

SILICON SIMULACRA

Post-humans of the Machine Worlds

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Chapter 3

The Daydreamer and the Probability

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nor the ruling group of our society but they are contemporary society's leading class and as such shape its character, leadership and social profile.

10 Paul Starr and Ross Corson, "Who Will Have the Numbers? The Rise of the Statistical Services Industry and the Politics of Public Data" in William Alonso and Paul Starr, eds. *The Politics of Numbers*, (New York: Russell Sage Foundation, 1987), 415—447 is a short history of the consumer information business.

11 Dick Shaver, *The Next Step in Database Marketing: Consumer Guided Marketing* (New York: John Wiley & Sons: 1996), 40.

12 John Goss, "Marketing the New Marketing: The Strategic Discourse of Geodemographic Information Systems," in John Pickles, ed. *Ground Truth: The Social Implications of Geographic Information Systems* (New York: Guilford Press, 1995), 130—170. See also Jerry L. Salvaggio, "Projecting a Positive Image of the Information Society" in Jennifer Daryl Slack and Fred Fejes, eds., *The Ideology of the Information Age* (Norwood: Ablex Publishing Company, 1987), 146—157.

13 U.S. Census Bureau, *Statistical Abstract of the United States, 2000*: Section 18: Communications and Information Technology, No. 936. "U.S. Postal Service—Summary: 1980 to 1999," www.census.gov/prod/2001pubs/statab/sec18.pdf.

14 "Direct Marketing to Account for 53% of US Ad Spend in 2009," The Research Brief from the Center for Media Research Blog, December 5, 2008, www.mediapost.com/publications/?fa=Articles.showArticle&art_aid=95711..

CHAPTER 3

THE DAYDREAMER AND THE PROBABILITY

Dreams are but interludes, which fancy makes;
When monarch reason sleeps, this mimic wakes.

—John Dryden, "The Cock and the Fox" in *Fables* (1697)

Like dreams, statistics are a form of wish fulfillment.

—Jean Baudrillard, *Cool Memories* (1987)

The word *communication* in everyday usage connotes transportation. An intended meaning is packaged into a message of words and images at Point A and then sent via some channel to Point B, where the message is unpacked and its meaning acquired. But this view understates the collaboration involved. The receiver at Point B must first pay attention to the message's arrival; unpack its contents; interpret its meaning, sometimes the way the sender intended, sometimes not and finally decide whether to apply the interpreted meaning to her own situation.

In Latin *com-* means *with*, and every communication is a collaboration, one that shapes the self-experience of the communicators. We all know this from everyday life. A conversation between parent and child, for example, or between doctor and patient—who says what to whom and how—reflects a set of assumptions about where each stands relative to the

other and to the world that shapes who each can be within those conversations.

Public modes of address do this, too. All journalism, for example, even the sports pages, speaks to the citizen, someone who can weigh reported facts and attributed comments and come to his own conclusion. Marketing communications, which dominates public discourse in the consumer republic and to which all of us are incessantly exposed almost everywhere, addresses us in three ways. On a general level, all marketing communications tees us up as self-expressionists; its two disciplines, advertising and data-based marketing, conjure us up more narrowly as daydreamers and probabilities. The first two provide context and contrast, respectively, for understanding the third.

All marketing communications makes four assumptions about each of us. The first three are procedural: each of us has the right to desire, to choose and to buy the product. The fourth is substantive: each of us is centrally committed to lifestyle—the lifelong project of expressing one’s self via particular assemblages of goods, services, practices, experiences, appearances and bodily dispositions. Critics from both the left and right have for ages scorned the commitment to lifestyle as vapid materialism and much worse. Much of their criticism is solid but typically critics on both sides omit self-expression’s cultural history: it was born as critique and was as important as self-interest in the emergence of the modern self. Recalling this history helps explain what the critics haven’t: why we enjoy experiencing ourselves as consumers and, more important here, why all marketing communications addresses us as self-expressionists.

In the Western canon, the precursor of our commitment to lifestyle can be found in Romanticism. This late 18th to-early 19th century cultural movement championed various forms of religio-aesthetic self-expression: sensibility, inner feelings and/or imagination. And it did so in part in protest, as a salutary alternative to the calculating rationality

with which self-interest was pursued in the impersonal worlds of commerce and contracts.

Romanticism’s chief British exponents, the poets Blake, Coleridge, Wordsworth, Keats and Shelley, were all critical of the then-emerging society for the primacy of utility as *the* source of value among men and for the primacy of the “cash nexus” as *the* social relation among them. Contemporary political conservatives such as Edmund Burke and Thomas Carlyle also rejected the idea of society as simply a neutral procedural arena defined by rules within which each individual is free to pursue his own advantage. As Carlyle explained, a society must be more than economic relationships:

“Supply and demand” we will honor; and yet how many “demands” are there, entirely indispensable, which have to go elsewhere than to the shops, and produce quite other than cash, before they can get their supply.¹

While they acknowledged the calculation of utility and the cash nexus, the conservatives found the glue of social life in the interrelation and continuity of human activities and the community’s shared values in which they were rooted. The disintegrative effects of social atomism would in the next century become a theme of the Left as well, but 18th century liberalism championed individualism: *homo economicus* in economics, the Cartesian ego in philosophy, the novel hero in literature and the autonomy of consciousness, reason and perception everywhere else.

The poets sought even higher truths—God, Nature and Beauty—and found the path to those universals not in the shared life of the community but within the individual. Specifically, through the individual’s imagination the spiritual nature of man was to be revealed, and the poets offered up their verses as private adventures to these transcendent glories. According to one scholar, Romanticism was a “prodigious effort to discover the world of spirit through the unaided efforts

of the solitary soul.”² These poets were not the first to claim that the artist revealed a higher kind of truth, but they were the first to claim autonomy for the individual artist in doing so and the individual’s imagination as its source. In short, the Romantics legitimized self-expression and subjectivity.

A self-expressivist strain can be traced among our canonical philosophers, too; here’s just the start and the finish. The pre-Romantic Jean-Jacques Rousseau is usually credited as the founder. His criticism of then-emerging society focused on what it had done to the individual; specifically, it had replaced the virtuous egoism of Rousseau’s “natural man” (whom the Romantics renamed “noble savage”) with an ignoble vanity that depended on others, on what *they* think of, expect from, admire in or despise in us. To regain our virtuous individualism we need to turn inward. Others before Rousseau had argued that one could trust one’s inner feelings to *understand* the good. He took one radical step further. He argued that one’s inner feelings could *define* the good; unity and wholeness were to be discovered within. The culmination of this strain among the philosophers is usually credited to the anti-Romantic Friedrich Nietzsche. For Nietzsche the world consisted of blind, chaotic and unspiritual forces for which there would never be resolution, compensation, reconciliation or any other way out. In an amoral universe, the only moral source that anyone could affirm lay beyond good and evil in the act of affirmation itself, in our ability to look into the maelstrom and say “yes” to everything. His *ubermenschen* were those individuals who affirm life and overcome nihilism by way of self-creation, specifically self-differentiation. “We have art,” he said, “that we may not perish from the truth.”

Baudelaire, Balzac, Wilde and the Bloomsbury Group lived out aesthetic individualism in their personal lives, often brazenly and sometimes notoriously, but it was lesser minds who popularized it. *Fin-de-siècle* journalists, artists and bohemian hangers-on in Paris, London, New York and other capitals challenged the prevailing business-Christian ethic

of industry, foresight and thrift and instead advocated living for the moment and the stylization of life. In short, they replaced salvation with self-realization.³ Soon thereafter, the advertising industry co-opted the avant-garde position and turned it into a celebration of consumption as the path to self-expression.⁴ The concept even got a slogan—“Life is an art.”—from the 1923 best-seller *The Dance of Life* by pioneer sex researcher Havelock Ellis.

Two basic weaknesses in the credo were denounced right away and famously. According to Joseph Wood Krutch in *The Modern Temper* (1929), it promotes subjectivism. One can live life as an art, he argued, only if human life and history have no grand purpose, meaning or message, only if one abandons the notion that truths exist that owe their name to the fact that they correspond to something in the world outside, whether that something is revealed by religion or science. Instead, under the credo of life as art, the aims of self-expression, whether noble or neurotic, are private goals, not open to examination or critique.⁵ It also promotes privatism, according to sociologist Robert S. Lynd. Already famous for *Middletown* (1929), his co-authored study of middle-class life in Muncie, Indiana, Lynd argued in the *President’s Research Committee on Social Trends* (1933) that the credo was undermining *public* virtues, such as neighborliness and social responsibility, and *social* sentiments, such as “all men are created equal” and “live and let live.” Even worse, it fueled the growing belief that individual needs could be met at the shopping mall, that self-fulfillment could be purchased.⁶

The credo’s strengths were and remain obvious. It certainly does liberate the individual. No longer controlled by conformity to community, whether villages and neighborhoods or tribes and religions, or by nature, whether by the seasons and terrain or by body types and age, we are free to be self-made. Living life as the art of self-expression, each of us can make herself up, albeit from raw materials provided by the marketplace. Like the artist, each of us has wide latitude in aims and methods with no judge or criteria other than to

be true to her inner self. It also affirms the ultra-ordinary life of work and family that all modern politics—Marxist, liberal and conservative—define as the general welfare. In particular, it upholds the “householder ethos,” the concerns of providing and caring for wife and children and the rich joys of family love as a web of relationships that give fullness and meaning to human life.⁷ Indeed, a strong case has been made that in the affirmation of everyday life, individuals can and do connect to what philosophers call the “good.”⁸

The strengths and weaknesses of our commitment to lifestyle have been argued at length many times before. Here, it suffices to recall that self-expression was as important as self-interest in the emergence of the modern self several centuries ago. In recent history, certainly from the 1920s onward, all marketing communications assumes that each of us is centrally committed to lifestyle as the means of our self-expressions, and every instance of such communication calls us up as self-expressionists. This assumption is the context within which advertising and data-based marketing conjure us up in their distinctive ways.

The Daydreamer

All advertising contains two implicit messages that some with good reason see as ideological. First, it’s universally optimistic. For whatever problem advertising poses, it always presents a solution and does so with clarity and speed. Second, it’s always progressive. Every instance asserts that given appropriate knowledge (about the product or service), we can “control the consequences of our deeds and shape our destinies.”⁹ Both promises are expressed in all advertising. More important here, the structure of the genre, its mode of address, in every instance calls us up as daydreamers.

That structure is drama: problem, solution and conclusion. A problem is posed: some peril of everyday life, like bad breath or lost credit cards, threatens the hero/heroine (warrior/maiden; good father/good mother). The solu-

tion appears: a *deus ex machina* in a wide variety of incredible guises—a wise confidant (hairstylist or manicurist), helpful factotum (genie or repairman), knowing expert (pharmacist or stock broker), super-human (athlete or entertainer), an allegorical figure (little man made of dough or a big man made of tires) and a menagerie of singing animals and dancing objects. The solution prompts the hero’s/heroine’s moment of insight, conversion or turning point, followed by the happy conclusion, usually peace of mind, self-esteem or a successful human relationship.¹⁰

Consumers do not expect rationality. To the contrary, advertising’s mythic characters and their miraculous interventions are overt signals to the consumer that she can suspend her disbelief and put aside the critical faculties she would apply if the content were informational. But it’s not. For the most part, advertising serves up nonreflective content to a passive audience in an associative frame of mind. Reverie, the interplay of listening and viewing with thinking and imagining, describes our half-conscious collaboration with advertising. Inhabiting the worlds we see and, just as easily, moving outside of them, mixing our external perceptions with our inner reflections, imaginary and real emotions, we take in what’s out there and then create interior experiences that pleasure us.¹¹ In short, the consumer collaborates with advertising as a daydreamer.

Although daydreaming is as old as the hills, the cultural praise and legitimacy of our inner imaginings and the subjective experiential pleasure we take in them has also been traced to 18th Romanticism. Indeed, historical sociologist Colin Campbell proposes that a Romantic ethic of “autonomous imaginative hedonism” was as central to the spirit of consumerism as the Protestant ethic was to spirit of capitalism.¹² Prior to the 18th century, Campbell argues, pleasure was sought through the senses: food, sex, music and laughter. Thus, elites had banquets, harems, musicians and clowns, while the masses had carnivals, their annual taste of the same. In contrast, the modern self replaced the sensory

experience of the body with the emotional experience of the imagination—daydreams of finer lifestyles, novel goods, exotic experiences and so forth. According to Campbell, these images reflected a new “ability to create an illusion known to be false but felt to be true” and were created by the individual for self-consumption.

The evoking of interior pleasures was also a distinguishing feature of two cultural-economic developments of the 18th century, both of which were precursors to consumer culture: the rise of the novel-reading public and the emergence of the European fashion system.¹³ Art was seen the same way. Poet and essayist Joseph Addison was among many who argued that art pleases by evoking the action of the mind in apprehending color, sound and other sensations, that it’s our interior response that pleases us and that both novelty and surprise, while having little value in themselves, were nevertheless often necessary to elicit this experience.¹⁴ In other words, we learned as early as the 18th century how to pleasure ourselves with our imaginings.

Today, neuroscientists are trying to capture the physical expression of these imaginings. Using functional magnetic resonance imaging to scan the brain’s reactions to different marketing actions, they found that we light up, particularly in the medial orbitofrontal cortex, in response to goods we expect to deliver more pleasant self-experiences.¹⁵ In short, we get a cerebral shiver. “A little mist of energy ... rather like love but trivial” is how one mid-20th century cultural critic described it long before the neuroscientists arrived.¹⁶ Of course, Average Joe doesn’t need critics or scientists. He already knows all about this. The belief in subliminal advertising persists as urban legend because it captures our suspicion that something *is* going on just below consciousness that does stimulate us.¹⁷

Whether we are boobs being bamboozled by Madison Avenue, savvy consumers who greet commercial solicitations with ironic detachment, something in between or something else altogether is a different discussion. What’s

proposed here, with an aspiration to saying something as close to empirical as the phenomenon will allow, is that advertising as a mode of address conjures us up as daydreamers. That’s how we collaborate with advertising’s 30-second vignettes and storytelling snapshots; it wants our attention because it wants to trigger our associations. Perhaps, daydreaming as such, our subjective immersion into pleasurable self-contemplation, explains why we tolerate, even embrace, the genre. Maybe we don’t want the marketer’s steak at all; maybe it’s our internal sizzles that we can’t get enough of.

The Probability

Data-based marketing conjures us up in an entirely different way. The most basic difference is atomic. The daydreamer is carbon-based; she’s human. The data-profile appears in silicon; it’s an informational product. That is, with the data-profile we leave the physical world and cross the boundary into what Yale computer scientist David Gelernter calls the “mirror world”—the vast array of computer databases in which the details of our everyday lives (and much else besides) are stored, processed, exchanged and analyzed in order to inform others’ decision making.

Just as individuals collaborate with advertising and co-create the daydreamer, we co-create the data profile by contributing the electronic traces that we leave behind whenever we use credit/debit cards, store/loyalty cards, mobile phones and toll plaza tags, whenever we request information, submit claims, register at Web sites, order tickets, donate to charities, return warranty cards, answer surveys or enter sweepstakes, supplemented by public records created by numerous government agencies.¹⁸ These data fall into several large buckets:

- Personal data: Name, address, city, state, zip code, phone number, e-mail address

- Demographic data: Age, gender, marital status, presence of children, home value, education level
- Purchase data: What we bought, when and how much we spent
- Promotion data: The campaigns, offers and incentives to which we responded
- Consumer data: Category usage, brand preferences, purchase motivators and barriers
- Lifestyle data: Media usage, hobbies, interests, political affiliations, charitable donations and other psychographic indicators¹⁹

Some consumer information brokers have more than 1,000 data points on each individual and household in their databases. In short, the digital detritus of our behaviors and choices in our everyday lives is the ectoplasm for our profiles in the datascape. From this data, marketers create profiles of us behind our backs after we've moved on.

Privacy defenders raise a hue and cry. What if Amazon were to sell to prospective employers lists of the books we bought? What if health insurers knew the illnesses that we looked up at WebMD? These and other alarms ring hollow because, for the most part, only tax agents and divorce lawyers want records about individuals or households. Everyone else wants groups. Records of individual- and household-level data do undergo a regular schedule of "data hygiene" procedures (monthly is typical among consumer information brokers) that help ensure completeness, accuracy, recency and other quality attributes. Those ministrations aside, however, the data just sit until someone queries the database, and all queries can be boiled down to one: how does this group differ from that group? In other words, applying a query to its database, the machine sorts individual records into group profiles,²⁰ turning data into information. In practice, queries generally are intended to inform decision making and be predictive, yielding this definition: data profiles are informational constructs of aggregated records that statistically differentiate the

people associated with *these* records as more likely than the people associated with *those* records to conform to some end state desired by the analyst and on that basis justify and enable treating *these* persons differently from *those* persons.

Some profiles are simple. For example, a company can make a profile of its current customers and then target prospects who look like them; these look-alikes are better prospects. A little more sophisticated: a company can profile its best current customers and narrow its look-alike prospecting. Industry-specific versions are easy. A bank segments its current customers into those with relationship services (e.g., mortgages, investment accounts and CDs), those with transactional services (e.g., checking and savings accounts) and those with both types; it then profiles each segment and targets prospects who look like each.

Other groupings are more complex. For example, any company can and many do divide their customers into four groups based on how often the customer buys and how much the customer spends. The resulting four groups are customers who (1) buy often and spend a lot (best), (2) buy rarely but spend a lot (good), (3) buy often but spend little (good) and (4) buy rarely and spend little (worst). Some groupings are very complex, the result of analyses performed on hundreds of variables about each customer. A regression model, for example, calculates the correlation between each of a customer's many attributes and a dependent variable. The attribute with the strongest correlation with the dependent variable gets the highest weight in the model, the attribute with the next strongest correlation gets the next highest weight and so on. The result is a list of customer attributes rank ordered by the strength with which each attribute correlates with the dependent variable. Prospects whose rank-ordered attributes look like the rank-ordered attributes of existing customers are better.

Whether simple or complex, the purpose of all this slicing and dicing is the same: to predict which ones among us are more likely than others to buy, buy more often, pay full

prices, respond to a promotion or behave in some other way that's profitable. That's why marketing solicitations that go directly to households and individuals focus on stimulating behavior, not reverie; the marketer's data analysis has already teed us up as statistically more likely than others to respond. So, those solicitations emphasize the immediate benefits of purchasing the product, carry a call to action, such as returning this post card or calling this number and stimulate that action with a discount, rebate or other limited-time incentive.

Dividing people into groups and treating them differently poses two issues. Although both affect individuals, they're social in structure and substance. First is the fairness in treating persons of one group differently from persons of another group. Second is the larger framework—here, the vision of the larger society—that defines which differences among us matter and how the resulting groups fit together. Transparency is a third issue, especially because the source of unfairness often resides in the rules applied to data, but it's procedural, not substantive.

Statistical differentiation as the basis for commercial discrimination has certain consequences that are logical and inescapable: cherry-picking at the high end, social dumping at the bottom and stereotyping everywhere in between.²¹ When this commercial discrimination conflicts with other commitments and values, fairness issues arise. Following are two examples, both largely invisible. One discriminates against residents of Black neighborhoods, the other against loyal customers, regardless of race, color or creed.

A 2008 report by the Federal Reserve Bank of Boston found that credit card companies offer a higher credit line to residents of white neighborhoods than to *similarly qualified* residents of black neighborhoods. That neighborhood-level discrimination harms the black group and its individual members. A data rule compounds the harm to the individual. In determining an individual's credit score, the amount borrowed is compared with the amount available. The smaller

this ratio, the higher one's credit score. All other things being equal, then, two borrowers with the same loan amount but different credit lines will get different credit scores. Black neighborhood residents are thus twice harmed, first by the lower credit lines available to them as members of a group and then by the lower credit scores as individuals that result when the individual's loan amount is weighted by the group's lower credit line.²² Neither harm is readily visible, and the second resides in a rule.

The example that affects everyone, regardless of race, color or creed, is this: loyal customers are charged higher prices. This practice is unknown to most consumers but old news to marketers; loyal customers have always been charged more in part because they are willing to pay more. What's new is the spread of the data-driven solutions that enable discriminatory treatments of all types in the more thorough extraction of each customer's lifetime financial value. Thanks to customer relationship management (CRM) software, introduced in the mid-1990s, companies can now gather in one place all records relating to the same customer: products purchased, prices paid, purchase dates, promotion responses, service appointments, returns, complaints and payment history. This more complete data set enables companies to segment customers by profitability, the revenues they get from the customer minus the costs to acquire and keep her. On that basis, marketers spend more to acquire and keep those of us who are probably more profitable and less on those probably less so.²³ That's fair. But those profits we deliver include the prices we pay, and, profits notwithstanding, it still seems unfair to ask the more loyal to pay the higher prices.

Red-lining inside credit scoring, discriminatory pricing and other "fairness" issues abound because discrimination is the whole point of all this slicing and dicing. Of course, it cuts both ways; some get spiffed, others get stiffed. But every instance divides us in order to conquer us. It need not be these persons *rather than* those persons; it could be these

persons *among* those persons, these persons *before* those persons, or these persons get *this* while those persons get *that*. Commercial discrimination takes many forms but, at bottom, is everywhere the same. Every targeted marketing campaign whether that targeting occurs through the mail, the Web, TV, cell phones, or even the cash register means that some marketer somewhere has compiled from one or more databases a temporary constellation of attributes about some of us in order to identify, address and target some smaller subgroup of us who, according to their data analyses, are more likely than others to buy once, buy more, buy again or provide some other business benefit.

The second social problem is more invidious because it's hard to see, even though it's in plain sight. Like perceiving the pattern of the tiles in a mosaic, it requires stepping back to see the vision of the larger society within which groups are defined and differentiated. These larger frameworks are the national segmentation schemas. The earliest were *Acorn* from CACI International for the United Kingdom and *PRIZM* from Claritas for the United States.²⁴ Today, all the big brokers of consumer information, such as Experian, Acxiom and Harte Hanks, and media research companies, like MRI and Simmons, have proprietary schemas for the whole. So do many national brands and retailers; if not, they plug their in-house data into commercially available ones.

All work roughly alike: the record for each household and individual in their databases combines (at least) three sets of data. The first is geographic: area codes, zip codes, census tracts and their subunits. The second is demographic: age, marital status, educational level, income range and more. The third is psychographic: data on our values, attitudes and lifestyle interests. Geographic, demographic and psychographic data about households and individuals make us addressable, targetable and, marketers hope, persuadable.

Taking one giant step further, the national segmentation schemas do what their name implies: they segment the entire population into lifestyle-based clusters. Initially, we

were parsed into neighborhood types, each with an appropriately descriptive label, such as Blue Blood Estates, Urban Gold Coast, Furs & Station Wagons, Pools & Patios, Blue-Collar Blues, Shotguns & Pickups, Coalburg & Corntown, Emerging Minorities and several dozen more. Now that commercial databases are rich with addressable individual- and household-level data, the neighborhoods are no longer necessary, and we can be targeted by lifestyle cluster wherever we happen to live. Within each cluster, homogeneity is assumed; even though it's not entirely true, it's true enough for most purposes. More important, like tiles in a mosaic, the clusters only make sense in the context of the whole.

In computer science such a whole is called an ontology. An ontology is a conceptualization of any particular activity, broken down into all the entities involved, their functions relative to the activity's goals and their relations with each other, so they can be represented within an information system. An ontology is then implemented on a computer so that the activities by the entities in the real world can be mirrored within the machine. Once an ontology has mapped out its view of an activity and implemented its map on a computer, actual entities and actual episodes of their activity are identified, verified, counted, compared, rearranged and evaluated in terms of the activity's goals. An ontology is not a given of nature; it's a construct.²⁵

The ontology of the national segmentation schemas presents society as a socioeconomic stratification (SES) system. The primary hierarchical principle is class, specifically wealth, income and occupation, supplemented by the attributes that correlate with class: education and race. This core is then elaborated by applying additional attributes: geographic attributes that characterize different residential types and neighborhood environments, demographic attributes that differentiate households based on the kinship relations and the life stages of families within them and psychographic attributes, such as hobbies, interests, media habits and purchasing behaviors. In other words, the skeleton

of these schemas is a vision of our SES system, with all its assumptions about what's important, how it works and how its parts relate, re-presented for marketers' purposes in commodity form as a mosaic of lifestyle-based clusters.

Unfortunately, the ontology of these national schemas is antiquated. The schemas do have more clusters today than originally, largely integrating demographic shifts, including delayed marriage, single parenthood, aging baby boomers, increasing longevity and immigration, but all see America's SES system largely as it emerged a century ago with the rise of the corporate form of industrial capitalism: old money, nouveau riches and power elites on top, professionals and upper management next, followed by white-, blue- and pink-collar wage earners, farm labor and migrant workers. This view is not wrong. This hierarchy and its groups are still with us. But there's not a hint that the SES system underneath the lifestyle schemas may have or may be changing in any fundamental ways.

Real life suggests otherwise. It is universally acknowledged that the growing importance of information-based goods and services has already led us into a post-industrial economy, that the rapidly growing strata of knowledge workers is altering society's occupational structure and that all work is being transformed into provisional labor. These changes are in progress, and many questions about them—whether the post-industrial economy is a real break or just a phase of capitalism's history, whether knowledge workers are a leading strata or the 21st century's proletariat—are far from settled. It's certainly not the job of marketers or their tools to wrestle with changes in our SES system. At the same time, these changes are huge and they've been operating at full tilt and in plain sight for over four decades. Everyone has experienced some impact from at least one, and they all condition our considerations and decisions as consumers and in other capacities. In other words, the schemas aren't wrong; they still work. They just don't speak to much of what we're actually experiencing in and what's distinctive to our times.

Making matters worse, the schemas are self-perpetuating for three good reasons. First, researchers don't like to change their yardsticks because it compromises the ability to make comparisons over time. So there's a professional preference for keeping things the same. Second, all data-based representation schemas are limited by their ontologies. A system for tracking an object's location, for example, will not be affected by and will not measure changes in its color. So, too, the national segmentation schemas cannot accept inputs that don't already fit into their conceptual maps. Finally, feedback loops or cybernetic systems are circular. By definition, feedback is a method for controlling a system by reinserting into it the results of its past performance. In the decision-making regime of data-based marketing, decision makers see and make decisions about the world through the lens of a specific data model. We consumers then interact with the world that those decisions shaped, generating more data within that model, informing the next round of decisions *ad indefinitum*.²⁶ In short, the yardstick is stable, the ontology closed and the feedback circular—all quite legitimate reasons for the schemas to be self-perpetuating.

Using information systems to integrate consumers and producers is, to critics, an invidious form of social control; to champions, it's an advanced form of functional optimization. Both are a bit abstract. The schemas examined here assume and act within a more specific context. They conceive and subsume all of us under and within a view of society as a socioeconomic stratification system and a particular one that makes assumptions about what's important in this society, how it works and how its parts relate to each other and to the whole. In other words the clusters are the tiles while the schemas are the pattern in the mosaic.

While the social problem of fairness derives from dividing and then treating us differently, the social problem here derives from unifying us all under a particular vision of our society and then making that vision both real and self-perpetuating through the follow-on decisions made about the face

of the world, the physical and symbolic terrains of our lived experience. As explained earlier, these decisions start but do not end with the individual. It's not just who gets what offers, such as the interest rate on a home mortgage or an auto loan, the rewards on a credit card, the terms of a mobile calling plan or the premium on an insurance policy. Beyond individuals, these schemas determine what stores open up in the mall, the goods they stock and the prices they charge, the channels available from the cable service, the movies booked for neighborhood theaters and more. They determine which high schools the U.S. Army targets for recruiting, which medical specialties are offered at local hospitals, which neighborhoods are rezoned for development and so on.

Moreover, while these and all other decisions are made independently, they are not discrete from each other. Rather, they are layered, tangled and textured into an ecology of representation and action that continually monitors, adjusts and readjusts the made environment toward or away from statistical patterns of consumer behaviors. In short, ersatz versions of us go into databases, ersatz answers about us come out and we must all live with the consequences of all the decisions made on that basis. This is how data-based marketing shapes the built environment as readymade for our consumption.²⁷

The data profile is the corresponding shape that humans take inside the machine as readymade to consume the built environment. This does not violate the individual's privacy or anything else. Rather, the individual is reconstituted inside this decision-making regime as a probability, an informational entity with properties of its own.

Our assimilation into the machine begins, of course, in the carbon-based world. Our choices and behaviors in everyday life, captured continuously, are the lifeblood of this whole apparatus. Thus, our carbon-based selves and silicon representations change in tandem but, although they are based on us, they are not us. As explained in the recounting of the birth of social statistics, whenever human affairs are apprehended through the lens of numbers, individuals and our

qualities disappear because data cannot capture the sources of individuality. Instead, the lens must focus on observable, common and variable attributes. It documents our individual states on those attributes in order to sort us by how we vary on those attributes. In short, the individual is reduced to an ersatz person, stripped of what data cannot measure about individuals and described by variable attributes that are useful to commerce and administration.

Upon leaving the carbon-based world, the data are placed inside the records of databases. Although regularly refreshed, the data just sit in the record as raw material, a resource waiting in reserve and on call to help others fulfill their purposes. In other words, before any statistical procedure is applied, the behaviors and choices of our everyday lives have been collected and repurposed into means for others' ends.

The data profile is born when some "other" actually queries the database. The machine answers a query by applying a statistical procedure that sorts records into profiles, turning data into information. The profile doesn't exist until called up. As an informational entity, it is contingent; it depends on the other for its existence.

The profile depends on the querier for its substance, too, because the profile in every instance is relative to the observer. Obviously, the profile is partial; not all of our attributes are relevant to every query. The converse is more important. The attributes that *are* included—those identified by the statistical procedure as most relevant to the query—make each profile specific to the observer. Some social critics complain of a "self multiplied by databases" not because every one of us is conjured up into profiles thousands, perhaps tens of thousands, of times daily (which we are), but because we are never the same person twice; indeed, we're never our own person even once. The profile's particulars are always specific to the query, and the profile as a whole is always specific to the eye of the beholder.

Finally, the profile is probabilistic. Designed to inform decision making, statistical procedures are applied in order

to conjure up some us as more likely than others to conform to the end state desired by the observer. French philosopher Jean Baudrillard called statistics a form of wish fulfillment because every profile portrays us as the observer's desire.

In general, as long as numbers define humans in a common language, we can be submitted to assembly, disassembly, investment and exchange. The data profile is a version of this transformation. Based on the data of our everyday lives, it's part human, part machine—contingent, relative, and probabilistic. In short, the subject has been reconstituted as a manipulatable element of the object and the human assimilated into the machine.

Individuals are largely passive in the creation and use of data profiles. (The few steps we can take are reviewed in Appendix I.) Our lack of involvement is unfortunate given the importance of their use in the decisions that others make about us and our world. At the same time, this is certainly an achievement. Modern life would be impossible if we had not gone about slicing and dicing up both humans and nature. The peril occurs if this way of apprehending human affairs becomes predominant. As explained in the recounting of the crisis of capitalism in the 1970s and the triumph of data-based marketing over the three decades since, that's exactly what's happened. Going forward, however, we face a different situation: the opportunity to build, manage and promote our own cyberpersonas. They aren't created on a clean sheet of paper, of course; the tools available to us shape how we can present ourselves in cyberspace. But that's also the point. Tools are available today with new ones coming tomorrow, and like much else in cyberspace, they put power in the hands of users.

Notes

1 Quoted in Raymond Williams, *Culture and Society, 1780—1950* (New York: Harper & Row, 1966), 83.

2 C.M. Bowra, *The Romantic Imagination* (Oxford: Oxford University Press, 1969), 23.

3 T.J. Jackson Lears, "From Salvation to Self-Realization: Advertising and the Therapeutic Roots of Consumer Culture, 1880—1930," in T.J. Jackson Lears and Richard Wrightman Fox, eds., *The Culture of Consumption: Critical Essays in American History* (New York: Pantheon, 1983).

4 Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste* (Cambridge, MA: Harvard University Press, 1984), 318—371 argues that the project of making an art of life reflects the particular social position of workers at ad agencies who universalized their own attraction to the superficial aristocratic qualities of style and refinement as a way to establish social distinction. Thorstein Veblen, *The Theory of the Leisure Class* (1899) had already critiqued the "conspicuous consumption" of the *nouveau riches*; the democratization of "life as art" among middle-class Americans was a later and different development.

5 For recent critiques along this line, see Zygmunt Bauman, *Freedom* (Minneapolis: University of Minnesota Press, 1988), esp. chapter 3 and Michael Featherstone, "Lifestyle and Consumer Culture," *Theory, Culture and Society*, vol. 4 (1987), 55—70.

6 See Robert S. Lynd and A. C. Hanson, "The People as Consumers," in *President's Research Committee on Social Trends: Recent Social Trends in the United States* (New York: McGraw-Hill, 1933), 857—911.

7 It's worth noting that in contemporary America a disproportionate share of retail sales are gifts, including greeting cards, toiletries, cosmetics, stationary, books and art. See Michael Schudson, *Advertising, the Uneasy Persuasion: Its Dubious Impact on American Society* (New York: Basic Books, 1984), 135—143. .

8 Charles Taylor, *Sources of the Self: The Making of Modern Identity* (Cambridge, MA: Harvard University Press, 1989) offers this philosophical assessment. More narrowly, Albert O. Hirschman, *The Passions and the Interests: Political Arguments for Capitalism before Its Triumph* (Princeton: Princeton University Press, 1977) explains how in the 17th and 18th centuries the pursuit of material interests, previously denounced as avarice, was recast as *le doux commerce* and assigned the role of containing the unruly, dangerous and destructive pursuits of glory and domination that had bred wars and aristocratic display.

9 Walter Cummins, "Love and Liquor: Modernism and Postmodernism in Advertising and Fiction in Mary Cross, ed., *Advertising and Culture: Theoretical Perspectives* (Westport: Praeger, 1996), 62. See also Schudson, 215.

10 Martin Esslin, "Aristotle and the Advertisers: The Television Commercial Considered as a Form of Drama" in Horace Newcomb, ed., *Television: The Critical View* (New York: Oxford University Press, 1987), 304—318. Legendary copywriter Howard Luck Gossage explored the magical dimension of advertising in "That Old Black, White, or Pango Peach Magic," *Harper's Magazine* (March 1961).

11 On reverie, see Ron Burnett, *How Images Think* (Cambridge, MA: The MIT Press, 2004), esp. 40—56. In an earlier age this same phenomenon was understood as "low involvement learning"; see Herbert E. Krugman, "The Impact of Television Advertising: Learning without Involvement," *Public Opinion Quarterly* 29 (1965), 349—356.

12 Colin Campbell, *The Romantic Ethic and the Spirit of Modern Consumerism* (Cambridge, MA: Blackwell, 1987)

13 Anne Hollander, *Seeing through Clothes* (New York: Viking, 1978), 362. On novels and the imaginary, see Mark Poster, *What's the Matter with the Internet* (Minneapolis: University of Minnesota Press, 2001), 82—86.

14 Walter Jackson Bate, *From Classic to Romantic: Premises of Taste in Eighteenth Century England* (New York: Harper & Row, 1961), 98—99.

15 Hilke Plassmann, John O'Doherty, Baba Shiv and Antonio Rangel, "Marketing Actions Can Modulate Neural Representations of Experienced Pleasantness," *Proceedings of the National Academy of Science*, vol. 105 (January 22, 2008), 1050—1054 and Martin Lindstrom, *Buyology: Truth and Lies about Why We Buy* (New York: Doubleday, 2008).

16 George W. S. Trow, *Within the Context of No Context* (New York: Atlantic Monthly Press, 1997), 46—47. See also James B. Twitchell, *Adcult USA* (New York: Columbia University Press, 1996), 52.

17 See Leslie Savan, *The Sponsored Life: Ads, TV, and American Culture* (Philadelphia: Temple University Press, 1994), 61—64 on the popular belief in subliminal advertising.

18 In practice, public and private data interpenetrate; see Howard Radest, "The Public and the Private: An American Fairy Tale," *Ethics*, vol. 89 (April 1979), 280—291.

19 One data set is omitted from the text but discussed in Appendix I: one's social security number, bank account number, driver's license number or military ID number. They are called *personally identifying information* because they are used to authenticate individuals and thereby enable access to resources, including financial accounts.

20 The word *profile* is used here metaphorically, embracing all profiles, clusters, segmentations, correlated factors, algorithms and other data models used by marketing statisticians and data-based marketers to represent human beings by categorization and classification, especially those who seek to predict future needs and wants based on aggregated past choices and behaviors.

21 See Oscar H. Gandy, Jr., “It’s Discrimination, Stupid!” in J. Brook and I. Boal, eds., *Resisting the Virtual Life. The Culture and Politics of Information* (San Francisco: City Lights Books, 1995), 35—47. The only thing worse than bias is invisibility, and it is well known that certain population segments—most notably, African Americans, Hispanic Americans, rural residents, the poor and immigrants—leave fewer electronic traces and as a result are less likely to appear in the datascape and the segmentation schemes derived from it. Because these population segments are rarely attractive to marketers, this issue rarely surfaces.

22 Ethan Cohen-Cole, “Credit Card Redlining,” Working Paper No. QAU08-1, Federal Reserve Bank of Boston, February 26, 2008.

23 Among the myriad of books on CRM solutions, Ronald S. Swift, *Accelerating Customer Relationships: Using CRM and Relationship Technologies* (Upper Saddle River: Prentice Hall: 2001) provides a good overview. For a critical perspective, see “The Wealth and Poverty of Networks: Tackling Social Exclusion,” *Demos Collection*, Issue 12 (1997).

24 Paul A Longley and Graham Clarke, eds., *GIS for Business and Service Planning*, (New York: John Wiley & Sons, 1995) and Michael Weiss, *The Clustering of America* (New York: Harper & Row, 1988) are descriptive accounts of these systems in the United Kingdom and United States, respectively.

25 Philip E. Agre, “Surveillance and Capture: Two Models of Privacy,” *Information Society*, 10 (April – June, 1994), 101—127.

26 See Terry Curtis, “The Information Society: A Computer-Generated Caste System” and Oscar H. Gandy Jr., “The Political Economy of Communications Competence” in Vincent Mosco and Janet Wasko, eds., *The Political Economy of Information* (Madison: University of Wisconsin Press, 1988), 95—107 and 108—124, respectively, and the earlier works that both cite.

27 Geographers and urban planners have been particularly concerned with the impacts on our physical space; see Stephen Graham, “Spaces of Surveillent-Simulation: New Technologies, Digital Representations and Material Geographies,” *Environment and Planning: Society and Space*, vol. 16, (1998), 483—504 and John Pickles, ed., *Ground Truth: The Social Implications of Geographic Information Systems* (New York: Guilford Press, 1995).