31, 344, 347.
- Financial markets, 127-28, 130, 153, 179-83, 207, 219, 225, 231, 314, 328, 384, 403, 411, 412, 421; design of, 390-94, 396-99, 400-402.
- Financiers, *see* Investors.
- Finders (matchmakers), 218.
- Firms, as complex agents, 157-58.
- Fischer, Alain, 139.
- Fish markets, 318.
- FNCCR, *see* Fédération nationale des collectivités concédantes et régies.
- Food industry, 136, 187, 272, 284, 377, 419.
- Forward contracts (derivatives), 128-30, 347, 376.
- Fossil fuel industries, 75, 134, 236, 404, 414.
- Foucault, Michel, 355-59, 360-61, 366.
- Fourcade, Marion, 146, 179, 326.
- Framings, 80, 142, 208, 246, 256, 302, 319, 361-62, 373, 375; alignment of, 364-65, 368, 372, 373; attachment (fourth framing), 59, 268; defined, 57;

- encountering (third framing), 59, 363, 378; market-oriented passiva(c)tion (first framing), 18, 57–58, 101, 376; noncommercial operations, 206; and overflowings, 80, 373, 375, 376, 378–79, 386; price formulation (fifth framing), 59; purpose of, 57–60; qualification-singularization (second framing), 58–59; types of, 57, 206. *See also* affectio mercatus; Price formulation.
- Franklin, Rosalind, 345.
- Free (telecommunications company), 319–21.
- Free zones, 370–73, 376, 380.
- French Association against Myopathy, 401.
- French Conseil supérieur de l'audiovisuel, 241.
- French National Medical Council, 352.
- French Revolution, 380.
- French Rugby Federation, 84.
- Frictional markets, 204, 206–208, 210, 216, 229. *See also* match making.
- Friedman, Milton, 33, 179, 182–83.
- Frydman, Roman, 395, 398, 400.
- Fugger (banking family), 171.
- Functional goods, 377.
- Funerals, 379, 380–83, 385.
- Furet, François, 426.
- Futures, 129–30.
- GADREY, JEAN, 140.
- Galichon, Alfred, 208, 390–91, 392–93.
- Gambling, 23–24, 123–24, 130–31, 262, 278–81, 283–84, 287–88; price of, 29, 288, 337; singularization of, 27–29; space for, 283; “zone,” 24–27, 279, 283.
- Game theory, 40, 192, 291, 352.
- Garcier, Romain, 70.
- Garud, Raghu, 181–82.
- GDF Suez (Engie), 341.
- Geertz, Clifford, 34.
- Gene therapy, 138.
- Généthon, 234.
- Genetically modified organisms, 136, 138, 389, 419, 421, 423, 425. *See also* agriculture; transgenesis.
- Geolocalization, of customers, 214.
- Gerlitz, Carolin, 276, 277.
- Gift, The* (Mauss), 84.
- Gitelman, Lisa, 76.
- GlaxoSmithKline, 176.
- Global warming, *see* Climate change.
- Glyphosate, 422.
- GMCs, *see* Genetically modified crops.
- GMOs, *see* Genetically modified organisms.
- GNU, 376.
- Godelier, Maurice, 70, 82, 83, 85, 444 n.51.
- Goldberg, Michael, 395, 398, 400.
- Goncourt Academy, 221.
- Goods: commodification of, 65; commodification-resistant, 67–69, 73, 104, 339; devices for characterizing, 152–54, 157; qualification of, 53–54, 58; singularization of, 59, 315; transformation of, 315. *See also* Density; Inalienable possessions; Sphere of exchange.
- Goods, evaluating: nominal, ordinal, and numerical scales, 330.
- GoPro, 314.
- Grandclément, Catherine, 315.
- Granovetter, Mark, 35, 209, 292.
- Great Transformation, The* (Polanyi), 45.
- Greenhouse gas emissions, 79, 334, 376, 389, 404; economization of, 409–16; and market failures, 403–406; market for, 144; and optimum-based approaches, 409–13; policy instruments, 406–7, 411–12, 415, 416; quotas, 406–407, 416; regulating, 406–407; taxes on, 193, 406–407, 411–12, 415; worst-case avoidance, 413–18. *See also* Energy transition.
- Greenspan, Alan, 31–32.
- Guattari, Félix, 359.
- Guesnerie, Roger, 34–35.

- Guyer, Jane, 68, 74, 161–62, 178, 182, 330–31, 332, 338, 349, 352, 368.
- HAAS, JÉRÔME, 180.
- Habitus, 195–99.
- Harvey, David, 107.
- Hawking, Stephen, 188.
- Hayek, Friedrich, 33, 433 n.36.
- Health care sector, 53, 136, 158, 176–77, 225, 274, 342, 345. *See also* biomedicine.
- Healy, Kieran, 326.
- Hecketsweiler, Chloé, 231.
- Hennion, Antoine, 265.
- Hirschman, Albert, 238, 253.
- Hochschild, Arlie, 256–57.
- Houellebecq, Michel, 196, 197, 198.
- Housing market, 379, 383–86.
- Hungary, 109.
- IDENTITY COSTS, 424.
- Impulse buy, 190.
- Inalienable possessions, 72, 82–83.
- Individuals, problematization of, 232–35.
- Individuation (Simondon), 81.
- Inheritance, 82.
- Innovation, 98; intensive, 51; and singularization, 50–52; user involvement, 274.
- Innovation networks, 220, 373.
- Institutions: components of, 47.
- Intellectual property, 220, 225, 294, 420, 424.
- Interest, 113, 116, 121, 126, 127, 129, 325, 335, 340, 344.
- Interface market, 32–33, 64, 65, 203, 210, 229, 246–47, 248, 289, 290; and agencement model, 46–47, 55–56; and competition, 38–42, 44, 48, 290–92, 351; defined, 32–36, 44; and innovation, 41–42, 44; insufficiencies of, 47, 48, 51; role of goods, 36–38; role of institutions, 42–45; supply and demand in, 203–204. *See also* affectio mercatus.
- Intergovernmental Panel on Climate Change, 416.
- Internet, 182, 212–13, 216, 218.
- Internet, as platform for personalized conversations, 271.
- Investors, 179, 181, 217–19, 225, 239, 363.
- IQ, 322–23.
- İzmir Exchange, 333.
- JAMES, WILLIAM, 264.
- Jarabkowski, Paula, 183–84.
- Junk bonds, 128.
- KARNØE, PETER, 192–93.
- Karpik, Lucien, 173.
- Kasparov, Garry, 334.
- Keane, Webb, 74, 131.
- Keating, Peter, 226, 230, 274.
- Kepler, Johannes, 400.
- Kessous, Emmanuel, 265.
- Keynes, John Maynard, 132.
- Khurana, Rakesh, 179.
- Kickstarter, 218.
- Kill, The* (Zola), 122.
- Kirman, Alan, 318.
- Kjellberg, Hans, 275.
- Knight, Frank, 177, 178, 184.
- Kyoto Protocol, 407, 411.
- LA BOÉTIE, ESTIENNE DE, 208.
- Labor power, 107.
- Ladies' Paradise, The* (Zola), 337.
- Lafayette (bistro), 217.
- Laffitte, Pierre, 173.
- La Fontaine, 373–74.
- Lakoff, Andrew, 228.
- Lampland, Martha, 109.
- Lancaster, Kelvin, 408–409.
- Lancaster, Ryon, 292.
- Land: Aboriginal, 147; passiv(a)ction of, 90, 105, 110–12, 132.
- La Pradelle, Michèle de, 34.
- Las Vegas, 23–24, 28, 29, 278, 279, 282–83, 287, 337.
- Latour, Bruno, 74, 163.

- Lave, Jean, 189.
Law, John, 147–48.
Lehman Brothers, 347.
Lépinay, Vincent, 394.
LETS, 124.
Leveled cost of electricity, 193.
Leveraged buy-outs, 179.
Lévi-Strauss, Claude, 85.
Licoppe, Christian, 190.
Life chance (Weber), 326.
Lim, Hsin Hin, 130.
Limited liability companies, 369–70.
Lipsey, Richard, 408–409.
Lordon, Frédéric, 145.
Lovell, Heather, 383–84.
Loyalty cards, 224, 272. *See also*
 Clubcard (Tesco).
Lucky Strike, 278.
- MACKENZIE, DONALD, 347, 396–97, 398.
Macron, Emmanuel, 246.
Malcom, John, 328.
Malinowski, Bronisław, 81, 82.
Mallard, Alexandre, 271, 272, 273, 348.
Malls, *see* Shopping centers and physical markets.
Managed Heart, The (Hochschild), 257.
Mandarins, The (de Beauvoir), 34.
Maori, 73, 84–85.
Marginal cost pricing, 308, 348.
Marginal-cost rule, 408.
Maris, Bernard, 198, 238.
Market, constitutive elements of, 33–36,
 38, 45, 49, 206.
Market agencements, 32, 36, 46–47, 61,
 64, 101, 142, 146, 158–59, 200, 202,
 361; articulation of, 363, 367–68, 373;
 and bilateral relations, 49–50, 57, 202,
 207, 219, 225, 312, 363; characteristics
 of, 49, 53, 373; and competition, 42,
 49–51, 318, 341, 351, 418; vs *dispositifs*,
 357–59, 361–62; dynamics of, 215, 317,
 386; and encountering platforms, 219;
 and free zones, 370, 372; and interface
 market, 55–56; material component of,
 47–48; and morality, 418; politics in,
 60, 389, 418, 423–25; and price formu-
 lation, 59, 296, 307, 346, 353; and
 qualitative confrontation, 185–86;
 reagencing of, 60.
Market critique, 133.
Market design (Roth), 205.
Market economy, 32.
Market exchange, 46.
Markets: deviation from optimum model,
 407–401; role of, 49.
“Markets and Other Allocation Systems
 in History” (North), 45.
Market shares, 171.
Marking up, 301, 305, 308.
Marx, Karl, 66, 107.
Marxism, 113, 361.
Mass customization, 51.
Massification, 232, 317.
Mass singularization, 232.
The Match, 205.
Match making, 205–207, 209, 210,
 211, 213, 216, 217, 218, 228–29,
 232, 243, 245, 325, 344, 381.
 See also frictional markets.
Matsutake mushroom, 372.
Maurer, Bill, 131.
Mauss, Marcel, 66, 67, 81, 84–85.
McFall, Liz, 271, 272.
Méadel, Cécile, 346.
Measuring, dual nature of, 322–23,
 325–27.
Meat production, 135, 302–307.
Medical school graduates, *see* The Match.
Meetic, 38, 208, 209, 225, 229, 233,
 235, 245, 266, 267.
Mellet, Kevin, 271.
Metrological operations, *see*
 Measuring, dual nature of.
Mexico, 108, 282.
Michel, Anne, 231.
Michelangelo, 328–29.
Miller, Peter, 170.
Millo, Yuval, 129.
Mimesis, propensity to, 399.

- Missoffe, François, 351.
Mitchell, Tim, 236.
Modification, La (Butor), 288.
Monde, Le, 180.
Monetary masses, categories of, 122–23.
Money: as accounting unit, 114, 115; as commodity, 104–105, 112–13, 115–16, 119–23, 125, 126, 127, 132, 145; credit function of, 114, 115, 116, 121, 124, 145; debit function of, 113, 114, 121, 145; electronic, 118, 120; functions of, 113–17, 122–23, 125; Keynesian view, 132; liquidity of, 116, 118, 119, 122, 126, 131, 145; as market instrument, 42–43, 114–15, 120, 121, 122–24, 145; as medium of exchange, 113–14; and overflows, 105, 145; precious metals as, 115–16, 117, 118, 120, 123; regulation of, 123, 124, 125, 126.
Monnaie fiduciaire, 119.
Monopoly, 291, 293–94; bilateral, 50, 207–208, 210, 288, 310, 312; and competition, 50; discriminating, 289, 310–12, 317–19, 344, 382.
Monopsony, 291.
Monsanto, 33, 98, 345, 397, 420, 422.
Montagne, Sabine, 401.
Montaigne, abbé, 208.
Mortensen, Dale, 204–205.
Muniesa, Fabian, 206, 349.
Musée d'Art Moderne de la Ville de Paris, 70.
Mutagenesis, assisted, 94–97.
Myers, Fred, 90.

NATIONAL SOVEREIGNTIES, 407, 410.
Natural gas markets, 341.
Nature, role of, 95–99.
Negative externality, 200, 403.
Nelson, Richard, 33.
Netflix, 241.
Network markets, 229.
Neuromarketing, 188–89.
Newton, Isaac, 84, 92, 248.
New York Board of Trade, 333.
New York Stock Exchange, 128.
Nil price, 345–46, 348.
Nominal scales, 161–62.
Nonprofit organizations, 246, 369, 377.
North, Douglass, 45.
Novartis, 176.
Numerical scales, 162.

OIL, *SEE* FOSSIL FUEL INDUSTRIES.
Oil spills, 146–47.
Oncology, 226, 233. *See also* biomedicine.
Openness, quality of, 274, 275–76.
Open-source movement, 94.
Orange (telecommunications company), 319.
Ordinal scales, 162, 172, 178, 303, 338.
Organ donation, matchmaking, 206.
Orléan, André, 145.
Ortiz, Horatio, 401.
Ossandon, José, 282.
Ostrom, Elinor, 83–84.
Ouroussoff, Alexandra, 182.

PACIOLI, LUCA, 170.
Paoli, Pasquale, 87, 88.
Pardo-Guerra, Juan Pablo, 328–29.
Pareto, Vilfredo, 253.
Pareto optimum, 408.
Paris Stock Exchange, 349.
Parry, Jonathan, 67.
Passions, role of, 15, 56, 59, 112, 155, 239, 246, 248–53, 256, 262.
Passiva(c)tion, 57–58, 64, 81, 86–87, 89–90, 92–94, 96–105, 141–42, 151; of animals, 135–36, 144, 302, 376; vs appropriation, 97, 99; commercial, 107, 110; of data, 99–100; defined, 437 n.65; of derivatives, 128–29; of financial products, 130–31; gene-drugs, 138–40; of GMOs, 136–38, 140, 144; of human labor, 105–12, 132, 144, 376; of living processes, 134; and market agencements dynamics, 101; market-oriented, 57, 64, 86, 89–90, 94, 99, 100, 102, 143–44, 148; of money, 112,

- 120, 122, 127, 132; nonmarket-oriented, 86, 89; and overflows, 110; of plant life, 144-45; and property rights, 120; of services, 140-41, 382-83; of stocks, 127-28.
- Patent law, 98.
- Patient groups, 274, 338, 342, 352, 363, 365, 366, 376, 401.
- Paucilateral configurations, 291.
- Perfume industry, 187.
- Persian government, 338.
- Personalized medicine, 158, 225, 228, 362. *See also* biomedicine; pharmaceutical industry.
- Pfizer, 176, 228.
- Pharmaceutical industry, 154, 176-78, 218, 225-27, 235, 317, 362-64, 366.
- Philip Morris International, 397.
- Pièces jaunes*, 123.
- Pignarre, Philippe, 228.
- Piketty, Thomas, 196, 197, 198.
- Pinch, Trevor, 15-17, 23.
- Pipeline model, of therapeutic innovation, 364-66.
- Pissarides, Christopher, 205.
- Pitching, 15-24, 29, 214, 217-18, 263, 270, 273, 427 n.1.
- Platform, 38, 212; as set of devices, 203. *See also* encountering platform.
- Platform goods, 37-38, 208-209, 224, 317.
- Platform* (Houellebecq), 196.
- Polanyi, Karl, 9-10, 45, 48, 67, 103-104, 107, 112, 123, 338.
- Pollak, Michael, 461 n.2.
- Pomiès, Anissa, 371.
- Poon, Martha, 324.
- Preda, Alex, 127, 180.
- Price: as coordinating mechanism, 39, 41; and quality, 327; and social classifications, 322; as supply and demand, 28-29, 310; and value, 329.
- Price batting, 20.
- Price formulation, 19-21, 59, 204, 206, 288-89, 296, 322, 342, 345, 353, 362, 365-66, 367, 402; and auction catalogs, 328-30; by correlating scales, 330-32; exclusions from, 334, 343-45, 347, 378; formulas for, 300-301, 303-306, 308, 309, 328, 331, 333-43, 347-53, 386; labor, 339-40; in meat production, 302-307; microeconomics approach, 289-90, 295, 296; money, 340; moral dimensions of, 348-50; natural gas market, 341-42; and singularization, 308-11, 313-17, 339; and yield management, 308, 310, 312-16, 330, 344, 351.
- Prices, reference, 347.
- Printemps Haussmann, 214.
- Privacy, 237. *See also* Biobanks.
- Process goods, 54-55, 58, 67, 159.
- Profiling, 234, 237.
- Property law, 98.
- Property rights, 43, 63, 81, 83-84, 87, 89, 91-94, 96, 97, 98, 100-102, 109, 110, 143, 376.
- Proprietary Variety Protection Certificate, 137, 419.
- Prostheses, 186.
- Protestant ethic, 168.
- Provence, 216.
- Ptolemaic cosmology, 400.
- Public transportation, 414.
- QUAI BRANLY MUSEUM, PARIS, 69.
- Qualculation, 161, 163, 164-68, 185, 196.
- Qualculation equipment, 176, 181, 190, 192, 194, 195, 200, 246.
- Qualculative agencies, 150, 152, 166-67, 171, 172-73, 176, 179, 180-81, 183, 185, 190-92, 198, 268, 377; power dynamics between, 192-93, 195, 200, 334-36.
- Quality, 327.
- Que choisir*, 173, 314, 341, 365.
- RABEHARISOA, VOLOLONA, 228, 274.
- Rabinow, Paul, 283.
- Radioactive substances, 70-71.
- Rail sector, 308-10, 315.
- Ramping, 21-22.

- Rational expectations hypothesis, 392, 393, 394, 395, 400.
- Real-estate market, 187.
- Realistic economic policy, 405, 407, 411–12.
- Reddy, William, 108.
- Reentanglement, 77–78, 80, 142.
- Reference model, first best, 407.
- REH, *see* Rational expectations hypothesis.
- Reinsurance industry, 183–84.
- Relational marketing, 232.
- (Relative) autonomy, 80.
- Relics, 69.
- Rembrandt Harmenszoon van Rijn, 274–75.
- Renewable energies, 404, 414.
- Requalification, *see* Transformation-requalification process.
- Resources, optimal allocation of, 408.
- Retargeting, 268.
- Retroviruses, 79.
- Revenue management, *see* Yield management.
- Reverdy, Thomas, 336.
- Riesman, David, 235.
- Risk aversion, 398.
- Robinson, Joan, 50.
- Roche, 227, 228, 235, 342.
- Roman law, 63.
- Rome (Ancient), 106, 281.
- Roth, Alvin, 204–207, 210, 463 n.12.
- Rules, as institution, 43–44.
- SAHLINS, MARSHALL, 67, 81.
- Salary levels, 292, 339.
- Sanofi, 176.
- Sarkozy, Nicolas, 266, 268.
- Sartre, Jean-Paul, 242.
- Schengen Area, 366.
- Schrameck, Olivier, 241, 243.
- Schüll, Natasha, 23, 28, 123, 278–79, 283.
- Schumpeter, Joseph, 42, 44, 50, 248–49.
- Science and technology studies, 159.
- Scoring practices, 172–75, 176, 178, 182, 344.
- Script (Akrich), 78–79.
- Se-Dol, Lee, 334.
- Séguéla, Jacques, 266, 267, 268, 269.
- Selfies, 240.
- Serious Fraud Office, 117.
- Service sector, 53, 274.
- Sexual services, 107, 229.
- Shafiee, Katayoun, 338.
- Shopping centers and physical markets, 212, 216, 315–16.
- Short-circuiting, 415.
- Short distribution channels, 419.
- Simmel, Georg, 467 n.58.
- Simondon, Gilbert, 75, 81.
- Singularization, 18, 21–22, 59, 81, 163, 208, 212, 227–28, 357, 364, 394; of bilateral transactions, 50, 52, 319; and exploratoriums, 229–30, 231–32; and innovation, 51, 202, 265; and price competition, 319–21; and price formulation, 287, 296, 308–11, 313–17, 339, 350; and profiling, 233–35, 241, 242–43; of services, 316, 380–83.
- Singular multitudes, 235, 242–43.
- Sire, Guillaume, 346.
- Slavery, 106, 281.
- Smith, Adam, 39, 56, 249–51.
- Smith, Susan, 383–84.
- SNCF, *see* Société nationale des chemins de fer français.
- Social Life of Things, The* (Appadurai), 69.
- Social media marketing, 216.
- Social-network analysis, 191.
- Social networks, 40, 202, 209–10, 292–93, 430 n.26, 467 n.58.
- Social-network sociology, 35.
- Société nationale des chemins de fer français, 309.
- Sociobiology, 41.
- Sociocognitive prostheses, 157, 159–60, 167, 196, 197. *See also* cognitive prostheses.

- Sociology, 47, 64, 102, 150, 152, 153, 158, 197; intersection of supply and demand, 204; vs microeconomics, 295; on social class, 232; on social networks, 35.
- Sociology, economic, 156–57, 159, 257–58; agents, 156–57, 255–59; art markets, 156–57; markets, 45, 229, 259; price formation, 291–95; pricing, 289; supply and demand, 209.
- Sociotechnical lock-in, 321, 422–23.
- Solaris (Roche), 342.
- Sombart, Werner, 169.
- Sotheby's, 328.
- Souchon, Alain, 54.
- Sphere of exchange, 66–69.
- Spotify, 140.
- Sraffa, Piero, 301.
- Stallman, Richard, 376.
- Standards markets (Beckert), 297.
- Steiner, Philippe, 104, 370, 379.
- Stinchcombe, Arthur, 124.
- Stock markets, 128, 130, 180, 206, 207, 292.
- Stolz, Joëlle, 241.
- Structural homology (Bourdieu), 322.
- STS, *see* Science and technology studies.
- Submission (Houellebecq), 196, 197, 198, 199.
- Supermarkets*, 186–87, 190, 191, 200.
- Supply and demand, 22, 23, 29–30, 44, 53, 55, 135, 202–11, 235–36, 310–12.
- Sweden, 415.
- Symbolic value, 261, 296, 297–300.
- Symbolic violence (Bourdieu), 195.
- Syngenta, 420.
- Systemic effects, 347.
- Systems of exchange, 66.
- TAYLORIZATION, 109, 141.
- Television, 242–43.
- Tesco, 222–23, 224–25, 235.
- Thatcher, Margaret, 426.
- Thévenot, Laurent, 109, 348.
- Thomas, Nicholas, 75, 82, 87, 145.
- Ticker, 180–81.
- Tiv, of Nigeria, 66.
- Touraine, Alain, 426.
- Traceability, of goods, 89.
- Trajectories, of things, 68–70.
- Transaction-free zone, 368–73.
- Transformation-requalification process, 54–57, 75, 108, 129, 149, 165–66, 172, 275–76, 313.
- Transgenesis, 76, 95–97, 137–38, 140, 334, 376, 419–20, 422, 424–25.
- Translational medicine, 363, 364.
See also pharmaceutical industry.
- Transubstantiation, 111, 302.
- Trespeuch, Marie, 379.
- Trompette, Pascale, 380, 382.
- Tropes (Guyer), 332, 338.
- Trust, 251.
- Tsing, Anna, 372.
20 minutes, 345.
- UBER, 38, 340.
- UFC-Que Choisir, 341–42.
- Undertakers, 216.
- Unencapsulated firms, 370.
- United Nations, 416.
- United States, climate policy of, 407.
- Urban planning, 404, 414.
- Uzzi, Brian, 292.
- VATIN, FRANÇOIS, 328.
- Venter, Craig, 92.
- Venture capital, 218.
- Vernon Subutex* (Despentes), 221.
- Veyne, Paul, 356.
- Vikings, 123.
- Von Hippel, Eric, 274.
- WALMART, 315.
- Wasmer, Étienne, 311.
- Wasps, The* (Aristophanes), 122.
- Watson, James, 92, 345.
- Weber, Max, 47–48, 56, 168, 169, 180, 203, 253, 295.

Weiner, Annette, 70, 72-73, 82.
Weinstein, David, 208.
Weinstein, Olivier, 42.
Whatever (Houellebecq), 196.
White, Harrison, 45, 292.
Williamson, Oliver, 33.
Wine markets, 156-57, 257-58, 297-99.
Wolfe, Tom, 122.
Wonga, 281-82.
Woolgar, Steve, 189.
Work, unit of, 109.

XENOPHANES OF COLOPHON, 402.

X-linked severe combined
immunodeficiency, 138-39.

YELLOW PAGES, 217.

Yield management, 308, 310, 312-16,
330, 344, 351.
Yon, Guillaume, 348.
Yoruba people, 182, 330, 331, 339.

ZELIZER, VIVIANA, 45, 85, 86, 124,
266, 445 n.56.
Zola, Émile, 122, 337.